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A

DICTIONARY,

PRACTICAL, THEORETICAL, AND HISTORICAL,

OF

COMMERCE

AND

COMMERCIAL NAVIGATION:

ILLUSTRATED WITH MAPS AND PLANS.

BY J. R. M'CULLOCH, ESQ.

SECOND EDITION,

Corrected throughout, and greatly enlarged:

WITH A SUPPLEMENT TO OCTOBER, 1834.

Tutte le invenzioni le più benemerite del genere umano, e che hanno svillupato l'ingegno e la facoltà dell' animo nostro, sono quelle che accostano l' uomo all' uomo, e facilitano la communicazione delle idee, dei bisogni, dei sentimenti, e riducano il genere umano a massa. -

VERRI.

LONDON:

PRINTED FOR

LONGMAN, REES, ORME, BROWN, GREEN, AND LONGMAN,

MDCCCXXXV.

"Though immediately and primarily written for the merchants, this Commercial Dictionary will be of use to every man of business or of curiosity. There is no man who is not in some degree a merchant; who has not something to buy and something to sell, and who does not therefore want such instructions as may teach him the true value of possessions or commodities The descriptions of the productions of the earth and water which this volume contains, may be equally pleasing and useful to the speculatist with any other Natural History. The descriptions of ports and cities may instruct the geographer as well as if they were found in books appropriated only to his own science; and the doctrines of funds, insurances, currency, monopolies, exchanges, and duties, is so necessary to the politician, that without it he can be of no use either in the council or the senate, nor can speak or think justly either on war or trade.

"We, therefore, hope that we shall not repent the labour of compiling this work, nor flatter ourselves unreasonably, in predicting a favourable reception to a book which no condition of life can render useless, which may contribute to the advantage of all that make or receive laws, of all that buy or sell, of all that wish to keep or improve their possessions, of all that desire to be rich, and all that desire to be wise."

JOHNSON, *Preface to Rolt's Dict.*

LONDON:
Printed by A. SPOTTISWOODE,
New-Street-Square.

PREFACE

TO

THE SECOND EDITION.

The first impression of this Dictionary, consisting of 2,000 copies, was entirely sold off in less than nine months from the date of its publication. We feel very deeply indebted to the public for this unequivocal proof of its approbation; and we have endeavoured to evince our gratitude, by labouring to render the work less undeserving a continuance of the favour with which it has been honoured. In the prosecution of this object, we can truly affirm we have grudged neither labour nor expense. We have subjected every part of the work to a careful revision; have endeavoured to eradicate the errors that had crept into it; to improve those parts that were incomplete or defective; and to supply such articles as had been omitted. We dare not flatter ourselves with the idea that we have fully succeeded in these objects. The want of recent and accurate details as to several important subjects, has been an obstacle we have not, in all cases, been able to overcome; but those in any degree familiar with such investigations will not, perhaps, be disposed severely to censure our deficiencies in this respect.

The changes in the law bearing upon commercial transactions have been carefully specified. Copious abstracts of all the late Customs Acts are contained in the articles Colonies and Colony Trade, Importation and Exportation, Navigation Laws, Registry, Smuggling, Warehousing, &c.

The abolition of the East India Company's commercial monopoly, and the great and growing interest that has in consequence been excited amongst all classes as to the commercial capabilities and practices of India, China, and other Eastern countries, have made us bestow peculiar attention to this department. The articles Bangkok*, Batavia, Bombay, Bushire*, Bussorah*, Calcutta, Canton, Columbo, East India Company and East Indies, Indigo, Macao*, Madras, Manilla, Mocha, Muscat*, Nangasacki*, Rangoon*, Singapore, Tatta*, Tea, &c. contain, it is believed, a greater mass of recent and well-authenticated details as to the commerce of the vast countries stretching from the Arabic Gulf to the Chinese Sea, than is to be found in any other English publication. In compiling these and other articles, we derived much valuable assistance from John Crawfurd, Esq.

The article Banking is mostly new. Besides embodying the late act prolonging the charter of the Bank of England, and the more important details given in the Report of the Select Committee on the Renewal of the Bank Charter, this article contains some novel and important information not elsewhere to be met with. No account of the issues of the Bank of England has hitherto been pub-

* The articles marked with an asterisk were not in the former edition.

lished, that extends farther back than 1777. But this deficiency is now, for the first time, supplied; the Directors having obligingly furnished us with an account of the issues of the Bank on the 28th of February and the 31st of August of each year, from 1698, within four years of its establishment, down to the present time. We have also procured a statement, from authority, of the mode of transacting business in the Bank of Scotland; and have been able to supply several additional particulars, both with respect to British and to foreign banks.

We have made many additions to, and alterations in, the numerous articles descriptive of the various commodities that form the materials of commerce, and the historical notices by which some of them are accompanied. We hope they will be found more accurate and complete than formerly.

The Gazetteer department, or that embracing accounts of the principal foreign emporiums with which this country maintains a direct intercourse, was, perhaps, the most defective in the old edition. If it be no longer in this predicament, the improvement has been principally owing to official co-operation. The sort of information we desired as to the great sea-port towns could not be derived from books, nor from any sources accessible to the public; and it was necessary, therefore, to set about exploring others. In this view we drew up a series of queries, embracing an investigation of imports and exports, commercial and shipping regulations, port charges, duties, &c., that might be transmitted to any port in any part of the world. There would, however, in many instances, have been much difficulty in getting them answered with the requisite care and attention by private individuals; and the scheme would have had but a very partial success, had it not been for the friendly and effectual interference of Mr. Poulett Thomson. Alive to the importance of having the queries properly answered, he voluntarily undertook to use his influence with Lord Palmerston to get them transmitted to the Consuls. This the Noble Lord most readily did; and answers have been received from the greater number of these functionaries. There is, of course, a considerable inequality amongst them; but they almost all embody a great deal of valuable information, and some of them are drawn up with a degree of skill and sagacity, and display an extent of research and a capacity of observation, that reflect the highest credit on their authors.*

The information thus obtained, added to what we received through other, but not less authentic channels, supplied us with the means of describing twice the number of foreign sea-ports noticed in our former edition; and of enlarging, amending, and correcting the accounts of such as were noticed. Besides much fuller details than have ever been previously published of the nature and extent of the trade of many of these places, the reader will, in most instances, find a minute account of the regulations to be observed respecting the entry and clearing of ships and goods, with statements of the different public charges laid on shipping, the rates of commission and brokerage, the duties on the principal goods imported and exported, the prices of provisions, the regulations as to quarantine, the practice as to credit, banking, &c., with a variety of other particulars. We have also described the ports; and have specified their depth of water, the course to be steered by vessels on entering, with the rules as to pilotage, and the fees on account of pilots, light-houses, &c. As it is very difficult to convey a sufficiently distinct idea of a sea-port by any description, we have given plans, taken from

* The returns furnished by the Consuls at Hamburgh, Trieste and Venice, Naples, Dantzic, Bordeaux, Christiania, Amsterdam, Elsineur, New York, Charleston, &c. are particularly good.

the latest and best authorities, of about a dozen of the principal foreign ports. Whether we have succeeded, is more than we can venture to say; but we hope we have said enough to satisfy the reader, that we have spared no pains to furnish him with authentic information on this important department.

The Tariff, or Table of Duties on Imports, &c., in this edition, is highly important and valuable. It is divided into three columns: the first containing an account of the existing duties payable on the importation of foreign products for home use, as the same were fixed by the Act of last year, 3 & 4 Will. IV. cap. 56. The next column exhibits the duties payable on the same articles in 1819, as fixed by the Act 59 Geo. III. cap. 52.: and the third and last column exhibits the duties as they were fixed in 1787 by Mr. Pitt's Consolidation Act, the 27 Geo. III. cap. 13. The duties are rated throughout in Imperial weights and measures; and allowances have been made for differences in the mode of charging, &c. The reader has, therefore, before him, and may compare together, the present customs' duties with the duties as they stood at the end of the late war, and at its commencement. No similar Table is to be met with in any other work. We are indebted for it to J. D. Hume, Esq., of the Board of Trade, at whose suggestion, and under whose direction, it has been prepared. Its compilation was a work of great labour and difficulty; and could not have been accomplished by any one not thoroughly acquainted with the customs acts, and the various changes in the mode of assessing the duties. Its accuracy may be relied on.

The article Slaves and Slave Trade contains a full abstract of the late important statute for the abolition of slavery.

Among the new articles of a miscellaneous description, may be specified those on Aliens, Ionian Islands, Population, Tally Trade, Truck System, &c.

On the whole, we trust it will be found, that the work has been improved throughout, either by the correction of mistakes, or by the addition of new and useful matter. Still, however, we are well aware that it is in various respects defective; but we are not without hopes that those who look into it will be indulgent enough to believe that this has been owing as much to the extreme difficulty, or rather, perhaps, the impossibility, of obtaining accurate information respecting some of the subjects treated of, as to the want of care and attention on our part. Even as regards many important topics connected with the commerce and manufactures of Great Britain, we have had to regret the want of authentic details, and been obliged to grope our way in the dark. Nothing, indeed, can exceed the accuracy and luminous arrangement of the customs accounts furnished by the Inspector General of Imports and Exports. But, owing to the want of any details as to the cross-channel trade between Great Britain and Ireland, the value of these accounts is much diminished. The condition and habits of the people of Ireland and of Great Britain are so very different, that conclusions deduced from considering the trade or consumption of the United Kingdom *en masse*, are generally of very little value; and may, indeed, unless carefully sifted, be the most fallacious imaginable; while, owing to the want of any account of the trade between the two great divisions of the empire, it is not possible accurately to estimate the consumption of either, or to obtain any sure means of judging of their respective progress in wealth and industry. As respects manufactures, there is a still greater deficiency of trustworthy, comprehensive details. We submitted the articles relating to them in this work, to the highest practical authorities; so that we incline to think they are about as accurate as they can well be rendered in the absence of official returns. It is far, however, from creditable to the country, that we should be obliged, in matters of such import-

ance, to resort to private and irresponsible individuals for the means of coming at the truth. Statistical science in Great Britain is, indeed, at a very low ebb: and we are not of the number of those who suppose that it will ever be materially improved, unless government become more sensible, than it has hitherto shown itself to be, of its importance, and set machinery in motion, adequate to procure correct and comprehensive returns.

The statistical Tables published by the Board of Trade embrace the substance of hundreds of accounts, scattered over a vast mass of Parliamentary papers. They seem to be compiled with great care and judgment, and are a very valuable acquisition. We have frequently been largely indebted to them. But their arrangement, and their constantly increasing number and bulk, make them quite unfit for being readily or advantageously consulted by practical men. Most part of the returns relating to the principal articles given in this work, go back to a much more distant period than those published by the Board of Trade.

We have seen no reason to modify or alter any PRINCIPLE OF COMMERCIAL POLICY advanced in our former edition. In some instances, we have varied the exposition a little, but that is all. In every case, however, we have separated the practical, legal, and historical statements from those of a speculative nature; so that those most disposed to dissent from our theoretical notions will, we hope, be ready to admit that they have not been allowed to detract from the practical utility of the work.

The maps given with the former edition have been partially re-engraved, and otherwise improved. Exclusive of the plans already referred to, the present edition contains two new maps: one, of the completed and proposed canals and rail-roads of Great Britain and Ireland; exhibiting, also, the coal fields, the position of the different light-houses, &c.: the other map exhibits the mouths of the rivers Mersey and Dee, and the country from Liverpool to Manchester, with the various lines of communication between these two great and flourishing emporiums. Care has been taken to render them accurate.

The important service done to us, or rather to the public, by Mr. Poulett Thomson, in the obtaining of the Consular Returns, is a part only of what we owe to that gentleman. We never applied to him for any sort of information which it was in his power to supply, that he did not forthwith place at our free disposal. That system of commercial policy, of which the Right Honourable gentleman is the enlightened and eloquent defender, has nothing to fear from publicity. On the contrary, the better informed the public become, the more fully the real facts and circumstances relating to it are brought before them, the more will they be satisfied of the soundness of the measures advocated by Mr. Thomson, and of their being eminently well fitted to promote and consolidate the commercial greatness and prosperity of the empire.

It is proper, also, to state, that, besides the Board of Trade, all the other departments of government to which we had occasion to apply, discovered every anxiety to be of use to us. We have been particularly indebted to Mr. Spring Rice; Sir Henry Parnell; Mr. Wood, Chairman of the Board of Stamps and Taxes; Mr. Villiers, Ambassador at Madrid; and Mr. Mayer, of the Colonial Office.

We are under peculiar obligations to the many mercantile and private gentlemen in this and other countries, who have favoured us with communications. We hardly ever applied to any one, however much engaged in business, for any information coming within his department, which he did not readily furnish. We have not met with any mystery, concealment, or affectation of concealment.

Every individual seemed disposed to tell us all that he knew; and several gentlemen have taken a degree of trouble with respect to various articles in this work, for which our thanks and gratitude make but a poor return.

The expense of reprinting a work of this sort, containing a greater mass of figures and of small type than any other volume in the English language, is quite enormous. This edition is, therefore, stereotyped; and will not be recast for a few years. But we intend to publish, whenever they seem to be required, Supplements, containing statements of any alterations in the duties on commodities, and in the laws and regulations as to commercial affairs in Great Britain and foreign countries, with such additional information on other topics as may seem to possess general interest. And we do most anxiously hope that our mercantile and other friends at home and abroad will enable us to make these Supplements as useful as possible, by pointing out whatever errors or omissions they may perceive in the present edition, and by supplying us with fresh details. Much of what is most valuable in this work has been derived from the Circulars issued by mercantile houses, brokers, &c.; and the transmission to us, through Messrs. Longman and Co., of such documents, is *one of the greatest favours we can receive*. Any stipulations as to the use to be made of them will be carefully attended to; and we beg no one will consider his Circular as not being of sufficient interest to be acceptable to us.

PREFACE

TO

THE FIRST EDITION.

It has been the wish of the Author and Publishers of this Work, that it should be as extensively useful as possible. If they be not deceived in their expectations, it may be advantageously employed, as a sort of *vade mecum*, by merchants, traders, ship-owners, and ship-masters, in conducting the details of their respective businesses. It is hoped, however, that this object has been attained without omitting the consideration of any topic, incident to the subject, that seemed calculated to make the book generally serviceable, and to recommend it to the attention of all classes.

Had our object been merely to consider commerce as a science, or to investigate its principles, we should not have adopted the form of a Dictionary. But commerce is not a science only, but also an *art* of the utmost practical importance, and in the prosecution of which a very large proportion of the population of every civilised country is actively engaged. Hence, to be generally useful, a work on commerce should combine practice, theory, and history. Different readers may resort to it for different purposes; and every one should be able to find in it clear and accurate information, whether his object be to make himself familiar with details, to acquire a knowledge of principles, or to learn the revolutions that have taken place in the various departments of trade.

The following short outline of what this Work contains may enable the reader to estimate the probability of its fulfilling the objects for which it has been intended: —

I. It contains accounts of the various articles which form the subject matter of commercial transactions. To their English names are, for the most part, subjoined their synonymous appellations in French, German, Italian, Russian, Spanish, &c.; and sometimes, also, in Arabic, Hindoo, Chinese, and other Eastern languages. We have endeavoured, by consulting the best authorities, to make the descriptions of commodities as accurate as possible; and have pointed out the tests or marks by which their goodness may be ascertained. The places where they are produced are also specified; the quantities exported from such places; and the different regulations, duties, &c. affecting their importation and exportation, have been carefully stated, and their influence examined. The prices of most articles have been given, sometimes for a lengthened period. Historical notices are inserted illustrative of the rise and progress of the trade in the most important articles; and it is hoped, that the information embodied in these notices will be found to be as authentic as it is interesting.

II. The Work contains a general article on Commerce, explanatory of its nature, principles, and objects, and embracing an inquiry into the policy of restrictions

intended to promote industry at home, or to advance the public interests by excluding or restraining foreign competition. Exclusive, however, of this general article, we have separately examined the operation of the existing restrictions on the trade in particular articles, and with particular countries, in the accounts of those articles, and of the great sea-port towns belonging to the countries referred to. There must, of course, be more or less of sameness in the discussion of such points, the principle which runs through them being identical. But in a Dictionary this is of no consequence. The reader seldom consults more than one or two articles at a time; and it is of infinitely more importance to bring the whole subject at once before him, than to seek to avoid the appearance of repetition by referring from one article to another. In this Work such references are made as seldom as possible.

III. The articles which more particularly refer to commercial navigation are Average, Bills of Lading, Bottomry, Charterparty, Freight, Master, Navigation Laws, Owners, Registry, Salvage, Seamen, Ships, Wreck, &c. These articles embrace a pretty full exposition of the law as to shipping: we have particularly endeavoured to exhibit the privileges enjoyed by British ships; the conditions and formalities, the observance of which is necessary to the acquisition and preservation of such privileges, and to the transference of property in ships; the responsibilities incurred by the masters and owners in their capacity of public carriers; and the reciprocal duties and obligations of owners, masters, and seamen. In this department, we have made considerable use of the treatise of Lord Tenterden on the Law of Shipping, — a work that reflects very great credit on the learning and talents of its noble author. The Registry Act and the Navigation Act are given with very little abridgment. To this head may also be referred the articles on the Cod, Herring, Pilchard, and Whale fisheries.

IV. The principles and practice of commercial arithmetic and accounts are unfolded in the articles Book-keeping, Discount, Exchange, Interest and Annuities, &c. The article Book-keeping has been furnished by one of the official assignees under the new bankrupt act. It exhibits a view of this important art as actually practised in the most extensive mercantile houses in town. The tables for calculating interest and annuities are believed to be more complete than any hitherto given in any work not treating professedly of such subjects.

V. A considerable class of articles may be regarded as descriptive of the various means and devices that have been fallen upon for extending and facilitating commerce and navigation. Of these, taking them in their order, the articles Banks, Brokers, Buoys, Canals, Caravans, Carriers, Coins, Colonies, Companies, Consuls, Convoy, Docks, Factors, Fairs and Markets, Light-houses, Money, Partnership, Pilotage, Post-Office, Rail-roads, Roads, Treaties (Commercial), Weights and Measures, &c. are among the most important. In the article Banks, the reader will find, besides an exposition of the principles of banking, a pretty full account (derived principally from official sources) of the Bank of England, the private banks of London, and the English provincial banks; the Scotch and Irish banks; and the most celebrated foreign banks: to complete this department, an account of Savings' Banks is subjoined, with a set of rules which may be taken as a model for such institutions.* There is added to the article Coins a Table of the assay, weight, and sterling value of the principal foreign gold and silver coins, deduced from assays made at the London and Paris Mints, taken, by permission, from the last edition of Dr. Kelly's

* Some of the improvements made on this article are noticed in the Preface to the Second Edition.

Cambist. The article COLONIES is one of the most extensive in the work: it contains a sketch of the ancient and modern systems of colonisation; an examination of the principles of colonial policy; and a view of the extent, trade, population, and resources of the colonies of this and other countries. In this article, and in the articles CAPE OF GOOD HOPE, HALIFAX, QUEBEC, SYDNEY, and VAN DIEMEN'S LAND, recent and authentic information is given, which those intending to emigrate will find worthy of their attention. The map of the British possessions in North America is on a pretty large scale, and is second to none, of those countries, hitherto published in an accessible form. It will be a valuable acquisition for emigrants to Canada, Nova Scotia, &c. The article COLONIES is also illustrated by a map of Central America and the West Indies. An engraved plan is given, along with the article DOCKS, of the river Thames and the docks from Blackwall to the Tower; and the latest regulations issued by the different Dock Cômpanies here and in other towns, as to the docking of ships, and the charges on that account, and on account of the loading, unloading, warehousing, &c. of goods, are given verbatim. The statements in the articles LIGHT-HOUSES and PILOTAGE have been mostly furnished by the Trinity House, or derived from Parliamentary papers, and may be implicitly relied upon. In the article WEIGHTS AND MEASURES the reader will find tables of the equivalents of wine, ale, and Winchester measures, in Imperial measure.*

VI. Besides a general article on the constitution, advantages, and disadvantages of Companies, accounts are given of the principal associations existing in Great Britain for the purpose of conducting commercial undertakings, or undertakings subordinate to and connected with commerce. Among others (exclusive of the Banking and Dock Companies already referred to) may be mentioned the EAST INDIA COMPANY, the GAS COMPANIES, the INSURANCE COMPANIES, the MINING COMPANIES, the WATER COMPANIES, &c. The article on the East India Company is of considerable length; it contains a pretty complete sketch of the rise, progress, and present state of the British trade with India; a view of the revenue, population, &c. of our Indian dominions; and an estimate of the influence of the Company's monopoly. We have endeavoured, in treating of insurance, to supply what we think a desideratum, by giving a distinct and plain statement of its principles, and a brief notice of its history; with an account of the rules and practices followed by individuals and companies in transacting the more important departments of the business; and of the terms on which houses, lives, &c. are commonly insured. The part of the article which peculiarly respects marine insurance has been contributed by a practical gentleman of much knowledge and experience in that branch.

VII. In addition to the notices of the Excise and Customs regulations affecting particular commodities given under their names, the reader will find articles under the heads of CUSTOMS, EXCISE, IMPORTATION AND EXPORTATION, LICENCES, SMUGGLING, WAREHOUSING, &c. which comprise most of the practical details as to the business of the Excise and Customs, particularly the latter. The most important Customs' Acts are given with very little abridgment, and being printed in small letter, they occupy comparatively little space. The article TARIFF contains an account of the various duties, drawbacks, and bounties, on the importation and exportation of all sorts of commodities into and from this country.—

The article CANALS in this (the second) edition has been greatly enlarged. It is accompanied by the map already referred to (see Preface to Second Edition) of the completed and proposed British CANALS, RAIL-ROADS, LIGHT-HOUSES, &c. The latter have been laid down, by permission of the Trinity House, from a chart recently published by that corporation.

The article DOCKS is now, also, accompanied by a Chart of the Mouths of the Mersey and Dee, &c. (See Preface to Second Edition.)

(See Preface to Second Edition.) We once intended to give the tariffs of some of the principal Continental states; but from the frequency of the changes made in them, they would very soon have become obsolete, and would have tended rather to mislead than to instruct. But the reader will notwithstanding find a good deal of information as to foreign duties under the articles CADIZ, DANTZIC, HAVRE, NAPLES, NEW YORK, TRIESTE, &c.

VIII. Among the articles of a miscellaneous description, may be specified ALIENS *, APPRENTICE, AUCTIONEER, BALANCE OF TRADE, BANKRUPTCY, CONTRABAND, CREDIT, HANSEATIC LEAGUE, IMPORTS AND EXPORTS, IMPRESSMENT, IONIAN ISLANDS *, MARITIME LAW, PATENTS, PAWNBROKING, PIRACY, POPULATION *, PRECIOUS METALS, PRICES, PRIVATEERS, PUBLICANS, QUARANTINE, REVENUE AND EXPENDITURE *, TALLY TRADE *, TRUCK SYSTEM *, &c.

IX. Accounts are given, under their proper heads, of the principal emporiums with which this country has any immediate intercourse; of the commodities usually exported from and imported into them; of their monies, weights, and measures; and of such of their institutions, customs, and regulations, with respect to commerce and navigation, as seemed to deserve notice. There are occasionally subjoined to these accounts of the great sea-ports, pretty full statements of the trade of the countries in which they are situated, as in the instances of ALEXANDRIA, AMSTERDAM, BORDEAUX, CADIZ, CALCUTTA, CANTON, COPENHAGEN, DANTZIC, HAVANNAH, HAVRE, NAPLES, NEW YORK, PALERMO, PETERSBURGH, RIO DE JANEIRO, SMYRNA, TRIESTE, VERA CRUZ, &c. To have attempted to do this systematically would have increased the size of the Work beyond all reasonable limits, and embarrassed it with details nowise interesting to the English reader. The plan we have adopted has enabled us to treat of such matters as might be supposed of importance in England, and to reject the rest. We believe, however, that, notwithstanding this selection, those who compare this work with others, will find that it contains a much larger mass of authentic information respecting the trade and navigation of foreign countries than is to be found in any other English publication.†

The reader may be inclined, perhaps, to think that it must be impossible to embrace the discussion of so many subjects in a single octavo volume, without treating a large proportion in a very brief and unsatisfactory manner. But, in point of fact, this single octavo contains about as much letter-press as is contained in two ordinary folio volumes, and more than is contained in Macpherson's Annals of Commerce, in four large volumes quarto, published at 8*l.* 8*s.*! This extraordinary condensation has been effected without any sacrifice either of beauty or distinctness. Could we suppose that the substance of the book is at all equal to its form, there would be little room for doubt as to its success.

Aware that, in a work of this nature, accuracy in matters of fact is of primary importance, we have rarely made any statement without mentioning our authority. Except, too, in the case of books in every one's hands, or Dictionaries, the page or chapter of the works referred to is generally specified; experience having taught us that the convenient practice of stringing together a list of authorities at the end of an article is much oftener a cloak for ignorance than an evidence of research.

Our object being to describe articles in the state in which they are offered for sale, we have not entered, except when it was necessary to give precision or

* The articles marked * are new.
† For an account of the improvements effected in this department, see Preface to Second Edition.

clearness to their description, into any details as to the processes followed in their manufacture.

Besides the maps already noticed, the work contains a map of the world, on Mercator's projection, and a map of Central and Southern Europe and the Mediterranean Sea. These maps are on a larger scale than those usually given with works of this sort; and have been carefully corrected, and compared with the best authorities.

Such is a rough outline of what the reader may expect to meet with in this Dictionary. We do not, however, flatter ourselves with the notion that he will consider that all that has been attempted has been properly executed. In a work embracing such an extreme range and diversity of subjects, as to many of which it is exceedingly difficult, if not quite impossible, to obtain accurate information, no one will be offended should he detect a few errors. At the same time we can honestly say that neither labour nor expense has been spared to render the Work worthy of the public confidence and patronage. The author has been almost incessantly engaged upon it for upwards of three years; and he may be said to have spent the previous part of his life in preparing for the undertaking.* He has derived valuable assistance from some distinguished official gentlemen, and from many eminent merchants; and has endeavoured, wherever it was practicable, to build his conclusions upon official documents. But in very many instances he has been obliged to adopt less authentic data; and he does not suppose that he has had sagacity enough always to resort to the best authorities, or that, amidst conflicting and contradictory statements, he has uniformly selected those most worthy of being relied upon, or that the inferences he has drawn are always such as the real circumstances of the case would warrant. But he has done his best not to be wanting in these respects. Not being engaged in any sort of business, nor being under any description of obligation to any political party, there was nothing to induce us, in any instance, to conceal or pervert the truth. We have, therefore, censured freely and openly whatever we considered wrong; but the grounds of our opinion are uniformly assigned; so that the reader may always judge for himself as to its correctness. Our sole object has been to produce a work that should be generally useful, particularly to merchants and traders, and which should be creditable to ourselves. Whether we have succeeded, the award of the public will show; and to it we submit our labours, not with "frigid indifference," but with an anxious hope that it may be found we have not misemployed our time, and engaged in an undertaking too vast for our limited means.

The following notices of some of the most celebrated Commercial Dictionaries may not, perhaps, be unacceptable. At all events, they will show that there is at least room for the present attempt.

The *Grand Dictionnaire de Commerce*, begun and principally executed by M. Savary, Inspector of Customs at Paris, and completed by his brother, the Abbé Savary, Canon of St. Maur, was published at Paris in 1723, in two volumes folio: a supplemental volume being added in 1730. This was the first work of the kind that appeared in modern Europe; and has furnished the principal part of the materials for most of those by which it has been followed. The undertaking was liberally patronised by the French government, who justly considered that a Commercial Dictionary, if well executed, would be of national importance.

* The preparation of this new edition has cost nearly two years of additional labour.

Hence a considerable, and, indeed, the most valuable, portion of M. Savary's work is compiled from Memoirs sent him, by order of government, by the inspectors of manufactures in France, and by the French consuls in foreign countries. An enlarged and improved edition of the *Dictionnaire* was published at Geneva in 1750, in six folio volumes. But the best edition is that of Copenhagen, in five volumes folio; the first of which appeared in 1759, and the last in 1765.

More than the half of this work consists of matter altogether foreign to its proper object. It is, in fact, a sort of Dictionary of Manufactures as well as of Commerce; descriptions being given, which are, necessarily perhaps, in most instances exceedingly incomplete, and which the want of plates often renders unintelligible, of the methods followed in the manufacture of the commodities described. It is also filled with lengthened articles on subjects of natural history, on the bye laws and privileges of different corporations, and a variety of subjects nowise connected with commercial pursuits. No one, however, need look into it for any developement of sound principles, or for enlarged views. It is valuable as a repertory of facts relating to commerce and manufactures at the commencement of last century, collected with laudable care and industry; but the spirit which pervades it is that of a customs officer, and not that of a merchant or a philosopher. "*Souvent dans ses réflexions, il tend plutôt à égarer ses lecteurs qu'à les conduire, et des maximes nuisibles au progrès du commerce et de l'industrie obtiennent presque toujours ses éloges et son approbation.*"

The preceding extract is from the Prospectus, in one volume octavo, published by the Abbé Morellet, in 1769, of a new Commercial Dictionary, to be completed in five or probably six volumes folio. This Prospectus is a work of sterling merit; and from the acknowledged learning, talents, and capacity of its author for laborious exertion, there can be no doubt that, had the projected Dictionary been completed, it would have been infinitely superior to that of Savary. It appears (Prospectus, pp. 353—373.) that Morellet had been engaged for a number of years in preparations for this great work; and that he had amassed a large collection of books and manuscripts relative to the commerce, navigation, colonies, arts, &c. of France and other countries. The enterprise was begun under the auspices of M. Trudaine, Intendant of Finance, and was patronised by Messrs. L'Averdy and Bertin, Comptrollers General. But whether it were owing to the gigantic nature of the undertaking, to the author having become too much engrossed with other pursuits, the want of sufficient encouragement, or some other cause, no part of the proposed Dictionary ever appeared. We are ignorant of the fate of the valuable collection of manuscripts made by the Abbé Morellet. His books were sold at Paris within these few years.

A Commercial Dictionary, in three volumes 4to, forming part of the *Encyclopédie Méthodique*, was published at Paris in 1783. It is very unequally executed, and contains numerous articles that might have been advantageously left out. The editors acknowledge in their Preface that they have, in most instances, been obliged to borrow from Savary. The best parts of the work are copied from the edition of the *Traité Général du Commerce* of Ricard, published at Amsterdam in 1781, in two volumes 4to.*

The earliest Commercial Dictionary published in England, was compiled by Malachy Postlethwayt, Esq., a diligent and indefatigable writer. The first part of the first edition appeared in 1751. The last edition, in two enormous folio volumes, was published in 1774. It is chargeable with the same defects as that

* This, when published, must have been a very valuable work. It is now, however, in a great measure obsolete.

of M. Savary, of which, indeed, it is for the most part a literal translation. The author has made no effort to condense or combine the statements under different articles, which are frequently not a little contradictory; at the same time that many of them are totally unconnected with commerce.

In 1761, Richard Rolt, Esq. published a Commercial Dictionary in one pretty large folio volume. The best part of this work is its Preface, which was contributed by Dr. Johnson. It is for the most part abridged from Postlethwayt; but it contains some useful original articles, mixed, however, with many alien to the subject.

In 1766, a Commercial Dictionary was published, in two rather thin folio volumes, by Thomas Mortimer, Esq., at that time Vice-Consul for the Netherlands. This is a more commodious and better arranged, but not a more valuable work than that of Postlethwayt. The plan of the author embraces, like that of his predecessors, too great a variety of objects; more than half the work being filled with geographical articles, and articles describing the processes carried on in different departments of manufacturing industry; there are also articles on very many subjects, such as architecture, the natural history of the ocean, the land-tax, the qualifications of surgeons, &c., the relation of which to commerce, navigation, or manufactures, it seems difficult to discover.

In 1810, a Commercial Dictionary was published, in one thick octavo volume, purporting to be by Mr. Mortimer. We understand, however, that he had but little, if any thing, to do with its compilation. It is quite unworthy of the subject, and of the epoch when it appeared. It has all the faults of those by which it was preceded, with but few peculiar merits. Being not only a Dictionary of Commerce and Navigation, but of Manufactures, it contains accounts of the different arts: but to describe these in a satisfactory and really useful manner, would require several volumes, and the co-operation of many individuals: so that, while the accounts referred to are worth very little, they occupy so large a space that room has not been left for the proper discussion of those subjects from which alone the work derives whatever value it possesses. Thus, there is an article of twenty-two pages technically describing the various processes of the art of painting, while the general article on commerce is comprised in less than *two* pages. The articles on coin and money do not together occupy four pages, being considerably less than the space allotted to the articles on engraving and etching. There is not a word said as to the circumstances which determine the course of exchange; and the important subject of credit is disposed of in less than *two lines!* Perhaps, however, the greatest defect in the work is its total want of any thing like science. No attempt is ever made to explain the principles on which any operation depends. Every thing is treated as if it were empirical and arbitrary. Except in the legal articles, no authorities are quoted so that very little dependence can be placed on the statements advanced.

In another Commercial Dictionary, republished within these few years, the general article on commerce consists of a discussion with respect to simple and compound demand, and simple and double competition: luckily the article does not fill quite a page; being considerably shorter than the description of the kaleidoscope.

Under these circumstances, we do think that there is room for a new Dictionary of Commerce and Commercial Navigation: and whatever may be thought of our Work, it cannot be said that in bringing it into the field we are encroaching on ground already fully occupied.

A DICTIONARY OF COMMERCE AND COMMERCIAL NAVIGATION.

AAM, Aum, or Ahm, a measure for liquids, used at Amsterdam, Antwerp, Hamburgh, Frankfort, &c. At Amsterdam it is nearly equal to 41 English wine gallons, at Antwerp to $36\frac{1}{2}$ ditto, at Hamburgh to $38\frac{1}{4}$ ditto, and at Frankfort to 39 ditto.

ABANDONMENT, in commerce and navigation, is used to express the abandoning or surrendering of the ship or goods insured to the insurer.

It is held, by the law of England, that the insured has the right to abandon, and to compel the insurers to pay the whole value of the thing insured, in every case "where, by the happening of any of the misfortunes or perils insured against, the voyage is lost, or not worth pursuing, and the projected adventure is frustrated; or where the thing insured is so damaged and spoiled as to be of little or no value to the owner; or where the salvage is very high; or where what is saved is of less value than the freight; or where further expense is necessary, and the insurer will not undertake to pay that expense," &c. — (*Marshall*, book i. cap. 13. § 1.)

Abandonment very frequently takes place in cases of capture: the loss is then total, and no question can arise in respect to it. In cases, however, in which a ship and cargo are recaptured *within such a time that the object of the voyage is not lost*, the insured is not entitled to abandon. The mere *stranding* of a ship is not deemed of itself such a loss as will justify an abandonment. If by some fortunate accident, by the exertions of the crew, or by any borrowed assistance, the ship be got off and rendered capable of continuing her voyage, it is not a total loss, and the insurers are only liable for the expenses occasioned by the stranding. It is only where the stranding is followed by *shipwreck*, or in any other way renders the ship incapable of prosecuting her voyage, that the insured can abandon.

It has been decided, that damage sustained in a voyage to the extent of forty-eight per cent. of the value of the ship, did not entitle the insured to abandon. If a cargo be damaged in the course of a voyage, and it appears that what has been saved is less than the amount of freight, it is held to be a total loss. — (*Park on Insurance*, cap. 9.)

When by the occurrence of any of the perils insured against the insured has acquired a right to abandon, he is at liberty either to abandon or not, as he thinks proper. He is in no case bound to abandon; but if he make an election, and resolve to abandon, he must abide by his resolution, and has no longer the power to claim for a partial loss. In some foreign countries specific periods are fixed by law within which the insured, after being informed of the loss, must elect either to abandon or not. In this country, however, no particular period is fixed for this purpose; but the rule is, that if the insured determine to abandon, he must intimate such determination to the insurers within a *reasonable period* after he has got intelligence of the loss, — any unnecessary delay in making this intimation being interpreted to mean that he has decided not to abandon.

No particular form or solemnity is required in giving notice of an abandonment. It may be given either to the underwriter himself, or the agent who subscribed for him.

The effect of an abandonment is to vest all the rights of the insured in the insurers. The latter become the legal owners of the ship, and as such are liable for all her future outgoings, and entitled to her future earnings. An abandonment, when once made, is irrevocable.

In case of a shipwreck or other misfortune, the captain and crew are bound to exert themselves to the utmost to save as much property as possible; and to enable them to do this without prejudice to the right of abandonment, our policies provide that, "in case of any loss or misfortune, the insured, their factors, servants, and assigns, shall be at liberty to sue and labour about the defence, safeguard, and recovery of the goods, and merchandises, and ship, &c., without prejudice to the insurance; to the charges whereof the insurers agree to contribute, each according to the rate and quantity of his subscription."

"From the nature of his situation," says Mr. Serjeant Marshall, "the captain has an implied authority, not only from the insured, but also from the insurers and all others interested in the ship or cargo, in case of misfortune, to do whatever he thinks most conducive to the general interest of all concerned; and they are all bound by his acts. Therefore, if the ship be disabled by stress of weather, or any other peril of the sea, the captain may hire another vessel for the transport of the goods to their port of destination, if he think it for the interest of all concerned that he should do so; or he may, upon a capture, appeal against a sentence of condemnation, or carry on any other proceedings for the recovery of the ship and cargo, provided he has a probable ground for doing so; or he may, upon the loss of the ship, invest the produce of the goods saved in other goods, which he may ship for his original port of destination; for whatever is recovered of the effects insured, the captain is accountable to the insurers. If the insured neglect to abandon when he has it in his power to do so, he adopts the acts of the captain, and he is bound by them. If, on the other hand, the insurers, after notice of abandonment, suffer the captain to continue in the management, he becomes their agent, and they are bound by his acts."

As to the sailors, when a misfortune happens, they are bound to save and preserve the merchandise to the best of their power; and while they are so employed, they are entitled to wages, so far, at least, as what is saved will allow; but if they refuse to assist in this, they shall have neither wages nor reward. In this the Rhodian law, and the laws of Oleron, Wisby, and the Hanse Towns, agree.

The policy of the practice of abandonment seems very questionable. The object of an insurance is to render the insurer liable for whatever loss or damage may be incurred. But this object does not seem to be promoted by compelling him to pay as for a total loss, when, in fact, the loss is only partial. The captain and crew of the ship are selected by the owners, are their servants, and are responsible to them for their proceedings. But in the event of a ship being stranded, and so damaged that the owners are entitled to abandon, the captain and crew become the servants of the underwriters, who had nothing to do with their appointment, and to whom they are most probably altogether unknown. It is admitted that a regulation of this sort can hardly fail of leading, and has indeed frequently led, to very great abuses. We, therefore, are inclined to think that abandonment ought not to be allowed where any property is known to exist; but that such property should continue at the disposal of the owners and their agents, and that the underwriters should be liable only for the damage really incurred. The first case that came before the British courts with respect to abandonment was decided by Lord Hardwicke, in 1744. Mr. Justice Buller appears to have concurred in the opinion now stated, that abandonment should not have been allowed in cases where the loss is not total.

For further information as to this subject, see the excellent works of Mr. Serjeant Marshall (book i. cap. 13.); and of Mr. Justice Park (cap. 9.) on the Law of Insurance.

ABATEMENT, or Rebate, is the name sometimes given to a discount allowed for prompt payment; it is also used to express the deduction that is sometimes made at the custom-house from the duties chargeable upon such goods as are damaged. This allowance is regulated by the 6 Geo. 4. c. 107. § 28. No abatement is made from the duties charged on coffee, currants, figs, lemons, oranges, raisins, tobacco, and wine.

ACACIA. See Gum Arabic.

ACAPULCO, a celebrated sea-port on the western coast of Mexico, in lat. 16° 50½′ N., long. 99° 46′ W. Population uncertain, but said to be from 4,000 to 5,000. The harbour of Acapulco is one of the finest in the world, and is capable of containing any number of ships in the most perfect safety. Previously to the emancipation of Spanish America, a galleon or large ship, richly laden, was annually sent from Acapulco to Manilla, in the Philippine Islands; and at her return a fair was held, which was much resorted to by strangers. But this sort of intercourse is no longer carried on, the trade to Manilla and all other places being now conducted by private individuals. The exports consist of bullion, cochineal, cocoa, wool, indigo, &c. The imports principally consist of cotton goods, hardware, articles of jewellery, raw and wrought silks, spices, and aromatics. Acapulco is extremely unhealthy; and though it be the principal port on the west coast of Mexico, its commerce is not very considerable. The navigation from Acapulco to Guayaquil and Callao is exceedingly tedious and difficult, so that there is but little intercourse between Mexico and Peru. The monies, weights, and measures are the same as those of Spain; for which see Cadiz.

ACIDS, are a class of compounds which are distinguished from all others by the following properties. They are generally possessed of a very sharp and sour taste: redden the infusions of blue vegetable colours; are often highly corrosive, and enter into combination with the alkalies, earths, and metallic oxides; forming compounds in which the characters of the constituents are entirely destroyed, and new ones produced differing in every respect from those previously existing. The quality or strength of an acid is generally ascertained, either by its specific gravity, which is found by means of the hydrometer, if the acid be liquid, or by the quantity of pure and dry subcarbonate of potass or soda, or of carbonate of lime (marble), which a given weight of the acid requires for its exact neutralisation. This latter process is termed Acidimetry, or the ascertaining the quantity of *real* acid existing in any of the liquid or crystallised acids.

The principal acids at present known are, the Acetic, Benzoic, Boracic, Bromic, Carbonic, Citric, Chloric, Cyanic, Fluoric, Ferroprussic, Gallic, Hydrobromic, Hydriodic, Iodic, Lactic, Malic, Margaric, Meconic, Muriatic or Hydrochloric, Nitrous, Nitric, Oleic, Oxalic, Phosphoric, Prussic or Hydrocyanic, Purpuric, Saccholactic, Suberic, Sulphurous, Sulphuric, Tartaric, Uric, and many others which it would be superfluous to detail. It is the most important only of these, however, that will be here treated of, and more particularly those employed in the arts and manufactures.

Acetic or pyroligneous acid. — This acid, in its pure and concentrated form, is obtained from the fluid matter which passes over in distillation, when wood is exposed to heat in close iron cylinders. This fluid is a mixture of acetic acid, tar, and a very volatile ether; from these the acid may be separated, after a second distillation, by saturating with chalk, and evaporating to dryness; an acetate of lime is thus procured, which, by mixture with sulphate of soda (Glauber's salt), is decomposed, the resulting compounds being an insoluble sulphate of lime, and a very soluble acetate of soda; these are easily separated from each other by solution in water and filtration; the acetate of soda being obtained in the crystalline form by evaporation. From this, or the acetate of lime, some manufacturers employing the former, others the latter, the acetic acid is obtained by distillation with sulphuric acid (oil of vitriol); as thus procured, it is a colourless, volatile fluid, having a very pungent and refreshing odour, and a strong acid taste. Its strength should be ascertained by the quantity of marble required for its neutralisation, as its specific gravity does not give a correct indication. It is employed in the preparation of the acetate of lead (sugar of lead), in many of the pharmaceutical compounds, and also as an antiseptic.

Vinegar is an impure and very dilute acetic acid, obtained by exposing either weak wines or infusions of malt to the air and a slow fermentation; it contains, besides the pure acid, a large quantity of colouring matter, some mucilage, and a little spirit; from these it is readily separated by distillation. The impurities with which this distilled vinegar is sometimes adulterated, or with which it is accidentally contaminated, are oil of vitriol, added to increase the acidity, and oxides of tin or copper, arising from the vinegar having been distilled through tin or copper worms. These may be easily detected; the oil of vitriol by the addition of a little solution of muriate of barytes to the distilled vinegar, which, should the acid be present, will cause a dense white precipitate; and the oxides of tin or copper by the addition of water impregnated with sulphureted hydrogen. Vinegar is employed in many culinary and domestic operations, and also very largely in the manufacture of the carbonate of lead (white lead).

Benzoic acid — exists naturally, formed in the gum benzoin, and may be procured either by submitting the benzoin in fine powder to repeated sublimations, or by digesting it with lime and water, straining off the clear solution, and adding muriatic acid, which enters into combination with the lime, and the benzoic acid, being nearly insoluble in water, falls as a white powder; this may be further purified by a sublimation. Benzoic acid is of a beautiful pearly white colour when pure, has a very peculiar aromatic odour, and an acrid, acid, and bitter taste; it is used in making pastilles and perfumed incense. This acid also occurs in the balsams of Tolu and Peru, and in the urine of the horse and cow.

Boracic acid — is found in an uncombined state in many of the hot springs of Tuscany, as also at Sesso in the Florentine territory, from whence it has received the name of Sessolin. In Thibet, Persia, and South America, it occurs in combination with soda, and is imported from the former place into this country in a crystalline form, under the name of Tincal. These crystals are coated with a rancid, fatty substance, and require to be purified by repeated solutions and crystallisations; after which it is sold under the appellation of borax (bi-borate of soda); from a hot solution of this salt the boracic acid is readily obtained, by the addition of sulphuric acid in slight excess; sulphate of soda is formed, and the boracic acid crystallises as the solution cools. When pure, these crystals are white, and have an unctuous greasy feel; they are soluble in alcohol, communicating a green tinge to its flame; when fused it forms a transparent glass, and has been found by Mr. Faraday to unite with the oxide of lead, producing a very uniform glass, free from all defects, and well adapted for the purpose of telescopes and other astronomical instruments. Borax is much employed in the arts, particularly in metallurgic operations as a flux; also in enamelling, and in pharmacy.

Carbonic acid. — This acid occurs very abundantly in nature, combined with lime, magnesia, barytes, aerial acid, fixed air, mephitic acid; from any of these it is easily separated by the addition of nearly any of the other acids. In its uncombined form, it is a transparent, gaseous fluid, having a density of 1·53, atmospheric air being unity; it is absorbed to a considerable extent by water, and when the water is rendered slightly alkaline by the addition of carbonate of soda, and a large quantity of gas forced into it by pressure, it forms the well known refreshing beverage, soda water. This gas is also formed in very large quantities during combustion, respiration, and fermentation. Carbonic acid gas is destructive of animal life and combustion, and from its great weight accumulates in the bottoms of deep wells, cellars, caves, &c., which have been closed for a long period, and numerous fatal accidents arise frequently to persons entering such places incautiously; the precaution should always be taken of introducing a lighted candle prior to the descent or entrance of any one; for should the candle be extinguished, it would be dangerous to enter until properly ventilated. The combinations of carbonic acid with the alkalies, earths, and metallic oxides are termed carbonates.

Citric acid — exists in a free state, in the juice of the lemon, lime, and other fruits, combined however with mucilage, and sometimes a little sugar, which renders it, if required to be preserved for a long period, very liable to ferment; on this account, the crystallised citric acid is to be preferred. It is prepared by saturating the lemon juice with chalk: the citric acid combines with the lime, forming an insoluble compound, while the carbonic acid is liberated; the insoluble citrate, after being well washed, is to be acted upon by dilute sulphuric acid, which forms sulphate of lime, and the citric acid enters into solution in the water; by filtration and evaporation the citric acid is obtained in colourless transparent crystals. The chief uses to which it is applied are as a preventive of sea scurvy, and in making refreshing acidulous or effervescing drinks; for which latter purposes it is peculiarly fitted from its very pleasant flavour.

Fluoric acid — is found in the well known mineral fluor spar in combination with lime; from which it is

procured in the liquid form, by distillation with dilute sulphuric acid in a leaden or silver retort; the receiver should be of the same material as the retort, and kept cool by ice or snow.

This acid is gaseous in its pure form, highly corrosive, and intensely acid; it is rapidly absorbed by water, communicating its properties to that fluid. Its chief use is for etching on glass, which it corrodes with great rapidity. For this purpose a thin coating of wax is to be melted on the surface of the glass, and the sketch drawn by a fine hard-pointed instrument through the wax; the liquid acid is then poured on it, and after a short time, on the removal of the acid and coating, an etching will be found in the substance of the glass. A very excellent application of this property, possessed by fluoric acid, is in the roughing the shades for table lamps. All the metals, except silver, lead, and platina, are acted upon by this acid.

Gallic acid. — The source from which this acid is generally obtained is the nut gall, a hard protuberance produced on the oak by the puncture of insects. The most simple method of procuring the acid in its pure form, is to submit the galls in fine powder to sublimation in a retort, taking care that the heat be applied slowly and with caution; the other processes require a very long period for their completion. When pure, gallic acid has a white and silky appearance, and a highly astringent and slightly acid taste. The nut galls, which owe their properties to the gallic acid they contain, are employed very extensively in the arts, for dyeing and staining silks, cloths, and woods of a black colour; this is owing to its forming with the oxide of iron an intense black precipitate. Writing ink is made on the same principle: a very excellent receipt of the late Dr. Black's is, to take 3 oz. of the best Aleppo galls in fine powder, 1 oz. sulphate of iron (green vitriol), 1 oz. logwood finely rasped, 1 oz. gum arabic, one pint of the best vinegar, one pint of soft water, and 8 or 10 cloves; in this case the black precipitate is kept suspended by the gum.

Hydriodic acid, — a compound of iodine and hydrogen, in its separate form is of very little importance in the arts; its combinations with potass, soda, and other of the metallic oxides, will be treated of hereafter.

Malic acid — exists in the juices of many fruits, particularly the apple, as also in the berries of the service and mountain ash.

Meconic acid — is found in opium, in combination with morphia, forming the meconate of morphia, on which the action of opium principally depends.

Muriatic acid, or spirits of salts. — This acid (the hydrochloric of the French chemists) is manufactured from the chloride of sodium (dry sea salt), by the action of sulphuric acid (oil of vitriol). The most economical proportions are 20 pounds of fused salt, and 20 pounds of oil of vitriol previously mixed with an equal weight of water; these are placed in an iron or earthen pot, to which an earthen head and receiver are adapted, and submitted to distillation; the muriatic acid passes over in the vaporous form, and may be easily condensed. The liquid acid thus obtained should have a specific gravity of 1·17, water being equal to 100; it has a strong acid taste, and a slight yellow colour; this is owing to a small quantity of oxide of iron. By redistillation in a glass retort at a low temperature, it may be obtained perfectly pure and colourless. It sometimes contains a little sulphuric acid; this is detected by a solution of muriate of barytes. Muriatic acid, in its uncombined state, is an invisible elastic gas, having a very strong affinity for water; that fluid absorbing, at a temperature of 40° Fahrenheit, 480 times its volume, and the resulting liquid acid has a density of 121. So great is this attraction for water, that when the gas is liberated into the air, it combines with the moisture always present in that medium, forming dense white vapours. Its combinations with the alkalies, &c. are termed muriates; those of the greatest importance are, the muriates of tin, ammonia, barytes, and sea salt. The test for the presence of muriatic acid in any liquid is the nitrate of silver (lunar caustic), which causes a curdy white precipitate.

Nitric acid, or aquafortis. — This, which is one of the most useful acids with which the chemist is acquainted, is prepared by acting upon saltpetre (nitre or nitrate of potass) with oil of vitriol: the proportions best suited for this purpose are, three parts by weight of nitre and two of oil of vitriol; or 100 nitre, and 60 oil of vitriol previously diluted with 20 of water; either of these proportions will produce a very excellent acid. When submitted to distillation, which should be conducted in earthen or glass vessels, the nitric acid passes over in the form of vapour, and a bisulphate of potass (sal mixum) remains in the retort.

Nitric acid of commerce has usually a dark orange-red colour, giving off copious fumes, and having a specific gravity of 150, water being 100. It is strongly acid and highly corrosive. It may be obtained perfectly colourless by a second distillation, rejecting the first portion that passes over. It is much employed in the arts, for etching on copper-plates for engraving; also, for the separation of silver from gold, in the process of quartation. In pharmacy and surgery it is extensively used, and is employed for destroying contagious effluvia. Combined with muriatic acid, it forms aqua regia (nitro-muriatic acid), used as a solvent for gold, platina, &c. This acid is frequently contaminated with the muriatic and sulphuric acids; these may be detected by the following methods.—A portion of the suspected acid should be diluted with three or four times its volume of distilled water, and divided into two glasses; to one of which nitrate of silver (lunar caustic in solution) is to be added, and to the other, nitrate of barytes: if muriatic acid be present, a white curdy precipitate will be thrown down by the former; and if sulphuric, a white granular precipitate by the latter.

Oxalic acid — occurs in combination with potass as binoxalate of potass in the different varieties of sorrel, from whence the binoxalate of potass has been termed salt of sorrel. This acid is usually prepared by the action of nitric acid upon sugar, evaporating the solution, after the action has ceased, to the consistence of a syrup, and redissolving and recrystallising the crystals which are thus procured.

It is sold in small white acicular crystals, of a strongly acid taste and highly poisonous, and sometimes in its external appearance bears a strong similarity to Epsom salts (sulphate of magnesia), which it has been unfortunately frequently mistaken for. It is instantly distinguished from Epsom salts by placing a small crystal upon the tongue; when its strong acid taste, compared with the nauseous bitter of the sulphate of magnesia, will be quite a sufficient criterion. In cases of poisoning however by this acid, lime, or chalk, mixed with water to form a cream, should be immediately administered, the combinations of oxalic acid with these substances being perfectly inert. It is employed in removing ink stains, iron moulds, &c. from linen and leather; the best proportions for these purposes are, 1 oz. of the acid to a pint of water. The most delicate test of the presence of oxalic acid is, a salt of lime or lime-water, with either of which it forms a white precipitate, insoluble in water, but soluble in acids. Its combinations are termed oxalates.

Phosphoric acid — is of very little importance in a commercial point of view, except as forming with lime the earth of bones (phosphate of lime). It is prepared by heating bones to whiteness in a furnace; from this phosphoric acid is obtained by the action of sulphuric acid, still combined, however, with a small quantity of lime. The action of nitric acid upon phosphorus, the latter being added gradually and in small pieces, yields this acid in a state of purity; its combinations are termed phosphates.

Prussic acid, or hydrocyanic acid. — This acid, which is the most virulent and poisonous acid known, is contained in peach blossoms, bay leaves, and many other vegetable productions, which owe their peculiar odour to the presence of prussic acid. For the purposes of medicine and chemistry, this acid is prepared either by distilling one part of the cyanuret of mercury, one part of muriatic acid of specific gravity 1·15, and six parts of water, six parts of prussic acid being collected; or, by dissolving a certain weight of cyanuret of mercury, and passing a current of sulphureted hydrogen through the solution, until the whole of the mercury shall be precipitated; if an excess of sulphureted hydrogen should be present, a little carbonate of lead (white lead), will remove it; on filtering, a colourless prussic acid will be obtained. By the first process, which is the one followed at Apothecaries' Hall, the acid has a density 995, water being equal to 1000; by the latter, it may be procured of any required strength, depending on the quantity

of cyanuret of mercury dissolved. The best test for the presence of this acid is, first to add a small quantity of the protosulphate of iron (solution of green vitriol), then a little solution of potassa, and lastly diluted sulphuric acid; if prussic acid be present, prussian blue will be formed. Its combinations are called prussiates or hydrocyanates; when in its concentrated form, it is so rapid in its effects that large animals have been killed in the short space of 80 seconds, or from a minute to a minute and a half.

Sulphurous acid — is formed whenever sulphur is burnt in atmospheric air: it is a suffocating and pungent gas, strongly acid, bleaches vegetable colours with great rapidity, and arrests the process of vinous fermentation. For these purposes it is therefore very much employed, especially in bleaching woollen goods and straws. Fermentation may be immediately arrested by burning a small quantity of sulphur in casks, and then racking off the wine while still fermenting into them; this frequently gives the wine a very unpleasant taste of sulphur, which is avoided by the use of sulphate of potass, made by impregnating a solution of potass with sulphurous acid gas.

Sulphuric acid, or oil of vitriol — called oil of vitriol from its having been formerly manufactured from green vitriol (sulphate of iron). In some parts of the Continent this process is still followed. The method generally adopted in this country, is to introduce nine parts of sulphur, intimately mixed with one part of nitre, in a state of active combustion, into large leaden chambers, the bottoms of which are covered with a stratum of water. Sulphurous and nitrous acid gases are generated, which entering into combination form a white crystalline solid, which falls to the bottom of the chamber; the instant that the water comes in contact with it, this solid is decomposed with a hissing noise and effervescence, sulphuric acid combines with the water, and nitrous gas is liberated, which combining with oxygen from the air of the chamber, is converted into nitrous acid gas, again combines with sulphurous acid gas, and again falls to the bottom of the chamber: this process continues as long as the combustion of the sulphur is kept up, or as long as atmospheric air remains in the chamber; the nitrous acid merely serving as a means for the transference of oxygen from the atmosphere to the sulphurous acid, to convert it into sulphuric acid. The water is removed from the chamber when of a certain strength, and replaced by fresh. These acid waters are then evaporated in leaden boilers, and finally concentrated in glass or platina vessels. As thus manufactured, sulphuric acid is a dense oily fluid, colourless, intensely acid, and highly corrosive, and has a specific gravity of 1,846, water being equal to 1,000. This acid is the most important with which we are acquainted; it is employed in the manufacture of the nitric, muriatic, acetic, phosphoric, citric, tartaric, and many other acids; also in the preparation of chlorine, for the manufacture of the bleaching powder (oxymuriate of lime or chloride of lime), for the preparation of sulphate of mercury, in the manufacture of calomel and corrosive sublimate, and in innumerable other chemical manufactures. In the practice of physic it is also very much employed. It usually contains a little oxide of lead, which is readily detected by diluting the acid with about four times its volume of water, and allowing the sulphate of lead to subside. Its combinations are denominated sulphates. The fuming sulphuric acid, as manufactured at Nordhausen, contains only one half the quantity of water in its composition.

Tartaric acid. — This acid is procured from the cream of tartar (bitartrate of potass), obtained by purifying the crust which separates during the fermentation of wines by solution and crystallisation. When this purified bitartrate is dissolved, and lime or carbonate of lime added, an insoluble tartrate of lime falls, which after washing should be acted upon by sulphuric acid; sulphate of lime is thus formed, and the tartaric acid enters into solution, and may be obtained by evaporation and crystallisation. It is employed very much in the arts, in calico-printing, as also in making effervescing draughts and powders in pharmacy.

Uric acid — is an animal acid of very little importance, except in a scientific point of view: it exists in the excrement of serpents, to the amount of 95 per cent., and forms the basis of many of the urinary calculi and gravel.

N. B. *This article, and that on alkalies, has been furnished by an able practical chemist.*

ACORNS (Ger. *Eicheln, Eckern;* Fr. *Glands;* It. *Ghiande;* Sp. *Bellotas;* Rus. *Schedudii;* Lat. *Glandes*), the seed or fruit of the oak. Acorns formed a part of the food of man in early ages, and frequent allusion is made in the classics to this circumstance (*Virgil, Georg.* lib. i. lin. 8.; *Ovid. Met.* lib. i. lin. 106, &c.). In some countries they are still used, in periods of scarcity, as a substitute for bread. With us they are now rarely used except for fattening hogs and poultry. They are said to make, when toasted, with the addition of a little fresh butter, one of the best substitutes for coffee. Their taste is astringent and bitter.

ACORUS (*Calamus aromaticus*), sweet flag, or sweet rush, a red or knotty root, about the thickness of the little finger, and several inches long. "The root of the sweet flag has a pleasant aromatic odour, similar to that of a mixture of cinnamon and allspice. The taste is warm, pungent, bitterish, and aromatic." — (*Thomson's Dispensatory.*) The root, which is used in medicine, was formerly imported from the Levant, but it is now obtained of an equally good quality from Norfolk.

ACRE, a measure of land. The Imperial or standard English acre contains 4 roods, each rood 40 poles or perches, each pole $272\frac{1}{4}$ square feet; and consequently each acre $= 43{,}560$ square feet. Previously to the introduction of the new system of weights and measures by the act 5 Geo. IV. cap. 74., the acres in use in different parts of England varied considerably from each other and from the standard acre; but these customary measures are now abolished. The Scotch acre contains four roods, each rood 40 falls, and each fall 36 ells; the ell being equal to 37·06 Imperial inches. Hence the Imperial is to the Scotch acre nearly as 1 to $1\frac{1}{4}$, one Scotch acre being equal to 1·261 Imperial acres. The Irish acre is equal to 1 acre 2 roods and $19\frac{21}{121}$ poles; $30\frac{1}{4}$ Irish being equal to 49 Imperial acres.

ADAMANTINE SPAR (Hind. *Corundum*), a stone so called from its hardness, found in India, Ava, China, &c., crystallised, or in a mass. It is ascertained to be a species of sapphire. The Indian variety is the best. Colour grey, with shades of green and light brown; fracture foliated and sparry, sometimes vitreous. It is brittle, and so hard as to cut rock crystal and most of the gems. Specific gravity from 3·71 to 4·18. The Chinese variety differs from the Indian in containing grains of magnetic iron ore disseminated through it, in being generally of a darker colour, and having externally a *chatoyant* lustre: its specific gravity is greater, and its hardness somewhat inferior. It is employed to polish gems.

ADJUSTMENT, in commercial navigation, the settlement of a loss incurred by the insured.

In the case of a total loss, if the policy be an *open* one, the insurer is obliged to pay the goods according to their *prime cost*, that is, the invoice price, and all duties and expenses incurred till they are put on board, including the premium of insurance. Whether they might have arrived at a good or a bad market, is held by the law of England to be immaterial. The insurer is supposed to have insured a constant and not a variable sum; and in the event of a loss occurring, the insured is merely to be put into the same situation in which he stood before the transaction began. If the policy be a *valued* one, the practice is to adopt the valuation fixed in it in case of a total loss, unless the insurers can show that the insured had a colourable interest only, or that the goods were greatly over-valued. In the case of all partial losses, the value of the goods must be proved.

"The nature of the contract between the insured and insurer is," says Mr. Justice Park, "that the goods shall come safe to the port of delivery; or, if they do not, that the insurer will indemnify the owner to the amount of the value of the goods stated in the policy. Wherever then the property insured is lessened in value by damage received at sea, justice is done by putting the merchant in the same condition (relation being had to the prime cost or value in the policy) in which he would have been had the goods arrived free from damage; that is, by paying him such proportion of the prime cost or value in the policy as corresponds with the proportion of the diminution in value occasioned by the damage. The question then is, how is the proportion of the damage to be ascertained? It certainly cannot be by any measure taken from the prime cost; but it may be done in this way:—Where any thing, as a hogshead of sugar, happens to be spoiled, if you can fix whether it be a third, a fourth, or a fifth worse, then the damage is ascertained to a mathematical certainty. How is this to be found out? Not by any price at the port of shipment, but it must be at the port of *delivery*, when the voyage is completed and the whole damage known. Whether the price at the latter be high or low, it is the same thing; for in either case it equally shows whether the damaged goods are a third, a fourth, or a fifth worse than if they had come sound; consequently, whether the injury sustained be a third, fourth, or fifth of the value of the thing. And as the insurer pays the whole prime cost if the thing be wholly lost, so if it be only a third, fourth, or fifth worse, he pays a third, fourth, or fifth, not of the value for which it is sold, *but of the value stated in the policy*. And when no valuation is stated in the policy, the invoice of the cost, with the addition of all charge, and the premium of insurance, shall be the foundation upon which the loss shall be computed."

Thus, suppose a policy to be effected on goods, the prime cost of which, all expenses included, amounts to 1,000*l.*; and suppose further, that these goods would, had they safely reached the port of delivery, have brought 1,200*l.*, but that, owing to damage they have met with in the voyage, they only fetch 800*l.*; in this case it is plain, inasmuch as goods that would otherwise have been worth 1,200*l.* are only worth 800*l.*, that they have been deteriorated *one third;* and hence it follows, conformably to what has been stated above, that the insurer must pay one third of their *prime cost* (1,000*l.*), or 333*l.* 6*s.* 8*d.* to the insured.

In estimating the value of goods at the port of delivery, the *gross* and not the *nett* proceeds of the sales are to be taken as the standard.

A ship is valued at the sum she is worth at the time she sails on the voyage insured, including the expenses of repairs, the value of her furniture, provisions, and stores, the money advanced to the sailors, and, in general, every expense of the outfit, to which is added the premium of insurance.

When an adjustment is made, it is usual for the insurer to indorse upon the policy "adjusted this loss at (so much) per cent." payable in a given time, generally a month, and to sign it with the initials of his name. This is considered as a note of hand, and as such is *primâ facie* evidence of the debt not to be shaken, but by proving that fraud was used in obtaining it, or that there was some misconception of the law or the fact upon which it was made. See, for a further discussion of this subject, the article MARINE INSURANCE, *Park on the Law of Insurance* (cap. 6.), and *Marshall* (book i. cap. 14.).

ADMEASUREMENT. See TONNAGE.

ADVANCE implies money paid before goods are delivered, or upon consignment. It is usual with merchants to advance from a half to two thirds of the value of goods consigned to them, on being required, on their receiving invoice, bill of lading, orders to insure them from sea risk, &c.

ADVERTISEMENT, in its general sense, is any information as to any fact or circumstance that has occurred, or is expected to occur; but, in a commercial sense, it is understood to relate only to specific intimations with respect to the sale of articles, the formation and dissolution of partnerships, bankruptcies, meetings of creditors, &c. Until last year, a duty of 3*s.* 6*d.* was charged upon every advertisement, long or short, inserted in the Gazette, or in any newspaper, or literary work published in parts

or numbers. This duty added about 100 per cent. to the cost of advertising, for the charge (exclusive of the duty) for inserting an advertisement of the ordinary length in the newspapers rarely exceeds 3*s.* or 4*s.* In 1832, the duty produced 155,401*l.* in Great Britain, and 15,249*l.* in Ireland.

Last year (1833) the duty on advertisements was reduced to 1*s.* 6*d.*; and this, we have no doubt, will occasion such an increase of advertising as to prevent the revenue from being materially injured by the reduction. But, instead of being modified merely, this is a duty that ought to be wholly repealed. Its operation is necessarily most unequal, and, in many instances, most oppressive. Can any thing be more glaringly unjust than to impose the same duty on a notice of the publication of a sixpenny pamphlet, or of a servant being out of place, as on an intimation of the sale of a valuable estate? But as it is altogether impossible to impose the duty on an *ad valorem* principle, this injustice cannot be obviated so long as it is maintained. In a commercial country, a duty on advertisements is peculiarly objectionable, inasmuch as it checks the circulation of information of much importance to mercantile men. We, therefore, hope that this unjust and impolitic tax may be speedily given up. Its abandonment would not cause any diminution of revenue; for it is abundantly certain that its loss would be more than made up by the increased productiveness of the duties on paper and newspaper stamps. For an account of the operation of the stamp duty on literature, see Books.

ADVICE, is usually given by one merchant or banker to another *by letter*, informing him of the bills or drafts drawn on him, with all particulars of date, or sight, the sum, to whom made payable, &c. Where bills appear for acceptance or payment, they are frequently refused to be honoured for *want of advice*. It is also necessary to give advice, as it prevents forgeries: if a merchant accept or pay a bill for the honour of any other person, he is bound to advise him thereof, and this should always be done under *an act of honour* by a notary public.

AGARIC, a fungus growing on the trunks of trees. That produced in the Levant from the larch is accounted the best. It is brought into the shops in irregular pieces of different magnitudes, of a chalky whiteness, and very light. The best is easily cut with a knife, is friable between the fingers, and has no hard, gritty, or coloured veins. It is used in medicine and dyeing.—(*Lewis, Mat. Med.*)

AGATE (popularly Cornelian), (Ger. *Achat;* Du. *Achaat;* Fr. *Agate;* It. *Agata;* Rus. *Agat;* Lat. *Achates*). A genus of semi-pellucid gems, so called from the Greek αχατες, because originally found on the banks of the river of that name in Italy. It is never wholly opaque like jasper, nor transparent as quartz-crystal; it takes a very high polish, and its opaque parts usually present the appearance of dots, eyes, veins, zones, or bands. Its colours are yellowish, reddish, bluish, milk-white, honey-orange, or ochre-yellow, flesh-blood, or brick-red, reddish brown, violet blue, and brownish green. It is found in irregular rounded nodules, from the size of a pin's head to more than a foot in diameter. The lapidaries distinguish agates according to the colour of their ground; the finer semi-transparent kinds being termed oriental. The most beautiful agates found in Great Britain are commonly known by the name of *Scotch pebbles*, and are met with in different parts of Scotland, but principally on the mountain of Cairngorm; whence they are sometimes termed Cairngorms. The German agates are the largest. Some very fine ones have been brought from Siberia and Ceylon. They are found in great plenty at the eastern extremity of the settlement of the Cape of Good Hope; and are still met with in Italy. But the principal mines of agate are situated in the little principality of Rajpepla, in the province of Gujrat, fourteen miles distant from the city of Broach, where they are cut into beads, crosses, snuff-boxes, &c. They are exported in considerable quantities to other parts of India, and to this country; and hence, perhaps, the jewellers' term "broach."

AGENT. See Factor.

AGIO, a term used to express the difference, in point of value, between metallic and paper money; or between one sort of metallic money and another.

ALABASTER (Ger. *Alabaster;* It. *Alabastro;* Fr. *Albâtre;* Rus. *Alabastr;* Lat. *Alabastrites*). A kind of stone resembling marble, but softer. Under this name are confounded two minerals, the *gypseous* and *calcareous* alabasters; they are wholly distinct from each other when pure, but in some of the varieties are occasionally mixed together. The former, when of a white or yellowish, or greenish colour, semi-transparent, and capable of receiving a polish, is employed by statuaries. It is very easily worked, but is not susceptible of a polish equal to marble. Calcareous alabaster is heavier than the former; it is not so hard as marble, but is notwithstanding susceptible of a good polish, and is more used in statuary. The statuaries distinguish alabaster into two sorts, the common and oriental. Spain and Italy yield the best alabaster. That produced at Montania, in the papal states, is in the highest esteem for its beautiful whiteness. Inferior sorts are found in France and Germany. Alabaster is wrought into tables, vases, statues, chimney-pieces, &c.

ALCOHOL, (ardent Spirit) (Fr. *Esprit de Vin;* Ger. *Weingeist;* It. *Spirito ardente, Spirito di Vino, Acquarzente*), the name given to the *pure spirit* obtainable by distillation, and subsequent rectification, from all liquors that have undergone the vinous fermentation, and from none but such as are susceptible of it. It is light, transparent, colourless, of a sharp, penetrating, agreeable smell, and a warm stimulating

taste. It is quite the same, whether obtained from brandy, wine, whisky, or any other fluid which has been fermented. The specific gravity of alcohol when perfectly pure is from ·792 to ·800, that of water being 1,000; but the strongest spirit afforded by mere distillation is about ·820; alcohol of the shops is about ·835 or ·840. Alcohol cannot be frozen by any known degree of cold. It boils at 174°. It is the only dissolvent of many resinous substances; and is extensively used in medicine and the arts.—(*Drs. A. T. Thomson, Ure,* &c.)

ALDER, the *Betula alnus* of botanists, a forest tree abundant in England and most parts of Europe. It thrives best in marshy grounds and on the banks of rivers. It rarely attains to a very great size; its wood is extremely durable in water or in wet ground; and hence it is much used for piles, planking, pumps, pipes, sluices, and generally for all purposes where it is kept constantly wet. It soon rots when exposed to the weather or to damp; and when dry, it is much subject to worms. The colour of the wood is reddish yellow, of different shades, and nearly uniform. Texture very uniform, with larger septa of the same colour as the wood. It is soft, and works easily.—(*Tredgold's Principles of Carpentry.*)

ALE and BEER, well known and extensively used fermented liquors, the principle of which is extracted from several sorts of grain, but most commonly from barley, after it has undergone the process termed malting.

1. *Historical Notice of Ale and Beer.*—The manufacture of ale or beer is of very high antiquity. Herodotus tells us, that owing to the want of wine, the Egyptians drank a liquor fermented from barley (lib. ii. cap. 77.). The use of it was also very anciently introduced into Greece and Italy, though it does not appear to have ever been very extensively used in these countries. Mead, or metheglin, was probably the earliest intoxicating liquor known in the North of Europe. Ale or beer was, however, in common use in Germany in the time of Tacitus (*Morib. Germ.* cap. 23.). "All the nations," says Pliny, "who inhabit the West of Europe have a liquor with which they intoxicate themselves, made of corn and water (*fruge madida*). The manner of making this liquor is somewhat different in Gaul, Spain, and other countries, and it is called by many various names; but its nature and properties are every where the same. The people of Spain, in particular, brew this liquor so well that it will keep good for a long time. So exquisite is the ingenuity of mankind in gratifying their vicious appetites, that they have thus invented a method to make water itself intoxicate."—(*Hist. Nat.* lib. xiv. cap. 22.) The Saxons and Danes were passionately fond of beer; and the drinking of it was supposed to form one of the principal enjoyments of the heroes admitted to the hall of Odin.—(*Mallet's Northern Antiquities*, cap. 6, &c.) The manufacture of ale was early introduced into England. It is mentioned in the laws of Ina, King of Wessex; and is particularly specified among the liquors provided for a royal banquet in the reign of Edward the Confessor. It was customary in the reigns of the Norman princes to regulate the price of ale; and it was enacted, by a statute passed in 1272, that a brewer should be allowed to sell two gallons of ale for a penny in cities, and three or four gallons for the same price in the country.

The use of hops in the manufacture of ale and beer seems to have been a German invention. They were used in the breweries of the Netherlands, in the beginning of the fourteenth century; but they do not seem to have been introduced into England till 200 years afterwards, or till the beginning of the sixteenth century. In 1530, Henry VIII. enjoined brewers not to put hops into their ale. It would, however, appear that but little attention was paid to this order; for in 1552 hop plantations had begun to be formed.—(*Beckmann's Hist. Invent.* vol. iv. pp. 336—341. Eng. ed.) The addition of hops renders ale more palatable, by giving it an agreeable bitter taste, while, at the same time, it fits it for being kept much longer without injury. Generally speaking, the English brewers employ a much larger quantity of hops than the Scotch. The latter are in the habit of using, in brewing the fine Edinburgh ale, from a pound to a pound and a half of hops for every bushel of malt.

2. *Distinction between Ale and Beer, or Porter.*—This distinction has been ably elucidated by Dr. Thomas Thomson, in his valuable article on Brewing, in the Supplement to the Encyclopædia Britannica:—"Both ale and beer are in Great Britain obtained by fermentation from the malt of barley; but they differ from each other in several particulars. Ale is light-coloured, brisk, and sweetish, or at least free from bitter; while beer is dark-coloured, bitter, and much less brisk. What is called *porter* in England is a species of beer; and the term "porter" at present signifies what was formerly called *strong beer*. The original difference between ale and beer was owing to the malt from which they were prepared. Ale malt was dried at a very low heat, and consequently was of a pale colour; while beer or porter malt was dried at a higher temperature, and had of consequence acquired a brown colour. This incipient charring had developed a peculiar and agreeable bitter taste, which was communicated to the beer along with the dark colour. This bitter taste rendered beer more agreeable to the

palate, and less injurious to the constitution than ale. It was consequently manufactured in greater quantities, and soon became the common drink of the lower ranks in England. When malt became high priced, in consequence of the heavy taxes laid upon it, and the great increase in the price of barley which took place during the war of the French revolution, the brewers found out that a greater quantity of wort of a given strength could be prepared from pale malt than from brown malt. The consequence was that pale malt was substituted for brown malt in the brewing of porter and beer. We do not mean that the whole malt employed was pale, but a considerable proportion of it. The wort, of course, was much paler than before; and it wanted that agreeable bitter flavour which characterised porter, and made it so much relished by most palates. The porter brewers endeavoured to remedy these defects by several artificial additions. At the same time various substitutes were tried to supply the place of the agreeable bitter communicated to porter by the use of brown malt. Quassia, cocculus indicus, and we believe even opium, were employed in succession; but none of them was found to answer the purpose sufficiently. Whether the use of these substances be still persevered in we do not know; but we rather believe that they are not, at least by the London porter brewers."

3. *Adulteration of Ale and Beer — substitution of Raw Grain for Malt.* — The use of the articles other than malt, referred to by Dr. Thomson, has been expressly forbidden, under heavy penalties, by repeated acts of parliament. The act 56 Geo. 3. c. 58. has the following clauses: —

"No brewer or dealer in or retailer of beer shall receive or have in his possession, or make, or use, or mix with, or put into any worts or beer, any liquor, extract, calx, or other material or preparation for the purpose of darkening the colour of worts or beer; or any liquor, extract, calx, or other material or preparation other than brown malt, ground or unground, as commonly used in brewing; or shall receive, or have in his possession, or use, or mix with, or put into any worts or beer, any molasses, honey, liquorice, vitriol, quassia, cocculus indicus, grains of paradise, Guinea pepper, or opium, or any extract or preparation of molasses, honey, liquorice, vitriol, quassia, cocculus indicus, grains of paradise, Guinea pepper, or opium, *or any article or preparation whatsoever for or as a substitute for malt or hops*, upon pain that all such liquor, extract, calx, molasses, honey, vitriol, quassia, cocculus indicus, grains of paradise, Guinea pepper, opium, extract, article, and preparation as aforesaid, and also the said worts and beer, shall be forfeited, together with the casks, vessels, or other packages, and may be seized by any officer of excise; and such brewer of, dealer in, or retailer of beer, so offending, shall for each offence forfeit 200*l.*

"No druggist, or vender of or dealer in drugs, or chemist, or other person whatever, shall sell, send, or deliver to any licensed brewer of, or dealer in, or retailer of beer, knowing him to be so licensed, or reputed to be so licensed, or to any other person for, or on account of, or in trust for, or for the use of such brewer, dealer, or retailer, any colouring, from whatever material made, or any other material or preparation other than *unground brown malt*, for the purpose of darkening the colour of worts or beer; or any liquor or preparation heretofore or hereafter made use of for darkening the colour of worts or beer, or any molasses or other articles, as mentioned in the first section, for or as a substitute for malt or hops respectively; and if any druggist, or vender of or dealer in drugs, or any chemist, or other person whatever, shall so do, all such liquor called colouring, and material or preparation for the purpose aforesaid, and liquor and preparation used for darkening the colour of worts or beer, molasses, and article or preparation to be used as a substitute for malt or hops, shall be forfeited, and may be seized by any officer of excise; and the druggist, vender, dealer, chemist, or other person so offending, shall forfeit 500*l.*"

By the act 1 Will. 4. c. 51. for the repeal of the ale and beer duties, it is enacted (§ 17.), "that no brewer shall have in his brewery, or in any part of his entered premises, or in any mill connected with such brewery, any raw or unmalted corn or grain; and all unmalted corn or grain which shall be found in such brewing premises or mill, and all malted corn or grain with which such unmalted corn or grain may have been mixed, shall be forfeited, and may be seized by any officer, together with all vessels or packages in which such raw or unmalted corn or grain shall be contained, or in which such unmalted corn or grain, and the malted corn or grain with which the same may have been mixed, shall be contained; and every brewer shall for every such offence forfeit 200*l.*"

4. *Descriptions of Ale and Beer.* — Previously to 1823 there were only two sorts of beer allowed to be brewed in England, viz. *strong beer*, that is, beer of the value of 16*s.* and upwards the barrel, exclusive of the duty; and *small beer*, or beer of the value of less than 16*s.* a barrel, exclusive of the duty. In 1823, however, an act was passed (4 Geo. 4. c. 51.) authorising the brewing, under certain conditions, of an *intermediate* beer. But this sort of beer was either not suited to the public taste, or, which is more probable, the restrictions laid on the brewers deterred them from engaging extensively in its manufacture.

This limitation and classification of the different sorts of ale and beer, according to their strength, originated in the duties laid upon them; and now that these duties have been repealed, ale and beer may be brewed of any degree of strength. This is an immense advantage.

5. *Regulations as to the Manufacture of Ale and Beer.* — Since the abolition of the beer duties, these regulations are very few and simple; and consist only in taking out a licence, entering the premises, and abstaining from the use of any article, other than malt, in the preparation of the beer. A brewer using any place, or mash-tun, for the purpose of brewing, without having made an entry thereof at the nearest excise office, forfeits for every such offence 200*l.*; and all the worts, beer, and materials for making the same, together with the mash-tun, are forfeited, and may be seized by any officer. — Brewers obstructing officers shall, for every such offence, forfeit 100*l.* — (1 *Will.* 4. c. 51. §§ 15, 16.)

6. *Licence Duties. — Number of Brewers.* — The licence duties payable by brewers

of ale and beer, under the act 6 Geo. 4. c. 81., and the numbers of such licences granted during the years 1829 and 1832 are as follow: —

	Sums charged for Licences.			Number of Licences granted.	
				1829.	1832.
	£	s.	d.		
Common brewers of strong beer, not exceeding 20 barrels -	0	10	0	2,854	8,593
Exceeding 20 and not exceeding 50 barrels - - - -	1	0	0	4,871	6,844
— 50 — 100 — - - - -	1	10	0	6,997	9,162
— 100 — 1,000 — - - - -	2	0	0	11,562	16,828
— 1,000 — 2,000 — - - - -	3	0	0	297	619
— 2,000 — 5,000 — - - - -	7	10	0	249	488
— 5,000 — 7,500 — - - - -	11	5	0	63	124
— 7,500 — 10,000 — - - - -	15	0	0	24	71
— 10,000 — 20,000 — - - - -	30	0	0	32	89
— 20,000 — 30,000 — - - - -	45	0	0	5	23
— 30,000 — 40,000 — - - - -	60	0	0	2	6
Exceeding - - - 40,000 — - - - -	75	0	0	12	16
Brewers of table beer only, not exceeding 20 barrels - - -	0	10	0	22	51
Exceeding 20 and not exceeding 50 barrels - - - -	1	0	0	8	9
— 50 — 100 — - - - -	1	10	0	13	12
Exceeding - - - - 100 — - - - -	2	0	0	111	27
Retail brewers of strong beer - - - - - - - -	5	5	0	1,279	50

The great increase in the number of brewers in 1832, as compared with 1829, is to be ascribed to the abolition of the beer duties in 1830.

N. B. The barrel contains 36 gallons, or 4 firkins of 9 gallons each, Imperial measure. It is enacted, (1 Will. 4. c. 51. § 7.), that from the 10th of October, 1830, brewers are to pay their licence duty according to the malt used by them in brewing, and that every brewer shall be deemed to have brewed *one* barrel of beer for every *two* bushels of malt used by such brewer.

Account of the Number of Brewers, Licensed Victuallers, Persons licensed for the sale of Beer, &c.; with the Quantities of Malt used by such Brewers, &c. in England, Scotland, and Ireland, during the Year 1832.—(*Parl. Paper*, No. 95. Sess. 1833.)

Countries.	Number of					Bushels of Malt used by		
	Brewers.	Licensed Victuallers.	Persons licensed for the general Sale of Beer.	Victuallers who brew their own Beer.	Persons licensed for the general Sale of Beer, who brew their own Beer.	Brewers.	Licensed Victuallers.	Persons licensed for the general Sale of Beer.
England -	1,753	50,796	30,917	24,293	13,102	13,891,851	8,898,789	3,093,519
Scotland -	216	17,070		318		893,901	96,505	
Ireland -	216					1,543,265		
United Kingdom	2,185	67,866	30,917	24,611	13,102	16,329,017	8,995,294	3,093,519

It is enacted, (1 Will. 4. c. 51.,) that every person who shall sell any beer or ale in less quantities than four and a half gallons, or two dozen reputed quart bottles, to be drunk elsewhere than on the premises where sold, shall be deemed a dealer in beer.

7. *Progressive Consumption of Ale and Beer.* — Malt liquor early became to the labouring classes of England what the inferior sorts of wine are to the people of France, at once a necessary of life and a luxury: the taste for it was universally diffused. There are, however, no means by which an estimate can be formed of the quantity actually consumed previously to the reign of Charles II. But duties, amounting to 2*s.* 6*d.* a barrel on strong, and to 6*d.* a barrel on small ale or beer, were imposed, for the first time, in 1660. These duties being farmed until 1684, the amount of the revenue only is known; and as there are no means of ascertaining the proportion which the strong bore to the small beer, the quantities that paid duty cannot be specified. But, since the collection of the duty was intrusted to officers employed by government, accurate accounts have been kept of the quantities of each sort of beer on which duty was paid, as well as of the rate of duty and its amount. Now, it appears, that, at an average of the ten years from 1684 to 1693 inclusive, the amount of ale annually charged with duty was as follows: — Strong ale - - 4,567,293 barrels.
Small do - - 2,376,278 do.

Soon after the Revolution several temporary duties were imposed on ale and beer; but in 1694 they were consolidated, the established duties being then fixed at 4*s.* 9*d.* a barrel on the strong, and at 1*s.* 3*d.* on the small beer, instead of 2*s.* 6*d.* and 6*d.*, which had been the rates previously to 1690. This increase of duty had an immediate effect on the consumption, the quantity brewed during the ten years from 1694 to 1703 being as follows: — Strong ale - - - 3,374,604 barrels.
Small do. - - - 2,180,764 do.

The whole of this decrease must not, however, be ascribed to the increase of the beer duties only; the duties on malt and hops having been, at the same time, considerably increased, operated partly, no doubt, to produce the effect.

During the five years ending with 1750, the ale brewed amounted, at an average, to 3,803,580 barrels of strong, and 2,162,540 barrels of small. — (*Hamilton's Principles of Taxation*, p. 255.)

The ale brewed in private families for their own use has always been exempted from any duty; and it may, perhaps, be supposed that the falling off in the consumption, as evinced by the statements now given, was apparent only, and that the decline in the public brewery would be balanced by a proportional extension of the private brewery. But, though there can be no doubt that the quantity of beer brewed in private families was increased in consequence of the peculiar taxes laid on the beer brewed for sale, it is abundantly certain that it was not increased in any thing like the ratio in which the other was diminished. This is established beyond all dispute, by the fact of the consumption of malt having continued *very nearly stationary*, notwithstanding the vast increase of population and wealth, from the beginning of last century down to 1750, and, indeed, to 1830! — (See MALT.) Had the fact, as to malt, been different, or had the demand for it increased proportionally to the increase of population, it would have shown that the effect of the malt and beer duties had not been to lessen the consumption of beer, but merely to cause it to be brewed in private houses instead of public breweries: but the long continued stationary demand for malt completely negatives this supposition, and shows that the falling off in the beer manufactured by the public brewers has not been made up by any equivalent increase in the supply manufactured at home.

I. An Account of the Quantity of the different Sorts of Beer made in England and Wales, in each Year from 1787 to 1825, both inclusive, the Rate of Duty, and the total Produce of the Duties (English Ale Gallons).

Years ended 5th July.	Strong Beer.		Table Beer.		Small Beer.		Total Amount of Duty.
	Barrels.	Rate of Duty.	Barrels.	Rate of Duty.	Barrels.	Rate of Duty.	
1787	4,426,482	8*s.* 0*d.*	485,620	3*s.* 0*d.*	1,342,301	1*s.* 4*d.*	£1,932,922 10*s.* 8*d*
1788	4,304,895	—	524,176	—	1,334,947	—	1,889,580 17 4
1789	4,437,831	—	514,900	—	1,244,046	—	1,935,303 16 0
1790	4,525,950	—	546,260	—	1,282,157	—	1,977,796 2 8
1791	4,754,588	—	579,742	—	1,347,086	—	2,078,602 4 8
1792	5,082,293	—	625,260	—	1,401,870	—	2,220,164 4 0
1793	5,167,850	—	620,207	—	1,414,255	—	2,254,454 14 4
1794	5,011,320	—	586,554	—	1,446,939	—	2,188,973 14 0
1795	5,037,804	—	576,464	—	1,453,036	—	2,198,460 5 4
1796	5,504,453	—	565,630	—	1,479,130	—	2,385,234 7 4
1797	5,839,627	—	584,422	—	1,518,512	—	2,524,748 4 8
1798	5,784,467	—	622,064	—	1,547,570	—	2,510,267 14 8
1799	5,774,311	—	611,151	—	1,597,139	—	2,507,872 19 8
1800	4,824,306	—	574,995	—	1,360,502	—	2,106,671 15 8
1801	4,735,574	—	500,025	—	1,191,930	—	2,048,695 7 0
1802	5,345,884	9 5	392,022	—	976,787	—	2,321,198 0 4
1803	5,582,516	—	1,660,828	—			2,782,263 13 4
1804	5,265,623	10 0	1,779,570	—			2,810,768 10 0
1805	5,412,131	—	1,776,807	—			2,883,746 4 0
1806	5,443,502	—	1,771,754	—			2,898,926 8 0
1807	5,577,176	—	1,732,710	—			2,961,859 0 0
1808	5,571,360	—	1,710,243	—			2,956,704 6 0
1809	5,513,111	—	1,682,899	—			2,924,845 8 0
1810	5,753,319	—	1,635,588	—			3,040,218 6 0
1811	5,902,903	—	1,649,564	—			3,116,407 18 0
1812	5,860,869	—	1,593,395	—			3,089,774 0 0
1813	5,382,946	—	1,455,759	—			2,837,048 18 0
1814	5,624,015	—	1,432,729	—			2,955,280 8 0
1815	6,150,544	—	1,518,302	—			3,227,102 4 0
1816	5,982,379	—	1,514,867	—			3,142,676 4 0
1817	5,236,048	—	1,453,960	—			2,763,420 0 0
1818	5,364,009	—	1,434,642	—			2,825,468 14 0
1819	5,629,240	—	1,460,244	—			2,960,644 8 0
1820	5,296,701	—	1,444,290	—			2,792,779 10 0
1821	5,575,830	—	1,439,970	—			2,931,912 0 0
1822	5,712,937	—	1,492,281	—			3,005,696 12 0
1823	6,177,271	—	1,419,589	—			3,230,594 8 0
1824	6,188,271	—	1,401,021	—			3,234,237 12 0
					Intermediate Beer.		
1825	6,500,664	—	1,485,750	—	9,559	5 0	3,401,296 15 0

It appears from the foregoing table, that the quantity of strong beer manufactured by the public brewers had increased about a third since 1787; but the quantity of malt consumed in 1787 was quite as great as in 1828; a fact, which shows conclusively, either that the *quality* of the beer brewed in the public breweries has been deteriorated since 1787, or that less, comparatively, is now brewed in private families; or, which is most probable, that both effects have been produced.

II. An Account of the Quantity of all the different Sorts of Beer, stated in Barrels, made in each Year, from 5th of January 1825 to 5th of January 1830; the Rates of Duty per Barrel in each Year, and Total Amount thereof in each Year in England and Scotland. — (*Parl. Paper*, No. 190. Sess. 1830.)

Years ended 5th January	Number of Barrels, Imperial Measure.* Strong.	Rate per Barrel.	Table.	Rate per Barrel.	Intermediate.	Rate per Barrel.	Total Amount of Duty.
ENGLAND.							
		s. *d.*		*s.* *d.*		*s.* *d.*	£ *s.* *d.*
1826	7,008,143	9 10	1,606,899	1 11½	6,160	4 11	3,492,779 10 4
1827	4,177,225	9 0	1,040,726	1 9½	7,707	—	3,265,441 14 6
	2,512,767	9 10	562,927	1 11½			
1828	3,895,226	9 0	989,827	1 9½	17,158	—	3,128,047 9 0
	2,500,043	9 10	542,481	1 11½			
1829	3,941,519	9 0	977,962	1 9½	62,617	—	3,217,812 2 11
	2,617,691	9 10	552,457	1 11½			
1830	3,569,364	9 0	879,879	1 9½	55,498	—	2,917,828 8 4
	2,379,930	9 10	500,590	1 11½			
SCOTLAND.							
		s. *d.*		*s.* *d.*		*s.* *d.*	£ *s.* *d.*
1826	133,903	9 10	264,035	1 11½	- -	—	91,731 2 2
1827	116,594	9 0	219,722	1 9½	- -	—	79,931 4 7
	5,545	9 10	51,613	1 11½			
1828	102,769	9 0	187,873	1 9½	- -	—	72,855 4 4
	9,250	9 10	53,420	1 11½			
1829	101,475	9 0	178,530	1 9½	- -	—	76,885 9 11
	17,248	9 10	68,913	1 11½			
1830	94,387	9 0	161,488	1 9½	- -	—	71,733 17 5
	16,566	9 10	67,896	1 11½			

N. B. The duty on beer being repealed in 1830, there are no later accounts of the quantity brewed.

III. An Account of the Number of Barrels of Strong Beer exported in each Year, from 5th of January 1825 to 5th of January 1830.

Years ended 5th of January	Number of Barrels (Imperial Measure) exported from England.	Scotland.	Ireland.
1826	53,013	1,827	9,855
1827	42,602	1,679	10,000
1828	59,471	2,509	11,261
1829	71,842	3,304	14,499
1830	74,902	3,131	15,207

The exports in 1832 were 70,130 barrels.

It has been contended by some, that the condition of the bulk of the people has declined since the commencement of the late French war; and that this decline, and not the duties and restrictions on the manufacture and sale of malt and beer, has been the real cause that the consumption of malt liquors continued stationary during the thirty years ending with 1830. But nearly *four* millions of persons were added to the population of England and Wales during the eighteenth century, and it is admitted, on all hands, that the condition of the middle and lower classes was, at the same time, vastly improved. Instead, however, of increasing, as no doubt it would have done but for some very powerful counteracting cause, we have seen that the consumption of malt liquor continued stationary during the whole of *last century;* so that the fair presumption is, that it continued stationary during that period of the *present century* already referred to, not because the people have become less able to purchase beer, but because the same causes which formerly prevented the increase of consumption have continued to operate. If we except a portion of the peasantry in some of the southern counties, where the pernicious practice of paying wages out of the poor's rates has been introduced, it will be found that the condition of the labouring classes has been, speaking generally, changed very much for the better during the last thirty years. Their health has been remarkably improved; a result which could hardly have taken place without an improvement in their habits as to cleanliness, and in their ordinary accommodations; and, independent of this circumstance, the fact that the lower classes have lodged upwards of *fifteen* millions sterling in Savings' Banks, and that upwards of a million of them are members of Friendly Societies, shows pretty clearly that, though they may not be anywhere so comfortable as could be wished, and though, in Kent, Hampshire, and some other southern counties, they are exposed to very great privations, their condition is, on the whole, superior to what it has ever previously been. It has further been contended, that if the decline in the consumption of beer cannot be ascribed to any

* The ale gallon contains 282 cubic inches, and the Imperial gallon 277¼: the latter being $\frac{1}{69}$ part less than the former.

falling off in the condition of the people, or in their power to purchase malt liquors, the fair inference is, that it has originated in a change of taste; and the increased consumption of spirituous liquors that has taken place of late years has been appealed to in proof that such is the fact. But this increase has been very greatly exaggerated: admitting, however, that the circumstances are really such as have been represented, the question instantly recurs, to what is this change of taste owing? How comes it that the people of England should be less partial than heretofore to that palatable and nutritious beverage to which they have been long accustomed, and that they should be resorting to ardent spirits and other deleterious compounds, destructive alike of their health and morals? If we mistake not, it will be found to be wholly owing to the duties and restrictions that have been laid on the manufacture and sale of beer.

8. *Duties on Ale and Beer: old licensing System.* — The duty on malt is 20*s.* 8*d.* a quarter; on hops 2*d.* a pound; and on strong beer, which forms five tenths of the whole quantity brewed, the duty was 9*s.* 10*d.* a barrel. It is commonly estimated, that from three to three and a half barrels of beer are manufactured from a quarter of malt; and that each quarter of malt requires twelve pounds of hops. Now, supposing that three and a quarter barrels of beer are produced from a quarter of malt, the duties affecting it, down to the 10th of October, 1830, were

	s.	*d.*
Duty laid directly on malt - -	20	8
Beer duty on three and a quarter barrels -	31	11
Hop duty - - - -	2	0
	54s. 7d.	

and dividing this sum of 54*s.* 7*d.* by $3\frac{1}{4}$, the duties affecting each barrel of beer will be 17*s.*

Such duties are obviously oppressive. The price of barley does not at an average exceed 35*s.* per quarter. But the duties on malt or beer produced from a quarter of barley (exclusive of the hop duty) amounted to 52*s.* 7*d.*, being equal to 150 per cent. upon the cost of the barley employed! Need we seek elsewhere for the cause of the stationary demand for malt liquors? The taxes on wine, British spirits, tea, and coffee, do not, in any case, exceed 100 per cent. Nor can there be a doubt that the disproportionately heavy burden that has thus been imposed on the natural and healthy beverage of the lower classes has principally contributed to lessen its consumption, and to cause them to resort to less salubrious substitutes.

In another point of view, the beer duties were still more indefensible. They affected only that description of beer which was *brewed for sale;* and as all the higher classes brewed their own beer, the duty fell only on the lower and middle ranks of the community, and particularly the former. It is singular, that a tax so grossly unequal and oppressive should have been so long submitted to. Should the public necessities require, at any future period, that an effort should be made to increase the revenue from beer, the fair and proper method would be to increase the malt duties. They affect alike those who brew the beer which they consume, and those who buy it from a public brewer. Their increase would not require the employment of any additional officers; for it is obvious, that the same officers and regulations that serve to collect a duty of 20*s.* 8*d.* would equally serve to collect a duty of 30*s.*; and, what is most important, an increase of this sort would not require any interference with the process of brewing.

But besides the obstacles to the consumption of beer arising from the oppressive duties with which it was burdened, the system recently in force of granting licences for its sale, opposed obstacles that were hardly less formidable. Previously to 1830, no one could open a house for the sale of beer without first obtaining a licence renewable annually from the magistrates; and as these functionaries were accustomed only to grant licences to the occupiers of *particular houses*, the brewers naturally endeavoured, in order to ensure the sale of their beer, either to buy up those houses or to lend money upon them: and in many extensive districts a few large capitalists succeeded in engrossing most of the public houses; so that even the appearance of competition was destroyed, and a ready market and good prices secured for the very worst beer!

We, therefore, look upon the abolition of the beer duties, and the granting permission to all individuals to retail beer upon taking out an excise licence costing 2*l.* 2*s.*, as highly advantageous measures. The repeal of the duty has put an end to the unjust distinction that previously obtained; the poor man is no longer burdened with a heavy tax, from which the noble and affluent of the land were exempted; but all classes are placed, in so far at least as the duties on beer are concerned, in the same situation. The fall of price caused by the abolition of the duty, by rendering beer more easily obtainable, will do much to check the consumption of spirits; and will, at the same time, powerfully contribute to the health and comfort of the poor. The change in the mode of licensing houses for the retail of beer has introduced into the trade that system of free competition

that is so advantageous. It is no longer in the power of any combination of brewers to maintain the price of beer at an unnatural elevation; and the public may now depend on being supplied with malt liquors at the lowest price that will serve to indemnify the brewers.

9. *Complaints of the Increase of Beer Shops.*—In despite, however, of what has now been stated, it is strenuously objected to the late measure for licensing houses for the sale of beer, that it has led to their excessive multiplication in different parts of the country, and has, in consequence, had a most pernicious influence on the public morals: but there do not seem to be any good grounds for such statements. The whole number of public houses licensed for the sale of *beer and ale only* in England and Wales, during the year ended 31st of March, 1833, was 4,821; while 47,286 houses were licensed, during the same year, for the sale of beer, ale, and spirits. — (*Parl. Paper*, No. 426. Sess. 1833.) Whatever, therefore, may be the inconveniences arising from the number of the latter, it does seem ludicrous to imagine that they can be materially increased by the opening of the beer shops. On the contrary, we should think that every measure which has a tendency to substitute beer shops for spirit shops must be advantageous; and such is the precise effect of the act 1 Will. 4. cap. 64. Its privileges are acquired by those only who confine themselves to the sale of beer; and until it has been shown that the drinking of beer is less advantageous, or more pernicious, than the drinking of spirits, we shall not be inclined to lay much stress on the complaints so frequently put forth as to the number of beer shops. In order, however, to check their unnecessary multiplication, and to ensure as far as possible the maintenance of good order in them, it might be expedient, perhaps, to increase the license duty, and the security required from those applying for a licence, and to facilitate the suppression of disorderly houses: but we protest against any attempt to lessen the number of public houses by reviving the old licensing system, with the injustice and jobbing inseparable from it, and from every modification of it.

10. *Existing Regulations with respect to the Sale of Beer.*—The sale of ale, beer, &c. by retail in England, is now regulated by the act 1 Will. 4. c. 64., of which we subjoin a pretty full abstract.

Licenses to be granted by commissioners of excise, or by persons authorised by them; to cost 2*l.* 2*s.* a year: not to authorise the sale of wine or spirits; not to be granted to sheriffs' officers, nor to any person executing the legal process of any court of justice, nor to any person not being a householder assessed to the parish. — § 2.

The party requiring such licence to enter into a bond to the commissioners, with one sufficient surety in the penalty of 20*l.*, or with two sufficient sureties in the penalty of 10*l.* each, for the payment of any penalty or sum of money, not exceeding the amount of such 20*l.* or 10*l.* respectively, which shall be incurred for any offence against this act by the party to whom such licence shall be granted; and no person licensed to sell beer by retail, or not being a householder paying the poor rates, shall be surety in any such bond. — §§ 4, 5.

Every person who shall be licensed under this act, shall cause to be painted, in letters three inches at least in length, in white upon a black ground, or in black upon a white ground, publicly visible and legible, upon a board, to be placed over the door of the house in which such person shall be licensed, the Christian and surname of the persons mentioned in such licence, at full length, together with the words "Licensed to sell Beer by Retail;" and every such person shall keep up such name and words during all the time that such person shall continue so licensed, upon pain of forfeiting for every omission 10*l.* — § 6.

No person to sell any beer by retail, under this act, after the expiration of any licence granted, nor in any house not specified in such licence; and any person selling beer by retail, not being duly licensed, as the keeper of a common inn, ale-house, or victualling-house; or if any such person, so licensed, shall deal in or retail any wine or spirits, he shall, for every such offence, forfeit 20*l.*, half to go to the informer and half to the king; such penalty to be recovered as other excise penalties; and the powers of the excise act 7 & 8 G. 4. c. 53, &c. extended to this act. — §§ 7, 8, 9.

Persons trading in partnership, and in one house, shall not be obliged to take out more than one licence in any one year: provided also, that no one licence shall authorise any person to sell beer, in any other than the house mentioned in such licence. — § 10

In cases of riot or expected riot or tumult, every person licensed under this act, and keeping any house situate within their jurisdictions, shall close his house at any time which the justice or justices shall direct; and every such person who shall keep open his house at or after any hour at which such justices shall have so ordered or directed such house to be closed, shall be deemed to have not maintained good order and rule therein, and to be guilty of an offence against the tenor of his licence. — § 11.

Every person licensed to sell beer by retail, shall sell (except in quantities less than a half pint) by the gallon, quart, pint, or half pint measure, sized according to the standard; and in default thereof, he shall for every such offence forfeit the illegal measure, and pay not exceeding 40*s.*, together with the costs of the conviction, to be recovered within thirty days next after that on which such offence was committed, before two justices; such penalty to be over and above all penalties to which the offender may be liable under any other act. — § 12.

Every seller of beer by retail, having a licence under this act, who shall permit any person to be guilty of drunkenness, or disorderly conduct, in the house mentioned in such licence, shall forfeit the sums following: for the first offence, not less than 40*s.* nor more than 5*l.*, as the justices, before whom such retailer shall be convicted, shall adjudge; and for the second offence, any sum not less than 5*l.* nor more than 10*l.*; and for the third offence, any sum not less than 20*l.* nor more than 50*l.*; and it shall be lawful for the justices, before whom any such conviction for such third offence shall take place, to adjudge, if they shall think fit, that such offender shall be disqualified from selling beer by retail for the space of two years next ensuing such conviction, and also that no beer shall be sold by retail, by any person in the house mentioned in the licence of such offender; and if any person so licensed shall, knowingly, sell any beer, ale, or porter, made otherwise than from malt and hops, or shall mix, or cause to be mixed, any drugs or other pernicious ingredients, with any beer sold in his house, or shall fraudulently dilute, or in any way adulterate, any such beer, such offender shall, for the first offence, forfeit not less than 10*l.* nor more than 20*l.*, and for the second such offence such offender shall be adjudged to be disqualified from selling beer, ale, or porter, by retail, for the term of two years, or to forfeit not less than 20*l.* nor more than 50*l.*, and shall be subject to a like penalty at every house where he shall commit such offence; and if any

person shall, during any term in which it shall not be lawful for beer to be sold by retail on the premises of any offender, sell any beer by retail on such premises, knowing that it was not lawful to be sold, such offender shall forfeit not less than 10*l.* nor more than 20*l.*; every person suffering the conditions of the licence to be infringed to be deemed guilty of disorderly conduct. — § 13.

Retailers' houses not to be open before four in the morning, nor after ten in the evening; nor between the hours of ten in the forenoon and one in the afternoon, nor at any time between the hours of three and five in the afternoon, on any Sunday, Good Friday, Christmas-day, or any day appointed for a public fast or thanksgiving; and any person offending herein shall forfeit 40*s.* for every offence; every separate sale to be deemed a separate offence. — § 14.

All penalties under this act, except for selling beer by any person not duly licensed, shall be recovered, upon the information of any person before two justices in petty sessions; and every such penalty shall be prosecuted for within three calendar months next after the offence; and every person licensed under this act, who shall be convicted before two justices, shall, unless proof be adduced to the satisfaction of such justices, that such person had been theretofore convicted before two justices, within the space of twelve calendar months next preceding, be adjudged by such justices to be guilty of a first offence against this act, and to forfeit and pay any penalty by this act imposed for such offence, or if no specific penalty be imposed, then any sum not exceeding 5*l.*, together with the costs of the conviction; and if proof be adduced to the satisfaction of such justices, that such person had been previously convicted, within the space of twelve calendar months next preceding, of one such offence only, such person to be adjudged guilty of a second offence against this act, and to forfeit and pay any penalty by this act imposed for such offence, or if no specific penalty be so imposed, then any sum not exceeding 10*l.*, together with the costs of conviction; and if proof shall be adduced that such person had been previously convicted within the space of eighteen calendar months next preceding, of two such separate offences, and if proof be adduced that such person, so charged, is guilty of the offence charged against him, such person shall be adjudged to be guilty of a third offence against this act, and to forfeit and pay any penalty imposed by this act, in respect of such offence, or if no such specific penalty shall be imposed, then to forfeit and pay the sum of 50*l.*, together with the costs of conviction. — § 15.

The party, convicted of any such third offence, may appeal to the general sessions, or quarter sessions, then next ensuing, unless held within twelve days after conviction, and in that case, to the then next subsequent sessions; and, in such case, the party convicted shall enter into a recognizance, with two sureties, personally to appear at the said general or quarter sessions, to abide the judgment of the court; and to pay such costs as shall be by the court awarded; or, in failure of the party convicted entering into such recognizance, such conviction shall remain good and valid; and the said justices who shall take such recognizance, are also required to bind the person who shall make such charges to appear at such general or quarter sessions, then and there to give evidence against the person charged, and, in like manner, to bind any other person who shall have any knowledge of such offence; and it shall be lawful for the said general or quarter sessions to adjudge such person to be guilty of such third offence against this act, and such adjudication shall be final; and it shall be lawful for such general or quarter sessions to punish such offender by fine, not exceeding 100*l.*, together with the costs of such appeal, or to adjudge the licence to be forfeited, or that no beer be sold by retail in the house for the term of two years, and if such licence shall be adjudged to be forfeited, it shall henceforth be void; and whenever, in such case, the licence of such offender shall be adjudged to be void, such offender shall be deemed incapable of selling beer, ale, or porter, by retail, in any house kept by him, for the space of two years, to be computed from the time of such adjudication; and any licence granted to such person during such term shall be void. — § 16.

In default of payment of penalties, proceedings may be had against the sureties. — § 19.

Any person summoned as a witness, who shall neglect or refuse to appear, and not make such reasonable excuse for such neglect, &c. as shall be admitted by such justices of sessions, or who, appearing, shall refuse to be examined, shall, on conviction, forfeit not exceeding 10*l.* — § 20.

Offenders refusing or neglecting, within seven days after conviction, to pay the penalty imposed, and any costs assessed, such justices may issue their warrant, to levy the amount by distress and sale, together with the costs of distress and sale; and in every such case, such offenders, if in custody, shall be forthwith discharged; but if the goods and chattels are not sufficient, such justices may commit the offender to the common gaol or house of correction for not exceeding one calendar month, if the penalty shall not be above 5*l.*; for not exceeding three calendar months, if the penalty shall be above 5*l.* and not more than 10*l.*; and for not exceeding six calendar months, if the penalty shall be above 10*l.*; provided, that whenever such offender shall pay to the gaoler or keeper, or to whomsoever such justices shall have appointed, the penalty and costs, together with all the costs of apprehension and conveyance to gaol, at any time previous to the expiration of the time for which such offender shall have been committed, such offender shall be forthwith discharged. — § 21.

No conviction under this act, nor any adjudication made upon appeal therefrom, shall be quashed for want of form, nor removed by *certiorari*. — § 27.

Every action against any justice, constable, or other person, for any thing done in execution of his duty under this act, to be commenced within three calendar months, and not afterwards; and if any person be sued, he may plead the general issue, and give the special matter in evidence. — § 28.

This act not to affect the two universities, nor the vintners' company in London; nor to prohibit the sale of beer at fairs, as heretofore.

11. *Scotch Ale and Beer Duties.* — The duties on ale and beer in Scotland have been for a lengthened period the same as in England.

At the union in 1707, the English duties on ale and beer were introduced into Scotland. But, besides strong and small beer, the Scotch had an intermediate species, which they called *two-penny*, and which was their favourite beverage. The duty on this description of beer was fixed, at the union, at 2*s.* 1¼*d.* a barrel. For *thirty* years after its imposition, the quantity of two-penny that paid duty was always above 400,000, and sometimes exceeded 500,000 barrels a year. But in 1760 the duty on two-penny was increased to 3*s.* 4¼*d.* and the consumption immediately fell off to between 100,000 and 200,000 barrels! The quantity that paid duty in 1800 amounted to 149,803 barrels. The manufacture of this species of beer ceased entirely in 1802.

No account has been kept of the quantity of beer brewed in Ireland since 1809, when it amounted to 960,300 barrels. — (*Morewood on Intoxicating Liquors*, p. 353.) Perhaps it may now amount to from 1,000,000 to 1,200,000 barrels.

12. *Regulations as to the Exportation of Beer.* — Ale or beer exported to foreign parts as merchandise is allowed a drawback of 5*s.* the barrel of 36 gallons, Imp. meas. But before any debenture for the above drawback shall be paid, the exporter or his principal clerk or manager shall make oath thereon, before the proper officer of excise, that such ale or beer was put on board the exporting ship as merchandise to be sent beyond

seas, and no part thereof for the ship's use; and that, according to the best of his knowledge and belief, the same has been brewed wholly from malt which has been charged with and paid the duty of 2*s.* 7*d.* a bushel, and shall also specify in such oath the time when and the place where; and the brewer, being an entered and licensed brewer for sale, by whom such beer or ale was brewed, and that the quantity of malt used in brewing was not less than two bushels (Imp. meas.) for every 36 gallons of such beer or ale. Persons making false statements forfeit the sum of 200*l.* and the debenture is void. — (1 *Will.* 4. cap. 51. § 11.)

ALEXANDRIA, so called from its founder, Alexander the Great, the principal seaport of Egypt, on the coast of the Mediterranean. It is situate about 12 miles W. of the Canopic mouth of the Nile; the Pharos being in lat. 31° 12½ N., long. 29° 53½′ E. The situation of this famous city was most admirably chosen. Until the discovery of the route to India by the Cape of Good Hope, Egypt formed the natural seat of the commerce between the eastern and western worlds; and Alexandria was placed in the most favourable position in Egypt for an emporium. It is the only port on the whole northern coast of that country where there is, at once, deep water, and security for shipping throughout the year. The ports of Rosetta and Damietta, the former on the west, and the latter on the eastern arm of the Nile, are both difficult of entrance, each having a bar, upon which there is always a dangerous surf. Ships bound for Alexandria avoid this serious inconvenience; and by means of an artificial navigation, stretching from the city to the western branch of the Nile, it has, for a while at least, almost the same facilities of internal navigation that are enjoyed by the cities referred to.

It may be proper, however, to mention that this artificial communication with the Nile has not always been open. It existed in antiquity, but fell into decay during the barbarism of more modern times. After being shut up for some centuries, it has been re-opened by Mohammed Ali, who has dug a canal from Alexandria to Foûah on the Nile, about 27 miles above Rosetta. This important work is 48 miles in length, 90 feet in breath, and from 15 to 18 feet deep. It was opened in 1819; but owing partly to the nature of the ground, partly to some defects in its construction, and partly to the mud deposited by the water of the Nile, it is difficult to keep in repair; and cannot now, it is said, be navigated except during the period of the inundation. Its free navigation at all periods would, however, be of the greatest advantage, not to Alexandria only, but to all Egypt; and it is believed that this might be secured by facing the canal with brick, and putting it otherwise into good order.

Ports, &c. — The ancient city was situated a little more inland than the modern one, opposite to the small island of Pharos, on which was erected the lighthouse, so celebrated in antiquity. — (*Cæsar de Bello Civili*, lib. iii. cap. 112.) This island was, partly by artificial means, and partly by natural causes, gradually joined to the land by a mound, and on this the new town is principally built. The isthmus and island have now the form of a T, its head being N.E. and S.W. A square castle, or tower, built on a small islet or rock, at the extremity of a mole projecting from the north-east angle of the city, is still called the Pharos, and a light is regularly exhibited upon it. On each side of the city there is a port. That on the western, or African side, called the Old Port, is by far the largest and best. It stretches from the town westwards to Marabout, about six miles, and is about a mile and a half wide. It is bounded on the north, partly by the western tongue or angle of the island on which the city is partially built, and partly by rocks and sand banks. It has three entrances. The first, or that nearest the city, having 17 feet water, is about two miles S. W. from the large building, situated a little to the westward of the town, called the palace; but it is too narrow and difficult to be attempted by any one not thoroughly acquainted with the port. The *eastern* side of the second or middle entrance is marked by buoys which lie about two miles and three quarters S.W. from the palace; it is about a quarter of a mile wide, and has, where shallowest, 27 feet water. The third or western entrance has its *western* boundary within about three eighths of a mile from the east end of Marabout island; it is about half a mile wide, and has from 25 to 27 feet water in its shallowest places. This last is the best entrance. Ships, when in, may anchor close to the town in from 22 to 40 feet water, and there is good anchorage in deep water all along the shore. Foreigners were formerly excluded from this port; but this prohibition no longer exists.

The New or Asiatic harbour is on the eastern side of the town. A rock called the Diamond lies a little to the east of the Pharos tower; and ships entering the port ought to have this rock about a cable's length on the right. If they get much further to the left, they will come in contact with a shoal which stretches westward from the Pharillon, or little tower, on the east side of the port. The water immediately within the port S. W. from the Pharos is from 30 to 40 feet deep; but the space for anchorage is very limited, and is exposed to the northerly gales; and the ground being foul and rocky, hempen cables are very apt to chafe, and several accidents have happened in consequence to ships unprovided with iron cables. Ordinary tides rise 2 feet; but during the overflow of the Nile the rise is 4 feet. Variation 13° west. — (See *Plan of Alexandria*, by Lieut. Falbe.)

Ancient and Modern City. — Under the Ptolemies and Romans, Alexandria was the first commercial city in the world. It suffered greatly by its reduction by the Saracens in 640; but it continued to be a place of considerable commercial importance till the despotism of the Mamelukes and Turks, and the discovery of the route to India by the Cape of Good Hope, completed its ruin. Under the Ptolemies, the population is believed to have amounted to about 300,000, and the city was adorned by a vast number of magnificent structures. At present the population varies with the seasons of the year, but, when greatest, it is not supposed to exceed 25,000; and may vary between this amount and 16,000 or 18,000. The appearance of the modern town is most unpromising. "It may be justly said, that in the new city of Alexandria we find a poor orphan, whose sole inheritance has been the venerable name of its father. The vast extent of the ancient city is contracted in the new, to a little neck of land, between the two ports. The most superb temples are changed into plain mosques; the most magnificent palaces into houses of a bad structure; the royal seat is become a prison for slaves; an opulent and numerous people has given way to a small number of foreign traders, and to a multitude of wretches, that are the servants of those on whom they depend: a place formerly so famous for the extent of its commerce, is no longer any thing

more than a mere place of embarking; in fine, it is not a phœnix that revives from its own ashes, it is, at most, a reptile, sprung from the dirt, the dust, and corruption with which the Alcoran has infected the whole country."—(*Norden's Travels*, Eng. trans. 8vo ed. p. 37.) There is reason, however, to think that this striking description, though accurate at the time when it was written (1737), conveys too unfavourable an idea of the present state of Alexandria. The vigorous government of Mohammed Ali, by introducing comparative security and good order into Egypt, has latterly revived the commerce of Alexandria, which has again become a place of considerable importance in the trading world.

Trade of Alexandria.—The imports principally consist of cotton stuffs, timber, hardware, iron and tin, tobacco, machinery, ammunition, silk goods, woollens, staves, &c. The exports consist of raw cotton, wheat and barley, rice, linen, flax, linseed, sugar, coffee (from the Red Sea), drugs, gums, sal-ammoniac, saffron, wax, &c.

The principal articles of importation into this country from Egypt are cotton, flax and linseed, senna, and gum. Of these, cotton is by far the most important. We began to import it in 1823; and since then the imports have been as follows:—

Years.	Bales.	Years.	Bales.	Years.	Bales.
1824	38,022	1827	22,450	1830	14,752
1825	111,023	1828	32,889	1831	38,124
1826	47,621	1829	24,739	1832	41,183

In 1832, the French imported 25,807 bales of Egyptian cotton; the imports at Trieste during the same year were about 50,000 bales; and those at Leghorn and Genoa were, together, about the same as at Trieste. The bale of Egyptian cotton weighs about 220 lbs. This important trade owes its existence almost entirely to the exertions of the Pacha, by whom the cotton plantations have been established. The cotton exported is all long-staple, but of two sorts: one called in Egypt makko, and in England common Egyptian; the other, the produce of sea-island seed, called in Egypt Sennaar, and in England sea-island Egyptian. Besides these two descriptions, Egypt produces from 15,000 to 20,000 bales of short-staple cotton, similar in quality to that of Smyrna, and chiefly consumed in the country. The cotton brought from Egypt is found to be amongst the most useful that is grown: that raised from sea-island seed ranks next to American sea-island. The exports from this country to Egypt principally consist of cotton goods and twist, earthenware, iron and steel, arms and ammunition, &c. Their *real* value amounted, in 1831, to 122,832*l.*; but besides what goes direct, a good deal of British produce finds its way to Egypt at second hand from Malta, Smyrna, &c. Constantinople and the islands of the Archipelago are the great markets for the wheat and other grain exported from Egypt, the quantity sent to them being sometimes very large. The supplies are, however, extremely uncertain. Every thing in Egypt depends on the Nile; and when it does not rise to the usual height, the crops are very much below an average. Beans are extensively cultivated, and have sometimes been brought to England, but rarely, if ever, with advantage to the importers. They are very inferior to English beans, and are peculiarly subject to the worm. No oats are raised in Egypt, the horses being entirely fed upon barley. Besides cotton, the Pacha has turned his attention to the culture of sugar, indigo, &c. The first has long been raised in Egypt, but the exports are not very considerable. Silk is grown to some extent. The date-palm thrives in every part of Egypt, and the fruit is largely exported. It is singular, that notwithstanding the luxuriance of many of its vegetable productions, Egypt should be entirely destitute of timber.—(*Lords' Report of 1827, on the Price of Foreign Corn, Min. of Evid.* p. 120., and *private information.*)

In 1831, there entered the port of Alexandria 1,215 ships, of the burden of 198,299 tons. Of these, the Austrian were the most numerous; next, the English and Ionian; and then the French, Sardinian, Spanish, &c.

Money.—Accounts are kept at Alexandria, as at Cairo, in *current piastres*, each piastre being equal to 40 paras, or medini, and each medino to 30 aspers. The medino is also divided into 8 borbi, or 6 forli. A purse contains 25,000 medini. The piastres struck in 1826 contain a great deal of alloy; 15½ or 16 piastres = 1 Spanish dollar; hence 1 piastre = 3½*d.* sterling, very nearly. Payments in transactions of any importance are generally made in Spanish dollars.

Weights and Measures.—The yard, or *pik*, = 26·8 English inches; hence 100 piks = 74·438 English yards. The measures for corn are the *rhebebe*, and the *quillot* or *kisloz*; the former = 4·364 English bushels, the latter = 4·729 ditto. The *cantaro* or *quintal* = 100 *rottoli*, but the rottolo has different names and weights: 1 *rottolo forforo* = ·9347 lb. avoirdupois; 1 *rottolo zaidino* = 1·335 lb. ditto; 1 *rottolo zauro* or *zaro* = 2·07 lbs. ditto; 1 *rottolo mina* = 1·67 lb. ditto.—(*Manuel Universel de Nelkenbrecher.*)

Duties.—With the exception of the commercial monopolies of the Pacha, and the arbitrary principles on which he fixes the prices of commodities, there is nothing objectionable in his policy as to commerce. The duties on imports are only 3 per cent. We believe, however, that a small increase of the customs duty would compensate the Pacha for the abolition of most of his monopolies; and there can be little doubt that his subjects would be materially benefited by the change.

Policy of the Pacha.—It is to be regretted that Mohammed Ali, who, in many respects, is one of the most extraordinary persons of the age, should have no just idea of the principles, by the adoption of which his plans of improvement might be perpetuated, and industry be rendered really flourishing. He leaves nothing to the discretion and enterprise of individuals. He may, indeed, be said to be the sole proprietor, manufacturer, farmer general, and wholesale merchant of Egypt. He has monopolised the entire foreign trade of the country; and has fixed the price to be paid for every article to the cultivator, and the price at which it is to be sold to the foreigner. Hence the extension of cultivation, and the growth of commerce and manufactures, have been of no real advantage to the bulk of the nation; and hence, also, the risk, in the event of the reins of government falling into less vigorous or able hands, that the fabric of apparent prosperity which the Pacha has been attempting to raise, may fall to pieces: but we would fain hope that the influence of the many intelligent Europeans now in Egypt, and the observations which the Egyptians sent to England and France by the Pacha cannot fail to have made upon the advantages resulting from the security of property and the freedom of industry, may be instrumental in paving the way for the gradual introduction of a more enlarged and liberal system.

Ancient Trade of Alexandria.—As already remarked, Alexandria was, for a long series of years,—first under the Greek successors of Alexander, and subsequently under the Romans,—the principal *entrepôt* of the ancient world. Most part of the traffic between Asia and Europe that had at a more early period centered at Tyre, was gradually

diverted to this new emporium. An intercourse between the ports on the eastern coast of Egypt, and those on the opposite coast of Arabia, had subsisted from a very early period. That between Egypt and India was more recent. It was at first carried on by ships, which having sailed down the Red Sea from Myos Hormos and Berenice, coasted along the Arabian shores till they reached Cape Rasselgate, whence a short course brought them to India near the mouth of the river Indus. This was the course followed during the dynasty of the Ptolemies: but about 80 years after Egypt had been annexed to the Roman empire, Hippalus, the commander of an Egyptian ship trading to India, having observed the regular shifting of the trade winds, ventured to sail with the western monsoon from the Straits of Babelmandeb right across the Arabian Ocean; and was fortunate enough, after a prosperous voyage, to arrive at Musiris, in that part of India now known by the name of the Malabar coast. Having taken on board a cargo of Indian produce, Hippalus returned in safety with the eastern monsoon to Egypt. This discovery was deemed of so much importance, that the name of the discoverer was given to the wind which had carried him across the ocean to India: and how trifling soever this voyage may now appear, those who consider that Hippalus had no compass by which to direct his course, and that owing to this circumstance, and the otherwise imperfect state of the art of navigation, the ancients seldom ventured out of sight of land, even in seas with which they were well acquainted, will be forward to admit that his enterprise and daring were nowise inferior to his success; and that he was well entitled to the gratitude of his contemporaries and the respect of posterity.

From the epoch of this discovery, fleets traded periodically from Egypt to Musiris, conveying the products of Europe to India, and conversely. The Indian goods having been landed at Myos Hormos and Berenice, were thence conveyed by caravans to Coptos (the modern Kenné), on the Nile, where they were put on board lighters and sent to Alexandria, whence they were distributed all over the western world. The goods sent to India were conveyed to Myos Hormos and Berenice by the same route. Myos Hormos was situated on the shore of the Arabian gulf, about a degree to the north of the modern port of Cosseir. The distance from it to Coptos, in a straight line, is about 70 English miles. Berenice was situated a good way further to the south, being nearly under the tropic. It was built by Ptolemy Philadelphus. Its distance from Coptos is stated by Pliny at 258 Roman miles; the different resting places on the road were determined by the wells, and the journey occupied about 12 days. Ptolemy seems to have preferred this station to Myos Hormos, though the land carriage to Coptos was so much further, from its greater proximity to the Straits of Babelmandeb, and its lessening the voyage up the Red Sea.

Pliny says that the cost of the Indian commodities brought to Rome through Alexandria was increased a hundred fold (*centuplicato veneant*) by the expense of carriage, &c. We suspect that this is a rhetorical exaggeration, meaning merely that their price was very materially enhanced. If the increase was to any thing like the extent mentioned, it must have been owing to the imposition of oppressive tolls and duties, for it could not possibly have been occasioned by the mere expenses of conveyance.* — (*Plin. Hist. Nat.* lib. vi. cap. 23.; *Ameilhon, Commerce des Egyptiens*, pp. 161—176. &c.; *Robertson's Ancient India*, note 20. &c.)

Besides this important traffic, which supplied Rome and the western world with the silks, spices, precious stones, and other products of Arabia and India, a great trade in corn was carried on from Alexandria to Rome. Egypt, for a lengthened period, constituted the granary from which Rome, and afterwards Constantinople, drew the principal part of their supplies; and its possession was, on that account, reckoned of the utmost consequence. Augustus employed merchantmen of a larger size than any that had previously traded in the Mediterranean, to convey the corn of Egypt to Ostia. They were escorted by ships of war. The fleet received the names of *sacra* and *felix embole*; and enjoyed several peculiar privileges. The ships belonging to it were the only ones authorised to hoist the small sail called *supparum*, when they drew near the coasts of Italy. Some of the fast-sailing vessels attached to the fleet were sent on before, to give notice of its approach; and a deputation of senators went down to Ostia to receive the ships, which anchored amid the acclamations of an immense number of spectators. The captains were obliged to make oath that the corn on board their ships was that which had been delivered to them in Egypt, and that the cargoes were entire as shipped. — (*Huet, Commerce et Navigation des Anciens*, cap. xlviii.; *Senecæ Epist.* cap. lxxvii. &c.)

* In the 16th century, the cost of Indian commodities brought to Western Europe by way of Alexandria and Aleppo was about *three* times the cost of those brought by the Cape of Good Hope. — (See *post*, East India Company, *History of.*) But Egypt was then occupied by the Mamelukes and Turks, who threw every sort of obstacle in the way of commerce, and loaded it with the most oppressive exactions.

Intercourse with India by Alexandria. — These few details will, perhaps, serve to give a faint idea of the importance of Alexandria in the commerce of antiquity. It is impossible, indeed, for any one to glance at a map of the world, or of the ancient hemisphere, and not to perceive that Egypt is the natural *entrepôt* of the commerce between Hindostan and Europe. Nothing but the barbarism in which it has been so long involved, could make the intercourse with India and the East be wholly carried on by the Cape of Good Hope. The difficulty of navigating the Red Sea seems to have been much exaggerated. Generally speaking, its western side is shallow and infested with coral reefs; but on the Arabian side the water is deep and unobstructed; and vessels availing themselves of the proper seasons for sailing up and down the sea, may navigate it expeditiously, and in perfect safety. — (See *Captain Chesney's Report in Papers relating to India*, printed by order of the House of Commons, August 16. 1832.) We have, therefore, little doubt that, in the event of good order and civilisation being again established in Egypt, some considerable portion of the Indian trade will revert to its ancient channel. There is not, we apprehend, much reason to think that the project entertained by the Ptolemies, of cutting a canal across the Isthmus of Suez, will ever succeed. The distance is not great, but, notwithstanding this circumstance, and the flatness of the ground, the fact of its consisting almost wholly of moveable, parched sand, presents obstacles to the undertaking, that Volney (*Voyage en Syrie, &c.* cap. xiv.), and other good judges, have declared insuperable. The route by Cosseir (nearly the same as that by Myos Hormos) seems, all things considered, to present the fewest obstacles. The water in the port of Cosseir is deep, and the anchorage pretty good. — (*Chesney's Report.*) The distance from Cosseir to Kenné (Coptos) may be taken at about 70 English miles; and it would not be very difficult to construct a road between these points. After reaching Kenné, the goods would, as of old, be embarked on the Nile for Alexandria, &c. Hence the importance, in a general point of view, of the civilisation of Egypt. Even were it productive of no other consequences than the facilitating of the correspondence between Europe and the East, it would not be easy to overrate its importance; but the fair presumption undoubtedly is, that other results would follow; and that the Mediterranean ports would in future derive the principal part of their Indian commodities by way of Alexandria. The more westerly European ports would continue, we believe, to use the present channel of intercourse with India.

Whether these anticipations are ever destined to be realised, it is impossible to say; but the progress already made by Mohammed Ali in introducing a better order of things into Egypt, and the present state of the Ottoman empire, which seems fast falling to pieces, would appear to warrant the conclusion that important changes may be expected in the East. At all events, the brief statements now made, can hardly be deemed out of place in a work intended to exhibit, however imperfectly, the history, principles, and channels, as well as the details of commerce.

ALICANT, a sea-port town of Spain, in Valencia, in lat. 38° 20′ 41″ N., long. 0° 30′ W. Population about 14,500, and declining. The port is an open and spacious bay, between Cape de la Huerta on the north-east, and Isla Plana on the south, distant from each other S.W. and N.E. about 10 miles. Ships may enter on any course between these points, steering direct for the castle, which stands on an eminence about 400 feet high. Those of considerable burden moor N. and S., distant from $\frac{1}{4}$ to 1 mile from shore, in from 4 to 8 fathoms water; they are exposed to all winds from E.N.E. to S. by W.; but the holding ground is good, and there is no instance during the last twenty years of a ship having been driven from her moorings. Small craft lie alongside the mole, which is already 320 yards in length, and is to be projected still further into the sea. There are no pilots. The trade of Alicant, though still considerable, has declined much within the last few years; a consequence partly of the emancipation of America from the Spanish yoke, but more of the oppressive duties laid on the importation of most articles of foreign produce into Spain — (see Barcelona), and the extensive smuggling carried on from Cadiz and Gibraltar. Its exports consist principally of barilla, almonds, wine, and raisins, with small quantities of olives, olive oil, brandy, figs, salt, wool, silk, anise, &c. The barilla of Alicant, which is of the finest quality, is almost wholly taken off by England. The exports amount to from 50,000 to 90,000 quintals.* The celebrated sweet wine, tent (*vino tinto*), is exported from this port, principally for Brazil; a little dry wine goes to Gibraltar. Almonds, of which about 10,000 quintals are exported, go mostly to Hamburgh. The raisins are not of the finest quality; those brought to England are principally used in confectionary. Oil, which was formerly sent in large quantities to South America, is now comparatively neglected. Dates are exported, and are not unfrequently sold here as Barbary dates. The imports consist principally of linen, salted fish, tobacco, grain, iron, timber, sugar, coffee, indigo, cochineal, cotton and cotton stuffs, &c. The linens, of which from 350,000 to 500,000 yards are annually

* This is the consul's statement. Mr. Ingliss represents the exports as considerably greater.

imported, are furnished almost wholly by France and Genoa. In 1831, there entered the port of Alicant 157 foreign vessels, of the burden of 16,715 tons; of these were, British 54, burden 5,719 tons; French 45, burden 3,080 tons; Sardinian 40, burden 4,166 tons; Swedish 5, burden 1,350 tons, &c.

It was stated in the former edition of this work, that large quantities of Benicarlo wine were shipped at Alicant for Cette: but this is a mistake; almost all the Benicarlo being shipped from the northern ports of Valencia, and principally from Benicarlo, whence it has its name. — (*Ingliss's Spain in* 1830, p. 342.)

Shipping Charges. — These vary according to the burden of the ship, and the country to which she belongs. On a ship of 300 tons unloading and loading mixed cargoes, they would be, including consulage, as follows: —

	£	s.	d.		£	s.	d.
Spanish	6	9	4	Swedish	15	1	10¾
British	11	12	4¾	Russian	14	11	10¾
French	15	7	10	Dutch	13	19	6¾
Danish	15	16	10¾	American	13	17	10¾

Custom-house Regulations. — A manifest of the cargo, the ship's tonnage, and number of crew, must be presented within 24 hours after pratique being given, when two officers are put on board to prevent smuggling. The consignees then make entry of the articles consigned to them, and obtain an order to land and bring them to the Custom-house, where they are inspected and the duties ascertained; but before obtaining this order, the consignees must produce a *certificate of origin* from the Spanish consul at the port of lading, if it be in a foreign country, for without this the entry is not allowed, and the goods are deposited in the Custom-house until it be obtained. When the discharge is completed, the vessel is searched by the surveyor, who reports having done so to the collector. To load the whole or part of an outward cargo, the master has to report his intention to the collector, who gives his order permitting goods to be shipped, and the shippers make their specific entries. When the vessel is loaded, the waiting officers make their return to the collector; who, on being presented with the receipts of the captain of the port and of the Pratique office for their respective charges, grants his clearance, upon which a bill of health is obtained, and the vessel is clear for sea.

Warehousing System. — Goods that may be legally imported, may be deposited in bonded warehouses for twelve months, paying, in lieu of all charges, 2 per cent. *ad valorem*, but at the end of the year they must be either taken for home consumption or re-shipped. The 2 per cent. is charged, whether the goods lie for a day or the whole year. In charging duties, no allowance is made for waste or damage in the warehouses.

Rates of Commission are usually 2½ per cent. on sales and purchases; ½ per cent. is commonly charged on the negotiation of bills. Goods are commonly sold at 3 months' credit. Ordinary discount at the rate of 6 per cent. per annum.

Alicant is not a favourable place for repairing ships, and provisions of all sorts are scarce and dear.

Vessels with foul bills of health, or coming from an infected or suspected place, though with clean bills, are usually ordered to Port Mahon to perform quarantine. But vessels coming with clean bills obtain, under ordinary circumstances, immediate pratique.

Money. — Accounts are kept at Alicant in libras of 20 sueldos; each sueldo containing 12 dineros; the libra, also called the peso, = 10 reals; and a real of Alicant = 27·2 maravedis of plate, or 51·2 maravedis vellon. The libra may be valued at 3*s.* 6*d.* sterling, and the real at 4¼*d.* ditto.

Weights and Measures. — The carga = 2½ quintals = 10 arrobas. The arroba consists either of 24 large pounds, or of 36 small ditto; the latter having 12 Castilian ounces to the pound, the former 18. The arroba = 27 lbs. 6 oz. avoirdupois; but at the Custom-house the arroba = 25 lbs. of 16 oz. each.

The principal corn measure is the cahiz or caffise, containing 12 barchillas, 96 medios, or 192 quartillos. The cahiz = 7 Winch. bushels, nearly.

The principal liquid measure is the cantaro of 8 medios, or 16 quartillos. The cantaro = 3·05 English wine gallons. The tonnelada or ton contains 2 pipes, 80 arrobas, or 100 cantaros.

The yard or vara, divided into 4 palmos, is = 29·96, or very nearly 30 English inches.

(*Consul's Answer to Circular Queries; Ingliss's Spain in* 1830, vol. ii. p. 304. &c.; *Kelly's Cambist, &c.*)

ALIENS. According to the strict sense of the term, and the interpretation of the common law, all individuals born out of the dominions of the crown of England (*alibi natus*) are aliens or foreigners.

It is obvious, however, that this strict interpretation could not be maintained without very great inconvenience; and the necessity of making exceptions in favour of the children born of native parents resident in foreign countries was early recognised. The 25 Edw. 3. stat. 2. enacts, that all children born abroad, provided *both* the parents were at the time of their birth in allegiance to the king, and the mother had passed the seas by her husband's consent, might inherit as if born in England. And this relaxation has been carried still further by several modern statutes: so that all children born out of the king's ligeance, whose fathers, or grandfathers by the father's side, were natural born subjects, are now deemed to be themselves natural born subjects; unless their ancestors were outlawed, or banished beyond sea for high treason, or were, at the birth of such children, in the service of a prince at enmity with Great Britain.

Naturalisation of Aliens. — Aliens may be naturalised by act of parliament, which puts them in exactly the same condition as natural born subjects, except that they are incapable of being members of the Privy Council, or being elected to serve in parliament, or of holding any office of trust under the crown.

A *denizen* is an alien born, who has obtained letters patent, *ex donatione regis*, to make him an English subject. He occupies a kind of middle station between a natural born subject and an alien. He may acquire lands by purchase or devise, but not by inheritance; and may transmit such lands to his children born after his denization, but not to those born before. — (*Blackstone's Com.* book i. cap. 10.)

An alien may also be naturalised by serving on board any of his Majesty's ships of war, in time of war, for three years, or, if a proclamation has been issued to that effect, for two years. — (6 *Geo.* 4. cap. 109. §§ 16, 17.)

Influence of the Residence of Aliens. — There can be no doubt that, generally speaking, the resort of foreigners to a country, and their residence in it, are highly conducive to its interests. Those who emigrate in order to practise their calling in an old settled country, are pretty uniformly distinguished for activity, enterprise, and good conduct. The

native inhabitants have so many advantages on their side, that it would be absurd to suppose that foreigners should ever come into any thing like successful competition with them, unless they were acquainted with some branch of trade or manufacture of which the others were ignorant, or possessed superior skill, industry, or economy. But whether aliens practise new acts, or introduce more perfect processes into the old, or display superior economy, &c., their influx cannot fail to be of the very greatest advantage. They practically instruct those among whom they reside in what it most concerns them to know, that is, in those departments of art and science in which they are inferior to others; and enable them to avail themselves of whatever foreign sagacity, skill, or practice has produced that is most perfect. It is not easy, indeed, to overrate the benefits conferred on most countries by the resort of aliens. Previously to the invention of printing, there was hardly any other way of becoming acquainted with foreign inventions and discoveries; and even now it is far easier to learn any new art, method, or process, from the example and instruction of those familiar with its details, than from the best possible descriptions. The experience, indeed, of every age and country shows that the progress of nations in the career of arts and civilisation depends more on the freedom of commerce, and on the liberality with which they have treated foreigners, than on almost any thing else.

English Legislation as to Aliens. — But, notwithstanding what has been stated above, an antipathy to resident foreigners seems to be indigenous to all rude and uncivilised nations. Whatever is done by them appears to be so much taken from the employment, and, consequently, from the subsistence of the citizens; while the advantages resulting from the new arts or improved practices they introduce, for the most part manifest themselves only by slow degrees, and rarely make any impression on the multitude. Hence the jealousy and aversion with which foreigners are uniformly regarded in all countries not far advanced in civilisation. The early Greeks and Romans looked upon strangers as a species of enemies, with whom, though not actually at war, they maintained no sort of friendly intercourse. "*Hostis*," says Cicero, "*apud majores nostros is dicebatur, quem nunc peregrinum dicimus.*" — (*De Off.* lib. i. cap. 12.) It may, therefore, be considered as a striking proof of the good sense and liberality of those by whom it was framed, that a clause is inserted in Magna Charta which has the encouragement of commerce for its object; being to the effect, that "all merchants (if not openly prohibited before) shall have safe and sure conduct to depart out of and to come into England, to reside in and go through England, as well by land as by water; to buy and sell without any manner of evil tolls, by the old and rightful customs, except in time of war; and if they be of a land making war against us, and such be found in our nation at the beginning of the war, they shall be attached without harm of body or goods, until it be known unto us, or our chief justice, how our merchants be entreated in the land making war against us; and if our merchants be well entreated there, shall be so likewise here."

But until the era of Edward I. the stipulation in the Great Charter as to foreign merchants seems to have been little attended to. It is doubtful whether, previously to his reign, they could either hire houses of their own, or deal except through the medium of some Englishman. But this intelligent prince saw the advantage that would result to the trade and industry of his subjects from the residence and intercourse of Germans, Flemings, Italians, and other foreigners, who, at that time, were very superior to the English in most branches of manufactures and commerce. He, therefore, exerted himself to procure a repeal of some of the more oppressive restrictions on aliens, and gave them a charter which conveyed considerable privileges.* Down, however, to the reign of Edward III., it continued to be customary to arrest one stranger for the debt, and even to punish him for the crimes and misdemeanors of others! It may appear extraordinary that the gross injustice of this barbarous regulation ever permitted it to be adopted; and yet it was probably, at one period, the common law of most European states. As soon, however, as the foundations of good order and civilisation began to be laid, its operation was seen to be most pernicious. In 1325, Edward II. entered into a convention with the Venetians, in which it was expressly stipulated that they should have full liberty to come to England to buy and sell commodities, without being liable for the debts or crimes of others. Conventions to the same effect were entered into with other foreigners. At length, in 1353, this disgraceful practice was put an end to by 27 Edward 3. stat. ii. cap. 17.; it being provided in this statute, not only that no stranger shall be impeached for the trespass or debt of another, but that, in the event of a war breaking out with any foreign power, its subjects, residing amongst us, shall be warned thereof by proclamation, and be allowed forty days to arrange their affairs, and

* This charter was confirmed by Edward III. in 1328. Among other clauses, it has the following, viz.: 1st, That on any trial between foreigners and Englishmen, the jury shall be half foreigners; 2d, That a proper person shall be appointed in London to be justiciary for foreign merchants; and, 3d, That there shall be but one weight and measure throughout the kingdom. — (*Anderson*, anno 1302.)

to depart out of the kingdom; and that, under special circumstances, this term may be extended. There are few acts in the statute-book that reflect more credit on their proposers, or that have been more advantageous than this.

In consequence of the encouragement given by Edward III. to such of the woollen manufacturers of Flanders as chose to immigrate to England, a good many came over; and it is from their immigration that we may date the improvement and importance of the woollen manufacture in this country. — (See Woollen Manufacture.) But this policy, however wise and judicious, was exceedingly unpopular. The foreigners were openly insulted, and their lives endangered, in London and other large towns; and a few of them in consequence returned to Flanders. Edward, however, was not to be driven from his purpose by an unfounded clamour of this sort. A proclamation was issued, in which every person accused of disturbing or attacking the foreign weavers was ordered to be committed to Newgate, and threatened with the utmost severity of punishment. In a parliament held at York, in 1335, an act was passed for the better protection and security of foreign merchants and others, by which penalties were inflicted on all who gave them any disturbance. This seems to have had the effect, for a while, at least, of preventing any outrages.

The corporations of London, Bristol, and other great towns, have been at all times the principal enemies to the immigration of foreigners. Perhaps, indeed, they were not more hostile to them than to such of their own countrymen, belonging to another part of the kingdom, as should have attempted to settle amongst them without being free of their corporation. But in denouncing foreigners they had the national prejudice on their side; and their attempts to confirm and extend their monopolies by their exclusion were regarded as the noblest efforts of patriotism! Edward III. was fully aware of the real motives by which they were actuated, and steadily resisted their pretensions. But in the reigns of his successors they succeeded better: some of these were feeble and unfortunate, whilst others enjoyed the crown only by a disputed title, and in defiance of powerful competitors. The support of the great towns was of the utmost consequence to such princes, who, whatever might be their own opinion as to its policy, could hardly venture to resist the solicitations of such powerful bodies to exclude strangers, and to impose restrictions on commerce. From the death of Edward III. to the reign of Elizabeth, the progress made by the country was not inconsiderable, but it was little promoted by legislative enactments. Throughout the whole of this period, the influence of corporations seems to have predominated in all matters relating to trade and the treatment of foreigners; and our legislation partook of the selfish, monopolising character of the source whence it was principally derived. Were the acts and proceedings as to aliens the only memorials of our policy from 1377 to 1560, we should certainly seem to have retrograded materially during the interval. Some of these acts were passed with so little consideration, and were so very absurd, that they had to be immediately repealed. Of this sort was the statute of the 8 Henry 6. cap. 24., to the effect "that no Englishman shall within this realm sell, or cause to be sold, hereafter, to any merchant alien, any manner of merchandises, but only for ready payment in hand, or else in merchandises for merchandises, to be paid and contented in hand, upon pain of forfeiture of the same." But as an enactment of this sort was very speedily found to be more injurious to ourselves than to the foreigner, it was repealed in the following sessions.

The more tyrannical their conduct in other respects, the more were our princes disposed to humour the national prejudice against foreigners. If not a cheap, it was, at least, an easy method of acquiring popularity. In the very first parliament after the accession of Richard III., a statute was passed full of the most ridiculous, contradictory, and unfounded allegations as to the injury sustained by the influx of foreigners, and laying them under the most oppressive restraints. Considering, indeed, the sort of treatment to which aliens were then exposed, it may excite surprise that they should ever have thought of visiting the country; and, in point of fact, it appears that the resort of foreign merchants to our ports was materially impaired by the statutes referred to, and others of the same description. This is evident from the act 19 Henry 7. cap. 6., where it is stated that "woollen cloth is not sold or uttered as it hath been in divers parts," and that "foreign commodities and merchandises are at so dear and exceeding high price, that the buyer cannot live thereon." But in despite of this authoritative exposition of the mischiefs arising from the restraints on aliens, and on trade, they were both increased in the reign of Henry VIII. And it was not till the reign of Elizabeth that the pretensions of the corporations seem to have been disregarded, and an attempt made to act, not by starts, but consistently, on the policy of Edward III.

The influx of foreigners during the reign of Elizabeth was occasioned chiefly by the persecutions of the Duke of Alva and the Spaniards in the Low Countries. The friends of the reformed religion, which, at the time, was far from being firmly established, and the government, were glad to receive such an accession of strength; and from the superiority of the Flemings in commerce and manufactures, the immigrants contributed

materially to the improvement of the arts in England. It would seem, however, that the ministers of Elizabeth contented themselves, perhaps that they might not excite the public prejudice, with declining to enforce the laws against aliens, without taking any very active steps in their favour.

In the reign of James I. the corporation of London renewed with increased earnestness their complaints of aliens. In 1622, a proclamation was issued, evidently written by James himself, in which, under pretence of keeping "a due temperament" between the interests of the complainants and those of the foreigners, he subjects the latter to fresh disabilities.

Since the revolution, more enlarged and liberal views as to the conduct to be followed with respect to aliens have continued to gain ground: several of the restraining statutes have fallen into disuse, while others have been so much modified by the interference of the courts, which have generally been inclined to soften their severity, that their more offensive provisions are become inoperative. In 1708, an act was passed, notwithstanding the strenuous opposition of the corporations, for the general naturalisation of all foreign protestants; but the prejudice against them was still so powerful that it was repealed within about three years. Some unsuccessful attempts have since been made to carry a similar measure. One of these, about the middle of last century, occasioned the publication by Dr. Tucker of two excellent pamphlets, in which the policy of the naturalisation act is most ably vindicated, and the arguments against it successfully exposed.* But no such statute has hitherto been passed, and aliens still continue subject to various disabilities.

Disabilities of Aliens. — The principal of these regards the possession of fixed property. It is ruled that lands purchased by an alien for his own use, may be seized by the king. "If," says Blackstone, "he could acquire a permanent property in lands, he must owe an allegiance, equally permanent with that property, to the king of England; which would probably be inconsistent with that which he owes to his own natural liege lord: besides that, thereby the nation might in him be subject to foreign influence, and feel many other inconveniences. Wherefore by the civil law such contracts were made void, but the prince had no such advantage of forfeiture thereby as with us in England." — (*Commentaries*, book i. cap. 10.)

An alien cannot take a benefice without the king's consent, nor can he enjoy a place of trust, or take a grant of lands from the crown. Aliens may, however, acquire property in money, goods, or other personal estate, and may have houses for the purpose of their habitation, and for carrying on their business. They may bring actions as to their personal effects, and may dispose of them by will. The *droit d'aubaine* (*jus albinatus*, i. e. *alibi natus*), or the right of the crown to succeed to the effects of an alien at his death, so long the custom in France, never obtained in England. If an alien abroad die intestate, his whole property here is distributed according to the law of the country where he resided; but such residence must have been stationary, and not occasional, otherwise the foreign municipal regulations will not apply to the property.

Aliens may trade as freely as natives; and for these many years past, the duties of *package* and *scavage* in the port of London, repealed in 1833, were the only peculiar duties with which they were burdened. The statutes of Henry VIII. restraining alien artificers from working for themselves, are understood to have been repealed by the stat. 5 Eliz. cap. 7.; and they are quite at liberty to employ themselves as they please.

Aliens indicted for felony or misdemeanor are tried by a jury of which half are foreigners; a privilege they have enjoyed, as already seen, with some partial interruptions, from the reign of Edward I.

Conditions of Residence. — During the late war, aliens were placed under the surveillance of the police; they were obliged to send frequent reports of their residence, and of the mode in which they were employed; and were liable to be sent out of the kingdom at any moment by an order from the secretary of state. The conditions under which they now reside amongst us are embodied in the 7 Geo. 4. cap. 54.

This act requires every master of a vessel arriving from foreign parts to declare in writing the names, rank, occupations, &c. of all aliens on board such vessel, or who have been landed from it any where within the realm. Such declaration to be made immediately on arrival: neglecting or refusing to make it, or making a false one, is punished by the forfeiture of 20*l.*, and a further sum of 10*l.* for each alien in such vessel, or landed from it within the realm. Aliens *bona fide* employed in the navigation of the vessel are excepted. — § 1.

The act then goes on to lay down the conditions of residence, which are merely that every alien is required to make a declaration and registry, renewed half yearly, or oftener if required by the secretary of state, of his name, abode, and occupation. Aliens neglecting to make such declaration, or making a false one, are, for every such offence, to forfeit any sum not exceeding 50*l.*, or be imprisoned any time not exceeding six months, at the discretion of two justices.

Policy of the Laws as to Aliens. — The reasons assigned by Mr. Justice Blackstone and others for preventing aliens from acquiring fixed property seem to be very unsatisfactory. In small states there might be grounds, perhaps, for fearing lest the easy admission of aliens to the rights of citizenship should give them an improper bias; but in a country like England, such apprehensions would be quite futile. In this respect the example of Holland seems quite decisive. Notwithstanding the comparatively limited population of that country, it was "the constant policy of the republic to make Holland a perpetual, safe, and secure asylum for all persecuted and oppressed strangers; no alliance, no treaty, no regard for, nor solicitation of any potentate whatever, has at any time been able to weaken or destroy, or make the state recede from protecting, those who have fled to it for their own security and self-preservation."— (*Proposals for amending the Trade of Holland*, printed by authority. Lond. 1751.)

A short residence in the country, and a small payment to the state, was all that was required in Holland to entitle a foreigner to every privilege enjoyed by a native. And

* Historical Remarks on the late Naturalization Bill, 1751; Queries occasioned by the late Naturalization Bill, 1752.

it is of importance to remark, that it has not been so much as insinuated that this liberal conduct was in any instance productive of a mischievous result. On the contrary, all the highest authorities consider it as one of the main causes of the extraordinary progress made by the republic in wealth and commerce. It is said in the official paper just quoted, that "Throughout the whole course of all the persecutions and oppressions that have occurred in other countries, the steady adherence of the republic to this fundamental law has been the cause that many people have not only fled hither for refuge, with their whole stock in ready cash, and their most valuable effects, but have also settled and established many trades, fabrics, manufactures, arts, and sciences, in this country; notwithstanding the first materials for the said fabrics and manufactures were almost wholly wanting in it, and not to be procured but at a great expense from foreign parts." (*Ibid.*)

With such an example to appeal to, we are warranted in affirming that nothing can be more ridiculous than to suppose that any number of foreigners which it is at all likely should ever come to England under the most liberal system, could occasion any political inconvenience; and in all other respects their immigration would be advantageous. A general naturalisation act would, therefore, as it appears to us, be a wise and politic measure. It might be enacted, that those only who had resided three or four years in the country, and given proofs of their peaceable conduct, should be entitled to participate in its advantages.

(Some parts of this article have been borrowed from the *Treatise on Commerce* written for the Society for the Diffusion of Useful Knowledge, by the author of this Work.)

ALKALIES. The distinguishing characters of these bodies are, a strong acrid and powerfully caustic taste; a corrosive action upon all animal matter, destroying its texture with considerable rapidity; exposed to the atmosphere, when in their caustic state, they absorb carbonic acid with great rapidity, and become carbonated (or mild). Their action upon vegetable colours also affords us means by which the presence of an uncombined or carbonated alkali may be detected; the yellow colour of turmeric is changed to a red brown tint when immersed into solutions containing them; the blue colour of the litmus, after being reddened by an acid, is again restored; the infusions of the red cabbage, the violet, and many other purple vegetable colours, are converted to green. Litmus paper reddened by carbonic acid is, however, the most delicate test of the presence of an alkali. With the various acids they also combine, forming the very important and extensive class of compounds generally called salts; a salt being any compound formed by the union of an acid with an alkali or a metallic oxide.

Alkalimetry. — The method by which the value of the alkalies, or carbonated alkalies, is determined, being of considerable importance in a commercial point of view, we shall here treat it somewhat in detail. It is an established fact, that 49 parts by weight of oil of vitriol of the specific gravity 1·8485, are exactly equivalent to the neutralisation of 70 parts by weight of pure carbonate of potash, or 48 of pure potass, or 54 of carbonate of soda, or 32 of soda; and that 70 parts of oil of vitriol will therefore be necessary to neutralise 100 parts of carbonate of potass: hence, by employing a glass tube of about two ounces' capacity, and accurately divided into 100 equal parts, taking 70 grains of oil of vitriol, and diluting it with water, to make the 100 measures complete, every measure of this dilute acid must be equal to a grain of pure carbonate of potass. The per centage of real carbonate of potass existing in any sample of pearlash may be at once ascertained by taking 100 grains of the sample, dissolving it in hot water, straining, and adding by degrees 100 measures of the test acid above mentioned; the point of neutralisation (when it ceases to affect litmus paper or reddened litmus) being accurately ascertained, the residual acid will give the per centage of impurities: for instance, say that 75 measures of the dilute acid have been employed to render 100 grains of a sample of pearlash perfectly neutral, then we have ascertained that it contains 25 per cent. impurities. The same process of course must be followed in examining samples of barilla or kelp, except that the alkali contained in them, being carbonate of soda, 90·75 of oil of vitriol must be employed instead of 70. The process recommended by Mr. Faraday, and in which he uses only one test acid, is as follows: — Into a tube about three quarters of an inch in diameter, and nine and a half long, and as cylindrical as possible throughout its whole length, 1,000 grains of water are to be weighed, and the space occupied marked on the tube by a fine file; this space is then divided from above downwards into 100 equal parts. At 23·44, or 76·56 parts from the bottom, an extra line should be made, and soda marked opposite to it; at 48·96 potass should be marked in the same way; at 54·63, carbonate of soda; and at 65, carbonate of potass. A diluted acid is now to be prepared, which shall have a specific gravity 1·127; and this is made by mixing intimately together 19 parts by weight of oil of vitriol, and 81 of water. The method to be followed in the employment of this acid is as follows:—The dilute acid is to be measured in the tube up to the line opposite to which the alkali sought for is marked; if barilla, which contains carbonate of soda, 54·63 measures are to be taken. The 100 measures are then made up by the addition of water, and is then ready for use, following the method before stated.

The alkalies are four in number, namely, ammonia (or volatile alkali), potass (or vegetable alkali), soda (or mineral alkali), and lithia; which last is of so little importance that we shall not treat of it here.

The combinations of these alkalies with the various acids, whenever they form compounds of any importance, will be noticed.

Ammonia, or Spirits of Hartshorn, or Volatile Alkali, — in its uncombined form, is an elastic gaseous body, having a very pungent and suffocating odour, destroys animal life, converts the yellow of turmeric paper to a brown, which, from the volatility of the alkali, is again restored by a gentle heat to its original colour. This gas is rapidly absorbed by water, which takes into solution about 780 times its volume, forming the liquid ammonia, or what is commonly called hartshorn. Ammonia is liberated whenever any of the compounds of this alkali are acted upon by potass, soda, lime, and many other alkaline earths. Lime, from its being the most economical, is generally employed: the best proportions for its preparations are equal weights of sal ammoniac (muriate of ammonia), and fresh slaked lime. When these are introduced into a retort, and heat applied, ammonia is liberated in the gaseous form, and is conducted by a Wetter's safety tube into a vessel of water, by which the gas is instantly absorbed. Muriate of lime remains in the retort: sometimes water is added to the mixture, and then distilled. As thus obtained, it has a specific gravity of ·930 or ·940, water being equal to 1·000. The most concentrated solution of ammonia has the specific gravity ·875.

Carbonate of Ammonia, or Volatile Salt, or Subcarbonate of Ammonia. — This salt, which is very much employed in various processes of the arts, was formerly obtained by the action of chalk (carbonate of lime) upon muriate of ammonia; a double decomposition takes place. Carbonic acid and ammonia are sublimed in vapour, and muriate of lime remains in the vessel. A much less expensive process is, however, now followed, namely, from the waste gas liquors obtained in the purification of coal gas; these are evaporated, and the black impure sulphuric acid added. By this means a sulphate of ammonia is formed, and the carbonate procured from it by the action of powdered chalk, as in the former process.

Its uses are principally in forming other compounds of ammonia, as smelling salts; and it is likewise employed rather extensively by pastry-cooks for making light pastry, which is caused by the volatile carbonate of ammonia escaping and raising up the pastry by the heat of the oven. It is entirely dissipated during the baking, so that no ill effect can arise from its use.

Both this compound and the preceding act as violent stimulants on the animal system.

Muriate of Ammonia, or Sal Ammoniac — was formerly brought to this country from Egypt, where it was procured by submitting the soot of camels' dung (there employed for fuel) to sublimation in closed vessels; it is, however, at present manufactured in very large quantities in this country in a variety of ways. The most economical processes are either submitting sulphate of ammonia mixed intimately with muriate of soda (sea salt) to sublimation, or by substituting the bittern of sea water, which consists chiefly of muriate of magnesia, for the sea salt. In the first process a sulphate of soda is formed, and the muriate of ammonia, which, being volatile, rises in the vaporous form, and is condensed in the cool parts of the apparatus: in the latter process, a sulphate of magnesia (Epsom salts) results. It is generally from this salt (muriate of ammonia) that the liquid ammonia is manufactured: it is also employed in tinning and soldering, to preserve the metals from oxidation. It is a semi-transparent, tough salt, having an acrid and cool taste, and is usually met with in the form of hemispherical masses. Sal ammoniac is made at Calcutta, and is thence exported to Great Britain, the United States, and the Arabian and Persian gulfs. In 1824–25, the exports amounted to 114 tons.

Sulphate of Ammonia. — The preparation of the sulphate has been already given under the head of ammonia; it is employed in the manufacture both of the carbonate and muriate.

Acetate of Ammonia. — The spirit of Mindererus is obtained by acting upon the carbonate of ammonia by acetic acid; the carbonic acid escapes with effervescence, and an acetate of ammonia is formed: it is employed in medicine as a febrifuge.

All these salts of ammonia have the following properties; — they are volatile at a low red heat; the fixed alkalies decompose them, combining with their acid, and the ammonia is liberated.

When combined with a fixed acid, such as the boracic or phosphoric, they are decomposed, the ammonia alone being volatilised, and the acid remaining pure. *This process was described for obtaining pure phosphoric acid.*

Potass, or Vegetable Alkali. — The original source of this alkali is in the vegetable kingdom, whence is derived its name of vegetable alkali. When wood is burnt, and the ashes lixiviated with water, boiled, strained, and evaporated to dryness, an intensely alkaline mass is obtained, which is known by the name of potash, from this process being conducted in iron pots. It is then removed to a reverberatory furnace, and submitted to heat, and a current of air. This burns out extractive matter and other impurities, and the salt assumes a pearly white colour, and is hence called pearlashes. Care should be taken, during this process, that the potashes do not enter into fusion, as this would destroy the full effect of the operation.

Pearlashes. — Pearlashes generally contain about from 60 to 83 or 84 per cent. of pure carbonate of potass. Its uses in manufactures are numerous and important. It is employed in making flint-glass, of which it constitutes about one sixth of the materials employed; in soap-making, especially for the softer kinds of soap: for this purpose, however, it is first rendered caustic by means of lime. In the rectification of spirits, large quantities are employed to combine with the water previously in union with the spirit.

Subcarbonate of Potass, or Salt of Tartar — is used in preparing the subcarbonate of potass of the Pharmacopœia, (carbonate of potass of the chemical nomenclature,) and likewise in rendering hard spring waters soft, and in cleansing substances from grease; it is sometimes called salt of wormwood. When made by the deflagration of two parts of tartar of argol and one of nitre, it is called black flux, and is used extensively in metallurgic operations.

From the subcarbonate of potash the pure and uncombined potass is obtained, by adding an equal weight of fresh burnt lime, previously slaked, and boiling them with half their weight of water. By this process the lime combines with the carbonic acid, and the potass remains in solution in its caustic state; by boiling the clear solution rapidly in iron vessels, and submitting it to fusion, we obtain the fused potass.

If it be required perfectly pure for chemical purposes, it is necessary to evaporate in silver vessels, and dissolve in strong alcohol. This takes up the pure potass, and leaves any portion of the subcarbonate that may not have been acted upon by the lime; then the alcohol is to be distilled off, and the potass fused at a red heat, and poured out in its liquid state on a cold slab. As thus procured, it is a white, brittle mass, highly deliquescent, absorbing moisture and carbonic acid rapidly from the atmosphere. When evaporated in iron vessels it has a dirty colour, and lets fall a quantity of oxide of iron, when dissolved in water, from its having acted upon the iron boilers.

Potass acts with great rapidity upon animal substances, destroying their texture, and is on this account employed as a caustic, and was formerly called *lapis infernalis.*

Carbonate (*or*, in the chemical nomenclature, *Bicarbonate*) *of Potass* — is prepared by passing carbonic acid gas through a solution of the subcarbonate: and evaporating at a temperature below 212°, and crystallising. It is used in making effervescing draughts. It loses one proportion of its carbonic acid when heated, and is converted into the subcarbonate.

Sulphate of Potass, or Sal Polychrest, or Vitriolated Tartar — is obtained by submitting the salt, which remains after the manufacture of nitric acid from nitre and sulphuric acid, to a red heat, or by neutralising the excess of acid contained in that salt by subcarbonate of potass.

Bisulphate of Potass, or Sal Enixum. — This is the salt mentioned above, as the residue from the process for obtaining nitric acid. It is employed, in very large quantities, in the manufacture of alum; also in tinning iron, for pickling, as it is termed; it is sometimes also used as a flux.

Nitrate of Potash, Nitre, or Saltpetre. — This salt, which is of so much importance in every branch of the arts, is found native in many parts of the world, especially in the East Indies. It is obtained from soils composed of decomposing granite, the felspar of which gives rise, as is supposed, to the potass. The nitric acid is not so easily accounted for, except it is by a union of the nitrogen and oxygen gases of the atmosphere taking place in those hot climates; for, from authenticated accounts, no decaying animal or vegetable matter exists in the nitre districts of India. By lixiviation with water the nitre is dissolved from the soil, which is again thrown out into the air, to be washed the following year; so that it is formed continually. These lixiviations are then evaporated; and when of a certain strength, a quantity of common salt separates, which is removed as it falls; and the nitre is then crystallised and imported to this country, always containing a certain quantity of impurities, which are deducted in the purchase of large quantities of the article, being termed its refraction. It is generally used for the manufacture of gunpowder and pure nitric acid, refined or re-crystallised.

Nitre may be also made artificially, in beds of decaying vegetable or animal substances, mixed with old mortar, or other refuse calcareous earth; these are watered occasionally, too much moisture being hurtful; after a certain period, depending on the rapidity with which the process has gone on, the whole is submitted to lixiviation together with wood-ashes, which contain subcarbonate of potass, and which de-

composes any nitrate of lime formed, of which there is generally a considerable quantity. After the lixiviation is complete, which takes some time, the solution is separated and boiled down; the salt separates as in the other process, and the nitre is then crystallised. It was from this source that the whole of the nitre, nearly, employed by the French during the long protracted war with the continental powers, was obtained.

Nitre has a cold, penetrating, and nauseous taste; enters into igneous fusion at a gentle heat, and is then moulded into round cakes called sal prunella. It is employed in the manufacture of nitric acid; of gunpowder, which is composed of 75 parts by weight of nitre, 16 of charcoal, and 9 of sulphur (the nitre for this purpose should be of great purity); and in the manufacture of oil of vitriol: as a flux it is one of the most powerful we possess; it is also used for the preservation of animal food, and in making frigorific mixtures: 1 oz. of nitre dissolved in 5 oz. of water lowers its temperature 15 degrees of Fahrenheit's thermometer. — (See SALTPETRE.)

Oxalate and Binoxalate of Potass. — The binoxalate of potass, or salt of lemon, or sorrel, by both which last names it is very commonly known, is procured from the juice of the common sorrel (Rumex Acetosa), or the wood sorrel (Oxalis Acetosella), by crystallisation, after the feculent matter has been separated by standing a few days. Its chief uses are, in removing ink spots or iron moulds; and also as a refreshing beverage when mixed with sugar and water.

The neutral oxalate is obtained from this salt by combining the excess of acid which it contains with a solution of subcarbonate of potass. Is very much used in chemistry, as the best test of the presence of lime.

Tartrate and Bitartrate of Potass. — Bitartrate of potass, or cream of tartar, is, when in its crude and impure state, called argol, and is deposited in the interior of wine casks during fermentation, and from this source the whole of the cream of tartar is obtained. It is generally of a very dark brown colour, but may be purified and rendered perfectly white by solution and crystallisation. It is employed very extensively in dyeing, hat-making, and in the preparation of tartaric acid, and many of the compounds of tartaric acid, as tartar emetic, soluble tartar (tartrate of potass): when heated to redness it is converted into carbonate of potass and charcoal; mixed with half its weight of nitre and thrown into a red hot crucible it forms the black flux, and with its own weight of nitre the white flux, both of which are very much employed in metallurgic operations. The tartrate is made by the addition of subcarbonate of potass to a solution of the bitartrate until perfectly neutral: it is used in medicine as a mild purgative.

Ferrocyanate or Prussiate of Potass.—This salt is obtained by the action of subcarbonate of potass, at a low red heat, upon refuse animal matter, such as hoofs, horns, skin, &c., in the proportion of two of subcarbonate, to four or five of the animal matter. But the process recommended by M. Gautier is preferable; he finds, that when animal matter is heated with nitre, it yields a much larger quantity of the ferroprussiate than when either potass or subcarbonate of potass are employed; the proportions he finds most economical are, 1 part by weight of nitre, 3 parts of dry blood, and iron scales or filings equal to a fiftieth of the blood employed.

The coagulum of blood is mixed intimately with the nitre and iron filings, and dried by exposure to the air; they are then submitted to a very low red heat, in deep iron cylinders, as long as vapours continue to be liberated; when cold, the contents are dissolved in 12 or 15 times their weight and strained. On evaporation, till of the specific gravity 1·284, and allowing it to cool, a large quantity of bicarbonate of potass crystallises, and by further evaporation till of the specific gravity 1·306, the ferroprussiate of potass crystallises on cooling. This is to be recrystallised. It is a beautiful yellow salt, very tough, having a tenacity similar to spermaceti, and is decomposed at a red heat. It is employed very extensively in dyeing blues, and in calico printing; also in the manufacture of Prussian blue, which is a compound of the ferroprussic acid and oxide of iron, prepared by adding 1 part of the ferroprussiate of potass dissolved in water, to 1 part of copperas, and 4 parts of alum in solution.

Chromate of Potass. — This salt is obtained from the native chromate of iron by the action of nitre at a full red heat in equal proportions. By solution, filtration, and evaporation, a beautiful lemon-yellow coloured salt results. It is very much employed in dyeing, calico printing, and calico making, from its producing bright yellow precipitates with solutions of lead.

Bichromate of Potass — is prepared from the above-mentioned salt, by the addition of nitric acid to the yellow solution obtained from the heated mass by the action of water; on evaporating this, a dark red coloured salt crystallises, which is the bichromate. This is also very largely employed by the calico printers, and when mixed in solution with nitric acid, possesses the property of destroying vegetable colours; on this account it is of great importance, as it at the same time removes a vegetable colour, and forms a base for a yellow dye.

Chlorate or Hyperoxymuriate of Potass.—The preparation of this salt is attended with some little difficulty, and requires a great deal of nicety. It is obtained by passing a current of chlorine gas through a solution of caustic potass; then boiling and evaporating; the first salt that separates is the chlorate of potass; and by further evaporation, muriate of potass is obtained. It is used in making matches for instantaneous light boxes, which are prepared by first dipping the wood in melted sulphur, and then into a thin paste, formed of 3 parts chlorate of potass, 2 parts starch, and a little vermilion; with sulphur it forms a very explosive compound, generally employed for filling the percussion caps of fowling-pieces.

Soda, or Mineral Alkali.—The sources of this alkali in nature are various. It is obtained in combination with carbonic acid, when plants which grow by the sea-side are burnt. The ashes thus obtained are called barilla and kelp; and also in some countries it is found as an efflorescence upon the surface of the earth, and is called nitrum or natron; this occurs particularly in Egypt and South America. Trona is also another native carbonate of soda, and is exported from Tripoli. In combination with muriatic acid it is also found in immense abundance, forming the rock salt, and sea salt, or muriate of soda. It is obtained from the carbonate exactly in the same way as potass is obtained from its carbonate, namely, by boiling it with fresh burnt lime previously slaked, decanting the clear solution, and evaporating and fusing. It is a white brittle substance, and by exposure to the air becomes converted into a dry carbonate. Its uses in the arts and manufactures are of considerable importance. In soap-making it is employed in very large quantities, and for this purpose is generally procured from barilla or kelp, by mixing them with lime, and by the infusion of water procuring a caustic soda ley; this is mixed with oil and fatty matters in various proportions, and boiled; the saponification of the fatty matter takes place, and the soap formed rises to the surface; the ley is then drawn from beneath, and fresh leys added, until the soap is completely free from oil; it is then allowed to dry. Soda is also employed in the manufacture of plate, crown, and bottle glass, though for this purpose it is generally in the form of carbonate or sulphate.

Subcarbonate of Soda. (In the chemical nomenclature it is called carbonate.) — This is generally prepared from barilla, which contains about from 16 to 24 per cent. Barilla is procured by incinerating the *salsola soda*, and other sea-side plants; it is made in large quantities on the coast of Spain. Kelp is another impure carbonate of soda, but does not contain more than 4 or 5 per cent.; it is the ashes obtained from sea weeds by incineration, and is made on the northern shores of Scotland. From these, the crystallised carbonate (or subcarbonate, as it is more frequently called) is made by the addition of a small quantity of water, boiling, straining, evaporating, and skimming off the common salt as it forms on the surface; on cooling, the subcarbonate of soda crystallises. Another method is by heating the sulphate of soda with carbonate of lime and charcoal, and then dissolving out the soluble carbonate; also, by the action of carbonate of potass (pearlash) upon solutions of sea salt. — (See BARILLA and KELP.)

Bicarbonate of Soda — is procured by driving a current of carbonic acid gas through solutions of the carbonate, and then evaporating at a temperature below 212° Fahrenheit; it is chiefly employed in making soda water powders. This is the carbonate of soda of the Pharmacopœia. By the application of a red heat it loses carbonic acid, and is converted into the subcarbonate.

Sulphate of Soda, or Glauber Salts. — This salt, which has received the name of Glauber, from its discoverer, is the residue of a great many chemical processes; for instance, when muriate of soda is acted upon by oil of vitriol, muriatic acid and sulphate of soda result; in making chlorine gas for the manufacture of the chloride of lime, or bleaching powder, sulphate of soda and sulphate of manganese result; the materials employed being sea salt, sulphuric acid (oil of vitriol), and black oxide of manganese: also, in the preparation of acetic acid from the acetate of soda, and in the preparation of muriate of ammonia from sea salt and sulphate of ammonia. Sulphate of soda is a colourless, transparent salt, effloresces readily when exposed to the air, and becomes converted into a dry powder; it has a cold, bitter taste. It is used for the preparation of carbonate of soda, and as a medicine. It is found native in some countries, particularly in Persia and South America — frequently as an efflorescence upon new walls.

Nitrate of Soda. — This salt is found native in some parts of the East Indies, and is called, from its square form, cubic nitre; it is, however, very little used.

Muriate of Soda, or Sea Salt. — This compound is found in immense quantities in the earth, and is called from this circumstance rock salt, or sal gem. The mines of Cheshire and Droitwich, in this country, and those in Poland, Hungary, and Spain, and many others, afford immense quantities of this compound. It is also obtained by the evaporation of sea water, both spontaneously in pits formed for the purpose, and in large iron boilers; the uncrystallisable fluid is called the bittern; basket salt is made by placing the salt after evaporation in conical baskets, and passing through it a saturated solution of salt, which dissolves and carries off the muriate of magnesia or lime. Pure salt should not become moist by exposure to the air; it decrepitates when heated; it is employed for the preparation of muriatic acid, carbonate of soda, muriate of ammonia, and many other operations; also in glazing stone-ware, pottery, &c.; and from its great antiseptic properties, is used largely for the preservation of animal food; as a flux also in metallurgy.

Borate of Soda, or Borax. — This salt is found in Thibet and Persia, deposited from saline lakes; it is called tincal, and is imported into this country, where it is purified by solution; the fatty matter with which the tincal is always coated being removed, and the solution evaporated and crystallised: its principal uses are as a flux, from its acting very powerfully upon earthy substances.

ALKANET, or ANCHUSA (Ger. *Orkanet;* Du. *Ossetong;* Fr. *Orcanette;* It. *Ancusa;* Sp. *Arcaneta*), a species of bugloss (*Anchusa tinctoria* Lin.). It has been cultivated in England; but is found of the finest quality in Siberia, Spain, and more particularly in the south of France, in the vicinity of Montpellier. The roots of the plant are the only parts that are made use of. When in perfection, they are about the thickness of the finger, having a thick bark of a deep purplish red colour. This, when separated from the whitish woody pith, imparts a fine deep red to alcohol, oils, wax, and all unctuous substances. To water it gives only a dull brownish hue. It is principally employed to tint pomatums and unguents, wax used in the making of fancy candles, oils employed in the dressing of mahogany, rose-wood, &c. The alkanet brought from Constantinople yields a more beautiful but less permanent dye than that of France. — (*Lewis's Mat. Med.; Magnien, Dictionnaire des Productions.*)

The duty, which was previously very oppressive, was reduced in 1832 to 2*s.* a cwt. In that year it produced 1,787*l.* 4*s.* 8*d.* This, supposing it to have been all charged with the 2*s.* duty, shows a consumption of 17,872 cwt. The price varies from 27*s.* to 32*s.* a cwt.

ALLOWANCES, TARES, &c. In selling goods, or in paying duties upon them, certain deductions are made from their weights, depending on the nature of the packages in which they are enclosed, and which are regulated in most instances by the custom of merchants, and the rules laid down by public offices. These allowances, as they are termed, are distinguished by the epithets *Draft, Tare, Trett,* and *Cloff.*

Draft is a deduction from the original or gross weight of goods, and is subtracted before the tare is taken off.

Tare is an allowance for the weight of the bag, box, cask, or other package, in which goods are weighed.

Real or *open tare* is the actual weight of the package.

Customary tare is, as its name implies, an established allowance for the weight of the package.

Computed tare is an estimated allowance agreed upon at the time.

Average tare is when a few packages only among several are weighed, their mean or average taken, and the rest tared accordingly.

Super-tare is an additional allowance, or tare, where the commodity or package exceeds a certain weight.

When tare is allowed, the remainder is called the nett weight; but if trett be allowed, it is called the *suttle weight.*

Trett is a deduction of 4 lbs. from every 104 lbs. of suttle weight.

This allowance, which is said to be for dust or sand, or for the waste or wear of the commodity, was formerly made on most foreign articles sold by the pound avoirdupois; but it is now nearly discontinued by merchants, or else allowed in the price. It is wholly abolished at the East India warehouses in London; and neither trett nor draft is allowed at the Custom-house.

Cloff, or *Clough,* is another allowance that is nearly obsolete. It is stated in arithmetical books to be a deduction of 2 lbs. from every 3 cwt. of the *second suttle;* that is, the remainder after trett is subtracted; but merchants, at present, know cloff only as a small deduction, like draft, from the original weight, and this only from two or three articles. — (See *Kelly's Cambist,* art. "London.")

For an account of the tares and allowances at London, see Tare; for the tares and allowances at the great foreign trading towns, see their names.

ALMONDS (Ger. *Mandeln;* Du. *Amandelen;* Fr. *Amandes;* It. *Mandorli;* Sp. *Almendra;* Port. *Amendo;* Rus. *Mindal;* Lat. *Amygdalæ amaræ, dulces*), a kind of medicinal fruit, contained in a hard shell, that is enclosed in a tough sort of cotton skin. The tree (*Amygdalus communis*) which produces this fruit nearly resembles the peach both in leaves and blossoms; it grows spontaneously only in warm countries, as Spain, and particularly Barbary. It flowers early in the spring, and produces fruit in August. Almonds are of two sorts, sweet and bitter. They are not distinguishable from each other but by the taste of the kernel or fruit. "The Valentia almond is sweet, large, and flat-pointed at one extremity, and compressed in the middle. The Italian almonds are not so sweet,

smaller, and less depressed in the middle. The Jordan almonds come from Malaga, and are the best sweet almonds brought to England. They are longer, flatter, less pointed at one end and less round at the other, and have a paler cuticle than those we have described. The sweet almonds are imported in mats, casks, and boxes; the bitter, which come chiefly from Mogadore, arrive in boxes."—(*Thomson's Dispensatory.*)

Duties on Almonds. — Previously to 1832, almonds were among the most grossly overtaxed articles in the British tariff; but the subjoined statement shows that the duties were then materially reduced. It further appears from it, that though the duty on bitter almonds in 1832 amounted to only about one eighth part of its amount in 1831, the revenue derived from them did not fall off more than about half, showing that the consumption had increased in a *fourfold* proportion! The revenue from Jordan almonds in 1831 was 7,830*l.*; and in 1832, 5,092*l.*; though the duty in the latter year was less than half what it had been in the former. The results of the reduction of the duty on other sorts of almonds are exactly similar. This, therefore, is a striking instance of the beneficial influence of reasonable duties. The fair presumption is, that in a few years the revenue from almonds, under the present moderate duties, will be much greater than it has ever been under the high duties.

An Account of the different Descriptions of Almonds imported into the United Kingdom in the Years 1831 and 1832, the Rates of Duty thereon, the Produce of the Duties, with the Countries from whence the Almonds were brought, and specifying the Quantities brought from each. — (Obtained from the *Custom-house* for this Work.)

Countries from which imported.	Quantities imported.											
	Bitter Almonds.				Jordan Almonds.				Almonds of other Sorts.			
	1831.			1832.			1831.			1832.		
	Cwt.	*qrs.*	*lbs.*	*Cwt.*	*qrs.*	*lbs.*	*Cwt.*	*qrs.*	*lbs.*	*Cwt.*	*qrs.*	*lbs.*	*Cwt.*	*qrs.*	*lbs.*	*Cwt.*	*qrs.*	*lbs.*
Germany	-	-	-	22	2	5	-	-	-	-	-	-	103	3	2	5	0	8
The Netherlands	-	-	-	21	2	24	-	-	-	-	-	-	-	-	-	0	1	9
France	56	1	22	43	1	24	-	-	-	-	-	-	550	0	22	549	1	12
Portugal, Azores, and Madeira	1	2	24	-	-	-	1	2	10	0	1	8	331	2	25	339	3	2
Spain	1	3	6	2	2	16	2,361	2	3	1,333	3	11	2,618	2	10	1,835	3	17
Gibraltar	193	3	7	-	-	-	130	0	23	0	0	18	232	0	22	86	1	12
Italy	22	2	6	18	2	24	0	2	0	0	0	2	151	3	15	140	0	5
Malta	-	-	-	-	-	-	0	1	5	0	0	6	0	0	27	-	-	
Turkey	-	-	-	-	-	-	-	-	-	-	-	-	0	0	13	-	-	
Tripoli, Barbary, and Morocco	3,115	3	24	2,697	0	21	-	-	-	-	-	-	5,138	2	11	6,018	3	15
Cape of Good Hope	-	-	-	-	-	-	-	-	-	-	-	-	0	0	6	0	0	14
East Indies	-	-	-	-	-	-	-	-	-	-	-	-	1	0	23	0	1	24
United States of America	-	-	-	101	3	13	-	-	-	-	-	-	-	-	-	-	-	
Isles of Guernsey, Jersey, and Man	-	-	-	-	-	-	-	-	-	1	1	27	7	0	1	25	3	14
Total	3,392	1	5	2,908	0	15	2,494	0	13	1,335	3	16	9,135	2	9	9,002	0	20
	Rates of Duty per Cwt.											
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
From Foreign Countries	1	11	8	0	4	0	4	15	0	2	0	0	2	7	6	1	0	0
From British Possessions	0	15	10	0	4	0	2	7	6	1	0	0	2	7	6	1	0	0
Nett produce of the Duties	2,260	6	2	1,068	17	1	7,830	5	11	5,092	0	6	7,850	17	6	5,466	5	7

Almonds were worth, in bond, in the London market, in August 1833, Jordan, 75*s.* to 100*s.* per cwt.; Barbary (bitter), 31*s.* per ditto; Valencia (sweet), 72*s.* to 75*s.* per ditto.

ALOES (Du. *Aloe;* Fr. *Aloés;* Ger. and Lat. *Aloe;* Rus. *Sabir;* Sp. *Aloè;* Arab. *Mucibar*), a bitter, gummy, resinous, inspissated juice, obtained from the leaves of the plant of the same name. There are four sorts of aloes met with in commerce; viz. *Socotrine*, *Hepatic*, *Caballine*, and *Cape*.

1. *Socotrine* — so called from the island of Socotra, in the Indian Ocean, not very distant from Cape Guardafui, where the plant (*Aloe spicata*), of which this species is the produce, grows abundantly. It is in pieces of a reddish brown colour, glossy as if varnished, and in some degree pellucid. When reduced to powder, it is of a bright golden colour. Its taste is extremely bitter; and it has a peculiar aromatic odour, not unlike that of the russet apple decaying. It softens in the hand, and is adhesive; yet is sufficiently pulverulent. It is imported by way of Smyrna and Alexandria, in chests and casks, but is very scarce in England.

2. *Hepatic.* — The real hepatic aloes, so called from its liver colour, is believed to be the produce of the *Aloe perfoliata*, which grows in Yemen in Arabia, from which it is exported to Bombay, whence it finds its way to Europe. It is duller in the colour, bitterer, and has a less pleasant aroma than the Socotrine aloes, for which, however, it is sometimes substituted. Barbadoes aloes, which is often passed off for the hepatic, is the produce of the *Aloe vulgaris*. It is brought home in calabashes, or large gourd shells, containing from 60 to 70 lbs. It is duskier in its hue than the Bombay, or real hepatic aloes, and the taste is more nauseous, and intensely bitter. The colour of the powder is a dull olive yellow.

3. *Caballine*, or *Horse*, *Aloes* seems to be merely the coarsest species or refuse of the Barbadoes aloes. It is used only in veterinary medicine; and is easily distinguished by its rank fœtid smell.

4. *Cape Aloes* is the produce of the *Aloe spicata*, which is found in great abundance in the interior of the Cape colony, and in Melinda. The latter furnishes the greater part of the extract sold in Europe under the name of Socotrine aloes. The odour of the Cape aloes is stronger and more disagreeable than that of the Socotrine; they have, also, a yellower hue on the outside; are less glossy, softer, and more pliable; the colour of the powder is more like that of gamboge than that of the true Socotrine aloes. — (*Ainslie's Mat. Indica; Thomson's Dispensatory* and *Mat. Medica.*)

Last year the duty on aloes was reduced to 2*d.* per lb. on those from a British possession, and to 8*d.* on those from a foreign country. The duty produced 1,810*l.* 5*s.* 2*d.* of nett revenue; but as the old rates of duty existed during a part of the year, it does not afford the means of determining the consumption.

ALOES-WOOD (Ger. *Aloeholz;* Du. *Aloëhout, Paradyshout;* Fr. *Bois d'Aloés;* It. *Legno di Aloe;* Sp. *Aloè chino;* Lat. *Lignum Aloes;* Sans. *Aguru;* Malay, *Agila;* Siam. *Kisna*), the produce of a large forest tree, to be found in most of the countries between China and India, from the 24th degree of north latitude to the equator.

It seems to be the result of a diseased action confined to a small part of a few trees, of which the rest of the wood is wholly valueless. It appears to be more or less frequent according to soil and climate, and from the same causes to differ materially in quality. It is produced both in the greatest quantity and perfection in the countries and islands on the east coast of the Gulf of Siam. This article is in high repute for fumigations, and as incense, in all Hindu, Mohammedan, and Catholic countries. It formerly brought a very high price, being at one time reckoned nearly as valuable as gold. It is now comparatively cheap, though the finest specimens are still very dear. The accounts of this article in most books, even of good authority, are singularly contradictory and inaccurate. This is more surprising, as La Loubère has distinctly stated, that it consisted only of "*certains endroits corrompus dans des arbres d'une certaine espèce. Toute arbre de cette espèce n'en a pas; et ceux qui en ont, ne les ont pas tous en même endroit.*" — (Royaume de Siam, t. i. p. 45. 12mo ed.) The difficulty of finding the trees which happen to be diseased, and of getting at the diseased portion, has given rise to the fables that have been current as to its origin. The late Dr. Roxburgh introduced the tree which yields this production into the Botanical Garden at Calcutta, from the hills to the eastward of Sylhet, and described it under the name of *Aquillaria Agalocha.*

ALUM (Ger. *Alaun;* Du. *Aluin;* Fr. *Alun;* It. *Allume;* Sp. *Allumbre;* Rus. *Kwasszä;* Lat. *Alumen;* Arab. *Sheb*), a salt of great importance in the arts, consisting of a ternary compound of *aluminum*, or pure argillaceous earth, potass, and sulphuric acid. Alum is sometimes found native; but by far the greater part of that which is met with in commerce is artificially prepared. The best alum is the Roman, or that which is manufactured near Civita Vecchia, in the Papal territory. It is in irregular, octahedral, crystalline masses, about the size of a walnut, and is opaque, being covered on the surface with a farinaceous efflorescence. The Levant, or Roch alum, is in fragments, about the size of the former, but in which the crystalline form is more obscure; it is externally of a dirty rose-colour, and internally exhibits the same tinge, but clearer. It is usually shipped for Europe from Smyrna; but it was anciently made at Roccha, or Edessa, in Syria; and hence its name, Roch alum. English alum is in large, irregular, semi-transparent, colourless masses, having a glassy fracture; not efflorescent, and considerably harder than the others. It is very inferior to either the Roman or Roch alum. The principal use of alum is in the art of dyeing, as a mordant for fixing and giving permanency to colours which otherwise would not adhere at all, or but for a very short time; but it is also used for a great variety of other purposes.

Beckmann has shown (*History of Inventions*, vol. i. art. "Alum") that the ancients were unacquainted with alum, and that the substance which they designated as such was merely vitriolic earth. It was first discovered by the Orientals, who established alum works in Syria in the thirteenth or fourteenth century. The oldest alum works in Europe were erected about the middle of the fifteenth century. Towards the conclusion of the reign of Queen Elizabeth, Sir Thomas Chaloner established the first alum work in England, near Whitby, in Yorkshire, where the principal works of the sort in this country are still carried on. There is a large alum work at Hurlett, near Paisley. Alum is largely manufactured in China, and is thence exported to all the western Asiatic countries. In 1831, 11,779 piculs (785 tons) were exported from Canton.

AMBER (Ger. *Bernstein;* Du. *Barnsteen;* Da. *Bernsteen, Rav.;* Fr. *Ambre jaune;* It. *Ambra gialla;* Sp. *Ambar;* Rus. *Jantar;* Pol. *Bursztyn;* Lat. *Succinum, Electrum*), a brittle, light, hard substance, usually nearly transparent, sometimes nearly colourless, but commonly yellow, or even deep brown. It has considerable lustre. Specific gravity 1·065. It is found in nodules or rounded masses, varying from the size of coarse sand to that of a man's hand. It is tasteless, without smell, except when pounded or heated, when it emits a fragrant odour. It is highly electric. Most authors assert that amber is bituminous; but Dr. Thomson states, that "it is undoubtedly of a vegetable origin; and though it differs from resins in some of its properties, yet it agrees with them in so many others, that it may without impropriety be referred to them." — (*Chemistry*, vol. iv. p. 147. 5th ed.)

Pieces of amber occasionally enclose parts of toads and insects in their substance, which are beautifully preserved. It is principally found on the shores of Pomerania and Polish Prussia; but it is sometimes dug out of the earth in Ducal Prussia. It is also met with on the banks of the river Giaretta, in Sicily. Sometimes it is found on the east coast of Britain, and in gravel pits round London. The largest mass of amber ever found was got near the surface of the ground in Lithuania. It weighs 18 lbs., and is preserved in the royal cabinet at Berlin. Most of the amber imported into this country comes from the Baltic, but a small quantity comes from Sicily. Amber was in very high estimation among the ancients, but is now comparatively neglected.

AMBER-GRIS, OR AMBER-GREASE (Ger. *Amber;* Du. *Amber;* Fr. *Ambergris;* It. *Ambra-grigia;* Sp. *Ambar-gris;* Lat. *Ambra, Ambra grisea*), a solid, opaque, generally ash-coloured, fatty, inflammable substance, variegated like marble, remarkably light, rugged and uneven in its surface, and has a fragrant odour when heated; it does not effervesce with acids, melts freely over the fire into a kind of yellow resin, and is hardly soluble in spirit of wine. It is found on the sea-coast, or floating on the sea, near the coasts of India, Africa, and Brazil, usually in small pieces, but sometimes in masses of 50 or 100 lbs. weight. "Various opinions have been entertained respecting its origin.

Some affirmed that it was the concrete juice of a tree, others thought it a bitumen; but it is now considered as pretty well established that it is a concretion formed in the stomach or intestines of the *Physeter macrocephalus*, or spermaceti whale." — (*Thomson's Chemistry.*) Ambergris ought to be chosen in large pieces, of an agreeable odour, entirely grey on the outside, and grey with little black spots within. The purchaser should be very cautious, as this article is easily counterfeited with gums and other drugs.

AMETHYST (Ger. *Amethyst;* Fr. *Amethyste;* It. *Amatista;* Sp. *Ametisto;* Lat. *Amethystus*), a precious stone, of which there are two species differing widely in quality and value.

The *Oriental amethyst* is a gem of the most perfect violet colour, and of extraordinary brilliancy and beauty. It is said to be as hard as the sapphire or ruby, with which it also corresponds in its form and specific gravity — (see SAPPHIRE), differing in colour merely. It has been met with in India, Persia, Siam, and other countries; but it is exceedingly scarce. That found in India is said by Pliny to be the best. (*Principatum amethysti Indicæ tenent.*—Nat. Hist. lib. xxxvii. cap. 9.) Mr. Mawe says he had rarely seen an oriental amethyst offered for sale, unless small and inferior in colour. Mr. Hope, the author of Anastasius, had in his cabinet the finest gem of this sort in Europe. This exquisite specimen exceeds an inch in its greatest diameter; in daylight it exhibits the most beautiful violet colour, while by candle-light it is a decided blue.

The *Occidental amethyst* is merely coloured crystal or quartz. — "When perfect, its colour resembles that of the violet, or purple grape; but it not unfrequently happens that the tinge is confined to one part of the stone only, while the other is left almost colourless. When it possesses a richness, clearness, and uniformity of hue, it is considered a gem of exquisite beauty; and as it occurs of considerable size, it is suited to all ornamental purposes. In specific gravity and hardness it bears no comparison with the oriental amethyst; it is also inferior in beauty and lustre; though I have often seen the common amethyst offered for sale as oriental. Brazil, Siberia, and Ceylon produce very fine amethysts: they are found in rolled pieces in the alluvial soil, and finely crystallised in fissures of rock. From the first of these localities, they have lately been imported in such quantities, as considerably to diminish their value: but as they are the only coloured stones, except garnets, that are worn with mourning, they still retain, when perfect, a distinguished rank among the precious gems. The present price of inferior light-coloured stones, in the rough state, is about 20*s.* per pound, whilst those of good quality sell at 10*s.* or 12*s.* per ounce. Amethysts calculated for brooches or seals may be purchased at from 15*s.* to two or three guineas each, for which, ten years ago, treble that sum would have been given." — (*Mawe on Diamonds*, 2d ed. pp. 115—117.)

AMIANTHUS, ASBESTOS, OR MOUNTAIN FLAX, a mineral of which there are several varieties, all more or less fibrous, flexile, and elastic. It is inconsumable by a high degree of heat; and in antiquity the art was discovered of drawing the fibres into threads, and then weaving them into cloth. Pliny says that he had seen napkins made of this substance, which, when soiled, were thrown into the fire, and that they were better cleaned by this means than they could have been by washing! Hence it obtained from the Greeks the name of Αμιαντος (undefiled). Its principal use, as stated by Pliny, was to wrap the bodies of the dead previously to their being exposed on the funeral pile, that the ashes of the corpse might not be mixed with those of the wood. And in corroboration of this statement we may mention, that in 1702, a skull, some calcined bones, and a quantity of ashes, were found at Rome, in a cloth of amianthus nine Roman palms in length by seven in width. Its employment in this way was, however, confined to a few of the very richest families, incombustible cloth being very scarce, and bringing an enormously high price. *Rarum inventu, difficile textu propter brevitatem. Cùm inventum est, æquat prctia excellentium margaritarum.* — (Plin. Hist. Nat. lib. xix. cap. 1.) The disuse of the practice of cremation, or of burning the dead, caused the manufacture of amianthine cloth to be neglected. Several moderns have, however, succeeded in making it; but, if it be not lost, the art is now rarely practised. — (For further particulars, see *Rees's Cyclopædia.*)

AMMONIACUM (Fr. *Gomme Ammoniaque;* It. *Gomma Ammoniaco;* Sp. *Goma Ammoniaco;* Lat. *Ammoniacum;* Arab. *Feshook*), a concrete resinous juice obtained from a plant resembling fennel, found in the north of Africa, Arabia, Persia, the East Indies, &c. Pliny says that it derived its name from its being produced in the vicinity of the temple of Jupiter Ammon in Africa. — (*Hist. Nat.* lib. xii. cap. 23.) It has a faint but not ungrateful smell; and a bitter, nauseous, sweet taste. The fragments are yellow on the outside and white within, brittle, and break with a vitreous fracture; their specific gravity is 1·207. The best ammoniacum is brought from Persia by Bombay and Calcutta, packed in cases and chests. It is in large masses, composed of small round fragments or tears; or in separate dry tears, which is generally considered a sign of its goodness. The tears should be white internally and externally, and free from seeds or other foreign substances. Reject that which is soft, dark-coloured, and foul. It is used principally in the materia medica, and the quantity imported is but small. — (*Rees's Cyclopædia; Thomson's Dispensatory; Milburn's Orient. Com. &c.*)

AMMONIAC (SAL). See ALKALIES (*Muriate of Ammonia*).

AMMUNITION, a term expressive of the various implements used in war.

No ammunition can be imported into the United Kingdom by way of merchandise, except by licence from his Majesty, and such licence is to be granted for furnishing his Majesty's stores only, under penalty of forfeiture. — (*6 Geo.* 4. c. 107.) His Majesty may forbid, by order in council, the exportation of any saltpetre, gunpowder, or any sort of

ammunition. Any master of a vessel exporting ammunition when so forbidden, shall for every such offence forfeit 100*l.* —(29 *Geo.* 2. c. 16.)

AMSTERDAM, the principal city of Holland, situated on the Y, an arm of the Zuyder Zee, in lat. 52° 25′ N., and long. 4° 40′ E. From 1580 to 1750, Amsterdam was, perhaps, the first commercial city of Europe; and though her trade has experienced a great falling off since the last-mentioned epoch, it is still very considerable. In 1785, the population is said to have amounted to 235,000; in 1814, it had declined to 180,000, but at present it exceeds 200,000. The harbour is spacious and the water deep; but on account of a bank (the Pampus) where the Y joins the Zuyder Zee, large vessels going or coming by that sea are obliged to load and unload a part of their cargoes in the roads. The navigation of the Zuyder Zee is also, by reason of its numerous shallows, very intricate and difficult; and as there were no hopes of remedying this defect, it became necessary to resort to other means for improving the access to the port. Of the various plans suggested for this purpose, the preference was given to the scheme for cutting a canal capable of admitting the largest class of merchantmen, from the north side of the port of Amsterdam to Newdiep, opposite to the Texel, and a little to the east of the Helder. This canal has fully answered the views of the projectors, and has proved of signal service to Amsterdam, by enabling ships to avoid the Pampus, as well as the difficult navigation of the Zuyder Zee, where they were frequently detained for three weeks, and to get to Newdiep without any sort of risk in less than 24 hours. The canal was begun in 1819, and completed in 1825. The ground between its extremities being nearly level, it has only a lock at each end; and the dues and charges on account of towing, &c. are very moderate. At Newdiep the water is deeper than in any other port on the coast of Holland, and ships are there in the most favourable position for getting expeditiously to sea. — (See Canals.) The imports principally consist of sugar, coffee, spices, tobacco, cotton, tea, indigo, cochineal, wine and brandy, wool, grain of all sorts, timber, pitch and tar, hemp and flax, iron, hides, linen, cotton and woollen stuffs, hardware, rock salt, tin plates, coal, dried fish, &c. The exports consist partly of the produce of Holland, partly of the produce of her possessions in the East and West Indies and other tropical countries, and partly of commodities brought to Amsterdam, as to a convenient *entrepôt*, from different parts of Europe. Of the first class are cheese and butter (very important articles), madder, clover, rape, hemp, and linseeds, rape and linseed oils, Dutch linen, &c. Geneva is principally exported from Schiedam and Rotterdam; oak bark principally from the latter. Of the second class are spices, Mocha and Java coffee; sugar of Java, Brazil, and Cuba; cochineal, indigo, cotton, tea, tobacco, and all sorts of Eastern and colonial products. And of the third class, all kinds of grain, linens from Germany, timber and all sorts of Baltic produce; Spanish, German, and English wools; French, Rhenish, and Hungarian wines, brandy, &c. The trade of Amsterdam may, indeed, be said to comprise every article that enters into the commerce of Europe. Her merchants were formerly the most extensive dealers in bills of exchange. And though London be now, in this respect, far superior to Amsterdam, the latter still enjoys a respectable share of this business.

The Bank of the Netherlands was established at Amsterdam in 1814. It is not, like the old Bank of Amsterdam, which ceased in 1796, merely a bank of deposit, but a bank of deposit and circulation formed on the model of the Bank of England. — (See Banks, Foreign.)

For an account of the Dutch fisheries, see the articles Herring Fishery and Whale Fishery.

Ships entering the Port of Amsterdam during the three Years ending with 1831, specifying the Countries whence they came.

Countries.	1829.	1830.	1831.
	Ships.	Ships.	Ships.
Ports of Norway and North Sea	496	788	601
Baltic and Archangel	1,134	801	565
Mediterranean, France, Spain, and Portugal	113	105	99
South America	7	10	10
North America	46	57	40
West Indies	79	95	77
Great Britain	82	114	209
East Indies and China	18	26	23
Total	1,975	1,996	1,624

There are no means of ascertaining the tonnage and the crews of these vessels. About 220 or 230 large ships belong to Amsterdam; they are employed in the East and West India trades, and in trading to the Baltic, the Mediterranean, &c. There is comparatively little coasting trade at Amsterdam, the communication with most other ports in the vicinity being principally kept up by canals, and that with Friesland by regular packets. The total number of ships of all sorts annually entering the port amounts, at an average, to about 2,200.

Account of some of the principal Articles, specifying their Quantities and Values, imported into Amsterdam by Sea during the Years 1829, 1830, and 1831.

Denomination of Merchandise.	Description of Package.	1829. Quantity.	1829. Value in Dutch Money.	1829. Value in Sterling.	1830. Quantity.	1830. Value in Dutch Money.	1830. Value in Sterling.	1831. Quantity.	1831. Value in Dutch Money.	1831. Value in Sterling.
			Florins.	£		Florins.	£		Florins.	£
Coffee, East India -	Bags	100,000	2,016,000	168,000	84,470	1,667,437	138,953	121,500	2,704,590	225,388
— West India -	Casks	1,970	397,152	3 100	2,270	436,180	36,250	1,190	299,880	24,990
— Ditto -	Bags	43,700	2,796,80	233,060	50,770	3,096,970	258,080	24,280	1,942,400	161,860
Sugar, West India -	Casks	19,000	3,351,600	279,300	21,560	3,380,608	281,717	19,850	3,223,610	268,657
— Havannah -	Chests	22,200	1,758,240	146,520	8,820	579,474	48,290	17,690	1,082,628	90,219
— Brazil -	Do.	1,370	369,900	30,825	1,060	218,625	18,220	1,260	255,150	21,263
— Mauritius -	Bags	2,550	53,760	4,480	11,400	191,520	15,960	27,800	486,500	40,540
— East India -	Chests	810	68,000	5,666	1,800	122,130	10,177			
— Ditto	Canisters	1,980	122,859	10,240	2,530	126,879	10,573	7,430	457,873	38,154
— Ditto	Bags	1,840	36,846	3,076	6,630	110,389	9,200			
Cotton Wool, American	Do.	5,190	656,016	54,670	3,740	466,752	38,896	1,490	178,800	14,900
— Egyptian	Do.	220	24,310	2,026	40	4,680	390	300	31,980	2,655
— West India	Do.	2,900	419,050	34,920	4,270	609,756	50,813	2,590	348,837	29,070
— East India	Do.	1,800	142,200	11,850	490	44,120	3,677	660	63,610	5,300
Tobacco, Maryland	Casks	7,400	1,476,300	123,080	5,520	1,033,620	86,137	5,220	963,745	80,312
— Virginia -	Do.	620	90,613	7,550	5,330	675,712	56,143	6,050	821,469	68,455
— Kentucky -	Do.	2,230	298,150	24,846	580	72,007	6,000	180	23,550	1,963
Hides - -		28,200	359,550	29,960	48,600	577,125	48,094	42,000	493,500	41,125
Pepper - -	Bags	680	33,320	2,777	1,150	35,220	2,935	2,060	118,241	9,854
Rice - -	Casks	12,200	924,638	77,050	7,570	487,129	40,594	5,830	408,508	34,042
— - -	Bags	12,600	167,895	13,990	8,800	100,200	8,342	2,260	4,576	380
Linseed - -	Lasts	13,380 equal to 140,500 quarters	3,211,200	267,000	10,870 or 114,135 quarters	2,250,090	187,500	3,170 or 33,285 quarters	656,190	54,683
Wheat - -	Do.	12,870 equal to 135,135 quarters	4,350,060	362,505	10,940 or 114,870 quarters	3,183,540	265,295	13,300 or 139,650 quarters	4,402,300	366,858
Rye - -	Do.	12,260 equal to 128,730 quarters	2,022,900	168,575	15,340 or 161,070 quarters	2,515,760	209,646	18,290 or 192,045 quarters	3,840,900	320 075
Barley - -	Do.	1,100 equal to 11,550 quarters	146,300	12,192	2,770 or 29,085 quarters	396,110	33,009	290 or 3,045 quarters	42,340	3,528

During the year 1831, there were shipped from France for Holland, according to the official accounts given by the French Custom-house, 5,488,572 litres, or 1,372,188 wine gallons of wine. The total imports of Amsterdam in 1831 are estimated in the *Archives du Commerce* (tom. i. p. 236.), at 85,169,700 francs (3,400,000*l.* sterling), and the exports at 72,760,000 francs (2,910,000*l.* sterling). During 1831, 93,324 lbs. (English) of cheese, 380 tons of oil cake, 2,189 tons of oak bark, and 23,100 quarters of wheat, were exported from Amsterdam for Great Britain. The exports for England of butter, flax and tow, cloves and nutmegs (of which articles the Dutch have a monopoly), smaltz, linens, hides, &c., were very considerable.

Expenses of Ships in Amsterdam. —The expenses of a ship of 300 English tons, or 158 Dutch lasts, with a mixed cargo on board, inwards and outwards, coming and departing by the canal, were, in 1832, as follows: —

	Arriving from Great Britain. £	s.	d.	Arriving from the Mediterranean. £	s.	d.
Lock dues in the canal, and charges — inwards - -	4	10	0	8	10	0
Ditto - - - outwards - -	2	10	0	5	10	0
Measuring the ship - - - -	1	10	0	1	10	0
Tonnage dues, inwards and outwards - - -	25	12	0	25	12	0
A charge called Port money - - -	1	12	0	2	0	0
Haven money - - - - -	0	13	6	0	13	6
Quay or key money - - - -	1	2	0	1	2	0
Permit to consume provisions free of excise dues - -	0	8	0	0	8	0
Clearance - - - - - -	0	5	0	0	12	6
Expenses of clearing, fees, &c. - - - -	2	18	0	2	18	0
Total -	£41	0	6	£48	16	0

There is besides, the merchants' and brokers' commission on recovering and procuring freights, generally settled by agreement.

The *tonnage duty* is 45 cents (9*d.*) the Netherlands ton (nearly equal to the British) inwards, and the same outwards, with the addition of the Syndicate tax of 13 per cent. It is payable only *once a year* by ships bearing the following flags, viz. Netherlands, British, North American, Danish, Hanoverian, Hamburgh, Bremen, Lubeck, Mecklenburg, Oldenburg, Russian, Portuguese, Austrian, Syrian, Salonica, Swedish, Norwegian, Prussian, Turkish, Rio de la Plata. Others pay 57½ cents (11½*d.*) per ton inwards, and the same outwards every voyage.

The charge called port money is payable half on entry, and half on departure; and that called haven money the same. The hire of a horse for towing along the whole line of the canal amounts to 12 flor. 40 cents, or about 1*l.* 1*s.*

Quarantine. — The quarantine station is at the island of Wierengen, near the Helder.

Commission. — The usual rate of commission or factorage on the purchase or sale of goods is 2 per cent., and on bill transactions ½ and ⅓ per cent. according to their nature.

Provisions of all sorts are abundant at Amsterdam, and reasonably cheap. The wages of ships' carpenters vary from 1 flor. 20 cents to 1 flor. 80 cents; that is, from about 2*s.* to 3*s.* a day.

For an account of the prices of corn at Amsterdam, see Corn Trade and Corn Laws.

Custom-house Regulations. — Captains of ships are bound to make, within 24 hours of their arrival at Amsterdam, or any Dutch port, a declaration in writing, of the goods of which their cargo consists. If the captains be not acquainted with the goods of which the cargo consists, they must make their declaration under the general term of *merchandise*, and exhibit the bills of lading along with the declaration. The Custom-house officers are instructed to inform the captains of all formalities required by law.

All goods, whether for home consumption or transit, may be deposited in bonded warehouses. If re-exported by sea, they pay no duty; but if re-exported by canals or otherwise for the interior, they are subject to a transit duty. The warehouse rent chargeable per month on a quarter of wheat (Imp. meas.) is, on an upper loft, 1$\frac{2}{3}$*d.*, on an under do. 1$\frac{1}{2}$*d.*; on a ton (Eng.) of sugar in casks, the charge is 8*d.*; in chests or mats, 6*d.*

The business of insurance is extensively practised at Amsterdam; the premiums are moderate, and the security unexceptionable. The high duty imposed in this country on policies of insurance has contributed to the increase of this business in Holland.

Credit, Discount, &c. — Holland is, and has always been, a country of short credit. A discount is usually given for prompt payment, at the rate of 1 per cent. for six weeks, and of 2 per cent. for two months; but the terms of credit on most articles, and the discount allowed for ready money, have been fixed by usage, and are regarded as essential conditions in every bargain. Some of the more important of these terms and discounts are specified in the following table. In consequence of the preference given in Holland to ready money transactions, it is not a country in which adventurers without capital have much chance of speedily making a fortune. "Rien, en effet, de plus facile que de s'établir à Amsterdam; mais *rien de plus difficile que de s'y soutenir sans des grandes ressources.* Dans cette ville, où l'argent abonde, où on le prête contre des sûretés à si bon marché, *il est pourtant impossible de s'en procurer à crédit;* et sans argent il n'y a plus de possibilité d'y travailler, que de trouver quelqu'un qui veuille de se charger d'un papier nouveau qui ne seroit pas appuyé d'un crédit que l'opinion, la protection, ou des effets réels feroient valoir à la bourse. Les Hollandois suivent là-dessus des maximes très austères, même à l'égard des maisons d'une certaine considération."—(*Encyclopédie Méthodique, Commerce*, t. ii. p. 650.) But this *austerity* is not a disadvantage, but the reverse. It prevents commerce from degenerating, as it has too often done in other places, into gambling adventures, and places it on a comparatively solid foundation. And it should be mentioned to the honour of the Dutch, and as a proof of the excellence of this system, that, notwithstanding the distress and loss of trade occasioned by the invasion and occupation of their country by the French, the bankruptcies in 1795 and subsequent years were not, comparatively, so numerous as in England in ordinary seasons! The regulations in the Code Napoléon as to bankruptcy are enforced in Holland.

It has long been the practice in Holland to make, on selling articles, considerable deductions from their weight, particularly from those of large bulk, as compared with their value. These tares and drafts, as they are termed, are now fixed by ancient usage: and the most important amongst them are here specified.

Tares and Allowances on the principal Articles sold at Amsterdam.

	Tares.	Allowances. (Draft and Discount.)
Ashes	42 lbs. per cask	18 months' discount, and 1 per cent.
Barilla	per cent.	2 per cent. and 2 per cent.
Cocoa, Caracas	42 lbs.	1 per cent.
Maranham	ditto	2 per cent. and 2 per cent.
Cayenne	ditto	
Martinique	ditto	
Surinam	6 per cent.	
Coffee, East and West India in general	bags 3 per cent., casks real tare	
Bourbon	10 lbs. per original mat	
Java	14 lbs. per gunny.	
Mocha	24 lbs. per bale	
Cotton, Surat and Bengal	8 per cent.	2 per cent. and 1 per cent.
all other kinds	6 per cent.	
Cotton yarn twist	—	1 per cent.
Indigo, Bengal	real tare	1 per cent. 2 per cent. and 1 per cent.
Cochineal	3 à 4 lbs.	4 per cent. augment. 1 per cent. deduct.
Galls	6 lbs. or 20 lbs.	2 per cent. and 2 per cent.
Gums, Senegal	6 lbs. 14 lbs. or 21 lbs.	2 per cent. and 2 per cent.
Barbary		
Arabic	14 lbs. or 30 lbs.	
Logwood	2 and 3 per cent.	2 per cent.
Fustic	2 per cent.	
Hides, Buenos Ayres, &c.	2 lbs. per hide	2 per cent. and 1 per cent.
Linens, Flemish	—	2 per cent. and 1 per cent.
all other kinds	—	1 per cent.
Oils	—	1 per cent.
Rice, Carolina	real tare	2 per cent. and 2 per cent.
East India	6 lbs.	
Saltpetre	8 à 14 lbs.	1 per cent. and 1½ per cent.
Liquorice	real tare and 4 lbs.	2 per cent. and 1 per cent.
Spices, pepper, cinnamon	25 lbs. or 13 lbs.	
cloves and mace	—	1 per cent.
pimento	42 lbs. and above	1 per cent.
nutmegs	100	
	12 per cent.	
ginger	8 lbs. à 16 lbs.	2 per cent.
Sugars, Martinique	18 per cent.	2 per cent. and 2 per cent.
St. Domingo		
St. Croix		
Surinam		
English colonies	20 per cent.	
Demerara	18 per cent.	
Berbice		
Essequibo		
Brazil, white		
Ditto, Muscovado	—	18 months' discount, 2 per cent. and 2 per cent.
Havannah	80 lbs.	2 per cent. and 2 per cent.
Java	48 lbs.	
Salt	—	1 per cent.
Tea, bohea	21 lbs. à 24 lbs.	1 per cent.
congo		
souchong		
campoi		
hyson	18 lbs.	
pekoe	18 lbs. à 42 lbs.	
tonquin		
Tobacco, Maryland	casks tared	2 per cent. and 4 per cent. damaged, and 1 per cent.
Virginia	2 and 8 per cent.	
Tin plates	2 per cent.	1 per cent.
Wool, Spanish	bags tared, and 24 lbs. per 175 lbs.	21 months' discount, and 1 per cent.
Wines	—	1 per cent.
Madder	casks tared	10 lbs. per cask, and 2 per cent.
Herrings	3 or 5 per cent.	1 per cent. 2 per cent. and 2 per cent.
Smaltz	36 lbs.	2 per cent.
Flax, hams, seeds, geneva, grain	—	1 per cent.
Butter	—	none.
Hides	—	2 and 1 per cent.
Cheese, Edam	—	2 per cent.
Gouda	—	1 per cent.

The above are the customary tares and other allowance made by the merchants in their transactions with each other. But in paying the import duties at the Custom-house, the tare upon goods paying duty by weight is, with the exceptions undermentioned, fixed at 15 per cent. for such as are in casks or barrels, and at 8 per cent. for such as are in packages, canisters, mats, baskets, &c. Merchants dissatisfied with these allowances may pay the duty according to the *real* weight, ascertained by the customs officers at their expense.

Exceptions. — The tare upon grain imported in sacks is fixed at 2 per cent.

Porcelain, 15 per cent.

Indigo — in chests, 25 per cent.; in serons, 15 per cent.

Sugar — chests from Havannah, 18 per cent., other places 20 per cent.; canisters, 10 per cent.; casks and packages, 15 and 8 per cent. The tare upon sugar refined in the interior and exported, is 12 per cent. per barrel, 8 per cent per package.

Allowances for leakage are made upon all liquids, including treacle and honey, as follows, viz.

Coming from England, the northern ports of Europe, and France, by inland navigation, 6 per cent.

From France by sea, and from other countries by the rivers Rhine and Waal, 12 per cent.

From any other port or place, 14 per cent.

Finally, from whatever place the same may come, upon train oil, 12 per cent.; blubber, 6 per cent.

In case liquids shall have experienced, upon the voyage, such leakage as shall cause the importer to be dissatisfied with the allowance before specified, he is permitted to pay the duty upon the actual quantity, to be ascertained by the officers at the importer's expense.

Money. — Accounts used to be kept at Amsterdam by the pound Flemish = 6 florins = 20 schillings = 120 stivers = 240 groats = 1920 pennings. But in 1820, the decimal system was introduced. In order, however, to cause as little inconvenience as possible, the florin = 1*s.* 8$\frac{3}{4}$*d.* sterling, was made the unit of the new system. The florin is supposed to be divided into 100 equal parts or cents; and the other silver coins are equal multiples or sub-multiples of it. The new gold coin is called the florin piece, and is worth 16*s.* 6½*d.* very nearly. But accounts are still sometimes kept in the old way or by

the pound Flemish. Par of exchange between Amsterdam and London is 11 flor. 58 cents per pound sterling.

Weights and Measures. — In 1820, the French system of weights and measures was introduced into the Netherlands, the names only being changed.

The *pond* is the unit of weight, and answers to the French *kilogramme*. Its divisions are the ons, lood, wigtje, and korrel.

The *elle*, which is the unit or element of long measure, equals the French *mètre*. Its decimal divisions are the palm, duim, and streep; and its decimal multiples, the roede and mijle.

The *vierkante elle*, or square ell, is the unit of superficial measure; and answers to the *centiare* or *mètre carré* of France. Its divisions are the vierkante palm, vierkante duim, and the vierkante streep; and its multiples, the vierkante roede and vierkante bunder.

The *kubicke elle* is the unit of measures of capacity; and equals the French *stère*. Its divisions are the kubicke palm, kubicke duim, and kubicke streep.

The term *wisse* is given to a kubicke elle of fire-wood.

The *kop* is the unit of measures for dry wares, and is the cube of the palm; answering to the French *litre*. Its division is the maatje, and its multiples the schepel and mudde; the latter is also called the *zak*, and equals the French hectolitre. 30 mudden make 1 last.

The *kan* is the unit for liquid measure, and is the cube of the palm; it corresponds to the French *litre*. Its divisions are the maatje and vingerhoed, and 100 kans make a vat or cask, which equals the French hectolitre.

The apothecary's new pound is 12 ounces, 96 drachms, 288 scruples, or 5,760 grains; and answers to 375 grammes, or 5,787 English grains.

By the old method of calculating, which is not yet entirely superseded, the pound of Amsterdam was = to 1·09 lb. avoirdupois, or 100 lbs. Amsterdam = 108·923 lbs. avoirdupois.

The *last* or measure for corn = 27 mudden = 10 qurs. 5⅓ bushels Winchester measure. The *aam* liquid measure = 4 ankers = 8 steckans = 21 viertels = 64 stoops or stoppen = 128 mingles = 256 pints = 41 English wine gallons.

The stoop contains 5 1-8th pints English wine measure.

100 mingles are equal to 32 English wine gallons, or 26 1-5th English beer gallons, or 26 2-3d Imperial gallons.

French wine is sold per hogshead of ..... 180 mingles.
Spanish and Portuguese wine, per pipe of ..... 349 ditto.
French brandy, per hogshead of ..... 30 viertels.
Beer, per barrel (equal to the aam) of ..... 128 mingles.
Vegetable oils, per aam, of ..... 120 ditto.
Whale oil, per ditto ..... 16 ditto.

Rum is sold per *anker* of 2 steckan = 10¼ English wine gallons.

The foot of Amsterdam = 11 1-7th English inches.
The Rhineland foot ... = 12 ditto.
The ell, cloth measure = 27 1-12th ditto.

Rock salt is sold per hondert of 404 maaten, making 20 tons, or 4,000 lbs. Dutch.

Pit coal is sold per hoed of 38 maaten; nine hoeds are five chaldrons of Newcastle, or six hoeds are five chaldrons of London.

Butter is sold per barrel; the barrel of Leyden is 320 lbs. nett. — that of Friesland 28 lbs. nett — and the common Dutch barrel 336 lbs. gross.

A *last of herrings* is reckoned at 12, 13, or 14 barrels.
A *last of pitch* is 12 barrels.
A *last of tar*, 13 barrels.
A bag of seed = 2½ Winchester quarters.

A last for freight is reckoned 4,000 lbs. equal to two English tons.

Eight hogsheads (or oxhofts) of wine	are reckoned as one last in settling the freight of ships.
Twelve barrels of pitch	
Thirteen barrels of tar	
Twenty chests of lemons, &c.	
4,000 lbs. of iron, copper, and colonial produce	
4,000 lbs. of almonds	
2,000 lbs. of wool or feathers	

A last of wheat is considered 10 per cent. higher than one of rye, and the latter 20½ per cent. higher than oats, and 10 per cent. higher than seed. A last of ballast is only 2,000 lbs. — These details have been derived from the answers by the British consul to the circular queries, the *Dictionnaire du Commerce*, (*Ency. Méthod.*) tom. ii. pp. 554—650., *Kelly's Cambist, private information, &c.*

Magnitude of the Commerce of Holland in the seventeenth Century. — Causes of its Prosperity and Decline. — We believe we need make no apology for embracing this opportunity to lay before our readers the following details with respect to the commerce and commercial policy of Holland. It forms one of the most instructive topics of investigation; and it is to be regretted that so little attention should have been paid to it in this country.

Previously to the commencement of the long-continued and glorious struggle made by the Dutch to emancipate themselves from the blind and brutal despotism of Old Spain, they had a considerable marine, and had attained to distinction by their fisheries and commerce; and the war, instead of being injurious to the trade of the republic, contributed powerfully to its extension. After the capture of Antwerp by the Spaniards, in 1585, the extensive commerce of which it had been the centre was removed to the ports of Holland, and principally to Amsterdam, which then attained to the distinction she long enjoyed, of the first commercial city of Europe.

In 1602, the Dutch East India Company was formed; and notwithstanding the pernicious influence of that association, the Indian trade increased rapidly in magnitude and importance. Ships fitted either for commercial or warlike purposes, and having a considerable number of soldiers on board, were sent out within a few years of the establishment of the company. Amboyna and the Moluccas were first wrested from the Portuguese, and with them the Dutch obtained the monopoly of the spice trade. Factories and fortifications were in no long time established, from Bussorah, near the mouth of the Tigris, in the Persian Gulf, along the coasts and islands of India as far as Japan. Alliances were formed with several of the Indian princes; and in many parts, particularly on the coasts of Ceylon, and in various districts of Malabar and Coromandel, they were themselves the sovereigns. Batavia, in the large and fertile island of Java, the greater part of which had been conquered by the Dutch, formed the centre of their Indian commerce; and though unhealthy, its port was excellent, and it was admirably situated for commanding the trade of the Eastern Archipelago. In 1651, they planted a colony at the Cape of Good Hope, which had been strangely neglected by the Portuguese.

Every branch of commerce was vigorously prosecuted by the Dutch. Their trade with the Baltic was, however, by far the most extensive and lucrative of which they were in possession. Guicciardini mentions that the trade with Poland, Denmark, Prussia, &c., even before their revolt, was so very great, that fleets of 300 ships arrived twice a year at Amsterdam from Dantzic and Livonia only; but it increased prodigiously during the latter part of the sixteenth and the beginning of the seventeenth centuries. The great population of Holland, and the limited extent and unfruitful nature of the soil, render the inhabitants dependent on foreigners for the greater part of their supplies of corn. The countries round the Baltic have always furnished them with the principal part of those supplies; and it is from them that they have been in the habit of bringing timber, iron, hemp and flax, pitch and tar, tallow, ashes, and other bulky articles required in the building of their houses and ships, and in various manufactures. Nothing, however, redounds so much to the credit of the Dutch, as the

policy they have invariably followed with respect to the trade in corn. They have, at all times, had a large capital embarked in this business. The variations which are perpetually occurring in the harvests, early led them to engage very extensively in a sort of speculative corn trade. When the crops happened to be unusually productive, and prices low, they bought and stored up large quantities of grain, in the expectation of profiting by the advance that was sure to take place on the occurrence of an unfavourable year. Repeated efforts were made, in periods when prices were rising, to prevail on the government to prohibit exportation; but they steadily refused to interfere. In consequence of this enlightened policy, Holland has long been the most important European *entrepôt* for corn; and her markets have on all occasions been furnished with the most abundant supplies. Those scarcities which are so very disastrous in countries without commerce, or where the trade in corn is subjected to fetters and restraints, have not only been totally unknown in Holland, but became a copious source of wealth to her merchants, who then obtained a ready and advantageous vent for the supplies accumulated in their warehouses. "Amsterdam," says Sir Walter Raleigh, "is never without 700,000 quarters of corn, none of it of the growth of Holland; and a dearth of only one year in any other part of Europe enriches Holland for seven years. In the course of a year and a half, during a scarcity in England, there were carried away from the ports of Southampton, Bristol, and Exeter alone, nearly 200,000*l.*; and if London and the rest of England be included, there must have been 2,000,000*l.* more." — (*Observations touching Trade and Commerce with the Hollander*, Miscel. Works, vol. ii.)

The very well informed author of the *Richesse de la Hollande*, published in 1778, observes, in allusion to these circumstances, "Que la disette de grains regne dans les quatre parties du monde; vous trouverez du froment, du seigle, et d'autres grains à Amsterdam; *ils n'y manquent jamais.*" — (Tome i. p. 376.)

The Bank of Amsterdam was founded in 1609. The principal object of this establishment was to obviate the inconvenience and uncertainty arising from the circulation of the coins imported into Amsterdam from all parts of the world. The merchants who carried coin or bullion to the Bank obtained credit for an equal value in its books: this was called bank-money; and all considerable payments were effected by writing it off from the account of one individual to that of another. This establishment continued to flourish till the invasion of the French in 1795.

Between the years 1651 and 1672, when the territories of the republic were invaded by the French, the commerce of Holland seems to have reached its greatest height. De Witt estimates its increase from the treaty with Spain, concluded at Munster in 1648, to 1669, at fully a half. He adds, that during the war with Holland, Spain lost the greater part of her naval power; that since the peace, the Dutch had obtained most of the trade to that country, which had been previously carried on by the Hanseatic merchants and the English; that almost all the coasting trade of Spain was carried on by Dutch shipping; that Spain had even been forced to hire Dutch ships to sail to her American possessions; and that so great was the exportation of goods from Holland to Spain, that all the merchandise brought from the Spanish West Indies was not sufficient to make returns for them.

At this period, indeed, the Dutch engrossed, not by means of any artificial monopoly, but by the greater number of their ships, and their superior skill and economy in all that regarded navigation, almost the whole carrying trade of Europe. The value of the goods exported from France in Dutch bottoms, towards the middle of the fourteenth century, exceeded 40,000,000 livres; and the commerce of England with the Low Countries was, for a very long period, almost entirely carried on in them.

The business of marine insurance was largely and successfully prosecuted at Amsterdam; and the ordinances published in 1551, 1563, and 1570, contain the most judicious regulations for the settlement of such disputes as might arise in conducting this difficult but highly useful business. It is singular, however, notwithstanding the sagacity of the Dutch, and their desire to strengthen industrious habits, that they should have prohibited insurance upon lives. It was reserved for England to show the advantages that might be derived from this beautiful application of the science of probabilities.

In 1690, Sir William Petty estimated the shipping of Europe at about 2,000,000 tons, which he supposed to be distributed as follows: — viz. England, 500,000, France, 100,000; Hamburgh, Denmark, Sweden, and Dantzic, 250,000; Spain, Portugal, and Italy, 250,000; that of the Seven United Provinces amounting, according to him, to 900,000 tons, or to nearly one half of the whole tonnage of Europe! No great dependence can, of course, be placed upon these estimates; but the probability is, that, had they been more accurate, the preponderance in favour of Holland would have been greater than it appears to be; for the official returns to the circulars addressed in 1701 by the commissioners of customs to the officers at the different ports, show that the whole mercantile navy of England amounted at that period to only 261,222 tons, carrying 27,196 men. — (*Macpherson's Annals of Commerce, anno* 1701.)

It may, therefore, be fairly concluded, that, during the seventeenth century the foreign commerce and navigation of Holland was greater than that of all Europe besides; and yet the country which was the seat of this vast commerce had no native produce to export, nor even a piece of timber fit for ship-building. All had been the fruit of industry, economy, and a fortunate combination of circumstances.

Holland owed this vast commerce to a variety of causes: partly to her peculiar situation, the industry and economy of her inhabitants, the comparatively liberal and enlightened system of civil as well as of commercial policy adopted by the republic; and partly also to the wars and disturbances that prevailed in most European countries in the sixteenth and seventeenth centuries, and prevented them from emulating the successful career of the Dutch.

The ascendancy of Holland as a commercial state began to decline from about the commencement of last century. After the war terminated by the treaty of Aix-la-Chapelle, the attention of the government of Holland was forcibly attracted to the state of the shipping and foreign commerce of the republic. The discovery of means by which their decline might be arrested, and the trade of the republic, if possible, restored to its ancient flourishing condition, became a prominent object in the speculations of every one who felt interested in the public welfare. In order to procure the most correct information on the subject, the Stadtholder, William IV., addressed the following queries to all the most extensive and intelligent merchants, desiring them to favour him with their answers: —

"1. What is the actual state of trade? and if the same should be found to be diminished and fallen to decay, then, 2. To enquire by what methods the same may be supported and advanced, or, if possible, restored to its former lustre, repute, and dignity?"

In discussing these questions, the merchants were obliged to enter into an examination, as well of the causes which had raised the commerce of Holland to the high pitch of prosperity to which it had once attained, as of those which had occasioned its subsequent decline. It is stated, that, though not of the same opinion upon all points, they, speaking generally, concurred as to those that were most important. When their answers had been obtained, and compared with each other, the Stadtholder had a dissertation prepared from them, and other authentic sources, on the commerce of the republic, to which proposals were subjoined for its amendment. Some of the principles advanced in this dissertation apply to the case of Holland only; but most of them are of universal application, and are not more comprehensive than sound. We doubt, indeed, whether the benefits resulting from religious toleration, political liberty, the security of property, and the freedom of industry, have ever been more clearly set forth than in this dissertation. It begins by an enumeration of the causes which contributed to advance the commerce of the republic to its former unexampled prosperity; these the authors divide into three classes, embracing under the first those that were natural and physical; under the second, those they denominated moral; and under the third, those which they considered adventitious and external; remarking on them in succession as follows: —

"I. The natural and physical causes are the advantages of the situation of the country, on the sea, and at the mouth of considerable rivers; its situation between the northern and southern parts, which, by being in a manner the centre of all Europe, made the republic become the general market, where the merchants on both sides used to bring their superfluous commodities, in order to barter and exchange the same for other goods they wanted.

"Nor have the barrenness of the country, and the necessities of the natives arising from that cause, less contributed to set them upon exerting all their application, industry, and utmost stretch of genius, to fetch from foreign countries what they stand in need of in their own, and to support themselves by trade.

"The abundance of fish in the neighbouring seas put them in a condition not only to supply their own occasions, but with the overplus to carry on a trade with foreigners, and out of the produce of the fishery to find an equivalent for what they wanted, through the sterility and narrow boundaries and extent of their own country.

"II. Among the moral and political causes are to be placed, The unalterable maxim and fundamental law relating to the free exercise of different religions; and always to consider this toleration and connivance as the most effectual means to draw foreigners from adjacent countries to settle and reside here, and so become instrumental to the peopling of these provinces.

"The constant policy of the republic to make this country a perpetual, safe, and secure asylum for an persecuted and oppressed strangers. No alliance, no treaty, no regard for or solicitation of any potentate whatever, has at any time been able to weaken or destroy this law, or make the state recede from protecting those who have fled to it for their own security and self-preservation.

"Throughout the whole course of all the persecutions and oppressions that have occurred in other countries, the steady adherence of the republic to this fundamental law has been the cause that many people have not only fled hither for refuge, with their whole stock in ready cash, and their most valuable effects, but have also settled, and established many trades, fabrics, manufactories, arts, and sciences, in this country, notwithstanding the first materials for the said fabrics and manufactories were almost wholly wanting in it, and not to be procured but at a great expense from foreign parts.

"The constitution of our form of government, and the liberty thus accruing to the citizen, are further reasons to which the growth of trade, and its establishment in the republic, may fairly be ascribed; and all her policy and laws are put upon such an equitable footing, that neither life, estates, nor dignities, depend on the caprice or arbitrary power of any single individual; nor is there any room for any person, who, by care, frugality, and diligence, has once acquired an affluent fortune or estate, to fear a deprivation of them by any act of violence, oppression, or injustice.

"The administration of justice in the country has, in like manner, always been clear and impartial, and without distinction of superior or inferior rank, — whether the parties have been rich or poor, or were this a foreigner and that a native; and it were greatly to be wished we could at this day boast of

such impartial quickness and despatch in all our legal processes, considering how great an influence it has on trade.

"To sum up all, amongst the moral and political causes of the former flourishing state of trade, may be likewise placed the wisdom and prudence of the administration; the intrepid firmness of the councils; the faithfulness with which treaties and engagements were wont to be fulfilled and ratified; and particularly the care and caution practised to preserve tranquillity and peace, and to decline, instead of entering on, a scene of war, merely to gratify the ambitious views of gaining fruitless or imaginary conquests.

"By these moral and political maxims was the glory and reputation of the republic so far spread, and foreigners animated to place so great a confidence in the steady determinations of a state so wisely and prudently conducted, that a concourse of them stocked this country with an augmentation of inhabitants and useful hands, whereby its trade and opulence were from time to time increased.

"III. Amongst the adventitious and external causes of the rise and flourishing state of our trade may be reckoned —

"That at the time when the best and wisest maxims were adopted in the republic as the means of making trade flourish, they were neglected in almost all other countries; and any one, reading the history of those times, may easily discover, that the persecutions on account of religion throughout Spain, Brabant, Flanders, and many other states and kingdoms, have powerfully promoted the establishment of commerce in the republic.

"To this happy result, and the settling of manufacturers in our country, the long continuance of the civil wars in France, which were afterwards carried on in Germany, England, and divers other parts, have also very much contributed.

"It must be added, in the last place, that during our most burthensome and heavy wars with Spain and Portugal (however ruinous that period was for commerce otherwise), these powers had both neglected their navy; whilst the navy of the republic, by a conduct directly the reverse, was at the same time formidable, and in a capacity not only to protect the trade of its own subjects, but to annoy and crush that of their enemies in all quarters."*

We believe our readers will agree with us in thinking that these statements reflect the greatest credit on the merchants and government of Holland. Nothing, as it appears to us, could be conceived more judicious than the account they give of the causes which principally contributed to render Holland a great commercial commonwealth. The central situation of the country, its command of some of the principal inlets to the continent, and the necessity under which the inhabitants have been placed, in consequence of the barrenness of the soil and its liability to be overflowed, to exert all their industry and enterprise, are circumstances that seem to be in a great degree peculiar to Holland. But though there can be no doubt that their influence has been very considerable, no one will pretend to say that it is to be compared for a moment with the influence of those free institutions, which, fortunately, are not the exclusive attributes of any particular country, but have flourished in Phœnicia, Greece, England, and America, as well as in Holland.

Many dissertations have been written to account for the decline of the commerce of Holland. But, if we mistake not, its leading causes may be classed under two prominent heads, viz. first, the natural growth of commerce and navigation in other countries; and second, the weight of taxation at home. During the period when the republic rose to great eminence as a commercial state, England, France, and Spain, distracted by civil and religious dissensions, or engrossed wholly by schemes of foreign conquest, were unable to apply their energies to the cultivation of commerce, or to withstand the competition of so industrious a people as the Dutch. They, therefore, were under the necessity of allowing the greater part of their foreign, and even of their coasting trade, to be carried on in Dutch bottoms, and under the superintendence of Dutch factors. But after the accession of Louis XIV. and the ascendancy of Cromwell had put an end to internal commotions in France and England, the energies of these two great nations began to be directed to pursuits of which the Dutch had hitherto enjoyed almost a monopoly. It was not to be supposed, that when tranquillity and a regular system of government had been established in France and England, their active and enterprising inhabitants would submit to see one of their most valuable branches of industry in the hands of foreigners. The Dutch ceased to be the carriers of Europe, without any fault of their own. Their performance of that function necessarily terminated as soon as other nations became possessed of a mercantile marine, and were able to do for themselves what had previously been done for them by their neighbours.

Whatever, therefore, might have been the condition of Holland in other respects, the natural advance of rival nations must inevitably have stripped her of a large portion of the commerce she once possessed. But the progress of decline seems to have been considerably accelerated, or rather, perhaps, the efforts to arrest it were rendered ineffectual, by the extremely heavy taxation to which she was subjected, occasioned by the unavoidable expenses incurred in the revolutionary struggle with Spain, and the subsequent wars with France and England. The necessities of the state led to the imposition of taxes on corn, on flour when it was ground at the mill, and on bread when it came from the oven; on butter, and fish, and fruit; on income and legacies; the sale of houses; and, in short, almost every article either of necessity or convenience. Sir William Temple mentions that in his time — and taxes were greatly increased afterwards — one fish sauce was in common use, which directly paid no fewer than *thirty* different duties of excise;

* The Dissertation was translated into English, and published at London in 1751. We have quoted from the translation.

and it was a common saying at Amsterdam, that every dish of fish brought to table was paid for *once* to the fisherman, and *six* times to the state.

The pernicious influence of this heavy taxation has been ably set forth by the author of the *Richesse de la Hollande*, and other well-informed writers; and it has also been very forcibly pointed out in the Dissertation already referred to, drawn up from the communications of the Dutch merchants. "Oppressive taxes," it is there stated, "must be placed at the head of all the causes that have co-operated to the prejudice and discouragement of trade; and it may be justly said, that it can only be attributed to them that the trade of this country has been diverted out of its channel, and transferred to our neighbours, and must daily be still more and more alienated and shut out from us, unless the progress thereof be stopped by some quick and effectual remedy: nor is it difficult to see, from these contemplations on the state of our trade, that the same will be effected by no other means than *a diminution of all duties.*

"In former times this was reckoned the only trading state in Europe; and foreigners were content to pay the taxes, as well on the goods they brought hither, as on those they came here to buy; without examining whether they could evade or save them, by fetching the goods from the places where they were produced, and carrying others to the places where they were consumed: in short, they paid us our taxes with pleasure, without any farther enquiry.

"But, since the last century, the system of trade is altered all over Europe: foreign nations, seeing the wonderful effect of our trade, and to what an eminence we had risen only by means thereof, they did likewise apply themselves to it; and, to save our duties, sent their superfluous products beside our country, to the places where they are most consumed; and in return for the same, furnished themselves from the first hands with what they wanted."

But, notwithstanding this authoritative exposition of the pernicious effects resulting from the excess of taxation, the necessary expenses of the state were so great as to render it impossible to make any sufficient reductions. And, with the exception of the transit trade carried on through the Rhine and the Meuse, which is in a great measure independent of foreign competition, and the American trade, most of the other branches of the foreign trade of Holland, though still very considerable, continue in a comparatively depressed state.

In consequence principally of the oppressiveness of taxation, but partly, too, of the excessive accumulation of capital that had taken place while the Dutch engrossed the carrying trade of Europe, profits in Holland were reduced towards the middle of the seventeenth century, and have ever since continued extremely low. This circumstance would of itself have sapped the foundations of her commercial greatness. Her capitalists, who could hardly expect to clear more than two or three per cent. of nett profit by any sort of undertaking carried on at home, were tempted to vest their capital in other countries, and to speculate in loans to foreign governments. There are the best reasons for thinking that the Dutch were, until very lately, the largest creditors of any nation in Europe. It is impossible, indeed, to form any accurate estimate of what the sums owing them by foreigners previously to the late French war, or at present, may amount to; but there can be no doubt that at the former period the amount was immense, and that it is still very considerable. M. Demeunier (*Dictionnaire de l'Economie Politique*, tome iii. p. 720.) states the amount of capital lent by the Dutch to foreign governments, exclusive of the large sums lent to France during the American war, at *seventy-three* millions sterling. According to the author of the *Richesse de la Hollande* (ii. p. 292.), the sums lent to France and England only, previously to 1778, amounted to 1,500,000 livres tournois, or sixty millions sterling. And besides these, vast sums were lent to private individuals in foreign countries, both regularly as loans at interest, and in the shape of goods advanced at long credits. So great was the difficulty of finding an advantageous investment for money in Holland, that Sir William Temple mentions, that the payment of any part of the national debt was looked upon by the creditors as an evil of the first magnitude. "They receive it," says he, "with tears, not knowing how to dispose of it to interest with such safety and ease."

Among the subordinate causes which contributed to the decline of Dutch commerce, or which have, at all events, prevented its growth, we may reckon the circumstance of the commerce with India having been subjected to the trammels of monopoly. De Witt expresses his firm conviction, that the abolition of the East India Company would have added very greatly to the trade with the East; and no doubt can now remain in the mind of any one, that such would have been the case.* The interference of the administration in regulating the mode in which some of the most important branches of industry should be carried on, seems also to have been exceedingly injurious. Every

* For proofs of this, see the article on the Commerce of Holland in the Edinburgh Review, No. 102., from which most part of these statements have been taken.

proceeding with respect to the herring fishery, for example, was regulated by the orders of government, carried into effect under the inspection of officers appointed for that purpose. Some of these regulations were exceedingly vexatious. The period when the fishery might begin was fixed at five minutes past twelve o'clock of the night of the 24th of June! and the master and pilot of every vessel leaving Holland for the fishery, were obliged to make oath that they would respect the regulation. The species of salt to be made use of in curing different sorts of herrings was also fixed by law; and there were endless regulations with respect to the size of the barrels, the number and thickness of the staves of which they were to be made; the gutting and packing of the herrings; the branding of the barrels, &c. &c. — (*Histoire des Pêches, &c. dans les Mers du Nord*, tom. i. chap. 24.) These regulations were intended to secure to the Hollanders that superiority which they had early attained in the fishery, and to prevent the reputation of their herrings from being injured by the bad faith of individuals. But their real effect was precisely the reverse of this. By tying up the fishers to a system of routine, they prevented them from making any improvements; while the facility of counterfeiting the public marks opened a much wider door to fraud, than would have been opened had government wisely declined interfering in the matter.

In despite, however, of the East India monopoly, and the regulations now described, the commercial policy of Holland has been more liberal than that of any other nation. And in consequence, a country not more extensive than Wales, and naturally not more fertile, conquered, indeed, in a great measure from the sea, has accumulated a population of upwards of two millions; has maintained wars of unexampled duration with the most powerful monarchies; and, besides laying out immense sums in works of utility and ornament at home, has been enabled to lend hundreds of millions to foreigners.

During the occupation of Holland by the French, first as a dependent state, and subsequently as an integral part of the French empire, her foreign trade was almost entirely destroyed. Her colonies were successively conquered by England; and, in addition to the loss of her trade, she was burdened with fresh taxes. But such was the vast accumulated wealth of the Dutch, their prudence, and energy, that the influence of these adverse circumstances was far less injurious than could have been imagined; and, notwithstanding all the losses she had sustained, and the long interruption of her commercial pursuits, Holland continued, at her emancipation from the yoke of the French in 1814, to be the richest country in Europe! Java, the Moluccas, and most of her other colonies were then restored, and she is now in the enjoyment of a large foreign trade. Her connection with Belgium was an unfortunate one for both countries. The union was not agreeable to either party, and has been injurious to Holland. Belgium was an agricultural and manufacturing country; and was inclined, in imitation of the French, to lay restrictions on the importations of most sorts of raw and manufactured produce. A policy of this sort was directly opposed to the interests and the ancient practice of the Dutch. But though their deputies prevented the restrictive system from being carried to the extent proposed by the Belgians, they were unable to prevent it from being carried to an extent that materially affected the trade of Holland. Whatever, therefore, may be the consequences as to Belgium, there can be little doubt that the late separation between the two divisions of the kingdom of the Netherlands will redound to the advantage of Holland. It must ever be for the interest of England, America, and all trading nations, to maintain the independence of a state by whose means their productions find a ready access to the great continental markets. It is to be hoped that the Dutch, profiting by past experience, will adopt such a liberal and conciliatory system towards the natives of Java, as may enable them to avail themselves to the full of the various resources of that noble island. And if they do this, and freely open their ports, with as few restrictions as possible, to the ships and commodities of all countries, Holland may still be the centre of a very extensive commerce, and may continue to preserve a respectable place among mercantile nations. Even at this moment, after all the vicissitudes they have undergone, the Dutch are, beyond all question, the most opulent and industrious of European nations. And their present, no less than their former state, shows that a free system of government, security, and the absence of restrictions on industry, can overcome almost every obstacle; "can convert the standing pool and lake into fat meadows, cover the barren rock with verdure, and make the desert smile with flowers."

ANCHOR (Fr. *Ancre*; Lat. *Anchora*; Gr. Αγκυρα), a well-known maritime instrument used in the mooring or fastening of ships. It consists of a shank having two hooked arms at one end, and at the other end a bar, or stock, at right angles to the arms, with a ring to which the cable is fastened. The arms, shank, and ring should be made of the very best and toughest iron; the stock is for the most part of oak, but it is frequently also, especially in the smaller anchors, made of iron. On being let go, or cast into the water, the anchor sinks rapidly to the bottom, and is thrown by the stock into such a position that the *fluke*, or point of one of the arms, is sure to strike the ground perpendicularly, and being kept in that direction, unless the bottom be particularly hard

or rocky, sinks into it, and cannot be dislodged, where the ground is not soft or oozy, without a violent effort. When the anchor is dislodged, it is said, by the sailors, to *come home*.

Seeing that the safety and preservation of ships and crews are very frequently dependent on their anchors and cables, it is needless to say that it is of the utmost importance that these should be of the most approved quality and construction.

Every ship has, or ought to have, three principal anchors; viz. 1st, the *sheet anchor*, the largest of all, and only let down in cases of danger, or when the vessel is riding in a gale of wind; 2d, the *best bower* anchor; and, 3d, the *small bower* anchor. There are, besides, smaller anchors for mooring in rivers, ports, &c. The largest class of men-of-war have six or seven anchors. The weight of an anchor is determined principally by the tonnage; it being usual to allow, for every 20 tons of a ship's burthen, 1 cwt. for the weight of her best bower anchor; so that this anchor in a ship of 400 tons should weigh about 20 cwt., or a ton.

To cast, or let go, the anchor, is to let the anchor fall from the ship's bows into the water, so that it may take hold of the ground.

To drag the anchor, is to make it come home; that is, to dislodge it from its bed, and to drag it over or through the ground. This may be occasioned by the anchor being too light, by the violent straining of the cable in a storm or a current, by the too great hardness or softness of the ground, &c.

To weigh the anchor, is to dislodge it from its hold, and heave it up by means of the capstan, &c.

Law as to Anchors left, parted from, &c. — By the 1 & 2 Geo. 4. c. 75., pilots and other persons taking possession of anchors, cables, and other ship materials, parted with, cut from, or left by any vessel, whether in distress or otherwise, shall give notice of the same to a deputy vice-admiral, or his agent, within forty-eight hours, on pain of being considered as receivers of stolen goods; and if any person shall knowingly and wilfully purchase any such anchor, &c. that shall have been so obtained, without its being so reported, he shall be held to be a receiver of stolen goods, and suffer the like punishment as for a misdemeanour at common law, or be liable to be transported for seven years, at the discretion of the court. Any master of a ship or vessel outward-bound finding or taking on board any anchor, &c. shall make a true entry of the circumstance in the log-book of such ship or vessel, reporting the same by the first possible opportunity to the Trinity House, and on his return shall deliver the article to the deputy vice-admiral, or his agent, nearest to the port where he shall arrive, under a penalty of not more than 100*l.* nor less than 30*l.*, on conviction before a magistrate on the oath of one witness; one half to go to the informer, the other half to the Merchant Seamen's Society, established by 20 Geo. 3. c. 38.: he shall also forfeit double the value of the article to the owner. And every pilot, hoveller, boatman, &c. who shall convey any anchor, &c. to any foreign harbour, port, creek, or bay, and sell and dispose of the same, shall be guilty of felony, and be transported for any term not exceeding seven years. — (See SALVAGE.)

Invention of the Anchor. — This instrument, admirable alike for its simplicity and effect, is of very considerable antiquity. It was not, however, known in the earliest ages. The President de Goguet has shown that it was not used by the Greeks till after the Trojan war; and that they were then accustomed to moor their ships by means of large stones cast into the sea, a practice which still subsists in some rude nations.—(*Origin of Laws*, vol. ii. p. 330. Eng. trans.) Pliny ascribes the invention of the anchor to the Tyrrhenians. --(*Hist. Nat.* lib. vii. cap. 56.) At first it had only one arm, the other being added at a subsequent period; some authors say, by Anacharsis the Scythian.—(*Origin of Laws*, vol. i. p. 293.) Since this remote epoch, the form and construction of the instrument seem to have undergone very little change.

ANCHORAGE, OR ANCHORING GROUND. Good anchoring ground should neither be too hard nor too soft; for, in the first case the anchor is apt not to take a sufficient hold, and in the other to drag. The best bottom is a stiff clay, and next to it a firm sand. In a rocky bottom the flukes of the anchor are sometimes torn away, and hempen cables are liable to chafe and be cut through. It is also essential to a good anchorage that the water be neither too deep nor too shallow. When too deep, the pull of the cable, being nearly perpendicular, is apt to jerk the anchor out of the ground; and when too shallow, the ship is exposed to the danger, when riding in a storm, of striking the bottom. Where a ship is in water that is land-locked, and out of the tide, the nature of the ground is of comparatively little importance.

The anchorage of ships, especially ships of war, being a subject of great importance to the naval and commercial interests of the kingdom, several statutes have been enacted with respect to it. The first which it is necessary to notice here is 19 Geo. 2. c. 22. It prohibits masters of ships from casting out ballast, or rubbish of any kind, into any harbour or channel, except on the land where the tide never comes, on pain of forfeiting not more than 5*l.* nor less than 50*s.* on conviction before a justice on view, or on the oath of one witness, or of being committed to prison for two months; which penalty is increased to 10*l.*, over and above the expense of removing the same, by 54 Geo. 3. c. 159. In pursuance of the same object, 54 Geo. 3. c. 159. enables the Lords of the Admiralty to establish regulations for the preservation of the king's moorings or anchorage, as well as for those of merchant ships, in all the ports, harbours, channels, &c. &c. of the United Kingdom, as far as the tide flows, where or near to which his Majesty has, or may hereafter have, any docks, dock-yards, arsenals, wharfs, or moorings. It prohibits all descriptions of private ships from being moored, or anchored, or placed in any of his Majesty's moorings, &c. without special licence obtained from the Admiralty, or other persons appointed to grant such licences, on pain of forfeiting not exceeding 10*l.*, one moiety to his Majesty, the other to the informer, on conviction before any justice of the peace or commissioner of the navy.

It further prohibits the breaming of private vessels in such places, otherwise than appointed by the said authority of the Admiralty; and the receiving or having gunpowder, beyond a certain limited quantity, under a penalty of 5*l.* for every five pounds' weight of such powder beyond the quantity allowed. It prohibits, likewise, all such private vessels, in any such places, having any guns on board shotted or loaded with ball, as well as firing and discharging any such before sun-rising and after sun-setting, under a

penalty of 5*l.* for every gun so shotted, and 10*l.* for every gun so fired. It further gives to every officer of vessels of war, to harbour-masters, and others in their aid, a right of search in all private vessels so moored in such places, and inflicts a penalty of 10*l.* on resistance.

ANCHORAGE also means a duty laid on ships for the use of the port or harbour.

ANCHOVY (Fr. *Anchois;* It. *Acciughe;* Lat. *Encrasicolus*), a small fish (*Clupea encrasicolus* Lin.), common in the Mediterranean, resembling the sprat. Those brought from Gorgona in the Tuscan Sea are esteemed the best. They should be chosen small, fresh pickled, white outside and red within. Their backs should be round. The sardine, a fish which is flatter and larger than the anchovy, is frequently substituted for it. About 120,000 lbs. are annually entered for home consumption.

ANGELICA, a large umbelliferous plant, with hollow jointed stalks, of which there are several varieties. It grows wild, and is cultivated in moist places near London, and in most European countries from Lapland to Spain. Its roots are thick, fleshy, and resinous; have a fragrant agreeable smell, and a bitterish pungent taste, mixed with a pleasant sweetness glowing on the lips and palate for a long time after they have been chewed. To preserve them, they must be thoroughly dried, and kept in a well-aired place. The other parts of the plant have the same taste and flavour as the roots, but in an inferior degree. The leaves and seeds do not retain their virtues when kept. The London confectioners make a sweetmeat of the tender stems. The faculty used to direct that none but the roots of Spanish angelica should be kept by the druggists. In Norway the roots are sometimes used as bread, and in Iceland the stalks are eaten with butter. Here the plant is used only in confectionary and the materia medica.— (*Lewis's Mat. Med.; Rees's Cyclopædia, &c.*)

The duty of 4*s.* per cwt. on Angelica produced, in 1832, 275*l.* 2*s.* 10*d.*, showing that 1,375 cwt. had been entered for home consumption.

ANISE, OR ANISUM (Fr. *Anis;* It. *Anice;* Lat. *Anisum*), a small seed of an oblong shape. It is cultivated in Germany, but the best comes from Spain. It is also a product of China, whence it is exported. It should be chosen fresh, large, plump, newly dried, of a good smell, and a sweetish aromatic taste.

ANKER, a liquid measure at Amsterdam. It contains about 10¼ gallons English wine measure.

ANNOTTO, OR ARNOTTO (Fr. *Rocou;* Ger. *Orlean;* It. *Oriana*), a species of red dye formed of the pulp enveloping the seeds of the *Bixa orellana*, a plant common in South America, and the East and West Indies; but dye is made, at least to any extent, only in the first. It is prepared by macerating the pods in boiling water, extracting the seeds, and leaving the pulp to subside; the fluid being subsequently drawn off, the residuum, with which oil is sometimes mixed up, is placed in shallow vessels and gradually dried in the shade. It is of two sorts, viz. *flag* or *cake*, and *roll* annotto. The first, which is by far the most important article in a commercial point of view, is furnished almost wholly by Cayenne, and comes to us principally by way of the United States. It is imported in square cakes, weighing 2 or 3 lbs. each, wrapped in banana leaves. When well made, it ought to be of a bright yellow colour, soft to the touch, and of a good consistence. It imparts a deep but not durable orange colour to silk and cotton, and is used for that purpose by the dyers. Roll annotto is principally brought from Brazil. The rolls are small, not exceeding 2 or 3 oz. in weight; it is hard, dry, and compact, brownish on the outside, and of a beautiful red colour within. The latter is the best of all ingredients for the colouring of cheese and butter; and is now exclusively used for that purpose in all the British and in some of the continental dairies. In Gloucestershire it is the practice to allow an ounce of annotto to a cwt. of cheese; in Cheshire, 8 dwts. are reckoned sufficient for a cheese of 60 lbs. When genuine, it neither affects the taste nor the smell of cheese or butter. The Spanish Americans mix annotto with their chocolate, to which it gives a beautiful tint.— (*Gray's Supplement to the Pharmacopœias; Loudon's Encyc. of Agriculture*, and *private information.*)

At an average of the three years ending with 1831, the annotto entered for home consumption amounted to 128,528 lbs. a year. Previously to 1832, the duty on flag annotto was 18*s.* 8*d.* a cwt., and on other sorts 5*l.* 12*s.*; but the duty is now reduced to 1*s.* a cwt. on the former, and to 4*s.* on the latter. This judicious and liberal reduction will, we have no doubt, be followed by a considerable increase of consumption. The price of flag annotto varies in the market from 6*d.* to 1*s.* per lb., and of roll from 1*s.* to 1*s.* 6*d.*

ANNUITIES. See INTEREST AND ANNUITIES.

ANTIMONY (Ger. and Du. *Spiesglas;* Fr. *Antimoine;* It. *Antimonio;* Rus. *Antimonia;* Lat. *Antimonium*), a metal which, when pure, is of a greyish white colour, and has a good deal of brilliancy, showing a radiated fracture when broken; it is converted by exposure to heat and air into a white oxide, which sublimes in vapours. It is found in Saxony and the Hartz, also in Cornwall, Spain, France, Mexico, Siberia, the Eastern Islands, and Martaban in Pegu. We are at present wholly supplied with this metal from Singapore, which receives it from Borneo; it is imported in the shape of ore, and

commonly as ballast. It is about as hard as gold; its specific gravity is about 6·7; it is easily reduced to a very fine powder; its tenacity is such that a rod of $\frac{1}{10}$th of an inch diameter is capable of supporting 10 lbs. weight. Antimony is used in medicine, and in the composition of metal types for printing. The ores of antimony are soft, and vary in colour from light lead to dark lead grey; their specific gravity varies from 4·4 to 6·8; they possess a metallic lustre, are brittle, and occur in the crystallised massive forms. — (*Thomson's Chemistry*, and *private information.*)

ANTWERP, the principal sea-port of Belgium, long. 4° 22′ E., lat. 51° 14′ N. A large, well built, and strongly fortified city, situated on the Scheldt. It has about 65,000 inhabitants. Previously to its capture by the Spaniards, under Farnese, in 1585, Antwerp was one of the greatest commercial cities of Europe; but it suffered much by that event. In 1648, at the treaty of Westphalia, it was stipulated by Spain and Holland, that the navigation of the Scheldt should be shut up; a stipulation which was observed till the occupation of Belgium by the French, when it was abolished. In 1803, the improvement of the harbour was begun, and extensive new docks and warehouses have since been constructed. Ships of the largest burden come up to the town, and goods destined for the interior are forwarded with the greatest facility by means of canals. Almost all the foreign trade of Belgium is at present centred in Antwerp, which has again become a place of great commercial importance. By a decree issued in 1814, all goods are allowed to be warehoused in Antwerp *en entrepôt*, and may be exported on paying a charge of $\frac{1}{2}$ per cent. *ad valorem.* The exports chiefly consist of corn, seeds, linen, lace, carpets, flax, tallow, hops, &c. The imports principally consist of cotton, wine, hardware, sugar, tobacco, coffee, and all sorts of colonial produce.

Money. — Accounts are now commonly kept in *florins* of 1816, worth 1*s.* 8$\frac{3}{4}$*d.* sterling. The florin is divided into 20 sous, and the sou into 5 cents. Formerly accounts were kept in the pound Flemish = 2$\frac{1}{2}$ rix dollars = 6 florins = 20 schillings = 120 stivers = 240 groats = 1,920 pennings.—(See TABLE OF COINS.) The par of exchange between Antwerp and London is 11 florins 58 cents per pound sterling.

Weights and Measures. — By a law of 1816, the French system of weights and measures was adopted in the Netherlands on the 1st of January, 1820; but the old denominations are retained. The *pond* is the unit of weight, and answers to the French kilogramme. — (See AMSTERDAM.)

Of the old weights, which are still occasionally referred to, the *quintal* of 100 lbs. is equal to 103$\frac{1}{3}$ lbs. avoirdupois, 100 lbs. avoirdupois being consequently equal to 96·8 lbs. of Antwerp. A schippound is equal to 3 quintals, or 300 lbs.; a stone is equal to 8 lbs.

Of the old measures, a viertel of corn = 4 macken; 37$\frac{1}{2}$ viertels = last; and 40 viertels = 10$\frac{1}{2}$ Imperial quarters very nearly. The aam of wine contains 50 stoopen, or 36$\frac{1}{3}$ English wine gallons.

Of the weights and measures now current, 50$\frac{3}{4}$ lbs. = 112 lbs. English; 100 lbs. = 100 kilogrammes of France, or 212$\frac{3}{4}$ Antwerp old weight. One barrel = 26$\frac{1}{2}$ gallons English = 100 litres French.

Custom-house Regulations. — Captains of ships arriving at Antwerp, or any of the Belgian ports, must make, within 24 hours, a declaration in writing, of the goods of which their cargo consists; specifying the marks and numbers of the bales, parcels, &c.; their value, according to the current price at the time when the declaration is made; the name of the ship or vessel, as well as that of the captain, and of the country to which she belongs, &c.

Shipping. — The ships entering the port of Antwerp, during the five years ending with 1828, have been as follows: —

Years.	Ships.	Years.	Ships.
1824	681	1827	822
1825	800	1828	955
1826	928		

Of the 800 ships entering Antwerp in 1825, 114 were from Liverpool, 119 from London, 44 from Hull, 48 from Havre, 41 from Bordeaux, 24 from Petersburgh, 24 from New York, 25 from Cuba, 26 from Rio Janeiro, 11 from Batavia, &c. — (*Bulletin des Sciences Géographiques*, for January, 1829, and February 1826.)

The commerce of Antwerp suffered much, in 1831 and 1832, from the hostilities between the Belgians and Dutch. In 1831, there were only 388 arrivals of foreign ships.

Comparative Statement of the Imports of the undermentioned Goods, at Antwerp, since 1827, and of the Stocks at the Close of each Year.

Articles.	Imports.						Stocks, 31st December.					
	1827.	1828.	1829.	1830.	1831.	1832.	1827.	1828.	1829.	1830.	1831.	1832.
Ashes, U. S. barrels	7,158	9,647	11,642	6,951	7,452	8,506	600	800	2,950	214	650	1,800
— Russia casks	4,420	1,501	3,987	1,639	728	3,558	1,000	200	1,200	250	550	750
Coffee - tons	23,100	22,900	23,080	21,110	10,300	14,700	8,250	8,650	8,430	4,000	2,700	1,900
Cotton - bales	23,108	18,324	33,985	21,845	13,720	28,687	4,420	5,563	6,155	4,700	1,050	900
Hides, S. A. No.	211,349	148,584	462,577	340,507	228,896	362,878	4,000	1,350	43,600	22,500	38,500	92,000
Indigo - chests	1,357	2,103	1,846	1,063	433	649	287	606	717	286	175	210
— - serons	599	380	725	206	120	252	247	268	360	101	55	65
Pimento - bags	1,819	1,870	1,810	2,220	576	562	500	500	200	100	200	200
Pepper, small do.	22,149	6,340	11,522	12,999	6,406	4,960	12,500	6,000	8,400	3,000	4,000	1,000
Rice - tierces	14,505	13,961	18,712	23,221	6,029	14,458	2,300	1,200	5,000	4,500	700	300
— - bags	16,897	38,889	98,827	41,530	16,483	10,153	9,400	30,000	13,500	2,500	3,500	1,600
Sugar - tons	18,000	17,800	24,730	10,511	9,800	12,200	3,370	2,600	8,050	1,250	1,400	1,450
Tea - packages	1,564	91	186	1,253	814	3,778	2,255	1,878	1,335	391	155	1,600
Tobacco - hhds.	1,101	2,328	1,552	2,253	8,361	12,825	375	717	225	40	1,119	3,200
Logwood - tons	706	2,260	855	952	1,250	1,200	700	900	350	130	500	380
Fustic - do.	573	822	1,639	2,033	255	315	220	300	490	570	340	25

In the imports of 1831 and 1832, are included those received through Ostend which were destined for this port. The stocks of these goods now at Ostend, or on their way thence, are also included.

The following goods were imported at Antwerp in 1832 from all places:

Places.	Coffee.			Sugar.						Hides.	Cotton
	Casks.	Barrels.	Bags.	Casks.	C.Braz.	Bx.Hav	Can..	Barrels.	Bags.	Ox& Cow.	Bales.
Great Britain	211	15	101,285	623	992	8,103	2,451	443	16,316	65,164	12,789
S. America and W. Indies	- -	2	71,424	1,375	488	30,088	- -	147	354	203,756	1,623
United States	90	162	50,102	841	- -	1,732	- -	203	13,602	66,079	13,754
Continent of Europe	- -	- -	11,660	- -	- -	291	- -	260	1,078	20,262	521
East Indies	- -	- -	19,298	- -	- -	- -	- -	- -	- -	- -	- -
Jersey and Guernsey	- -	- -	- -	- -	- -	85	- -	- -	- -	7,616	- -
Totals	301	179	246,769	2,839	1,480	40,299	2,451	1,053	31,350	362,878	28,687

Places.	Pepper.	Pimento	Ashes.		Rice.		Indigo.		Tobac.	Tea.	Dyewoods.	
	Bags.	Bags.	U. Stat.	Russia.	Tierces.	Bags.	Chsts.	Serns.	Hhds.	Pack.	C.Tons.	F.Tons.
Great Britain	960	212	779	1,522	1,936	9,958	526	71	1,103	- -		
S. Amer. & W. Indies	- -	- -	- -	- -	- -	150	- -	- -	- -	- -		
United States	6,000	350	7,792	- -	10,731	45	61	173	10,839	1,455	1,200	315
Continent of Europe	- -	- -	25	2,046	1,791	- -	21	8	883	2,283		
East Indies	- -	- -	- -	- -	- -	- -	41	- -	- -	- -		
Jersey and Guernsey	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -		
Totals	6,960	562	8,596	3,568	14,458	10,153	649	252	12,825	3,738	1,200	315

Conditions under which Goods are sold. — On goods generally 2 per cent. is allowed for payment in 20 days, and 1½ per cent. on credit of 6 weeks or 2 months. On cottons, at 20 days' credit, 3 per cent. are allowed, and 1½ per cent. on a credit of 2 or 3 months. On ashes, hides, and sugar, 3 per cent. for 20 days, and 1½ per cent. for three months' credit.

Tares. — West India, Brazil, and Java coffee, in single bags, 2 per cent., and Havannah in joncs, ½ lb. per bag extra. Bourbon, in whole bags, 4½ lbs., and in ½ do. 2¼ lbs. Pimento, pepper, and ginger, in bags, 2 per cent.; on these articles, as also coffee, in casks and barrels, real tare. Cassia lignea, and cinnamon, in bales, 10 per cent.; and in chests, 6 to 6½ lbs. per chest. Ashes, 12 per cent. Quercitron bark, 10 per cent. Cotton, in bales, 4 per cent., exclusive of ropes; and in serons, 6 lbs. per seron. Horse hair, real tare. Indigo, in chests or barrels, real tare; and in serons, 6½ to 7 lbs. per seron. Rice, in casks, 12 per cent.; and in bags, 2 per cent. Muscovado sugars, in casks and barrels, and Havannah clayed, in boxes, 14 per cent.; Brazil, in chests, 16 per cent.; Java, in canisters and baskets, 9 per cent.: Siam and Manilla, in bags, 3 per cent.: Bengal, in triple bags, 5 lbs. each: Bourbon, in mats, 6 per cent. Bohea tea, exclusive of wrappers, 46 lbs. per chest, 24 lbs. per ½ ditto, and 13 lbs. per ¼ ditto, 14½ lbs. per ⅛ ditto; fine black and green tea, 12 to 13 lbs. per ½ chest, 9 lbs. per ¼ ditto, 7 lbs. per ⅛ ditto, 5 lbs. per 1-12th ditto, 3 lbs. per 1-16th ditto, and 2 per cent. in boxes. Tobacco, real tare: no draft or other deduction allowed. — (From the *Circular of Jollie, Clibborn, and Co.*)

APPLES, the fruit of the *Pyrus Malus*, or apple tree. It is very extensively cultivated in most temperate climates. An immense variety and quantity of excellent apples are raised in England, partly for the table, and partly for manufacturing into cider. Those employed for the latter purpose are comparatively harsh and austere. The principal cider counties are Hereford, Monmouth, Gloucester, Worcester, Somerset, and Devon. Mr. Marshall calculates the produce of the first four at 30,000 hhds. a year, of which Worcester is supposed to supply 10,000. Half a hogshead of cider may be expected, in ordinarily favourable seasons, from each tree in an orchard in full bearing. The number of trees on an acre varies from 10 to 40, so that the quantity of cider must vary in the same proportion, that is, from 5 to 20 hhds. The produce is, however, very fluctuating; and a good crop seldom occurs above once in three years. — (*Loudon's Encyc. of Agriculture, &c.*)

Besides the immense consumption of native apples, we import, for the table, considerable supplies of French and American apples, especially the former; the entries of foreign apples for home consumption having amounted, at an average of the three years ending with 1831, to 36,012 bushels a year. Were it not for the oppressive duty of 4*s.* a bushel, there can be little doubt that the imports would be decidedly larger. The apples produced in the vicinity of New York are universally admitted to be the finest of any; but unless selected and packed with care, they are very apt to spoil before reaching England. The exports of apples from the United States during the year ended the 30th of September, 1832, amounted to 6,928 barrels, valued at 15,314 dollars. Of these, 1,370 barrels were shipped for England. — (*Papers published by the Board of Trade*, p. 106.; *Papers laid before Congress*, 15th of February, 1833.)

APPRENTICE, a young person of either sex, bound by indenture to serve some particular individual, or company of individuals, for a specified time, in order to be instructed in some art, science, or trade.

According to the common law of England, every one has a right to employ himself at pleasure in every lawful trade. But this sound principle was almost entirely subverted by a statute passed in the fifth year of the reign of Queen Elizabeth, commonly called the Statute of Apprenticeship. It enacted that no person should, for the future, exercise any trade, craft, or mystery, at that time exercised in England and Wales, unless he had previously served to it an apprenticeship of *seven* years at least; so that what had before been a bye-law of a few corporations, became the general and statute law of the kingdom. Luckily, however, the courts of law were always singularly disinclined to give effect to the provisions of this statute; and the rules which they established for its interpretation served materially to mitigate its injurious operation. But though its impolicy had been long apparent, it was continued till 1814, when it was repealed by the 54 Geo. 3. c. 96. This act did not interfere with any of the existing rights, privileges, or bye-laws of the different corporations; but wherever these do not interpose, the formation of apprenticeships, and their duration, is left to be adjusted by the parties themselves.

The regulations with respect to the taking of apprentices on board ship, the only part of this subject that properly comes within the scope of this work, are embodied in the 4 Geo. 4. c. 25. They are as follow: —

From the 1st of January, 1824, every master of a merchant ship exceeding the burden of 80 tons shall have on board his ship, at the time of such ship clearing out from any port of the United Kingdom, one apprentice or apprentices, in the following proportion to the number of tons of her admeasurement, according to the certificate of registry; viz.

For every vessel exceeding 80 tons, and under 200 tons, 1 apprentice at least,
——— 200 ——— 400 — 2 ———
——— 400 ——— 500 — 3 ———
——— 500 ——— 700 — 4 ———
——— 700 and upwards - - 5 ———

who shall, at the period of being indentured, respectively be under the age of 17 years; provided that every apprentice so to be employed on board any vessel, as above described, shall be duly indented for at least four years; and the indentures of every such apprentice shall be enrolled with the collector and comptroller at the Custom-house of the port whence such vessel shall first clear out after the execution of such indentures. — § 2.

Every apprentice so enrolled is hereby exempted from serving in his Majesty's navy until he shall have attained the age of 21 years; provided he is regularly serving his time either with his first master or ship-owner, or some other master or ship-owner to whom his indentures shall have been regularly transferred; and every owner or master neglecting to enrol such indentures, or who shall suffer any such apprentice to leave his service, except in case of death or desertion, sickness, or other unavoidable cause, to be certified in the log-book, after the vessel shall have cleared outwards on the voyage upon which such vessel may be bound, shall for every such offence forfeit 10*l.*, to be paid in manner following; that is to say, one moiety by the owners of such vessel, and the other moiety by the master thereof, to be levied, recovered, and applied, in manner hereinafter mentioned. — § 4.

Every person to whom such apprentice shall have been bound may employ him, at any time, in any vessel of which such person may be the master or owner; and may also, with the consent of such apprentice, if above 17, and if under that age, with the consent of his parents or guardians, transfer the indentures of such apprentice, by endorsement thereon, to any other person who may be the master or owner of any registered vessel. — § 5.

No stamp duty shall be charged on any such transfer by endorsement. — § 6.

And by 6 Geo. 4. c. 107. § 138. it is enacted, that no person shall be deemed to be an apprentice for the purposes of the preceding act (4 Geo. 4. c. 25.), unless the indenture of such apprentice shall have been enrolled with the collector and comptroller of the port from which any such apprentice shall first go to sea after the date of such indenture; or in default of such enrolment, until the same shall have been enrolled at some port from which the ship in which such apprentice shall afterwards go to sea shall be cleared.

By stat. 7 & 8 Geo. 4. c. 56. § 7. it is enacted that no higher duty than 2*s.* shall be charged upon the indenture of any apprentice bound to serve at sea in the merchant service.

AQUA FORTIS. See Acid (*Nitric*).

AQUAMARINE. See Beryl.

AQUA VITÆ (Ger. *Aquavit;* Fr. *Eau de vie;* It. *Acqua vite;* Sp. *Agua de vida;* Rus. *Wodka;* Lat. *Aqua vitæ*), a name familiarly applied to all native distilled spirits; equivalent to the *eau de vie*, or brandy, of the French, the *whisky* of the Scotch and Irish, the *geneva* of the Dutch, &c. In this way it is used in the excise laws relating to the distilleries.

ARANGOES, a species of beads made of rough carnelian. They are of various forms, as barrel, bell, round, &c., and all drilled. The barrel-shaped kind, cut from the best stones, are from two to three inches long, and should be chosen as clear as possible, whether red or white, having a good polish, and free from flaws. The bell-shaped are from one to two inches long, being in all respects inferior. Considerable quantities were formerly imported from Bombay, for re-exportation to Africa; but since the abolition of the slave trade, the imports and exports of arangoes have been comparatively trifling. — (*Milburn's Orient. Com.*)

ARCHANGEL, the principal commercial city of the north of Russia, in lat. 64° 34′ N., long. 38° 59′ E. It is situated on the right bank of the Dwina, about 30 English miles above where it falls into the White Sea. Population, 7,000 or 8,000. The harbour is at the island of Sollenbole, about a mile from the town. The bar at the mouth of the Dwina has generally 14½ feet water; so that ships drawing more than this depth must be partially loaded outside the bar from lighters. The Dwina being a navigable river, traversing a great extent of country, renders Archangel a considerable *entrepôt*. It was discovered in 1554, by the famous Richard Chancellor, the companion of Sir Hugh Willoughby in his voyage of discovery; and from that period, down to the foundation of Petersburgh, was the only port in the Russian empire accessible to foreigners. Though it has lost its ancient importance, it still enjoys a pretty extensive commerce. The principal articles of export are grain, tallow, flax, hemp, timber, linseed, iron, potash, mats, tar, &c. Deals from Archangel, and Onega in the vicinity of Archangel, are considered superior to those from the Baltic. Hemp not so good as at Riga, but proportionally cheaper. Tallow is also inferior. Iron same as at Petersburgh, sometimes cheaper and sometimes dearer. The quality of the wheat exported from Archangel is about equal to that from Petersburgh. The imports are not very extensive. They consist principally of sugar, coffee, spices, salt, woollens, hardware, &c. The merchants of Archangel are said by Mr. Coxe to be distinguished for honesty and intelligence. — (*Travels in the North of Europe*, vol. iii. p. 150.)

Account of the Quantities of the principal Articles exported from Archangel during each of the Six Years ending with 1832.

Articles.	1827.	1828.	1829.	1830.	1831.	1832.
Flax - - poods	49,855	54,877	131,160	162,383	266,485	120,719
Grain, Barley chets.	3,670	550	11,765	1,897	8,657	323
Oats - do.	308,810	47,137	352,792	84,639	226,109	27,779
Rye - do.	44,108	39,106	96,460	157,645	174,102	189,486
Wheat do.	2,017	11,777	113,738	83,400	104,037	37,728
Hemp - - poods	46,979	45,693	57,317	63,057	53,855	51,142
Iron - - do.	64,319	65,013	117,261	116,372	89,675	47,369
Linseed - - chets.	78,612	131,804	136,968	142,158	95,039	103,494
Mats - - pieces	1,363,334	530,353	651,438	674,481	424,119	841,450
Pitch - - barrels	13,460	9,973	8,407	17,917	8,237	13,434
Potashes - - poods	10,166	3,967	3,209	10,065	12,823	9,205
Tallow - - do.	100,634	186,126	156,778	135,157	119,264	100,263
Tallow candles do.	2,815	3,422	3,773	4,756	3,491	2,937
Tar - - barrels	91,226	70,985	37,764	92,548	52,467	58,014
Train oil - poods	21,217	17,004	16,534	19,169	4,129	8,989
Wood, Deals pieces	382,245	246,526	260,771	415,989	238,660	234,313
Battens do.	84,745	73,133	75,335	121,426	63,175	43,354
Deal ends do.	74,644	56,620	64,160	101,285	53,363	44,535

The total value of the exports in 1831 was estimated at 14,750,756 rubles, while that of the imports was estimated at only 1,155,872 rubles. During the same year there arrived at Archangel 443 ships; of which 349 were British, 12 Dutch, 14 Prussian, 12 Mecklenburgh, &c.

Account of the Number of Ships that sailed from Archangel during each of the Six Years ending with 1832.

Years - - -	1827.	1828.	1829.	1830.	1831.	1832.
Ships - - -	386	290	450	505	445	364

The trade of Archangel is very much influenced by the demand from the more southerly parts of Europe, and especially from England, for corn. When a brisk demand is anticipated, oats are brought in large quantities from the interior, sometimes even from the distance of 1,500 miles, in covered barks capable of holding several hundred quarters. But as there are few extensive mercantile establishments here, the supplies are scanty, except when a large demand has been expected for some time previously to the season for bringing them down. — (*Oddy's European Commerce*, and *private information*.)

Monies, *Weights*, and *Measures*, same as at Petersburgh; which see.

ARGOL, ARGAL, OR TARTAR (Ger. *Weinstein*; Du. *Wynsteen*; Fr. *Tartre*; It. Sp. and Port. *Tartaro*; Rus. *Winnui kamen*; Lat. *Tartarus*), a hard crust formed on the sides of the vessels in which wine has been kept; it is red or white according to the colour of the wine, and is otherwise impure. On being purified, it is termed *cream* or *crystals of tartar*. It consists principally of bitartrate of potash. White argol is preferable to red, as containing less drossy or earthy matter. The marks of good argol of either kind are, its being thick, brittle, hard, brilliant, and little earthy. That brought from Bologna is reckoned the best, and fetches the highest price. Argol is of considerable use among dyers, as serving to dispose the stuffs to take their colours the better. Pure argol, or cream of tartar, is extensively used in medicine. It has an acid and rather unpleasant taste. It is very brittle, and easily reduced to powder: specific gravity 1·95.

The duty on argol, which was judiciously reduced in 1832 from 2*s.* a cwt. to 6*d.*, produced in that year 678*l.* 3*s.* 7*d.* of nett revenue. This, supposing the whole to have been charged with the low duty, would show an importation of 27,127 cwt. The price of argol in the London market, in August, 1833, varied, Bologna from 52*s.* to 58*s.* per cwt., Leghorn 48*s.* to 50*s.* per ditto, Naples 42*s.* to 48*s.*, Rhenish 48*s.* to 50*s.*

ARISTOLOCHIA (Fr. *Serpentaire*; Ger. *Schlangenwurzel*; It. *Serpentaria*; Lat. *Aristolochia serpentaria*), the dried root of Virginia snake-root, or birthwort: it is small, light, and bushy, consisting of a number of fibres matted together, sprung from one common head, of a brownish colour on the outside, and pale or yellow within. It has an aromatic smell something like that of valerian, but more agreeable; and a warm, bitterish, pungent taste, very much resembling camphor. — (*Ency. Metrop.*)

ARMS. See FIRE-ARMS.

ARQUIFOUX (Ger. *Bleyglanz*; Fr. *Arquifou*; It. *Archifoglio*; Lat. *Galena*), a sort of lead ore, very heavy, easily reduced to powder, and hard to melt; when it is broken, it parts into shining scales of a whitish colour. The potters use it to give their works a green varnish; and in England it is commonly called *potters' ore*. *Arquifoux* is exported from England in large lumps; it should be chosen heavy, the scales bright and resembling tin-glass.

ARRACK, OR RACK (Fr. *Arac*; Ger. *Arrack*, *Rack*; Du. *Arak*, *Rak*; It. *Araco*; Sp. *Arak*; Port. *Araca*; Rus. *Arak*), a spirituous liquor manufactured at different places in the East.

Arrack is a term applied in most parts of India, and the Indian islands, to designate every sort of spirituous liquor; a circumstance which accounts for the discrepancy in the statements as to the materials used in making it, and the mode of its manufacture. The

arrack of Goa and Batavia is in high estimation; that of Columbo or Ceylon has been said to be inferior to the former; but this is doubtful. Goa and Columbo arrack is invariably made from the vegetable juice, *toddy*, which flows by incision from the coco nut tree (*Cocos nucifera*). After the juice is fermented, it is distilled and rectified. It usually yields about an *eighth* part of pure spirit. Batavia or Java arrack is obtained by distillation from molasses and rice, with only a small admixture of toddy. When well prepared, arrack is clear and transparent; generally, however, it is slightly straw-coloured. Its flavour is peculiar; but it differs considerably, no doubt in consequence of the various articles of which it is prepared, and the unequal care taken in its manufacture. In England, arrack is seldom used except to give flavour to punch: formerly the imports were quite inconsiderable; but they have recently increased so as to amount, at an average of the years 1829 and 1830, to above 30,000 gallons a year. In the East its consumption is immense. It is issued to the soldiers in India as part of the established rations; and it is supplied, instead of rum, to the seamen of the royal navy employed in the Indian seas. It is one of the principal products of Ceylon. Its prime cost in that island varies from 8*d.* to 10*d.* a gallon; and from 600,000 to 700,000 gallons are annually exported, principally to the presidencies of Bengal, Madras, and Bombay. It is sold in Ceylon by the legger of 150, and in Java by the legger of 160 gallons. In 1829, the first quality of Java arrack sold in Batavia at 160 florins the legger, or 1*s.* 8¾*d.* per gallon. The second quality fetched 125 florins.

Pariah-arrack is a phrase used to designate a spirit distilled in the peninsula of India, which is said to be often rendered unwholesome by an admixture of *ganga* (*Cannabis sativa*), and a species of *Datura*, in the view of increasing its intoxicating power. But it is not clear whether the term pariah-arrack be meant to imply that it is an inferior spirit, or an adulterated compound. This liquor is sometimes distilled from coco nut toddy, and sometimes from a mixture of jaggery, water, and the barks of various trees. — (See *Milburn's Orient. Com.*; and *Mr. Marshall's* valuable *Essay on the Coco Nut Tree*, p. 18.)

ARROW-ROOT, the pith or starch of the root *Maranta arundinacea*. It has received its common name from its being supposed to be an antidote to the poisoned arrows of the Indians. The powder is prepared from roots of a year old. It is reckoned a very wholesome nutritious food: it is often adulterated, when in the shops, with the starch or flour of potatoes. It is a native of South America; but has been long introduced into the West Indies, where it forms a pretty important article of cultivation. An excellent kind of arrow-root, if it may be so called, is now prepared in India from the root of the *Curcuma angustifolia*. The plant is abundant on the Malabar coast, where the powder is made in such quantities as to be a considerable object of trade. Some of it has been brought to England. The *Maranta arundinacea* has been carried from the West Indies to Ceylon, where it thrives extremely well, and where arrow-root of the finest quality has been manufactured from it. — (*Ainslie's Mat. Indica.*)

At an average of the three years ending with 1831, the arrow-root entered for home consumption amounted to 441,556 lbs. a year. Previously to last year (1832), the duty on arrow-root from a British possession was 9*s.* 4*d.* a cwt.; but as it is now reduced to 1*s.* a cwt., a considerable increase of consumption may be expected. It was quoted in the London market, in August, 1833, at from 9*d.* to 1*s.* 10*d.* per lb.

ARSENIC (Ger. *Arsenik*; Fr. *Arsenic*; It. and Sp. *Arsenico*; Rus. *Müschjah*; Lat. *Arsenicum*). This metal has a bluish white colour not unlike that of steel, and a good deal of brilliancy. It has no sensible smell while cold, but when heated it emits a strong odour of garlic, which is very characteristic. It is the softest of all the metallic bodies, and so brittle that it may easily be reduced to a very fine powder by trituration in a mortar. Its specific gravity is 5·76. — (*Thomson's Chemistry.*)

Metallic arsenic is not used in the arts, and is not, therefore, extracted from the ore, except for the purposes of experiment or curiosity. The arsenic of commerce is the white oxide, or *arsenious acid* of chemists. It is a white, brittle, compact substance, of a glassy appearance; is inodorous; has an acrid taste, leaving on the tongue a sweetish impression; and is highly corrosive. In its metallic state, arsenic exerts no action on the animal system; but when oxidised, it is a most virulent poison. The arsenic of the shops is sometimes adulterated with white sand, chalk, or gypsum: the fraud may be detected by heating a small portion of the suspected powder; when the arsenic is dissipated, leaving the impurities, if there be any, behind. Though the most violent of all the mineral poisons, the white oxide of arsenic, or the arsenic of the shops, is yet, when judiciously administered, a medicine of great efficacy. It is also used for various purposes in the arts. It is principally imported from Saxony and Bohemia. — (*Thomson's Chemistry*; *A. T. Thomson's Dispensatory.*)

ASAFŒTIDA (Ger. *Teufelsdrech*; Du. *Duivelsdreck*; Fr. *Assa-fetida*; Sp. *Asa-fetida*; Lat. *Asa-fœtida*; Per. *Ungoozeh*), a gum resin, consisting of the inspissated juice of a large umbelliferous plant, the *Ferula asafœtida*. It is produced in the southern provinces of Persia, and in the territory of Sinde, or country lying at the mouth of the Indus.

It is exported from the Persian gulf to Bombay and Calcutta, whence it is sent to Europe. It has a nauseous, somewhat bitter, biting taste, and an excessively strong, fœtid, alliaceous smell: the newer it is, it possesses its smell and other peculiar properties in the greater perfection. It is imported, packed in irregular masses, in mats, casks, and cases; the last being, in general, the best. It should be chosen clean, fresh, strong-scented, of a pale reddish colour, variegated with a number of fine, white tears: when broken, it should somewhat resemble marble in appearance; and, after being exposed to the air, should turn of a violet red colour. That which is soft, black, and foul, should be rejected. The packages should be carefully examined, and ought to be tight, to prevent the smell from injuring any other article. In 1825, the imports of asafœtida amounted to 106,770 lbs., but they have not been so large since; and in

1830, only 8,722 lbs. were imported. We have not learned the quantity cleared for consumption, but it must be trifling. In this country, it is used only in the materia medica. In France, it is used both in that way, and to some extent, also, as a condiment. It is worth, in bond, in the London market, from 2*l.* to 8*l.* per cwt. — (*Milburn's Orient. Com.; Parl. Papers;* and *private information.*)

ASARUM (Fr. *Asaret;* Ger. *Hazelwurzel;* Sp. *Asaro de Europa*), the root or dried leaves of the asarabacca. The leaves are nearly inodorous; their taste slightly aromatic, bitter, acrid, and nauseous. The powder of the leaves is the basis of most cephalic snuffs. A good deal of their acrimony is lost in keeping: they should, consequently, be used in as recent a state as possible, and dried without the application of much heat. Asarabacca grows in several parts of England, particularly Lancashire and Westmoreland.

ASH (COMMON), the *Fraxinus excelsior* of botanists, a forest tree of which there are many varieties. It is abundant in England, and is of the greatest utility.

The ash is of very rapid growth; and, unlike most other trees, its value is rather increased than diminished by this circumstance. Like the chesnut, the wood of young trees is most esteemed. It grows on a great variety of soils, but is best where the growth has been most vigorous. It is inferior to the oak in stiffness, and is more easily split; but in toughness and elasticity it is far superior to the oak, or to any other species of timber. Hence its universal employment in all those parts of machinery which have to sustain sudden shocks, such as the circumference, teeth, and spokes of wheels, ship-blocks, &c., and in the manufacture of agricultural implements; in the latter, indeed, it is almost exclusively made use of. The want of prolonged durability is its greatest defect; and it is too flexible to be employed in building. The wood of old trees is of a dark brown colour, sometimes beautifully figured; the wood of young trees is brownish white, with a shade of green. The texture is alternately compact and porous: where the growth has been vigorous, the compact part of the several layers bears a greater proportion to the spongy, and the timber is comparatively tough, elastic, and durable. It has neither taste nor smell; and, when young, is difficult to work. The mountain ash (*Pyrus aucuparia*) is quite a different tree from the common ash, and its timber is far less valuable. — (*Tredgold's Principles of Carpentry; Timber Trees and Fruits,* in *Lib. of Entertaining Knowledge, &c.*)

ASHES (Fr. *Vedasse;* Ger. *Waidasche;* Du. *Weedas;* Da. *Veedaske;* It. *Feccia bruciata;* Sp. *Alumbre de hez;* Rus. *Weidasch;* Lat. *Cineres infectorii*), the residuum, or earthy part, of any substance after it has been burnt. In commerce, the term is applied to the ashes of vegetable substances; from which are extracted the alkaline salts called potash, pearlash, barilla, kelp, &c.; which see.

ASPHALTUM. See BITUMEN.

ASS (Fr. *Ane;* Ger. *Esel;* It. *Asino;* Lat. *Asinus*), the well-known quadruped of that name.

ASSETS, in commerce, a term used to designate the stock in trade, and the entire property of all sorts, belonging to a merchant or to a trading association. It is also applied to goods or property placed, for the discharge of some particular trust or obligation, in the hands of executors, assignees, &c.

ASSIENTO, a Spanish word signifying a contract. In commerce, it means the contract or agreement by which the Spanish government ceded first to a company of French, and afterwards (by the treaty of Utrecht) to a company of English merchants, the right to import slaves into the Spanish colonies. — (*Brougham's Colonial Policy,* vol. i. p. 439.)

ASSIGNEE, a person appointed by competent authority to do, act, or transact some business, or exercise some particular privilege or power, for or on account of some specified individual or individuals.

Assignees may be created by deed, or by law: by deed, where the lessee of a farm assigns the same to another; by law, where the law makes an assignee, without any appointment of the person entitled, as an executor is assignee in law to the testator, and an administrator to an intestate. The term is most commonly applied to the creditors of a bankrupt appointed to manage for the rest, and who consequently have the bankrupt's estate assigned over to them. — (See BANKRUPT.)

ASSIZE. See BREAD.

ASSURANCE. See INSURANCE.

AUCTION, a public sale of goods to the highest bidder. Auctions are generally notified by advertisement, and are held in some open place. The biddings may be made either by parties present, or by the auctioneer under authority given to him; the sale is usually terminated by the fall of a hammer.

AUCTIONEER, a person who conducts sales by auction. It is his duty to state the conditions of sale, to declare the respective biddings, and to terminate the sale by *knocking down* the thing sold to the highest bidder. An auctioneer is held to be lawfully authorised by the purchaser to sign a contract for him, whether it be for lands or goods. And his writing down the name of the highest bidder in his book is sufficient to bind any other person for whom the highest bidder purchased, even though such person be present, provided he do not object *before entry.*

Every auctioneer must take out a licence, renewable annually on the 5th of July, for which he is charged 5*l.*; and if he sell goods for the sale of which an excise licence is specially required, he must also take out such licence, unless the goods be the property of a licensed person, and sold for his behalf and on his *entered* premises, in which case such additional licence is not required. — (6 *Geo.* 4. c. 81.)

Auctioneers within the limits of the chief excise office in London are bound, when they receive their licence, to give security to the excise by bond, themselves in 1,000*l.* and two sureties in 200*l.* each, to deliver in within twenty-eight days of any sale a true and particular account of such sale, and to pay the

duties on the same. Auctioneers refusing or delaying to pay the duties within the specified time, forfeit their bond and the bonds of their sureties, and double the amount of the duties. — (19 *Geo.* 3. c. 56.)

Auctioneers carrying on their trade without the limits of the head office give bond, themselves in 500*l.* and two sureties in 50*l.* each, to render an account of the duties accruing on sales, and to pay them within six weeks, under the penalties already mentioned. — (19 *Geo.* 3. c. 56., and 38 *Geo.* 3. c. 54.)

A licensed auctioneer going from town to town by a public stage coach, and sending goods by a public conveyance, and selling them on commission by retail or auction, is a *trading person* within the 50 Geo. 3. c. 41. § 6., and must take out a hawker's and pedlar's licence.

The following duties are payable on goods sold by auction : —

For every 20*s.* of the purchase money arising or payable by virtue of any sale at auction for the benefit of the growers or first purchasers respectively of any sheep's wool, the growth or produce of any part of the United Kingdom, 2*d.*

For every 20*s.* of the purchase money arising or payable by virtue of any sale at auction of any interest in possession or reversion in any freehold, customary, copyhold, or leasehold lands, tenements, houses, or hereditaments, and any share or shares in the capital or joint stock of any corporation or chartered company, and of any annuities or sums of money charged thereon, and of any ships and vessels, and of any reversionary interest in the public funds, and of any plate or jewels, and so in proportion for any greater or less sum, 7*d.*

For every 20*s.* of the purchase money arising or payable by virtue of any sale at auction of furniture, fixtures, pictures, books, horses, and carriages, and all other goods and chattels whatsoever, and so in proportion for any greater or less sum, 1*s.*

The duties to be paid by the auctioneer, agent, factor, or seller by commission.

By stat. 29 Geo. 3. c. 63. §§ 1, 2., no duty shall be paid for piece goods sold by auction, wove or fabricated in this kingdom, which shall be sold entire in the piece or quantity as taken from the loom, and in lots of the price of 20*l.* or upwards, and so as the same be sold in no other than entered places, and openly shown and exposed at such sale.

And the auctioneer shall, besides the bond given on receiving his licence, give a further bond in 5,000*l.* with two sureties, that he will, within fourteen days after every such sale, deliver an account thereof at the next excise office, and will not sell by auction any goods woven out of this kingdom, or woven in this kingdom, which shall not be sold in the entire piece, without payment of the proper duty. § 6.

By stat. 41 Geo. 3. c. 91. § 8., all corn and grain of every sort, flour, and meal, and all beef, pork, hams, bacon, cheese, and butter, imported into Great Britain, shall be free of the duty on the first sale thereof by auction on account of the importer, so as the same be entered at some custom-house at the port of importation, and the sale thereof be within twelve months and by a licensed auctioneer.

By stat. 30 Geo. 3. c. 26., all goods imported by way of merchandise from *Yucatan*, and by 32 Geo. 3. c. 41., all whale-oil (and by 41 Geo. 3. c. 42., all elephant-oil, produced from sea-cows or sea-elephants, and commonly called "elephant's oil,") whalebone, ambergris, and head-matter, and all skins of seals and other animals living in the sea, and also elephants' teeth, palm-oil, dyeing-wood, drugs, and other articles for dyers' use, and all mahogany and other manufactured wood for the use of cabinet-makers and other manufacturers, imported in *British* ships from *Africa* and (by 42 Geo. 3. c. 93. § 3.) *America*, or any *British* settlement abroad, shall be free of the excise duty on the first sale thereof at auction by or for the account of the original importer to whom the same were consigned, and by whom they were entered at the Custom-house, so as such sale be made within twelve months after such goods are imported, and the same be sold by a licensed auctioneer.

By stat. 19 Geo. 3. c. 56. § 13., no duties shall be laid (1.) on any sale by auction of estates or chattels made by order of the Court of Chancery or Exchequer, or courts of great sessions in Wales : (2.) on any sale made by the *East India* or *Hudson's Bay* companies : (3.) by order of the commissioners of customs or excise : (4.) by order of the Board of ordnance : (5.) by order of the commissioners of the navy or victualling offices : (6.) on any such sales made by the sheriff, for the benefit of creditors, in execution of judgment : (7.) on sales of goods distrained for rent : (8.) on sales for non-payment of tithes : (9.) on sales of effects of bankrupts sold by assignees : (10.) on goods imported by way of merchandise from any *British* colony in *America*, the same being of the growth, produce, or manufacture of such colony, on the first sale thereof on account of the original importer to whom they were consigned, and by whom they were entered at the Custom-house, so as such sale be made within twelve months after importation (see 59 Geo. 3. c. 54. § 3.) : (11.) on any ships or their cargoes condemned as prize, and sold for the benefit of the captor : (12.) on any ships or goods wrecked or stranded, sold for the benefit of the insurers or proprietors : (13.) on the sale of any goods damaged by fire, and sold for the benefit of the insurers : (14.) on any auction to be held on the account of the lord or lady of the manor for granting any copyhold or customary messuages, lands, or tenements for the term of a life or lives, or any number of years : (15.) on any auction to be held for the letting or demising any messuages, lands, or tenements for the term of a life or lives, or any number of years, to be created by the person on whose account such auction shall be held : (16.) on the sale of any wood, coppice, produce of mines or quarries, or materials for working the same ; or on the sale of any cattle, and live or dead stock, or unmanufactured produce of land, so as such sale of woods, coppices, produce of mines or quarries, cattle, corn, stock or produce of land, may be made whilst they continue on the lands producing the same, and by the owner of such lands, or proprietor of or adventurer in such mines or quarries, or by their steward or agent.

By stat. 52 Geo. 3. c. 53. § 1., all coffee imported in any *British* ship from any *British* colony in *America* may be sold by auction, free of the auction duty, whilst the same shall remain in warehouses under the act 43 Geo. 3. c. 132. or any other act.

Certain articles from the United States, as regulated by the act 59 Geo. 3. c. 54. § 3., and goods from Portugal imported under stat. 51 Geo. 3. c. 47., may also be sold by auction free of duty, if on account of the original importer, and within twelve months of their importation.

By stat. 19 Geo. 3. c. 56. § 9., the auctioneer, if the sale be within the limits of the chief office of excise in *London*, shall give two days' notice at the said office, elsewhere three days' notice to the collector or at the next excise office, in writing, signed by him, specifying the particular day when such sale shall begin ; and shall at the same time, or within twenty-four hours after, deliver a written or printed catalogue, attested and signed by such auctioneer or his known clerk, in which catalogue shall be particularly enumerated every article, lot, parcel, and thing intended to be sold at such auction. And if he shall presume to make such sale without delivering such notice and catalogue, or sell any estate or goods not enumerated therein, he shall forfeit 20*l.*

By stat. 32 Geo. 3. c. 11., every auctioneer who shall have delivered such notice or catalogue shall, within 28 days (if within the limits of the chief office of excise, elsewhere within six weeks) after the day specified in such notice for such sale, deliver at such chief office, or to the collector of excise in whose collection such sale has been or was intended to be, a declaration in writing, setting forth whether or not any such sale had been or was opened or begun under such notice, or any article, lot, parcel, or thing contained in such catalogue was bid for or sold at such auction ; and such auctioneer, or person acting as his clerk as aforesaid, shall make oath to the truth of such declaration before the said commissioners or collector, on pain of forfeiting 50*l.* for every neglect or refusal of delivering such declaration, verified as aforesaid.

The real owner of any estate, goods, or effects put up to sale by way of auction, and bought in either by himself or by his steward or known agent employed in the management of the sale, or by any other person appointed *in writing* by the owner to bid for him, shall be allowed the duties, provided notice in writing be given to the auctioneer before such bidding, both by the owner and person intended to be the

bidder, of such person being appointed by the owner; and provided such notice be verified by the oath of the auctioneer, as also the fairness of the transaction to the best of his knowledge and belief. — (19 *Geo.* 3. c. 56., 28 *Geo.* 3. c. 37.) An auctioneer employed in a case of this sort, and neglecting to take the proper steps to prevent the duties from attaching, may be obliged to pay them himself. — (19 *Geo.* 3. c. 56.)

If the sale of an estate be void through defect of title, the commissioners of excise, or justices of the peace in the county, may, on oath being made, grant relief for the duties paid. Claim must be made within twelve months after the sale, if rendered void within that time; or if not rendered void within that time, within three months after the discovery.

The auctioneer is by law liable to pay the auction duties, but he may recover the same from the vendor. The conditions of sale usually oblige the buyer to pay the whole, or a part of the duties; and upon his refusing or neglecting to pay them, the bidding is void.

An auctioneer who declines to disclose the name of his principal at the time of sale, makes himself responsible. But if he disclose the name of his principal, he ceases to be responsible, either for the soundness of or title to the thing sold, unless he have expressly warranted it on his *own* responsibility.

If an auctioneer pay over the produce of a sale to his employer, after receiving notice that the goods were not the property of such employer, the real owner of the goods may recover the amount from the auctioneer.

It has long been a common practice at certain auctions (called for that reason *mock* auctions) to employ *puffers*, or mock bidders, to raise the value of the articles sold by their apparent competition, and many questions have grown out of it. It was long ago decided, that if the owner of an *estate* put up to sale by auction employ puffers to bid for him, it is a fraud on the real bidder, and the highest bidder cannot be compelled to complete his contract. — (6 *T. Rep.* p. 642.) But it would seem as if the mere employment of puffers under any circumstances were now held to be illegal. "The inclination of the courts at the present time is, that a sale by auction should be conducted in the most open and public manner possible; that there should be no reserve on the part of the seller, and no collusion on the part of the buyers. Puffing is illegal, according to a late case, even though there be only one puffer; and it was then decided that the recognised practice at auctions of employing such persons to bid upon the sale of horses could not be sustained." — (*Woolrych on Commercial Law*, p. 262.)

A party bidding at an auction may retract his offer at any time before the hammer is down. Another clearly established principle is, that verbal declarations by an auctioneer are not to be suffered to control the printed conditions of sale; and these, when pasted up under the box of the auctioneer, are held to be sufficiently notified to purchasers.

Auctioneers, like all other agents, should carefully observe their instructions. Should those who employ them sustain any damage through their carelessness or inattention, they will be responsible. They must also answer for the consequences, if they sell the property intrusted to their care for less than the price set upon it by the owners, or in a way contrary to order.

An auctioneer who has duly paid the licence duty is not liable, in the city of London, to the penalties for acting as a *broker* without being admitted agreeably to the 6 Anne, c. 16.

The establishment of mock auctions is said to be a common practice among swindlers in London. Persons are frequently placed at the doors of such auctions, denominated *barkers*, to invite strangers to come in; and puffers are in wait to bid up the article much beyond its value. A stranger making an offer at such an auction is almost sure to have the article knocked down to him. Plated goods are often disposed of at these auctions; but it is almost needless to add, that they are of very inferior quality. Attempts have sometimes been made to suppress mock auctions, but hitherto without much success.

We subjoin

An Account of the Number of Auction Licences granted from the 5th of January, 1819, with the Amount of Duty received on Sales by Auction; distinguishing each Year, and specifying those who have taken out such Licences for Town, Country, and Town and Country, down to 1831. — (*Parl. Paper*, No. 138. Sess. 1831.)

Years ended 5th of January.	Number of Auction Licences.	Amount of Duty received on Sales by Auction.			Number of Licences taken out.		
					For Town.	For Country.	For Town and Country.
		£	s.	d.			
1820	2,557	256,534	16	9	327	2,124	106
1821	2,770	225,630	5	9	338	2,323	109
1822	2,939	202,317	18	2¼	309	2,523	107
1823	2,897	206,322	8	1	343	2,433	121
1824	2,939	223,835	4	9	334	2,493	112
1825	2,941	279,264	1	9¾	338	2,496	107
1826	2,910	308,591	12	7¾	357	2,437	116
1827	2,981	225,061	9	11	607	2,325	49
1828	3,119	250,239	10	3	—	2,577	542
1829	2,972	235,447	18	10½	—	2,422	550
1830	3,043	225,258	11	4½	—	2,519	524
1831	2,467	203,090	17	0	—	2,478	489

Account of the Produce of the Auction Duties, in each of the Three Years, ending the 5th of January 1833, distinguishing the Amount paid under separate Heads.

	Amount of Auction Duties on the Sale of									Total Produce.		
	Estates, Houses, Annuities, Ships, Plate, Jewels, &c.			Household Furniture, Horses, Carriages, and all other Goods and Chattels.			Sheep's Wool.			Foreign Produce (First Sale thereof.)					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
England - - -	72,348	19	6	128,184	13	1	11	14	9	2,865	13	4	203,411	0	8
Scotland - - -	7,150	6	7	12,387	11	3	0	19	9	85	10	11	19,624	8	6
Ireland - - - -	1,952	13	5	9,004	18	8	0	6	9	-	-		10,957	18	10
Year ended 5th of January, 1831 -	81,451	19	6	149,577	3	0	13	1	3	2,951	4	3	233,993	8	0
England - - -	76,164	3	0	122,088	8	11	25	10	11	2,857	3	8	201,135	6	6
Scotland - - - -	4,863	9	7	12,014	11	3	0	16	9	69	7	2	16,948	4	9
Ireland - - -	1,616	8	5	8,847	2	7	0	7	3	1	7	5	10,465	5	8
Year ended 5th of January, 1832 -	82,644	1	0	142,950	2	9	26	14	11	2,927	18	3	228,548	16	11
England - - -	79,218	9	8	126,126	15	2	15	10	6	2,694	13	8	208,055	9	0
Scotland - - - -	5,436	13	8	12,294	3	7	1	2	2	136	0	2	17,867	19	7
Ireland - - -	2,213	5	5	8,180	5	4	-	-		0	13	2	10,394	3	11
Year ended 5th of January, 1833 -	86,868	8	9	146,601	4	1	16	12	8	2,831	7	0	236,317	12	6

Excise Office, London, 5th of August, 1833.

AVERAGE, a term used in commerce and navigation to signify a contribution made by the individuals, when they happen to be more than one, to whom a ship, or the goods on board it, belong, or by whom it or they are insured; in order that no particular individual or individuals amongst them, who may have been forced to make a sacrifice for the preservation of the ship or cargo, or both, should lose more than others. "Thus," says Mr. Serjeant Marshall, "where the goods of a particular merchant are thrown overboard in a storm to save the ship from sinking; or where the masts, cables, anchors, or other furniture of the ship, are cut away or destroyed for the preservation of the whole; or money or goods are given as a composition to pirates to save the rest; or an expense is incurred in reclaiming the ship, or defending a suit in a foreign court of admiralty, and obtaining her discharge from an unjust capture or detention; in these and the like cases, where any sacrifice is deliberately and voluntarily made, or any expense fairly and *bonâ fide* incurred, to prevent a total loss, such sacrifice or expense is the proper subject of a general contribution, and ought to be rateably borne by the owners of the ship, freight, and cargo, so that the loss may fall equally on all, according to the equitable maxim of the civil law — no one ought to be enriched by another's loss: *Nemo debet locupletari alienâ jacturâ.*"

Upon this fair principle is founded the doctrine of average contributions; regulations with respect to which having been embodied in the Rhodian law, were thence adopted into the Roman law; and form a prominent part of all modern systems of maritime jurisprudence. The rule of the Rhodian law is, that "if, for the sake of lightening a ship in danger at sea, goods be thrown overboard, the loss incurred for the sake of all, shall be made good by a general contribution." — (*Dig.* lib. 14. tit. 2. § 1.; *Schomberg on the Maritime Laws of Rhodes*, p. 60.)

Formerly it was a common practice to ransom British ships when captured by an enemy, the ransom being made good by general average. But this practice having been deemed disadvantageous, it was abolished by statute 22 Geo. 3. c. 25., which declares, "That all contracts and agreements which shall be entered into, and all bills, notes, and other securities, which shall be given by any person or persons, for ransom of any ship or vessel, merchandise, or goods, captured by the subjects of any state at war with his Majesty, or by any person committing hostilities against his Majesty's subjects, shall be absolutely void in law, and of no effect whatever;" and a penalty of 500*l.* is given to the informer, for every offence against this act.

Average is either *general* or *particular;* that is, it either affects all who have any interest in the ship and cargo, or only some of them. The contributions levied in the cases mentioned above, come under the first class. But when losses occur from ordinary wear and tear, or from the perils naturally incident to a voyage, without being *voluntarily* encountered, such as the accidental springing of masts, the loss of anchors, &c., or when any peculiar sacrifice is made for the sake of the *ship only*, or of the *cargo only*, these losses, or this sacrifice, must be borne by the parties not immediately interested, and are consequently defrayed by a *particular* average.

There are also some small charges called *petty* or *accustomed* averages; it is usual to charge one third of them to the ship and two thirds to the cargo.

No general average ever takes place, except it can be shown that the danger was

imminent, and that the sacrifice made *was indispensable, or supposed to be indispensable, by the captain and officers, for the safety of the ship and cargo.* The captain, on coming on shore, should immediately make his protests; and he, with some of the crew, should make oath that the goods were thrown overboard, masts or anchors cut away, money paid, or other loss sustained, for the preservation of the ship and goods, and of the lives of those on board, and for no other purpose. The average, if not settled before, should then be adjusted, and it should be paid before the cargo is landed; for the owners of the ship have a *lien* on the goods on board, not only for the freight, but also *to answer all averages and contributions that may be due.* But though the captain should neglect his duty in this respect, the sufferer would not be without a remedy, but might bring an action either against him or the owners.

The laws of different states, and the opinions of the ablest jurists, vary as to whether the loss incurred in defending a ship against an enemy or pirate, and in the treatment of the wounded officers and men, should be made good by general or particular average. The Ordinance of the Hanse Towns (art. 35.), the Ordinance of 1681 (liv. iii. tit. 7. § 6.), and the *Code de Commerce* (art. 400. § 6.), explicitly declare that the charges on account of medicine, and for attendance upon the officers and seamen wounded in defending the ship, shall be general average. A regulation of this sort seems to be founded on reason. But other codes are silent on the subject; and though the contrary opinion had been advanced by Mr. Serjeant Marshall, and by Mr. Justice Park in the earlier editions of his work, the Court of Common Pleas has unanimously decided, that in England neither the damage done to a ship, nor the ammunition expended, nor the expense of healing sailors wounded in an action with an enemy or pirate, is a subject of general average. — (*Abbott on the Law of Shipping*, part iii. cap. 8.)

Much doubt has been entertained, whether expenses incurred by a ship in an intermediate port in which she has taken refuge, should be general average, or fall only on the ship. But on principle, at least, it is clear, that if the retreat of the ship to port be made in order to obviate the danger of foundering, or some other great and imminent calamity, the expenses incurred in entering it, and during the time she is forced by stress of weather, or adverse winds, to continue in it, ought to belong to general average. But if the retreat of the ship to port be made in order to repair an injury occasioned by the unskilfulness of the master, or in consequence of any defect in her outfit, such, for example, as deficiencies of water, provisions, sails, &c., with which she ought to have been sufficiently supplied before setting out, the expenses should fall wholly on the owners.

When a ship (supposed to be *seaworthy*) is forced to take refuge in an intermediate port, because of a loss occasioned by a peril of the sea, as the springing of a mast, &c., then, as the accident is not ascribable to any fault of the master or owners, and the retreat to port is indispensable for the safety of the ship and cargo, it would seem that any *extraordinary expense* incurred in entering it should be made good by general average.

Supposing, however, that it could be shown, that the ship was not, at her outset, seaworthy, or in a condition to withstand the perils of the sea; that the mast, for example, which has sprung, had been previously damaged; or supposing that the mischief had been occasioned by the incapacity of the master; the whole blame would, in such a case, be ascribable to the owners, who, besides defraying every expense, should be liable in damages to the freighters for the delay that would necessarily take place in completing the voyage, and for whatever damage might be done to the cargo.

These, however, are merely the conclusions to which, as it appears to us, those must come who look only to principles. The law with respect to the points referred to, differs in different countries, and has differed in this country at different periods. "A doubt," says Lord Tenterden, "was formerly entertained as to the expenses of a ship in a port in which she had taken refuge, to repair the damage occasioned by a tempest; but this has been removed by late decisions. And it has been held, that the wages and provisions of the crew during such a period must fall upon the ship alone. But if a ship should necessarily go into an intermediate port for the purpose only of repairing such a damage as is in itself a proper object of general contribution, possibly the wages, &c. during the period of such detention, may also be held to be general average, on the ground that the accessory should follow the nature of its principal."— (*Law of Shipping*, part iii. cap. 8.)

Perhaps the reader who reflects on the vagueness of this passage will be disposed to concur with Lord Tenterden's remark in another part of the same chapter, "That the determinations of the English courts of justice furnish less of authority on this subject (average) than on any other branch of maritime law."

The question, whether the *repairs* which a ship undergoes that is forced to put into an intermediate port ought to be general or particular average, has occasioned a great diversity of opinion; but the principles that ought to regulate our decision with respect to it seem pretty obvious. Injuries voluntarily done to the ship, as cutting away masts, yards, &c. to avert some impending danger, are universally admitted to be general

average. It seems, however, hardly less clear, and is, indeed, expressly laid down by all the great authorities, that injuries done to the ship by the violence of the winds or the waves should be particular average, or should fall wholly on the owners. The ship, to use the admirable illustration of this principle given in the civil law, is like the tool or instrument of a workman in his trade. If in doing his work he break his hammer, his anvil, or any other instrument, he can claim no satisfaction for this from his employer.—(*Dig.* lib. xiv. tit. 2. § 2.) The owners are bound, both by the usual conditions in all charterparties, and at common law, to carry the cargo to its destination; and they must consequently be bound, in the event of the ship sustaining any accidental or natural damage during the voyage, either to repair that damage at their own expense, or to provide another vessel to forward the goods. In point of fact, too, such subsidiary ships have often been provided; but it has never been pretended that their hire was a subject of general average, though it is plain it has quite as good a right to be so considered as the cost of repairing the damage done to the ship by a peril of the sea. Hence, when a ship puts into an intermediate port for the common safety, the charges incurred in entering the port, and *down to the earliest time that the wind and weather become favourable for leaving it*, ought to be general average; but the repair of any damage she may have sustained by wear and tear, or by the mere violence of the storm, or an accidental peril, and the wages of the crew, and other expenses incurred after the weather has moderated, should fall wholly on the owners.

It has been, however, within these few years, decided, in the case of a British ship that had been obliged to put into port in consequence of an injury resulting from her accidentally coming into collision with another, that so much of the repair she then underwent as was *absolutely necessary to enable her to perform her voyage* should be general average. The Judges, however, spoke rather doubtfully on the subject; and it is exceedingly difficult to discover any good grounds for the judgment.—(Plummer and Another *v.* Wildman, 3 *M.* & *S.* 482.)—It seems directly opposed to all principle, as well as to the authority of the laws of Rhodes (*Dig.* 14. tit. 2.), of Oleron (art. 9.), of Wisby (art. 12.), and to the common law with respect to freight. Lord Tenterden has expressed himself as if he were hostile to the judgment. It is, indeed, at variance with all the doctrines he lays down; and the terms in which he alludes to it, "*yet in one case*," appear to hold it forth as an exception (which it certainly is) to the course of decisions on the subject.

It is now usual in this country, when a vessel puts into port on account of a damage belonging to particular average, which requires to be repaired before she can safely proceed on her voyage, to allow in general average the expense of entering the port and unloading, to charge the owners of the goods or their underwriters with the warehouse rent and expenses attending the cargo, and to throw the expense of reloading and departure on the freight.

According to the law of England, when a ship is injured by coming into collision with or *running foul* of another, if the misfortune has been accidental, and no blame can be ascribed to either party, the owners of the damaged ship have to bear the loss; but where blame can be fairly imputed to one of the parties, it, of course, falls upon him to make good the damage done to the other. The regulations in the *Code de Commerce* (art. 407.) harmonise, in this respect, with our own. According, however, to the laws of Oleron and Wisby, and the famous French ordinance of 1681, the damage occasioned by an accidental collision is to be defrayed equally by both parties.

The ship and freight, and every thing on board, even jewels, plate, and money, except wearing apparel, contribute to general average. But the wages of seamen do not contribute; because, had they been laid under this obligation, they might have been tempted to oppose a sacrifice necessary for the general safety.

Different states have adopted different modes of valuing the articles which are to contribute to an average. In this respect the law of England has varied considerably at different periods. At present, however, the ship is valued at the price she is worth on her arrival at the port of delivery. The value of the freight is held to be the clear sum which the ship has earned after seamen's wages, pilotage, and all such other charges as come under the name of petty averages, are deducted. It is now the settled practice to value the goods lost, as well as those saved, at the price they would have fetched in ready money, *at the port of delivery*, on the ship's arrival there, freight, duties, and other charges, being deducted. Each person's share of the loss will bear the same proportion to the value of his property, that the whole loss bears to the aggregate value of the ship, freight, and cargo. The necessity of taking the goods lost into this account is obvious; for otherwise their owner would be the only person who would not be a loser.

When the loss of masts, cables, and other furniture of the ship, is compensated by general average, it is usual, as the new articles will, in all ordinary cases, be of greater value than those that have been lost, to deduct *one third* from the value of the former, leaving two thirds only to be contributed.

But the mode of adjusting an average will be better understood by the following example, extracted from Chief Justice Tenterden's valuable work on the *Law of Shipping*, part iii. cap. 8.

"The reader will suppose that it became necessary, in the Downs, to cut the cable of a ship destined for Hull; that the ship afterwards struck upon the Goodwin, which compelled the master to cut away his mast, and cast overboard part of the cargo, in which operation another part was injured; and that the ship, being cleared from the sands, was forced to take refuge in Ramsgate harbour, to avoid the further effects of the storm.

AMOUNT OF LOSSES.		£
Goods of A. cast overboard		500
Damage of the goods of B. by the jettison		200
Freight of the goods cast overboard		100
Price of a new cable, anchor, and mast	£ 300	200
Deduct one third	100	
Expense of bringing the ship off the sands		50
Pilotage and port duties going into the harbour and out, and commission to the agent who made the disbursements		100
Expenses there		25
Adjusting this average		4
Postage		1
Total of losses	£	1,180

VALUE OF ARTICLES TO CONTRIBUTE.	£
Goods of A. cast overboard	500
Sound value of the goods of B., deducting freight and charges	1,000
Goods of C.	500
—— of D.	2,000
—— of E.	5,000
Value of the ship	2,000
Clear freight, deducting wages, victuals, &c.	800
Total of contributory values £	11,800

Then, 11,800*l.* : 1,180*l.* : : 100*l.* : 10*l.*

"That is, each person will lose 10 per cent. upon the value of his interest in the cargo, ship, or freight. Therefore, A. loses 50*l.*, B. 100*l.*, C. 50*l.*, D. 200*l.*, E. 500*l.*, the owners 280*l.*; in all, 1,180*l.* Upon this calculation, the owners are to lose 280*l.*; but they are to receive from the contribution 380*l.*, to make good their disbursements, and 100*l.* more for the freight of the goods thrown overboard; or 480*l.*, minus 280*l.*

They, therefore, are actually to receive	£ 200
A. is to contribute 50*l.*, but has lost 500*l.*; therefore A. is to receive	450
B. is to contribute 100*l.*, but has lost 200*l.*; therefore B. is to receive	100
Total to be actually received	£ 750
On the other hand, C., D., and E. have lost nothing, and are to pay as before; viz. C.	£ 50
D.	200
E.	500
Total to be actually paid	£ 750

which is exactly equal to the total to be actually received, and must be paid by and to each person in rateable proportion.

"In the above estimate of losses, I have included the freight of the goods thrown overboard, which appears to be proper, as the freight of the goods is to be paid, and their supposed value is taken clear of freight, as well as other charges. In this country, where the practice of insurance is very general, it is usual for the broker, who has procured the policy of insurance, to draw up an adjustment of the average, which is commonly paid in the first instance by the insurers without dispute. In case of dispute, the contribution may be recovered either *by a suit in equity*, or by an action at law, instituted by each individual entitled to receive, against each party that ought to pay, for the amount of his share. And in the case of a general ship, where there are many consignees, it is usual for the master, before he delivers the goods, to take a bond from the different merchants for payment of their portions of the average when the same shall be adjusted."

The subject of average does not necessarily make a part of the law of insurance; though as insurers, from the terms of most policies, are liable to indemnify the insured against those contributions which are properly denominated *general* average, its consideration very frequently occurs in questions as to partial losses. But in order to confine assurances to that which should be their only object, namely, an indemnity against real and important losses arising from a peril of the sea, as well as to obviate disputes respecting losses arising from the perishable quality of the goods insured, and all trivial subjects of difference and litigation, it seems to be the general law of all maritime states, and is expressly, indeed, provided by the famous Ordinance of 1681 (see liv. iii. tit. 6. § 47., and the elaborate commentary of M. Valin), that the insurer shall not be liable to any demand on account of average, unless it exceed *one* per cent. An article (No. 408.) to the same effect is inserted in the *Code de Commerce;* and, by stipulation, this limitation is frequently extended in French policies to *three* or *four* per cent. A similar practice was adopted in this country in 1749. It is now constantly stipulated in all policies, that upon certain enumerated articles of a quality peculiarly perishable, the insurer shall not be liable for any partial loss whatever; that upon certain others liable to partial injuries, but less difficult to be preserved at sea, he shall only be liable for partial losses above *five* per cent.; and that as to all other goods, and also the

ship and freight, he shall only be liable for partial losses above *three* per cent. This stipulation is made by a memorandum inserted at the bottom of all policies done at Lloyd's, of the following tenour: — "N. B. Corn, fish, salt, fruit, flour, and seeds, are warranted free from average, unless general, or the ship be stranded; sugar, tobacco, hemp, flax, hides, and skins, are warranted free from average under *5l.* per cent.; and all other goods free from average under *3l.* per cent., unless general, or the ship be stranded."

The form of this memorandum was universally used, as well by the Royal Exchange and London Assurance Companies as by private underwriters, till 1754, when it was decided that a ship having run aground, was a stranded ship within the meaning of the memorandum; and that although she got off again, the underwriters were liable to the average or partial loss upon damaged corn. This decision induced the two Companies to strike the words "*or the ship be stranded,*" out of the memorandum; so that now they consider themselves liable to no losses which can happen to such commodities, except general averages and total losses. The old form is still retained by the private underwriters. — (See STRANDING.)

The reader is referred, for the further discussion of this important subject, to the article MARINE INSURANCE; and to *Mr. Stevens's Essay on Average; Abbott on the Law of Shipping*, part iii. cap. 8.; *Marshall on Insurance*, book i. cap. 12. s. 7.; *Park on Insurance*, cap. 7.; and *Mr. Benecke's* elaborate and able work on the *Principles of Indemnity in Marine Insurance.*

AVOIRDUPOIS, a weight used in determining the gravity of bulky commodities. See WEIGHTS AND MEASURES.

B.

BACON (Ger. *Speck;* Du. *Spek;* Fr. *Lard;* It. Span. and Port. *Lardo;* Rus. *Solo;* Lat. *Lardum*) is made from the sides and belly of the pig, which are first thoroughly impregnated with salt; then suffered to remain for a certain period in brine; and, lastly, dried and smoked. The counties of England most celebrated for bacon are York, Hants, Berks, and Wilts. Ireland produces great quantities of bacon; but it is neither so clean fed, nor so well cured, as the English, and is much lower priced. Of the Scotch counties, Dumfries, Wigtown, and Kirkcudbright are celebrated for the excellence of their bacon and hams, of which they now export large quantities, principally to the Liverpool and London markets.

The imports of bacon and hams from Ireland have increased rapidly of late years. The average quantity imported during the three years ending the 25th of March, 1800, only amounted to 41,948 cwt.; whereas during the three years ending with 1820, the average imports amounted to 204,380 cwt.; and during the three years ending with 1825, they had increased to 338,218 cwt. In 1825, the trade between Ireland and Great Britain was placed on the footing of a coasting trade; and bacon and hams are imported and exported without any specific entry at the Custom-house. We believe, however, that the imports of these articles into Great Britain from Ireland amount, at present, to little less than 500,000 cwt. a year. The quantity of bacon and hams exported from Ireland to foreign countries is inconsiderable; not exceeding 1,500 or 2,000 cwt. a year.

The duty on bacon, being 28*s.* the cwt. is in effect prohibitory. The duty on hams is the same as on bacon. By the 7 Geo. 4. c. 48. bacon is not to be entered to be warehoused except for exportation only; and if it be so warehoused, it cannot be taken out for home use.

BAGGAGE, in commercial navigation, the wearing apparel and other articles destined for the sole use or accommodation of the crews and passengers of ships. The following are the Custom-house regulations with respect to baggage: —

Baggage and apparel accompanied by the proprietor, worn and in use (not made up for the purpose of being introduced into this country), exempted from all duty on importation.

Articles in baggage subject to duty or prohibited may be left in custody of the officers of customs for a period of six months, to give the party an opportunity of paying the duty or taking them back. — (*Customs Order*, August 6. 1822.)

If unaccompanied by proprietor, proof must be made by the party that it is as aforesaid, and not imported as merchandise, otherwise it is subject to a duty of 20 per cent.

If not cleared at the expiration of six months from the date of landing, it is liable to be sold for duty and charges, the residue (if any) to be paid to the right owner on proof being adduced to the satisfaction of the honourable Board.

One fowling-piece and one pair of pistols accompanying the party, *bonâ fide* in use, free per Customs Order, July 5. 1825.

Spirits, being the remains of passengers' stores may be admitted to entry. — (6 *Geo.* 4. c. 107. § 107.)

One pint of drinkable spirits of whatever strength, or half a pint of cordial or Cologne water, in baggage for private use — free. — (*Treasury Order*, October 20. 1820.)

Carriages of British manufacture, in use — free. — (*Treasury Order*, September 26. 1817.)

Glass, in dressing or medicine cases, of British manufacture, free upon proof that no drawback has been received. — (*Treasury Order*, December 5. 1821.) — (*Nyren's Tables.*)

English Books reprinted abroad. — Not more than *a single copy* of each work is allowed to be imported in a passenger's baggage, and for the private use of the party himself. — (*Customs Order*, 29th of June, 1830.) — Such works are absolutely prohibited to be imported as merchandise. — (See BOOKS.)

Passengers denying having Foreign Goods in their Possession. — The following clause in the act 3 & 4 Will. 4. c. 53. has reference to this subject: — "If any passenger or other person, on board any vessel or boat, shall, upon being questioned by any customs officer, whether he or she has any foreign goods upon his or her person, or in his or her possession, deny the same, and any such goods shall, after such denial, be discovered upon his or her person, or in his or her possession, such goods shall be forfeited, and such person shall forfeit treble the value of such goods." — § 37.

BAHIA, OR ST. SALVADOR, a large city (formerly the capital) of Brazil, contiguous to Cape St. Antonio, which forms the right or eastern side of the entrance of the noble bay of Todos os Santos, or All-Saints. According to the observations of M. Roussin, the light-house on the Cape is in lat. 13° 0′ 30″ S., long. 38° 30′ W. The opposite side of the entrance to the bay is formed by the island of Taporica, distant from Cape St. Antonio about $2\frac{1}{2}$ leagues. But a bank along the shore of the island narrows the passage for large ships to about two thirds this distance. Another bank runs S.S.W. from Cape St. Antonio about $1\frac{1}{2}$ league. Within, the bay expands into a capacious basin, having several islands and harbours, the depth of water varying from 8 and 10 to 40 fathoms, affording ample accommodation and secure anchorage for the largest fleets.

Plan. — The subjcined wood-cut conveys a clearer and better idea of this celebrated bay than could be acquired from any description. It is copied, without any reduction, from a revised edition of a Portuguese chart, published by Mr. Laurie; and exhibits the banks, soundings, anchorage, &c.

References to the Plan. — A, Cape, light-house, and fort of St. Antonio; B, Fort do Mar; C, Fort St. Philip; D, Tapagippe; E, Isla do Mar; F, Isla dos Frados; G, Fort Beaumont. The figures in the plan are the soundings in fathoms.

There is another entrance to the bay, partly exhibited in the above plan, on the west side of the island of Taporica; but it is narrow, intricate, and at its mouth has not more than 6 feet water. Several rivers have their embouchure in the bay, which generally occasions a current to set from the north end of the island by Cape St. Antonio; when the rivers are flooded, this current is sometimes very strong. The light-house at the extremity of the cape has no great elevation, and cannot be seen at a distance of more than 3 or $3\frac{1}{2}$ leagues. The usual place of anchorage is abreast of the city, north and south of Fort do Mar.

The city is partly built on the beach, but principally on pretty high ground immediately contiguous. The public buildings, particularly the churches, are numerous, and some of them magnificent; but the streets are narrow, ill paved, and filthy. Population, 125,000. The city is defended by several ports, but none of them are of very great strength.

The trade of Bahia is very considerable; and will no doubt continue to increase. The average exports amount, at present, to about 45,000 chests (13 cwt. each) of sugar; 35,000 bags (170 lbs. each) of cotton; 4,000 tons of coffee, with hides, tobacco, rice, dye and fancy woods, bullion, &c. The imports are similar to those of Rio de Janeiro, to which the reader is referred for some account of the commerce of Brazil, with particulars as to duties, charges, &c. There are several private building yards at Tapagippe, in which ships of all dimensions are built; they are handsome, well modelled, and the timber very suitable for the purpose.

Monies, Weights, and Measures of Brazil same as those of Portugal; for which, see Lisbon. The *alquiere*, or measure for corn, rice, &c. differs in different provinces, being in some 1·25 bushel Winch. meas., and in others 1 only. At Bahia it is estimated at 1. Wine and olive oil pay duty on being imported by the pipe, hogshead, or barrel: they are retailed by the frasco or case bottle = 4·5 pints English wine measure. In 1828, 122 British ships, carrying 25,166 tons, entered Bahia. — (*Annuaire du Commerce Maritime* for 1833, p. 583.; and *private information.*)

BALACHONG, an article consisting of pounded or bruised fish. Small fish, with prawns and shrimps, are principally employed in making it. Though fœtid and offensive to strangers, this substance, used as a condiment to rice, is largely consumed in all the countries to the east of Bengal, including the southern provinces of China, and the islands of the Eastern Archipelago. Its distribution gives rise to an extensive internal traffic.

BALANCE, in accounts, is the term used to express the difference between the debtor and creditor sides of an account.

BALANCE, in commerce, is the term commonly used to express the difference between the value of the exports from and imports into a country. The balance is said to be favourable when the value of the exports exceeds that of the imports, and unfavourable when the value of the imports exceeds that of the exports. According to the Custom-house returns, the official value of the exports from Great Britain, exclusive of foreign and commercial merchandise, during the year ending 5th of January, 1833, amounted to 64,582,037*l.*; and the official value of the imports during the same year amounted to 43,237,416*l.*; leaving a favourable balance of 21,344,621*l.*

The attainment of a favourable balance was formerly regarded as an object of the greatest importance. The precious metals early acquired, in consequence of their being used as money, an artificial importance, and were long considered as the only real wealth either individuals or nations could possess. And as countries without mines could not obtain supplies of these metals except in exchange for exported products, it was concluded, that if the value of the commodities exported exceeded that of those imported, the balance would have to be paid by the importation of an equivalent amount of the precious metals; and conversely. A very large proportion of the restraints imposed on the freedom of commerce, during the last two centuries, grew out of this notion. The importance of having a favourable balance being universally admitted, every effort was made to attain it; and nothing seemed so effectual for this purpose as the devising of schemes to facilitate exportation, and to hinder the importation of almost all products, except gold and silver, that were not intended for future exportation. But the gradual though slow growth of sounder opinions with respect to the nature and functions of money, showed the futility of a system of policy having such objects in view. It is now conceded on all hands that gold and silver are nothing but commodities; and that it is in no respect necessary to interfere either to encourage their importation, or to prevent their exportation. In Great Britain they may be freely exported and imported, whether in the shape of coin or bullion. — (See Coin.)

The truth is, however, that the theory of the balance of trade is not erroneous merely from the false notions which its advocates entertained with respect to money; it proceeds on radically mistaken views as to the nature of commerce. The mode in which the balance is usually estimated is, indeed, completely fallacious. Supposing, however, that it could be correctly ascertained, it would be found, in opposition to the common opinion, that the imports into every commercial country generally exceed the exports; and that

when a balance is formed, it is only in certain cases, and those of rare occurrence, that it is cancelled by a bullion payment.

I. The proper business of the wholesale merchant consists in carrying the various products of the different countries of the world, from the places where their value is least to those where it is greatest; or, which is the same thing, in distributing them according to the effective demand. It is clear, however, that there could be no motive to export any species of produce, unless that which it was intended to import in its stead were of greater value. When an English merchant commissions a quantity of Polish wheat, he calculates on its selling for so much more than its price in Poland, as will be sufficient to pay the expense of freight, insurance, &c., and to yield, besides, the common and ordinary rate of profit on the capital employed. If the wheat did not sell for this much, its importation would obviously be a loss to the importer. It is plain, then, that no merchant ever did or ever will export, but in the view of importing something more valuable in return. And so far from an excess of exports over imports being any criterion of an advantageous commerce, it is directly the reverse; and the truth is, notwithstanding all that has been said and written to the contrary, that unless the value of the imports exceeded that of the exports, foreign trade could not be carried on. Were this not the case — that is, were the value of the exports always greater than the value of the imports — merchants would lose on every transaction with foreigners, and the trade with them would be speedily abandoned.

In England, the rates at which all articles of export and import are officially valued were fixed so far back as 1696. But the very great alteration that has since taken place, not only in the value of money, but also in the cost of most part of the commodities produced in this and other countries, has rendered this official valuation, though valuable as a means of determining their quantity, of no use whatever as a criterion of the true value of the exports and imports. In order to remedy this defect, an account of the *real* or *declared* value of the exports is annually prepared, from the declarations of the merchants, and laid before parliament: there is, however, no such account of the imports; and, owing to the difficulties which high duties throw in the way, it is, perhaps, impossible to frame one with any thing like accuracy. It has also been alleged, and apparently with some probability, that merchants have not unfrequently been in the habit of exaggerating the value of articles entitled to drawbacks on exportation; but the recent extension and improvement of the warehousing system, and the diminution of the number of drawbacks, must materially lessen whatever fraud or inaccuracy may have arisen from this source. Indeed, as most articles are charged with an *ad valorem* duty of 10*s.* per cent. on exportation, we should consider that, if anything, their value would be rather under than overrated. We believe, however, that their declared value comes very near the truth; at least, sufficiently so for all practical purposes.

Now the declared value of the exports in 1832 was only 36,046,027*l.*, being little more than half their official value, and upwards of 7,000,000*l.* under the official value of the imports. What the excess of the latter might be, had we the means of comparing their real value with that of the exports, it is impossible to say: but there can be no manner of doubt, that, generally speaking, it would be very considerable. The value of an exported commodity is estimated at the moment of its being sent abroad, and *before* its value is increased by the expense incurred in transporting it to the place of its destination; whereas the value of the commodity imported in its stead is estimated *after* it has arrived at its destination, and, consequently, after its value has been enhanced by the cost of freight, insurance, importer's profits, &c.

In the United States, the value of the imports, as ascertained by the Custom-house returns, always exceeds the value of the exports. And although our practical politicians have been in the habit of considering the excess of the former as a certain proof of a disadvantageous commerce, "it is nevertheless true," says Mr. Pitkin, "that the real gain of the United States has *been nearly in proportion as their imports have exceeded their exports.*"— (*Commerce of the United States*, 2d ed. p. 280.) The great excess of American imports has in part been occasioned by the Americans generally exporting their own surplus produce, and, consequently, receiving from foreigners not only an equivalent for their exports, but also for the cost of conveying them to the foreign market. "In 1811," says the author just quoted, "flour sold in America for *nine dollars and a half* per barrel, and in Spain for *fifteen dollars*. The value of the cargo of a vessel carrying 5,000 barrels of flour would, therefore, be estimated at the period of its exportation at 47,500 dollars; but as this flour would sell, when carried to Spain, for 75,000 dollars, the American merchant would be entitled to draw on his agent in Spain for 27,500 dollars more than the flour cost in America; or than the sum for which he could have drawn, had the flour been exported in a vessel belonging to a Spanish merchant. But the transaction would not end here. The 75,000 dollars would be vested in some species of Spanish or other European goods fit for the American market; and the freight, insurance, &c., on account of the return cargo, would probably increase

its value to 100,000 dollars; so that, in all, the American merchant might have imported goods worth 52,500 dollars more than the flour originally sent to Spain." It is as impossible to deny that such a transaction as this is advantageous, as it is to deny that its advantage consists entirely in the excess of the value of the goods imported over the value of those exported. And it is equally clear that America might have had the real balance of payments in her favour, though such transactions as the above had been multiplied to any conceivable extent.

II. In the second place, when a balance is due by one country to another, it is but seldom that it is paid by remitting bullion from the debtor to the creditor country. If the sum due by the British merchants to those of Holland be greater than the sum due by the latter to them, the balance of payments will be against Britain; but this balance will not, and indeed cannot, be discharged by an exportation of bullion, *unless bullion be, at the time, the cheapest exportable commodity;* or, which is the same thing, *unless it may be more advantageously exported than any thing else.* To illustrate this principle, let us suppose that the balance of debt, or the excess of the value of the bills drawn by the merchants of Amsterdam on London over those drawn by the merchants of London on Amsterdam, amounts to 100,000*l.*: it is the business of the London merchants to find out the means of discharging this debt with the least expense; and it is plain, that if they find that any less sum, as 96,000*l.*, 97,000*l.*, or 99,900*l.*, will purchase and send to Holland as much cloth, cotton, hardware, colonial produce, or any other commodity, as would sell in Amsterdam for 100,000*l.*, no gold or silver would be exported. The laws which regulate the trade in bullion are not in any degree different from those which regulate the trade in other commodities. It is exported only when its exportation is advantageous, or when it is more valuable abroad than at home. It would, in fact, be quite as reasonable to expect that water should flow from a low to a high level, as it is to expect that bullion should leave a country where its value is great, to go to one where it is low! It is never sent abroad to destroy but always to find its level. The balance of payments might be ten or a hundred millions against a particular country, without causing the exportation of a single ounce of bullion. Common sense tells us that no merchant will remit 100*l.* worth of bullion to discharge a debt in a foreign country, if it be possible to invest any smaller sum in any species of merchandise which would sell abroad for 100*l.* exclusive of expenses. The merchant who deals in the precious metals is as much under the influence of *self-interest*, as he who deals in coffee or indigo; but what merchant would attempt to extinguish a debt, by exporting coffee which cost 100*l.*, if he could effect his object by sending abroad indigo which cost only 99*l.*?

The argument about the balance of payment is one of those that contradict and confute themselves. Had the apparent excess of exports over imports, as indicated by the British Custom-house books for the last hundred years, been always paid in bullion, as the supporters of the old theory contend is the case, there ought at this moment to be about 450,000,000 or 500,000,000 of bullion in the country, instead of 50,000,000 or 60,000,000, which it is supposed to amount to! Nor is this all. If the theory of the balance be good for any thing — if it be not a mere idle delusion — it follows, as every country in the world, with the single exception of the United States, has its favourable balance, that they must be paid by an annual importation of bullion from the mines corresponding to their aggregate amount. But it is certain, that the entire produce of the mines, though it were increased in a *tenfold* proportion, would be insufficient for this purpose! This *reductio ad absurdum* is decisive of the degree of credit that ought to be attached to the conclusions respecting the flourishing state of the commerce of any country drawn from the excess of the exports over the imports!

Not only, therefore, is the common theory with respect to the balance of trade erroneous, but the very reverse of that theory is true. In the *first* place, the value of the commodities imported by every country which carries on an advantageous commerce (and no other will be prosecuted for any considerable period), invariably exceeds the value of those which she exports. Unless such were the case, there would plainly be no fund whence the merchants and others engaged in foreign trade could derive either a profit on their capital, or a return for their outlay and trouble; and in the *second* place, whether the balance of debt be for or against a country, that balance will neither be paid nor received in bullion, unless it be at the time the commodity by the exportation or importation of which the account may be most profitably settled. Whatever the partisans of the doctrine as to the balance may say about money being a preferable product, a *marchandise par excellence*, it is certain it will never appear in the list of exports and imports, while there is any thing else with which to carry on trade, or cancel debts, that will yield a larger profit, or occasion a less expense to the debtors.

It is difficult to estimate the mischief which the absurd notions relative to the balance of trade have occasioned in almost every commercial country; — here they have been particularly injurious. It is principally to the prevalence of prejudices to which they have given rise, that the restrictions on the trade between this country and France are to

be ascribed. The great, or rather the only, argument insisted upon by those who prevailed on the legislature, in the reign of William and Mary, to declare the trade with France a *nuisance*, was founded on the statement that the value of the imports from that kingdom considerably exceeded the value of the commodities we exported to it. The balance was regarded as a *tribute* paid by England to France; and it was sagaciously asked, what had we done, that we should be obliged to pay so much money to our natural enemy? It never occurred to those who so loudly abused the French trade, that no merchant would import any commodity from France, unless it brought a higher price in this country than the commodity exported to pay it; and that the profit of the merchant, or the national gain, would be in exact proportion to this excess of price. The very reason assigned by these persons for prohibiting the trade affords the best attainable proof of its having been a lucrative one; nor can there be any doubt that an unrestricted freedom of intercourse between the two countries would still be of the greatest service to both.

BALE, a pack, or certain quantity of goods or merchandise; as a *bale* of silk, cloth, &c.

Bales are always marked and numbered, that the merchants to whom they belong may know them; and the marks and numbers correspond to those in the bills of lading, &c. Selling under the *bale*, or under the *cords*, is a term used in France and other countries for selling goods wholesale, without sample or pattern, and unopened.

BALKS, large pieces of timber.

BALLAST (Du. *Ballast;* Fr. *Lest;* Ger. *Ballast;* It. *Savorra;* Sp. *Lastre;* Sw. *Ballast*), a quantity of iron, stones, sand, gravel, or any other heavy material, laid in a ship's hold, in order to sink her deeper in the water, and to render her capable of carrying sail without being overset. All ships clearing outwards, having no goods on board other than the personal baggage of the passengers, are said to be in ballast.

The quantity of ballast required to fit ships of equal burden for a voyage, is often materially different; the proportion being always less or more, according to the sharpness or flatness of the ship's bottom, called, by seamen, the *floor*.

The proper ballasting of a ship deserves peculiar attention, for, although it be known that ships in general will not carry sufficient sail, till they are laden so that the surface of the water nearly glances on the extreme breadth midships, more than this general knowledge is required. If the ship have a great weight of heavy ballast, as lead, iron, &c., in the bottom, the centre of gravity will be too low in the hold; this no doubt will enable her to carry a press of sail, but it will, at the same time, make her sail heavily, and roll so violently, as to run the risk of being dismasted.

The object in ballasting a ship is, therefore, so to dispose of the ballast or cargo, that she may be duly poised, and maintain a proper equilibrium on the water, so as neither to be too *stiff*, nor too *crank*, qualities equally pernicious. If too stiff, she may carry much sail, but her velocity will not be proportionally increased; whilst her masts are endangered by sudden jerks and excessive labouring. If too crank, she will be unfit to carry sail without the risk of oversetting.

Stiffness in ballasting is occasioned by disposing a too great quantity of heavy ballast, as lead, iron, &c., in the bottom, which throws the centre of gravity very near the keel; and this being the centre about which the vibrations are made, the lower it is placed, the more violent is the rolling.

Crankness, on the other hand, is occasioned by having too little ballast, or by disposing the ship's lading so as to raise the centre of gravity too high: this also endangers the masts when it blows hard; for when the masts cease to be perpendicular, they strain on the shrouds in the nature of a lever, which increases as the sine of their obliquity; and it is superfluous to add, that a ship that loses her masts is in great danger of being lost.

Hence the art of ballasting consists in placing the centre of gravity to correspond with the trim and shape of the vessel, so as to be neither too high nor too low; neither too far forward, nor too far aft; and to lade the ship so deep, that the surface of the water may nearly rise to the extreme breadth midships: she will then carry a good quantity of sail, incline but little, and ply well to windward. — (See *Falconer's Marine Dictionary.*)

The mischievous consequences of not attending to the circumstances now mentioned are often experienced by ships loading barilla, brimstone, and such heavy articles, on the coasts of Sicily and Spain. The habit there is to cut large quantities of brushwood and faggots, and to spread them in the hold, to hinder the cargo from sinking the centre of gravity too low, and causing the ship to labour violently; but it very frequently happens that the pressure of the cargo on this sort of dunnage is so great as to squeeze it into a much smaller space than could at first have been supposed; so that ships after getting to sea are sometimes obliged to return to port, to unload a part of their cargo, to prevent their foundering. In such cases firm dunnage, such as oak staves, should, if possible, be always employed. — (See *Jackson's Commerce of Mediterranean*, pp. 125—128.)

Ships that have cargoes of light goods on board require a quantity of ballast; increasing, of course, according to the greater lightness of the goods. The following table shows the average quantity of ballast allowed to ships of war: —

Ballast allowed to the following Ships.

Guns.	Tonnage.	Iron, Tons.	Shingles, Tons.	Guns.	Tonnage.	Iron, Tons.	Shingles, Tons.
110	2,290	180	370	36	870	65	160
100	2,090	180	370	32	700	65	140
98	2,110	160	350	28	600	60	100
90	1,870	160	350	24	500	50	80
80	1,620	140	300	22	450	50	70
74	1,700	80	270	20	400	50	60
64	1,370	70	260	Sloop - -	300	50	40
50	1,100	65	170	Brig - -	160	30	15
44	900	65	160	Cutter -	—	20	} seldom any.
38	930	70	170	Sloop - -	—	15	}

The iron ballast is first stored fore and aft, from bulk-head to bulk-head; then the shingle ballast is spread and levelled over the iron.

The soil of the river Thames from London Bridge to the sea is vested in the Trinity House corporation, and a sum of 10*l.* is to be paid for every ton of ballast taken from the channel of the river without due authority from the said corporation. Ships may receive on board land ballast from the quarries, pits, &c. east of Woolwich, provided the quantity taken in a year do not exceed the number of tons notified to the Trinity corporation. Land ballast must be entered, and 1*d.* paid per ton on entering. No ballast is to be put on board before entry at the ballast office, under a penalty of 5*l.* a ton. The Trinity corporation is authorised by the 3 Geo. 4. c. 111. to charge the following rates for all ballast demanded and entered at the ballast office, viz. : —

For every ton (20 cwt.) of ballast, not being washed ballast, carried to any ship or vessel employed in the coal trade, the sum of 1*s.*

For every such ton carried to any other British ship or vessel, the sum of 1*s.* 3*d.*

For every such ton carried to any foreign ship or vessel, the sum of 1*s.* 7*d.*

For every ton of washed ballast carried to any ship or vessel employed in the coal trade, the sum of 2*s.*

For every ton of washed ditto carried to any other British ship or vessel, the sum of 2*s.* 6*d.*

For every ton of washed ditto carried to any foreign ship or vessel, the sum of 3*s.* 2*d.*

And for every ton of ballast delivered in or unladen from the Inward West India Dock, the further sum of 10*d.*; and for every ton of ballast delivered in or unladen from the Outward West India Dock, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the London Docks, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the Inward East India Dock, the further sum of 10*d.*; and for every ton of ballast delivered in or unladen from the Outward East India Dock, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the Commercial Dock, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the East Country Dock, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the City Canal, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the Surrey Canal, the further sum of 4*d.*; and for every ton of ballast delivered in or unladen from the Regent's Canal, the further sum of 4*d.*

Which further rates or prices shall be payable and paid over and above the respective rates first mentioned.

In 1832, the gross receipt of the sums paid on account of ballast to the ballast office, on the Thames, amounted to 25,220*l.* 19*s.* 4*d.* The expenses amounted, during the same year, to about 23,000*l.*

The ballast of all ships or vessels coming into the Thames is to be unladen into a lighter, at the charge of 6*d.* a ton. If any ballast be thrown or unladen from any ship or vessel into the Thames, the captain, master, &c. shall for every such offence forfeit 20*l.* No ballast is to be received on board otherwise than from a lighter. By the stat. 54 Geo. 3. c. 149. it is enacted, that no person shall, under a penalty of 10*l.* over and above all expenses, discharge any ballast, rubbish, &c. in any of the ports, harbours, roadsteads, navigable rivers, &c. of the United Kingdom; nor take ballast from any place prohibited by the Lords of the Admiralty.

The masters of all ships clearing out in ballast, are required to answer any questions that may be put to them by the collectors or comptrollers, touching the departure and destination of such ships. — (3 & 4 *Will.* 4. c. 52. § 80.)

If a *foreign* ship clear out in ballast, the master may take with him British manufactured goods of the value of 20*l.*, the mate of the value of 10*l.*, and 5*l.* worth for each of the crew. — § 87.

BALSAM (Ger. *Balsam*; Du. *Balsem*; Fr. *Baume*; It. and Sp. *Balsamo*; Lat. *Balsamum*). Balsams are vegetable juices, either liquid, or which spontaneously become concrete, consisting of a substance of a resinous nature, combined with benzoic acid, or which are capable of affording benzoic acid by being heated alone, or with water. The liquid balsams are copaiva, opobalsam, balsam of Peru, storax, and Tolu; the concrete are benzoin, dragon's blood, and red or concrete storax. — (*Dr. Ure.*)

1. *Copaiva* (Fr. *Baume de Copahu*; Ger. *Kopaiva Balsam*; Sp. *Copayva*), obtained from a tree (*Copaifera*) growing in South America and the West India islands. The largest quantity is furnished by the province of Para in Brazil. It is imported in small casks, containing from 1 to 1½ cwt. Genuine good copaiva or copaiba balsam has a peculiar but agreeable odour, and a bitterish, hot, nauseous taste. It is clear and transparent; its consistence is that of oil; but when exposed to the action of the air it becomes solid, dry, and brittle, like resin. — (*Thomson's Dispensatory.*)

2. *Opobalsam* (Fr. *Balsamier de la Mecque*; It. *Opobalsamo*; Pat. *Balsamum verum album, Ægyptiacum*; Egypt. *Balessan*), the most precious of all the balsams, commonly called Balm of Gilead. It is the produce of a tree (*Amyris Gileadensis*), indigenous to Arabia and Abyssinia, and transplanted at an early period to Judea. It is obtained by cutting the bark with an axe at the time that the juice is in the strongest circulation. The true balsam is of a pale yellowish colour, clear and transparent, about the consistence of Venice turpentine, of a strong, penetrating, agreeable, aromatic smell, and a slightly bitterish pungent taste. By age it becomes yellower, browner, and thicker, losing by degrees, like volatile oils, some of its finer and more subtile parts. It is rarely if ever brought genuine into this country; dried Canada balsam being generally substituted for it. It was in high repute among the ancients; but it is now principally used as a cosmetic by the Turkish ladies. — (*Drs. Ure and Thomson.*)

The Canada balsam, now referred to, is merely *fine turpentine*. It is the produce of the *Pinus Balsamea*, and is imported in casks, each containing about 1 cwt. It has a strong, but not a disagreeable odour, and a bitterish taste; is transparent, whitish, and has the consistence of copaiva balsam. — (See TURPENTINE.)

"Szafra and Beder are the only places in the Hedjaz where the balsam of Mecha, or Balessan, can be procured in a pure state. The tree from which it is collected grows in the neighbouring mountains, but principally upon Djebel Sobh, and is called, by the Arabs, Beshem. I was informed that it is from 10 to 15 feet high, with a smooth trunk, and thin bark. In the middle of summer small incisions are made in the bark; and the juice, which immediately issues, is taken off with the thumb nail, and put into a vessel: the gum appears to be of two kinds, one of a white, and the other of a yellowish white colour; the first is the most esteemed. I saw here some of the latter sort in a small sheep-skin, which the Bedouins use in bringing it to market: it had a strong turpentine smell, and its taste was bitter. The people of Szafra usually adulterate it with sesamum oil and tar. When they try its purity, they dip their finger into it and then set it on fire; if it burn without hurting or leaving a mark on the finger, they judge it

to be of good quality, but if it burn the finger as soon as it is set on fire, they consider it to be adulterated. I remember to have read, in Bruce's Travels, an account of the mode of trying it, by letting a drop fall into a cup filled with water; the good balsam falling coagulated to the bottom, and the bad dissolving and swimming on the surface. I tried this experiment, which was unknown to the people here, and found the drop swim upon the water; I tried also their test by fire upon the finger of a Bedouin, who had to regret his temerity: I, therefore, regarded the balsam sold here as adulterated; it was of less density than honey. I wished to purchase some; but neither my own baggage, nor any of the shops of Szafra could furnish any thing like a bottle to hold it: the whole skin was too dear. The Bedouins, who bring it here, usually demand two or three dollars per pound for it when quite pure; and the Szafra Arabs resell it to the hadjeys of the great caravan at between 8 and 12 dollars per pound in an adulterated state. It is bought up principally by Persians."—(*Burckhardt's Travels in Arabia*, vol. ii. p. 123.)

3. *Balsam of Peru* (Fr. *Baume de Peru*; Ger. *Peruvianischer Balsam*; Sp. *Balsamo de Quinquina*; Lat. *Balsamum Peruvianum*), the produce of a tree (*Myroxylon Peruiferum*) growing in the warmest parts of South America. The balsam procured by incisions made in the tree is called *white liquid balsam*; that which is found in the shops is obtained by boiling the twigs in water: it is imported in jars, each containing from 20 to 40 lbs. weight. It has a fragrant aromatic odour, much resembling that of benzoin, with a warm bitterish taste. It is viscid, of a deep reddish brown colour, and of the consistence of honey. — (*Thomson's Dispensatory.*)

4. *Storax* (Fr. *Storax*; Ger. *Stryaxbroom*; It. *Storace*; Sp. *Azumbar*; Lat. *Styrax*; Arab. *Usteruk*), the produce of a tree (*Styrax officinale*) growing in the south of Europe and the Levant. Only two kinds are found in the shops: storax in tears, which is pure; and storax in the lump, or red storax, which is mixed with sawdust and other impurities. Both kinds are brought from the Levant in chests and boxes. Storax has a fragrant odour, and a pleasant, sub-acidulous, slightly pungent, and aromatic taste; it is of a reddish brown colour, and brittle. — (*Thomson's Dispensatory.*)

5. *Tolu, Balsam of* (Fr. *Baume de Tolu*; Ger. *Tolutanischer Balsam*; Sp. *Balsamo de Tolu*). The tree which yields this balsam is the same as that which yields the balsam of Peru; it being merely the white balsam of Peru, hardened by exposure to the air.

6. *Benzoin*, or *Benjamin* (Fr. *Benzoin*; Ger. *Benzoe*; Sp. *Bengui*; It. *Belzuino*; Lat. *Benzoinum*; Arab. *Liban*; Hind. *Luban*; Jav. *Menian*; Malay, *Caminyan*), is an article of much greater commercial importance than any of those balsams previously mentioned. It is obtained from a tree (*Styrax Benzoin*) cultivated in Sumatra and Borneo, but particularly the former. The plants produce in the seventh year. The balsam is obtained by making incisions in the bark, when it exudes, and is scraped off. During the first three years, the balsam is of a clear white colour, after which it becomes brown. Having borne 10 or 12 years, the tree is cut down, a very inferior article being obtained by scraping the wood. The balsams procured in these different stages are distinguished in commerce, and differ widely in value. Benzoin has a very agreeable, fragrant odour, but hardly any taste. It is imported in large masses, packed in chests and casks. It should be chosen full of clear, light-coloured, and white spots, having the appearance of white marble when broken: it is rarely, however, to be met with in so pure a state, but the nearer the approach to it the better. The worst sort is blackish, and full of impurities. — (*Milburn's Orient. Com.*, and *private information.*)

Mr. Crawfurd has given the following interesting and authentic details with respect to this article: — "Benzoin, or frankincense, called in commercial language Benjamin, is a more general article of commerce than camphor, though its production be confined to the same islands. Benzoin is divided in commerce, like camphor, into three *sorts*, (head, belly, foot), according to quality, the comparative value of which may be expressed by the figures 105, 45, 18. Benzoin is valued in proportion to its whiteness, semi-transparency, and freedom from adventitious matters. According to its purity, the first sort may be bought at the *emporia* to which it is brought, at from 50 to 100 dollars per picul (133⅓ lbs.); the second from 25 to 45 dollars; and the worst from 8 to 20 dollars. According to Linschoten, benzoin, in his time, cost, in the market of Sunda Calapa or Jacatra, from $19\frac{5}{100}$ to $25\frac{40}{100}$ Spanish dollars the picul. By Niebuhr's account, the worst benzoin of the Indian islands is more esteemed by the Arabs than their own best *olibanum*, or frankincense. In the London market, the best benzoin is fourteen times more valuable than *olibanum*, and even the worst $2\frac{1}{3}$ times more valuable. Benzoin usually sells in England at 10*s.* per pound. The quantity generally imported into England, in the time of the monopoly, was 312 cwts. The principal use of this commodity is as incense, and it is equally in request in the religious ceremonies of Catholics, Mohammedans, Hindus, and Chinese. It is also used as a luxury by the great in fumigations in their houses; and the Japanese chiefs are fond of smoking it with tobacco. Its general use among nations in such various states of civilisation, and the steady demand for it in all ages, declare that it is one of those commodities, the taste for which is inherent in our nature, and not the result of a particular caprice with any individual people, as in the case of Malay camphor with the Chinese." — (*Indian Archipelago*, vol. iii. p. 418.) The imports of benzoin, at an average of the three years ending with 1830, were 36,397 lbs. a year.

An inferior description of benzoin, the produce of a different tree from the *Styrax benzoin*, is produced in Siam. It is comparatively cheap and abundant.

7. *Dragon's Blood* (Fr. *Sang-Dragon*; Lat. *Sanguis Draconis*; Arab. *Damulākhwain*; Hind. *Heraduky*), the produce of a large species of rattan (*Calamus Draco*) growing on the north and north-east coast of Sumatra, and in some parts of Borneo. It is largely exported to China, and also to India and Europe. It is either in oval drops, wrapped up in flag-leaves, or in large and generally more impure masses, composed of smaller tears. It is externally and internally of a deep dusky red colour, and when powdered it should become of a bright crimson; if it be black, it is worth little. When broken and held up against a strong light, it is somewhat transparent: it has little or no smell or taste; what it has of the latter is resinous and astringent. Dragon's blood in drops is much preferable to that in cakes; the latter being more friable, and less compact, resinous, and pure than the former. Being a very costly article, it is very apt to be adulterated. Most of its alloys dissolve like gums in water, or crackle in the fire without proving inflammable; whereas the genuine dragon's blood readily melts and catches flame, and is scarcely acted on by watery liquors. It sells in the market of Singapore at from 15 to 35 dollars per picul, according to quality: but the Chinese have the art of purifying and refining it, when it sells at from 80 to 100 dollars per picul. The price of the best dragon's blood in the London market, varies from 21*l.* to 25*l.* per cwt. — (*Milburn's Orient. Com.*; *Crawfurd's East. Archip.*; and *private information.*)

The nett duty on balsams imported into Great Britain in 1832 amounted to 2,440*l.* 8*s.* 10*d.*

BALTIMORE, a large and opulent city of the United States, in Maryland, situated on the north side of the Patapsco river, about 14 miles above its entrance into Chesapeake bay, in lat. 30° 17′ N. long. 76° 30′ W. Population in 1830, 81,000. The harbour is spacious, convenient, and the water deep. The exports principally consist of tobacco, wheat and wheat-flour, hemp and flax, flax-seed, Indian corn, and other agricultural products, timber, iron, &c. The imports principally consist of cottons and woollens, sugar, coffee, tea, wine, brandy, silk goods, spices, rum, &c. There were, in 1830, ten banks in this city, with an aggregate capital of 6,888,691 dollars; the total dividends for the same year amounted to 362,118 dollars, being at the rate of $5\frac{1}{4}$ per cent. There were also four marine insurance companies, with a capital of 1,200,000 dollars, producing a dividend of nearly 15 per cent. on the capital paid up; and two fire insurance companies, one of which is on the principle of mutual guarantee. — (*Statement by J. H. Goddard, New York Daily Advertiser*, 29th of January, 1831.) The registered, enrolled, and licensed tonnage belonging to Baltimore, in December, 1831, amounted to 43,263 tons, of which 17,575 tons were employed in the coasting trade. The total value of the articles imported into Maryland, in the year ending the 30th of September, 1832, was 4,629,303 dollars; the total value of the exports during the same year being 4,499,918 do. (*Papers laid before Congress*, 15th of February, 1833.) In Maryland the dollar is worth 7*s.* 6*d.* currency, 1*l.* sterling being = 1*l.* 13*s.* 4*d.* currency. For an account of the currency of the different states of the Union, with a table of the value of the dollar in each, see NEW YORK; and to it also the reader is referred for an account of the foreign trade of the United States. Weights and measures same as those of England.

Exports of Flour. — Baltimore is one of the principal ports of the United States for the export of flour. None is allowed to be shipped from any port of the Union till it has been inspected by public officers appointed for the purpose, and its quality branded on the barrel. — (See NEW YORK.) It appears from the reports of these officers that the flour inspected at Baltimore during the five years ending with 1830, was as follows: —

Years.	Wheat Flower.		Rye Flour.		Indian Corn Meal.		
	Barrels.	Half barrels.	Barrels.	Half barrels.	Hhds.	Barrels.	Half barrels.
1826	583,671	25,355	1,098	4	30	2,699	20
1827	561,259	22,921	1,874	63	- -	5,214	2
1828	537,010	18,882	4,409	- -	415	8,798	11
1829	466,144	15,149	12,777	48	1,609	6,483	1
1830	587,875	19,865	4,436	- -	559	5,458	

In 1832 there were inspected 518,674 barrels, and 17,544 half barrels of wheat flour. The inspections of tobacco during the same year amounted to 24,156 hhds.

BAMBOO, (Fr. *Bambou, Bambochés*; Ger. *Indianischer Rohr*; It. *Bambu*; Hind. *Rans*; Malay, *Bûlûh*; Jav. *Preng*), a species of cane, the *Bambos arundinacea* of botanists. It grows every where within the tropics, and is of the greatest utility: strictly speaking, it is a gigantic grass with a ligneous stem. It often rises to the height of 40 or 50 feet, and sometimes to even double those heights. Like most plants long and extensively cultivated, it diverges into many varieties. Some of these are dwarfish, while others, instead of being hollow canes, are solid. The bamboo is of rapid growth, and in four or five years is fit for many uses, but does not bear fruit or grain till it be 25 years old, after which it perishes. The grain makes tolerable bread. The young,

but gigantic shoots, as they spring from the earth, make a tender and good esculent vegetable. The mature bamboo is employed in an immense variety of ways, in the construction of houses, bridges, boats, agricultural implements, &c. Some varieties grow to such a size as to be, in the largest part, near two feet in circumference, and single knees of these are used as pails or buckets. The Chinese are believed to fabricate their cheap and useful paper of macerated bamboo. The canes used in Europe as walking sticks are not bamboos, but rattans — a totally distinct class of plants. Bamboos are never used for that purpose. — (*Private information.*)

BANDANAS, silk handkerchiefs, generally red spotted with white. They were formerly manufactured only in the East Indies; but they are now manufactured of a very good quality at Glasgow and other places.

BANK.—BANKING. Banks are establishments intended to serve for the safe custody of money; to facilitate its payment by one individual to another; and, sometimes, for the accommodation of the public with loans.

I. Banking (General Principles of).
II. Bank of England (Account of).
III. Banks (English Private and Provincial).
IV. Banks (Scotch).
V. Banks (Irish).
VI. Banks (Foreign).
VII. Banks (Savings).

I. Banking (General Principles of).

Banks are commonly divided into two great classes; banks of deposit, and banks of circulation. This division is not, however, a very distinct one; for there is no bank of deposit that is not, at the same time, a bank of circulation, and few or no banks of circulation that are not also banks of deposit. But the term banks of deposit is meant to designate those which keep the money of individuals and circulate it only; while the term banks of circulation is applied to those which do not thus confine their circulation, but issue notes of their own payable on demand. The Bank of England is the principal bank of circulation in the empire; but it, as well as the private banks in England and Scotland that issue notes, is also a bank of deposit. The private banking establishments in London do not issue notes, and there are many similar establishments in Lancashire, and other parts of the country.

(1.) *Utility of Banks. Private banking Companies of London.* — The establishment of banks has contributed, in no ordinary degree, to give security and facility to all sorts of commercial transactions. They afford safe and convenient places of deposit for the money that would otherwise have to be kept, at a considerable risk, in private houses. They also prevent, in a great measure, the necessity of carrying money from place to place to make payments, and enable them to be made in the most convenient and least expensive manner. A merchant or tradesman in London, for example, who employs a banker, keeps but very little money in his own hands, making all his considerable payments by drafts or checks on his banker; and he also sends the various checks, bills, or drafts payable to himself in London, to his bankers before they become due. By this means he saves the trouble and inconvenience of counting sums of money, and avoids the losses he would otherwise be liable to, and would no doubt occasionally incur, from receiving coins or notes not genuine. Perhaps, however, the great advantage derived by the merchant or tradesman from the employment of a banker, consists in its relieving him from all trouble with respect to the presentation for payment of due bills and drafts. The moment these are transferred to the banker, they are at his risk. And if he either neglect to present them when due, or to have them properly noted in the event of their not being paid, he has to answer for the consequences.

"This circumstance alone must cause an immense saving of expense to a mercantile house in the course of a year. Let us suppose that a merchant has only two bills due each day. These bills may be payable in distant parts of the town, so that it may take a clerk half a day to present them; and in large mercantile establishments it would take up the whole time of one or two clerks to present the due bills and the drafts. The salary of these clerks is, therefore, saved by keeping an account at a banker's: besides the saving of expense, it is also reasonable to suppose that losses upon bills would sometimes occur from mistakes, or oversights, from miscalculation as to the time the bill would become due — from errors in marking it up — from forgetfulness to present it — or from presenting it at the wrong place. In these cases the indorsers and drawees are exonerated; and if the acceptor do not pay the bill, the amount is lost. In a banking house such mistakes occur sometimes, though more rarely; but when they do occur,

the loss falls upon the banker, and not upon his customer." — (*Gilbart's Practical Observations on Banking.*)

It is on other grounds particularly desirable for a merchant or tradesman to have an account with a banking house. He can refer to his bankers as vouchers for his respectability: and in the event of his wishing to acquire any information with respect to the circumstances, or credit, of any one with whom he is not acquainted, his bankers will render him all the assistance in their power. In this respect they have great facilities, it being the common practice amongst the bankers in London, and most other trading towns, to communicate information to each other as to the credit and solvency of their customers.

To provide for the public security, the statute 7 & 8 Geo. 4. c. 29. § 49. "for the punishment of embezzlement committed by agents intrusted with property," enacts, "That if any money, or security for the payment of money, shall be intrusted to any banker, merchant, broker, attorney, or other agent, with any direction *in writing* to apply such money, or any part thereof, or the proceeds, or any part of the proceeds of such security, for any purpose specified in such direction, and he shall, in violation of good faith, and contrary to the purpose so specified, in any wise convert to his own use or benefit such money, security, or proceeds, or any part thereof respectively, every such offender shall be guilty of a misdemeanor, and being convicted thereof, shall be liable, at the discretion of the court, to be transported beyond seas, for any term not exceeding fourteen years, nor less than seven years, or to suffer such punishment by fine or imprisonment, or by both, as the court shall award; and if any chattel or valuable security, or any power of attorney for the sale or transfer of any share or interest in any public stock or fund, whether of this kingdom, or of Great Britain, or of Ireland, or of any foreign state, or in any fund of any body corporate, company or society, shall be intrusted to any banker, merchant, broker, attorney, or other agent, for safe custody, or for any special purpose, *without any authority* to sell, negotiate, transfer, or pledge, and he shall, in violation of good faith, and contrary to the object or purpose which such chattel or security, or power of attorney, shall have been intrusted to him, sell, negotiate, transfer, pledge, or in any manner convert to his own use or benefit such chattel or security, or the proceeds of the same, or any part thereof, or the share or interest in stock or fund to which such power of attorney shall relate, or any part thereof, every such offender shall be guilty of a misdemeanor, and being convicted thereof, shall be liable, at the discretion of the court, to any of the punishments which the court may award as hereinbefore last mentioned."

This act is not to affect trustees and mortgagees, nor bankers receiving money due upon securities, nor securities upon which they have a lien, claim, or demand, entitling them by law to sell, transfer, or otherwise dispose of them, unless such sale, transfer, or other disposal shall extend to a greater number or part of such securities or effects than shall be requisite for satisfying such lien, claim, &c. — § 50.

Nothing in this act is to prevent, impeach, or lessen any remedy at law or in equity, which any party aggrieved by any such offence might or would have had, had it not been passed. No banker, merchant, &c. shall be convicted as an offender against this act, in respect of any act done by him, if he shall at any time previously to his being indicted for such offence have disclosed such act on oath, in consequence of any compulsory process of any court of law or equity, in any action *bonâ fide* instituted by any party aggrieved, or if he shall have disclosed the same in any examination or deposition before any commissioner of bankrupt. — § 52.

The Bank of England, and the private banking companies of London, as well as some of the English provincial banks, charge no commission on the payments made and received on account of those who deal with them. But they allow no interest on the sums deposited in their hands; and it is either stipulated or distinctly understood that a person employing a banker should, besides furnishing him with sufficient funds to pay his drafts, keep an average *balance* in the banker's hands, varying, of course, according to the amount of business done on his account; that is, according to the number of his checks or drafts to be paid, and the number of drafts and bills to be received for him. The bankers then calculate, as well as they can, the probable amount of cash that it will be necessary for them to keep in their coffers to meet the ordinary demands of their customers, and employ the balance in discounting mercantile bills, in the purchase of government securities, or in some other sort of profitable adventure; so that their profits result, in the case of their not issuing notes, from the difference between the various expenses attendant on the management of their establishments, and the profits derived from such part of the sums lodged in their hands as they can venture to employ in an advantageous way.

The directors of the Bank of England do not allow any individual to overdraw his account. They answer drafts to the full extent of the funds deposited in their hands; but they will not pay a draft if it exceed their amount. Private bankers are not generally so scrupulous; most of them allow respectable individuals, in whom they have confidence, to overdraw their accounts; those who do so paying interest at the rate of 5 per cent. on whatever sums they overdraw. The possession of this power of overdrawing is often a great convenience to merchants, while it is rarely productive of loss to the banker. The money which is overdrawn is usually replaced within a short period; sometimes, indeed, in the course of a day or two. The directors of the Bank of England decline granting this facility from a disinclination on their part to come into competition in a matter of this sort with private bankers, who transact this kind of business better, probably, than it could be done by a great establishment like the Bank.

The facility which banks afford to the public in the negotiation of bills of exchange, or in the making of payments at distant places, is very great. Many of the banking companies established in different districts have a direct intercourse with each other, and they have all correspondents in London. Hence an individual residing in any part of the country, who may wish to make a payment in any other part, however distant, may

effect his object by applying to the bank nearest to him. Thus, suppose A. of Penzance has a payment to make to B. of Inverness: to send the money by post would be hazardous; and if there were fractional parts of a pound in the sum, it would hardly be practicable to make use of the post: how then will A. manage? He will pay the sum to a banker in Penzance, and his debtor in Inverness will receive it from a banker there. The transaction is extremely simple: the Penzance banker orders his correspondent in London to pay to the correspondent of the Inverness banker the sum in question on account of B.; and the Inverness banker, being advised in course of post of what has been done, pays B. A small commission charged by the Penzance banker, and the postages, constitute the whole expense. There is no risk whatever, and the whole affair is transacted in the most commodious and cheapest manner.

By far the largest proportion both of the inland bills in circulation in the country, and also of the foreign bills drawn upon Great Britain, are made payable in London, the grand focus to which all the pecuniary transactions of the empire are ultimately brought to be adjusted. And in order still further to economise the use of money, the principal bankers of the metropolis are in the habit of sending a clerk each day to the *clearing house* in Lombard-street, who carries with him the various bills in the possession of his house that are drawn upon other bankers; and having exchanged them for the bills in the possession of those others that are drawn upon his constituents, the balance on the one side or the other is paid in cash or Bank of England notes. By this contrivance the bankers of London are enabled to settle transactions to the extent of several millions a day, by the employment of not more, at an average, than from 200,000*l.* to 300,000*l.* of cash or Bank notes. — (See CLEARING HOUSE.)

In consequence of these and other facilities afforded by the intervention of bankers for the settlement of pecuniary transactions, the money required to conduct the business of an extensive country is reduced to a trifle only, compared with what it would otherwise be. It is not, indeed, possible to form any very accurate estimate of the total saving that is thus effected; but, supposing that 50 or 60 millions of gold and silver and bank notes are at present required, notwithstanding all the devices that have been resorted to for economising money, for the circulation of Great Britain, it may, one should think, be fairly concluded, that 200 millions would, at the very least, have been required to transact an equal extent of business but for those devices. If this statement be nearly accurate, and there are good grounds for thinking that it is rather under than over rated, it strikingly exhibits the vast importance of banking in a public point of view. By its means 50 or 60 millions are rendered capable of performing the same functions, and in an infinitely more commodious manner, that would otherwise have required four times that sum; and supposing that 20 or 30 millions are employed by the bankers as a capital in their establishments, no less than 120 or 130 millions will be altogether disengaged, or cease to be employed as an instrument of circulation, and made available for employment in agriculture, manufactures, and commerce.

(2.) *Substitution of Bank Notes for Coins. Means by which the Value of Bank Notes may be sustained.* — Not only, however, does the formation of banking establishments enable the business of a country to be conducted with a far less amount of money, but it also enables a large portion of that less amount to be fabricated of *the least valuable materials*, or of paper instead of gold. It would, however, alike exceed the limits and be inconsistent with the objects of this article, to enter into lengthened details with respect to the mode in which this substitution originally took place. It is sufficient to observe, that it naturally grew out of the progress of society. When governments became sufficiently powerful and intelligent to enforce the observance of contracts, individuals possessed of written promises from others that they would pay certain sums at specified periods, began to assign them to those to whom they were indebted; and when those by whom such obligations are subscribed are persons of whose solvency no doubt can be entertained, they are readily accepted in payment of the debts due by one individual to another. But when the circulation of obligations or bills in this way has continued for a while, individuals begin to perceive that they may derive a profit by issuing them in such a form as to fit them for being readily used as a substitute for money in the ordinary transactions of life. Hence the origin of bank notes. An individual in whose wealth and discretion the public have confidence being applied to for a loan, say of 5,000*l.*, grants the applicant his bill or note payable on demand for that sum. Now, as this note passes, in consequence of the confidence placed in the issuer, currently from hand to hand as cash, it is quite as useful to the borrower as if he had obtained an equivalent amount of gold; and supposing that the rate of interest is 5 per cent., it will yield, so long as it continues to circulate, a revenue of 250*l.* a year to the issuer. A banker who issues notes, coins as it were his credit. He derives the same revenue from the loan of his written promise to pay a certain sum, that he would derive from the loan of the sum itself; and while he thus increases his own income, he at the same time contributes to increase the wealth of the society. Besides being incomparably cheaper, bank notes are

also incomparably more commodious than a metallic currency. A bank note for 1,000*l.* or 100,000*l.* may be carried about with as much facility as a single sovereign. It is of importance, too, to observe, that its loss or destruction, whether by fire, shipwreck, or otherwise, would be of no greater importance in a public point of view, than the loss or destruction of as much paper. No doubt it might be a serious calamity to the holder; but to whatever extent it injured him, it would proportionally benefit the issuer, whereas the loss of coin is an injury to the holder without being of service to any one else; it is, in fact, so much abstracted from the wealth of the community.

Promissory notes issued by private individuals or associations circulate only because those who accept them have full confidence in the credit and solvency of the issuers, or because they feel assured that they will be paid when they become due. If any circumstances transpired to excite suspicions as to their credit, it would be impossible for them to circulate any additional notes, and those that they had issued would be immediately returned for payment. Such, however, is not the case with paper money properly so called, or with notes that are declared *legal tender*. It is not necessary, in order to sustain the value of such notes, that they should be payable at all; the only thing that is required for that purpose is, that they should be issued in *limited quantities*. Every country has a certain number of exchanges to make; and whether these are effected by the employment of a given number of coins of a particular denomination, or by the employment of the same number of notes of the same denomination, is, in this respect, of no importance whatever. Notes which have been made legal tender, and are not payable on demand, do not circulate because of any confidence placed in the capacity of the issuers to retire them; neither do they circulate because they are of the same real value as the commodities for which they are exchanged; but they circulate because, having been selected to perform the functions of *money*, they are, as such, readily received by all individuals in payment of their debts. Notes of this description may be regarded as a sort of tickets or counters to be used in computing the value of property, and in transferring it from one individual to another. And as they are no wise affected by fluctuations of credit, their value, it is obvious, must depend entirely on the quantity of them in circulation as compared with the payments to be made through their instrumentality, or the business they have to perform. By reducing the supply of notes below the supply of coins that would circulate in their place were they withdrawn, their value is raised above the value of gold; while, by increasing them to a greater extent, it is proportionally lowered.

Hence, supposing it were possible to obtain any security other than immediate convertibility into the precious metals, that notes declared to be legal tender would not be issued in excess, but that their number afloat would be so adjusted as to preserve their value as compared with gold nearly uniform, the obligation to pay them on demand might be done away. But it is needless to say that no such security can be obtained. Wherever the power to issue paper, not immediately convertible, has been conceded to any set of persons, it has been abused, or, which is the same thing, such paper has uniformly been over-issued, or its value depreciated from excess. It is now admitted on all hands to be indispensable, in order to prevent injurious fluctuations in the value of money, that all notes be made payable, at the pleasure of the holder, in an unvarying quantity of gold or silver. This renders it impossible for the issuers of paper to depreciate its value below that of the precious metals. They may, indeed, by over-issuing paper, depress the value of the whole currency, gold as well as paper, in the country in which the over-issue is made; but the moment that they do this, gold begins to be sent abroad; and paper being returned upon the issuers for payment, they are, in order to prevent the exhaustion of their coffers, compelled to lessen their issues; and thus, by raising the value of the currency, stop the drain for bullion.

It does, however, appear to us, that it is not only necessary, in order to prevent the over-issue of paper, to enact that all notes should be payable on demand, but that it is further necessary, in order to insure compliance with this enactment, to prohibit any one from issuing notes until he has satisfied the government of his ability to pay them. The circumstances that excite public confidence in the issuers of paper are often of the most deceitful description; and innumerable instances have occurred, of the population of extensive districts having suffered severely from the insolvency of bankers in whom they placed the utmost confidence. In 1793, in 1814, 1815, and 1816, and again in 1825, a very large proportion of the country banks were destroyed, and produced by their fall an extent of ruin that has hardly been equalled in any other country. And when such disasters have already happened, it is surely the bounden duty of government to hinder, by every means in its power, their recurrence. It is no exaggeration to affirm, that we have sustained ten times more injury from the circulation of worthless paper, or paper issued by persons without the means of retiring it, than from the issue of spurious coin. It is said, indeed, by those who are hostile to interference, that coins are legal tenders, whereas, notes being destitute of that privilege, those who suspect

them are at liberty to refuse them: but, whatever notes may be in law, they are, in very many districts, *practically*, and *in fact*, legal tenders; and could not be rejected without exposing the parties to much inconvenience. It should also be observed, that labourers, women, minors, and every sort of persons, however incapable of judging of the stability of banking establishments, are dealers in money, and consequently liable to be imposed upon. This, then, is clearly a case in which it is absolutely imperative upon government to interfere, to protect the interests of those who cannot protect themselves, either by compelling all individuals applying for stamps for notes, to give security for their payment, or by making sure, in some other way, that they have the means of paying them, and that the circulation of the notes will be a benefit and not an injury to the public.

A security of this sort has been exacted in the case of the Bank of England; and the whole 14,686,000*l.* lent by the Bank to government, must be sacrificed before the holders of her notes can sustain the smallest loss. Her stability has, therefore, been truly said, by Dr. Smith, to be equal to that of the British government. The system of taking securities having been found to answer so well in the case of the Bank of England, is a powerful argument in favour of its extension. Were securities taken from the country banks, their ultimate failure, in the capacity of banks of issue, would be rendered impossible; and a degree of solidity would be given to our money system, which it is idle to expect it can ever attain, so long as it continues on its present footing.

It is exceedingly difficult to prevent the issue of forged notes. Various schemes have been suggested for this purpose; and though it is hardly possible to suppose that an *inimitable* note will ever be produced, it is contended, that by judiciously combining different sorts of engraving, forgery may be rendered so difficult, as to be but rarely attempted. But however this may be, during the period from 1797 to 1819, when the Bank of England issued 1*l.* notes, their forgery was carried on to a great extent. And the desire to check this practice, and to lessen the frequency of capital punishments, appears to have been amongst the most prominent circumstances which led to the return to specie payments in 1821, and the suppression of 1*l.* notes. — (See Table I.)

(3.) *Bank of England Notes legal Tender.* — According to the law as it stood previously to the present year (1834), all descriptions of notes were payable at the pleasure of the holder, in coin of the standard weight and purity. But the policy of such a regulation was very questionable; and we regard the enactment of the late stat. 3 & 4 Will. 4. c. 98., which makes Bank of England notes legal tender, every where except at the Bank and its branches, for all sums above 5*l.*, as a very great improvement. So long as the notes of the Bank are themselves convertible, at the pleasure of the holder, into coin, an arrangement of this sort will, it is obvious, effectually prevent any over-issue of country paper, at the same time that it is free from many very serious disadvantages that attached to the former plan. The unjust liabilities imposed upon the Bank of England by the old system, placed her in a situation of great difficulty and hazard. They obliged her to provide a supply of coin and bullion, not for her own exigencies only, but for those of *all* the country banks; and, what is harder still, they exposed her to be deeply injured by any misconduct on the part of the latter, as well as by the distress in which they might accidentally be involved. In consequence, her free action has been at all times in some degree impeded; and her power to render assistance to the banking and mercantile interests in periods of discredit materially diminished. The country banks kept but a small supply of coin in their coffers. They were all, however, holders, to a greater or less extent, of government securities; and whenever any circumstance occurred, to occasion a demand upon them for coin, they immediately sold or pledged the whole or a portion of their stock, carried the notes to the Bank to be exchanged, and then carried the specie to the country. Hence, when any suspicions were entertained of the credit of the country banks, or when a panic originated amongst the holders of their notes, as was the case in 1793 and 1825, the whole of them retreated upon the Bank of England, and 700 or 800 conduits were opened, to draw off the specie of that establishment, which was thus, it is evident, exposed to the risk of stoppage without having done any thing wrong. It was not the drain for gold from abroad, but the drain for gold from the country, that nearly exhausted the Bank's coffers in 1825, and forced her to issue about a million of 1*l.* and 2*l.* notes. The currency could not possibly be in a sound healthy state, while the Bank of England, and, through her, public credit, were placed in so perilous a situation. But the making of Bank of England notes legal tender at all places except the Bank, will tend materially to protect her from the injurious consequences of panics or runs among the holders of country bank paper; and while it does this, it will not, as it appears to us, in anywise impair the securities against over-issue or depreciation.

It was, no doubt, contended during the discussions on the late act, that the measure now referred to would lead to the depreciation of provincial paper; inasmuch as the expense of sending notes from a distance to London, to be exchanged for gold, would

prevent any one from demanding Bank of England notes from country banks in good credit, till the value of the notes issued by them was so much depreciated below the value of gold, that the difference would more than pay the expense of sending them to London, and bringing gold back. But this notion proceeds on a radical misconception of the nature of the old as well as of the new system of currency. There cannot, in point of fact, be the least difference, as respects value, in the provinces, between Bank of England paper, now that it is legal tender, and gold. London being the place where the exchanges are adjusted, the value of money in every part of the empire must depend on its value in it; and *this*, it is plain, cannot be in any degree affected by the late measure. Formerly the provincial currency, gold as well as paper, might be, and, indeed, frequently was, depreciated. This was brought about either by an over-issue on the part of the country banks, generally, in the first instance, the effect, but always, in the end, the cause of a rise of prices; or by the issues of the Bank of England being, in consequence of an adverse exchange, narrowed sooner or more rapidly than those of the country banks. In either case, the provincial currency being redundant as compared with that of the metropolis, there was a demand on its issuers for bills on London; but it is material to observe, that, unless their credit was suspected, there was not, in such cases, any demand upon them for gold. It is, indeed, obvious that a redundancy of the currency is a defect that cannot be obviated by getting gold from the country banks, unless (as hoarding is out of the question) it be intended to send it abroad; and that may always be done *better and cheaper* by getting from them Bank of England notes, or bills on London. A local redundancy of the currency may take place in future as it has done formerly; and its occurrence cannot be prevented, even though paper were wholly banished from circulation, so long as the whole currency is not supplied from *one* source, and as London is the focus where the exchanges with foreign countries are adjusted. But the statements now made show that it is a radical mistake to suppose that it can take place more readily, or to a greater extent, under the new system than formerly. In this respect no change has been made. But while our ancient security against over-issue is maintained unimpaired, the recent arrangements increase the stability of the Bank of England, and consequently improve our whole pecuniary system.

If any doubt could possibly remain as to the operation of the new system, it would be removed by referring to Scotland. Gold has been practically banished from that country for a long series of years; and yet no one pretends to say that prices are higher in Scotland than in England, or that her currency is depreciated. The Scotch currency is kept at its proper level, not by the check of gold payments, but by the demand for bills on London; and it is as effectually limited in this way as it could be were the banks universally in the habit of exchanging their notes for gold. On what grounds, then, is it to be apprehended that the obligation to give Bank of England notes or bills on London, will be less effectual in restraining over-issue in Yorkshire or Durham than in Scotland?

A banker who issues notes must keep beside him such a stock of cash and bullion, as may be sufficient to answer the demands of the public for their payment. If the value of the cash and bullion in his coffers were equal to the value of his notes in circulation, he would not, it is plain, make any profit; but if he be in good credit, a third, a fourth, or even a fifth part of this sum will probably be sufficient; and his profit consists of the excess of the interest derived from his notes in circulation, over the interest of the sum he is obliged to keep dormant in his strong box, and the expenses of managing his establishment. The Bank of England, as will be afterwards seen, keeps an average stock of coin and bullion equal to a third of her liabilities.

(4.) *Legal Description of Bank Notes.*—Bank notes are merely a species of promissory notes. They are subscribed either by the parties on whose account they are issued, or by some one in their employment, whose signature is binding upon them. A Bank of England note for *5l.* is as follows:—

Bank of England.

N° *I promise to pay to Mr. Thomas Rippon, or Bearer,* N°

on Demand, the Sum of Five *Pounds.*

1833. *September* 9, *London*, 9 *September*, 1833.

For the Gov^r and Comp^y of the

£ Five. BANK of ENGLAND.

A. B.

No particular form of words is necessary in a bank note. The essential requisites are, that it should be for a definite sum (in England and Wales not less than *5l.*, and in Scotland and Ireland not less than *1l.*), that it should be payable to bearer on demand, and that it should be properly stamped. Promissory notes, though issued by bankers, if not payable to bearer on demand, do not come under the denomination of bank notes: they are not, like the latter, taken as cash in all ordinary transactions; nor are they, like them, assignable by mere delivery.

The circulation of notes for less than *5l.* was restrained by law (stat. 15 Geo. 3. c. 51.) from 1766 to 1797. In 1808, it was enacted by stat. 48 Geo. 3. c. 88., that all bank notes, promissory notes, or other negotiable instruments for less than *20s.* should be absolutely void: a penalty of from *20s.* to *5l.*, at the discretion of the justices, being imposed on their issuers. It was enacted by the 7 Geo. 4. c. 6., that the issue of all bank notes or promissory notes for less than *5l.* by the Bank of England, or by any licensed English bankers, and stamped on the 5th of February, 1826, or previously (after which period such notes were not stamped), should terminate on the 5th of April, 1829.

The stamp duties on bank notes or promissory notes payable on demand, are —

	£	s.	d.		£	s.	d.	£	s.	d.
Not exceeding	1	1	0	- -	-	-	-	-	0	0 5
Exceeding	1	1	0	and not exceeding	2	2	0	-	0	0 10
—	2	2	0	—	5	5	0	-	0	1 3
—	5	5	0	—	10	0	0	-	0	1 9
—	10	0	0	—	20	0	0	-	0	2 0
—	20	0	0	—	30	0	0	-	0	3 0
—	30	0	0	—	50	0	0	-	0	5 0
—	50	0	0	—	100	0	0	-	0	8 6

Which notes may be reissued after payment, as often as shall be thought fit, provided they be issued by a banker or person who has taken out a licence, renewable annually, and costing *30l.*, to issue notes payable to bearer on demand. Any banker or other person issuing such reissuable notes, without being duly licensed, shall forfeit *100l.* for every offence. — (*55 Geo.* 3. c. 184. § 27.)

These conditions do not apply to the Bank of England, the stamp duties on the notes of that establishment being compounded for at the rate of *3,500l.* per million of its notes in circulation.

Notes or bills *not* payable to bearer on demand, are not reissuable, under a penalty of *50l.* — (For the stamp duties affecting them, see EXCHANGE.)

By the 9 Geo. 4. c. 23., English bankers not in the city of London, or within three miles thereof, are authorised to issue promissory notes, and to draw and issue bills of exchange, on unstamped paper, for any sum of *5l.* or upwards, expressed to be payable to the bearer on demand, or to order at any period not exceeding 7 days after sight, (*bills* may also be drawn at any period not exceeding 21 days after date,) upon obtaining licences, costing *30l.*, to that effect, provided such bills of exchange be drawn upon bankers in London, Westminster, or Southwark; or provided such bills be drawn by any banker or bankers at the place where he or they shall be licensed to issue unstamped notes and bills, upon himself or themselves, or his or their copartner or copartners, payable at any other place where such banker or bankers shall be licensed to issue such notes and bills. Bankers having such licences, are to give security by bond, that they will keep a true account of all promissory notes and bills so issued, and account for the duties on them at the rate of *3s. 6d.* for every *100l.*, and also for the fractional parts of *100l.* of the average value of such notes and bills in circulation. Persons post-dating unstamped notes or bills shall, for every such offence, forfeit *100l.*

(*5.*) *Legal Effect of the Payment of Bank Notes.* — Notes of the Bank of England were not, previously to the act 3 & 4 Will. 4. c. 98., like bills of exchange, mere securities, or documents of debt, but were treated as money or cash in the ordinary course or transactions of business; the receipts given upon their payment being always given as for money. Now, however, they are legal tender, every where except at the Bank, for all sums above *5l.* All notes payable to bearer are assignable by delivery. The holder of a bank note is *primâ facie* entitled to prompt payment of it, and cannot be affected by the previous fraud of any former holder in obtaining it, unless evidence be given to show that he was privy to such fraud. Such privity may, however, be inferred from the circumstances of the case. To use the words of Lord Tenterden, "If a person take a bill, note, or any other kind of security, under circumstances which *ought to excite suspicion* in the mind of any reasonable man acquainted with the ordinary affairs of life, and which ought to put him on his guard to make the necessary inquiries, and he do not, then he loses the right of maintaining possession of the instrument against the lawful owner."—(*Guildhall*, 25th October, 1826.)

Country bank notes are usually received as cash. But though taken as such, if they be presented *in due time* and not paid, they do not amount to a payment, and the deliverer of the notes is still liable to the holder. It is not easy to determine what is a

due or reasonable time, inasmuch as it must depend in a great measure on the circumstances of each particular case. On the whole, the safest rule seems to be to present all notes or drafts payable on demand, if received in the place where they are payable, on the day on which they are received, or as soon after as possible. When they have to be transmitted by post for payment, no unnecessary delay should be allowed to intervene. — (*Chitty's Commercial Law*, vol. iii. p. 590., and the art. "CHECK" in this Dictionary.)

II. BANK OF ENGLAND (ACCOUNT OF).

(1.) *Historical Sketch of the Bank.* — This great establishment, which has long been the principal bank of deposit and circulation, not in this country only, but in Europe, was founded in 1694. Its principal projector was Mr. William Paterson, an enterprising and intelligent Scotch gentleman, who was afterwards engaged in the ill-fated colony at Darien. Government being at the time much distressed for want of money, partly from the defects and abuses in the system of taxation, and partly from the difficulty of borrowing, because of the supposed instability of the revolutionary establishment, the Bank grew out of a loan of 1,200,000*l.* for the public service. The subscribers, besides receiving *eight* per cent. on the sum advanced as interest, and 4,000*l.* a year as the expense of management, in all 100,000*l.* a year, were incorporated into a society denominated the *Governor and Company of the Bank of England.* The charter is dated the 27th of July, 1694. It declares, amongst other things, that they shall "be capable in law, to purchase, enjoy, and retain to them and their successors, any manors, lands, rents, tenements, and possessions whatsoever; and to purchase and acquire all sorts of goods and chattels whatsoever, wherein they are not restrained by act of parliament; and also to grant, demise, and dispose of the same.

"That the management and government of the corporation be committed to the governor, deputy governor, and twenty-four directors, who shall be elected between the 25th day of March and 25th day of April, each year, from among the members of the Company duly qualified.

"That no dividend shall at any time be made by the said Governor and Company, save only out of the interest, profit, or produce arising by or out of the said capital stock or fund, or by such dealing as is allowed by act of parliament.

"They must be natural born subjects of England, or naturalised subjects; they shall have in their own name and for their own use, severally, viz. — the governor, at least 4,000*l.*, the deputy governor 3,000*l.*, and each director 2,000*l.* of the capital stock of the said corporation.

"That thirteen or more of the said governors and directors (of which the governor or deputy governor must be always one) shall constitute a court of directors, for the management of the affairs of the Company, and for the appointment of all agents and servants which may be necessary, paying them such salaries as they may consider reasonable.

"Every elector must have, in his own name and for his own use, 500*l.* or more capital stock, and can only give one vote. He must, if required by any member present, take the oath of stock; or the declaration of stock, in case he be one of the people called Quakers.

"Four general courts to be held in every year; in the months of September, December, April, and July. A general court may be summoned at any time, upon the requisition of nine proprietors, duly qualified as electors.

"The majority of electors in general courts have the power to make and constitute by-laws and ordinances for the government of the corporation, provided that such by-laws and ordinances be not repugnant to the laws of the kingdom, and be confirmed and approved, according to the statutes in such case made and provided."

The corporation is prohibited from engaging in any sort of commercial undertaking other than dealing in bills of exchange, and in gold and silver. It is authorised to advance money upon the security of goods or merchandise pledged to it; and to sell, by public auction, such goods as are not redeemed within a specified time.

It was also enacted, in the same year in which the Bank was established, by statute 6 William and Mary, c. 20., that the Bank "shall not deal in any goods, wares, or merchandise (except bullion), or purchase any lands or revenues belonging to the crown, or advance or lend to their Majesties, their heirs or successors, any sum or sums of money by way of loan or anticipation, or any part or parts, branch or branches, fund or funds of the revenue, now granted or belonging, or hereafter to be granted to their Majesties, their heirs and successors, other than such fund or funds, part or parts, branch or branches of the said revenue only, on which a credit of loan is or shall be granted by parliament." And in 1697 it was enacted, that the "common capital and principal stock, and also the real fund of the Governor and Company, or any profit or produce to

be made thereof, or arising thereby, shall be exempted from any rates, taxes, assessments, or impositions whatsoever, during the continuance of the Bank; and that all the profit, benefit, and advantage, from time to time arising out of the management of the said corporation, shall be applied to the uses of all the members of the said corporation of the Governor and Company of the Bank of England, rateably and in proportion to each member's part, share, and interest in the common capital and principal stock of the said Governor and Company hereby established."

It was further enacted, in 1697, that the forgery of the Company's seal, or of any sealed bill or Bank note, should be felony without benefit of clergy, and that the making of any alteration or erasure in any bill or note should also be felony.

In 1696, during the great recoinage, the Bank was involved in considerable difficulties, and was even compelled to suspend payment of her notes, which were at a heavy discount. Owing, however, to the judicious conduct of the directors, and the assistance of government, the Bank got over the crisis. But it was at the same time judged expedient, in order to place her in a situation the better to withstand any adverse circumstances that might afterwards occur, to increase her capital from 1,200,000*l.* to 2,201,171*l.* In 1708, the directors undertook to pay off and cancel one million and a half of Exchequer bills they had circulated two years before, at 4½ per cent., with the interest on them, amounting in all to 1,775,028*l.*; which increased the permanent debt due by the public to the Bank, including 400,000*l.* then advanced in consideration of the renewal of the charter, to 3,375,028*l.*, for which they were allowed 6 per cent. The Bank capital was then also doubled or increased to 4,402,343*l.* But the year 1708 is chiefly memorable, in the history of the Bank, for the act that was then passed, which declared, that during the continuance of the corporation of the Bank of England, "it should not be lawful for any body politic, erected or to be erected, other than the said Governor and Company of the Bank of England, or for any other persons whatsoever, united or to be united in covenants or partnership, exceeding the number of 6 persons, in that part of Great Britain called England, to borrow, owe, or take up any sum or sums of money on their bills or notes payable on demand, or in any less time than 6 months from the borrowing thereof."—This proviso, which has had so powerful an operation on banking in England, is said to have been elicited by the Mine-adventure Company having commenced banking business, and begun to issue notes.

It has been pretty generally imagined, from the private banking companies in the metropolis not issuing notes, that they were legally incapacitated from doing so. But the clause in the act of 1708, which has been the only restriction on the issue of notes, applied generally to all England, and had no peculiar reference to London. The fact that banks with 6 or fewer partners have not issued notes in the metropolis, as well as in the provinces, is, therefore, ascribable either to their being aware that their notes would obtain no considerable circulation concurrently with those of a great association like the Bank of England, or from their believing that their issue would not be profitable.

The charter of the Bank of England, when first granted, was to continue for eleven years certain, or till a year's notice after the 1st of August, 1705. The charter was further prolonged in 1697. In 1708, the Bank having advanced 400,000*l.* for the public service, without interest, the exclusive privileges of the corporation were prolonged till 1733. And in consequence of various advances made at different times, the exclusive privileges of the Bank have been continued by successive renewals, till a year's notice, after the 1st of August, 1855, under the proviso that they may be cancelled on a year's notice to that effect being given on the 1st of August, 1845.

We subjoin

An Account of the successive Renewals of the Charter, of the Conditions under which these Renewals were made, and of the Variations in the Amount and Interest of the Permanent Debt due by Government to the Bank, exclusive of the Dead Weight.

Date of Renewal.	Conditions under which Renewals were made, and Permanent Debt contracted.	Permanent Debt. £	s.	d.
1694.	Charter granted under the act 5 & 6 Will. 3. c. 20., redeemable upon the expiration of 12 months' notice after the 1st of August, 1705, upon payment by the public to the Bank of the demands therein specified. Under this act the Bank advanced to the public 1,200,000*l.*, in consideration of their receiving an annuity of 100,000*l.* a year, viz. 8 per cent. interest, and 4,000*l.* for management - - -	1,200,000	0	0
1697.	Charter continued by the 8 & 9 Will. 3. c. 20. till 12 months' notice after 1st of August, 1710, on payment, &c. Under this act the Bank took up and added to their stock 1,001,171*l.* Exchequer bills and tallies.			
	Carried forward - -	1,200,000	0	0

An Account of the successive Renewals of the Charter, &c. — *continued.*

Date of Renewal.	Conditions under which Renewals were made, and Permanent Debt contracted.	Permanent Debt. £	s.	d.
	Brought forward - -	1,200,000	0	0
1708.	Charter continued by 7 Anne, c. 7. till 12 months' notice after 1st of August, 1732, on payment, &c.			
	Under this act the Bank advanced 400,000*l.* to government without interest; and delivered up to be cancelled 1,775,027*l.* 17*s.* 10*d.* Exchequer bills, in consideration of their receiving an annuity of 106,501*l.* 13*s.*, being at the rate of 6 per cent. -	2,175,027	17	10
1713.	Charter continued by 12 Anne, stat. 1. c. 11. till 12 months' notice after 1st of August, 1742, on payment, &c.			
	In 1716, by the 3 Geo. 1. c. 8., Bank advanced to government, at 5 per cent. - - - - -	2,000,000	0	0
	And by the same act, the interest on the Exchequer bills cancelled in 1708 was reduced from 6 to 5 per cent.			
	In 1721, by 8 Geo. 1. c. 21., the South Sea Company were authorised to sell 200,000*l.* government annuities, and corporations purchasing the same at 26 years' purchase were authorised to add the amount to their capital stock. The Bank purchased the whole of these annuities at 20 years' purchase - -	4,000,000	0	0
	5 per cent. interest was payable on this sum to Midsummer, 1727, and thereafter, 4 per cent.	9,375,027	17	10
	At different times between 1727 and 1738, both inclusive, the Bank received from the public, on account of permanent debt, 3,275,027*l.* 17*s.* 10*d.*, and advanced to it on account of ditto, 3,000,000*l.*: Difference - - - - - -	275,027	17	10
	Debt due by the public in 1738 - - - -	9,100,000	0	0
1742.	Charter continued by 15 Geo. 2. c. 13. till 12 months' notice after 1st of August, 1764, on payment, &c.			
	Under this act the Bank advanced 1,600,000*l.* without interest, which being added to the original advance of 1,200,000*l.*, and the 400,000*l.* advanced in 1710, bearing interest at 6 per cent., reduced the interest on the whole to 3 per cent. - - -	1,600,000	0	0
	In 1745, under authority of 19 Geo. 2. c. 6., the Bank delivered up to be cancelled 986,000*l.* of Exchequer bills, in consideration of an annuity of 39,472*l.*, being at the rate of 4 per cent. - -	986,000	0	0
	In 1749, the 23 Geo. 2. c. 6. reduced the interest on the 4 per cent. annuities held by the Bank, to 3½ per cent. for 7 years from the 25th of December, 1750, and thereafter to 3 per cent.			
1764.	Charter continued by 4 Geo. 3. c. 25. till 12 months' notice after 1st of August, 1786, on payment, &c.			
	Under this act the Bank paid into the Exchequer 110,000*l.* free of all charge.			
1781.	Charter continued by 21 Geo. 3. c. 60. till 12 months' notice after 1st of August, 1812, on payment, &c.			
	Under this act the Bank advanced 3,000,000*l.* for the public service for 3 years at 3 per cent.			
1800.	Charter continued by 40 Geo. 3. c. 28. till 12 months' notice after 1st of August, 1833, on payment, &c.			
	Under this act the Bank advanced to government 3,000,000*l.* for 6 years without interest; but in pursuance of the recommendation of the committee of 1807, the advance was continued without interest till 6 months after the signature of a definitive treaty of peace.			
	In 1816, the Bank, under authority of the act 56 Geo. 3. c. 96, advanced at 3 per cent., to be repaid on or before 1st of August, 1833	3,000,000	0	0
1833.	Charter continued by 3 & 4 Will. 4. c. 98. till 12 months' notice after 1st of August, 1855, with a proviso that it may be dissolved on 12 months' notice after 1st of August, 1845, on payment, &c.	14,686,800	0	0
	This act directs that in future the Bank shall deduct 120,000*l.* a year from their charge on account of the management of the public debt; and that a fourth part of the debt due by the public to the Bank, or 3,638,250*l.*, be paid off - - - -	3,638,250	0	0
	Permanent advance by the Bank to the public, bearing interest at 3 per cent., independent of the advances on account of dead weight - - - - - -	11,048,550	0	0

For further details as to this subject, see the *Appendix* No. 1. *of the Report of* 1832 *on the Renewal of the Bank Charter*, and the acts of parliament referred to in it; see also *James Postlethwayt's History of the Revenue*, pp. 301—310.; and *Fairman on the Funds*, 7th ed. pp. 85—88. &c.

The capital of the Bank on which dividends are paid, has never exactly coincided with, though it has seldom differed very materially from, the permanent advance by the Bank to the public. We have already seen that it amounted, in 1708, to 4,402,343*l.* Between that year and 1727 it was increased to near 9,000,000*l.* In 1746, it amounted to 10,780,000*l.* From this period it underwent no change till 1782, when it was increased 8 per cent., or to 11,642,400*l.* It continued stationary at this sum down to 1816, when it was raised to 14,553,000*l.* by an addition of 25 per cent. from the profits of the Bank, under the provisions of the act 56 Geo. 3. c. 96. The late act for the renewal of the charter, 3 & 4 Will. 4. c. 98., directs that the sum of 3,638,250*l.*, the portion of the debt due to the Bank to be repaid by the public, shall be deducted from the Bank's capital; which will, therefore, be in future 10,914,750*l.* —(*Report on Bank Charter, Appen.* No. 33.)

The Bank of England has been frequently affected by panics amongst the holders of its notes. In 1745, the alarm occasioned by the advance of the Highlanders under the Pretender as far as Derby, led to a run upon the Bank; and in order to gain time to concert measures for averting the run, the directors adopted the device of paying in shillings and sixpences! But they derived a more effectual relief from the retreat of the Highlanders; and from a resolution agreed to at a meeting of the principal merchants and traders of the city, and very numerously signed, declaring the willingness of the subscribers to receive Bank notes in payment of any sum that might be due to them, and pledging themselves to use their utmost endeavours to make all their payments in the same medium.

During the tremendous riots in June, 1780, the Bank incurred considerable danger. Had the mob attacked the establishment at the commencement of the riots, the consequences might have proved fatal. Luckily, however, they delayed their attack till time had been afforded for providing a force sufficient to insure its safety. Since that period a considerable military force is nightly placed in the interior of the Bank, as a protection in any emergency that may occur.

In the latter part of 1792 and beginning of 1793, there was, in consequence of a previous over-issue on their part, a general run on most of the private banks; and about *one third* of these establishments were forced to stop payment. This led to a considerable demand for coin from the Bank.

The year 1797 is, however, the most important epoch in the recent history of the Bank. Owing partly to events connected with the war in which we were then engaged—to loans to the Emperor of Germany—to bills drawn on the treasury at home by the British agents abroad—and partly, and chiefly, perhaps, to the advances most unwillingly made by the Bank to government, which prevented the directors from having a sufficient control over their issues,—the exchanges became unfavourable in 1795, and in that and the following year large sums in specie were drawn from the Bank.* In the latter end of 1796 and beginning of 1797, considerable apprehensions were entertained of invasion, and rumours were propagated of descents having been actually made on the coast. In consequence of the fears that were thus excited, runs were made on the provincial banks in different parts of the country; and some of them having failed, the panic became general, and extended itself to London. Demands for cash poured in upon the Bank from all quarters; and on Saturday, the 25th of February, 1797, she had only 1,272,000*l.* of cash and bullion in her coffers, with every prospect of a violent run taking place on the following Monday. In this emergency an order in council was issued on Sunday, the 26th, prohibiting the directors from paying their notes in cash until the sense of parliament had been taken on the subject. And after parliament met, and the measure had been much discussed, it was agreed to continue the restriction till six months after the signature of a definitive treaty of peace.

As soon as the order in council prohibiting payments in cash appeared, a meeting of the principal bankers, merchants, traders, &c. of the metropolis, was held at the Mansion-house, when a resolution was agreed to, and very numerously signed, pledging, as had been done in 1745, those present to accept, and to use every means in their power to cause Bank notes to be accepted as cash in all transactions. This resolution tended to allay the apprehensions that the restriction had excited.

Parliament being sitting at the time, a committee was immediately appointed to examine into the affairs of the Bank; and their report put to rest whatever doubts might have been entertained with respect to the solvency of the establishment, by showing that at the moment when the order in council appeared, the Bank was possessed of property to the amount of 15,513,690*l.*, after all claims upon it had been deducted.

Much difference of opinion has existed with respect to the policy of the restriction in

* So early as December, 1794, the court of directors represented to government their uneasiness on account of the magnitude of the debt due by the government to the Bank, and anxiously requested a repayment of at least a considerable part of what had been advanced. In January, 1795, they resolved to limit their advances upon treasury bills to 500,000*l.*; and at the same time they informed Mr. Pitt that it was their wish that he would adjust his measures for the year *in such a manner as not to depend on any further assistance from them.* On the 11th of February, 1796, they resolved, "That it is the opinion of this court, founded upon the experience of the late Imperial loan, that if any further loan or advance of money to the emperor, or to any of the foreign states, should in the present state of affairs take place, it will, in all probability, prove fatal to the Bank of England. The court of directors do, therefore, most earnestly deprecate the adoption of any such measure, and they solemnly protest against any responsibility for the calamitous consequences that may follow thereupon." But notwithstanding these, and many other similar remonstrances, fresh advances of money were made to our foreign allies, and fresh demands upon the Bank; the directors reluctantly abandoning their own better judgment to what they truly termed the "*pressing solicitations*" of the Chancellor of the Exchequer, and their desire to avert "the probable distress which a refusal (on their part) might occasion, in the then alarming situation of public affairs." But notwithstanding the difficulties of the Bank were greatly aggravated by that conduct on the part of government against which the directors had so strongly protested, she could hardly, in any state of her affairs, have got safely over the crisis of 1797. The run upon the Bank that then took place, was occasioned by alarms of invasion; and it is clear, as remarked in the text, that while they continued, no paper immediately convertible into gold could remain in circulation.

1797; but, considering the peculiar circumstances under which it took place, its expediency seems abundantly obvious. The run did not originate in any over-issue of Bank paper; but grew entirely out of political causes. So long as the alarms of invasion continued, it was clear that no Bank paper immediately convertible into gold would remain in circulation. And as the Bank, though possessed of ample funds, was without the means of instantly retiring her notes, she might, but for the interference of government, have been obliged to stop payment; an event which, had it occurred, must have produced consequences in the last degree fatal to the public interests.

It had been generally supposed, previously to the passing of the Restriction Act, that Bank notes would not circulate unless they were immediately convertible into cash; but the event showed, conformably to principles that have since been fully explained, that this was not really the case. Though the notes of the Bank of England were not, at the passing of the Restriction Act, publicly declared to be legal tender, they were rendered so in practice, by being received as cash in all transactions on account of government, and of the vast majority of individuals. For the first three years of the restriction, their issues were so moderate, that they not only kept on a par with gold, but actually bore a small premium. In the latter part of 1800, however, their quantity was so much increased that they fell to a discount of about 8 per cent. as compared with gold, but they soon after rose nearly to par; and it was not until 1808 that the decline of their value excited any considerable attention. Early in 1810, they were at a discount of about 13½ per cent.; and this extraordinary fall having attracted the attention of the legislature, the House of Commons appointed a committee to inquire into the circumstances by which it had been occasioned. The committee examined several witnesses; and in their report, which was drawn up with considerable ability, they justly ascribed the fall to the over-issue of Bank paper, and recommended that the Bank should be obliged to resume cash payments within two years. This recommendation was not, however, acted upon; and the value of Bank paper continued to decline, as compared with gold, till 1814.

At the period when the restriction on cash payments took place in 1797, it is supposed that there were about 280 country banks in existence; but so rapidly were these establishments multiplied, that they amounted to above 900 in 1813. The price of corn, influenced partly by the depreciation of the currency, and the facility with which discounts were obtained, but far more by deficient harvests, and the unprecedented difficulties which the war threw in the way of importation, had risen to an extraordinary height during the five years ending with 1813. But the harvest of that year being unusually productive, and the intercourse with the Continent being then also renewed, prices, influenced by both circumstances, sustained a very heavy fall in the latter part of 1813, and the beginning of 1814. And this fall having proved ruinous to a considerable number of farmers, and produced a general want of confidence, such a destruction of provincial paper took place as has rarely been paralleled. In 1814, 1815, and 1816, no fewer than 240 country banks stopped payment; and *eighty-nine* commissions of bankruptcy were issued against these establishments, being at the rate of *one* commission against every *ten and a half* of the total number of banks existing in 1813.

The great reduction that had been thus suddenly and violently brought about in the quantity of country bank paper, by extending the field for the circulation of Bank of England paper, raised its value in 1817 nearly to a par with gold. The return to cash payments being thus facilitated, it was fixed, in 1819, by the act 59 Geo. 3. c. 78., commonly called Mr. Peel's Act, that they should take place in 1823. But to prevent any future over-issue, and at the same time to render the measure as little burdensome as possible, it was enacted, in pursuance of a plan suggested by the late Mr. Ricardo, that the Bank should be obliged, during the interval from the passing of the act till the return to specie payments, to pay her notes, if required, in bars of standard bullion of not less than sixty ounces' weight. This plan was not, however, acted upon during the period allowed by law; for, a large amount of gold having been accumulated at the Bank, the directors preferred recommencing specie payments on the 1st of May, 1821. — (See Table III. for an account of the price of bullion, the depreciation of paper, &c. from 1800 to 1821.)

A great diversity of opinion has been entertained with respect to the policy of the return to the old standard, in 1819. By one party it has been represented as a wise and politic measure: they contend that Mr. Peel's Act not only put an end to those fluctuations in the value of money, which had previously been productive of great mischief, and gave effect to the solemn engagements into which the public had entered with the national creditor, but that it did this without adding any thing material to the national burdens. But another, and, perhaps, a more numerous party, take a totally different view of this measure: they contend that the public was not really bound to return to cash payments at the old standard at the termination of the war; that the return has

very greatly enhanced the value of the currency; and that this enhancement, by adding proportionally to the fixed burdens laid on the industrious classes, has been most injurious to their interests. It will, however, be found in this, as in most cases of the sort, that the statements of both parties are exaggerated; and that if, on the one hand, the measure has not been so advantageous as its apologists represent, neither, on the other, has it been nearly so injurious as its enemies would have us believe.

In discussing this question, it is material to observe that the value of paper, which had been in 1815 and 1816 about $16\frac{3}{4}$ per cent. below that of gold, rose in 1817 and 1818, from the causes already mentioned, without any interference whatever on the part of government, to within little more than $2\frac{1}{2}$ per cent. of the value of gold; and that in 1819 the depreciation only amounted to $4\frac{1}{2}$ per cent.—(See Table III.) It is, therefore, quite ludicrous to ascribe to the act of 1819, as is often done, the whole rise that has taken place in the value of the currency since the peace, seeing that the currency had been for *three years previously to its enactment* from $12\frac{1}{2}$ to $14\frac{1}{2}$ per cent. above its value in 1815, and from 21 to 23 per cent. above its value in 1814! The main object which the promoters of the act of 1819 had in view, was to sustain the value of the currency at the point to which it had recovered itself, without legislative interference. This, however, could not be done without recurring to specie payments; and the difference of $4\frac{1}{2}$ per cent. that obtained in 1819 between the value of gold and paper, was not deemed sufficiently considerable to warrant a departure from the old standard, and from the acts engaging to restore it.

But it is alleged, that those who suppose that the act of 1819 added only $4\frac{1}{2}$ per cent. to the value of the currency, mistake altogether the effect of the measure. It is admitted, indeed, that paper was then only $4\frac{1}{2}$ per cent. less valuable than gold; but by reverting to specie payments, we made an unexpected purchase of *thirty millions* of gold; and it is affirmed, that this novel and large demand, concurring simultaneously with the contraction of paper in several of the continental states, and with a falling off in the supply of bullion from the mines, had the effect of adding very greatly to the value of gold itself, and consequently to that of the currency. It is very difficult, or rather, perhaps, impossible, to determine the precise degree of credit that ought to be attached to this statement; but while we incline to think that it is well founded to a certain extent, we see no grounds for believing that it is so to any thing like the extent that has been stated. The gold imported into Great Britain, to enable the Bank to resume specie payments, was not taken from any particular country or district, but was drawn from the market of the world; and considering the vast extent of the supply whence it was derived, it is against all reason to suppose that its value could be materially influenced by our purchases. We doubt, too, whether the contraction of the paper currency of some of the continental states, and the substitution of specie in its stead, was not more than balanced by the cessation of the demand for specie for the military chests of the different armies, by the stoppage of the practice of hoarding, and the greater security consequent to the return of peace. And with respect to the falling off in the supplies from the mines, it is not a circumstance, supposing it to have had a considerable influence, that parliament could take into account. It could neither determine the extent to which bullion had been raised, nor at what point the rise would stop, nor how soon it might again begin to decline. The diminution in the supply of bullion had then continued for too short a period, and its influence on the value of gold was much too uncertain, to make it a ground for interfering in any degree with the standard.

The decline in the price of most articles that has taken place since the peace, has been often referred to, as a conclusive proof of the great enhancement in the value of bullion. But the inference is by no means so certain as has been represented. The prices of commodities are as much affected by changes in the cost of their production, as by changes in the quantity of money afloat. Now, there is hardly one of the great articles of commerce, the cost of which has not been considerably reduced, or which has not been supplied from new sources, within the last few years. The growth of corn, for example, has been vastly extended in France, Prussia, and generally throughout the Continent, by the splitting of large estates, and the complete subversion of the feudal system; and the reduction of its price in this country is, at least, as much owing to the extraordinary increase of imports from Ireland, as to any other cause. The fall in the price of wool is most satisfactorily accounted for by the introduction and rapid multiplication of Merino sheep in Germany, where they seem to succeed even better than in Spain; and by the growing imports from New Holland and elsewhere. And a very large portion, if not the whole, of the fall in the price of colonial products, is admitted, on all hands, to be owing to the destruction of the monopoly system, and the vast extension of cultivation in Cuba, Brazil, Louisiana, Demerara, &c. Although, therefore, we do not deny that the falling off in the supply of bullion from the mines must have had some influence on prices, we hold it to be the greatest imaginable error to

ascribe to it the entire fall that has taken place since the peace. Were its effect rated at 10 per cent. we believe it would be very considerably overstated. — (See art. Precious Metals.)

On the whole, therefore, we are disposed to approve of the conduct of those who framed the act of 1819. That it added to the burdens of the industrious classes, and has been in so far hostile to the public interests, it seems impossible to doubt; but it has not done this in any thing like the degree which its enemies represent. The period, too, when it was passed, is now so distant, that the existing engagements amongst individuals have almost all been formed with reference to the altered value of the currency; so that whatever injury it may have occasioned in the first instance, must be nearly gone by. To modify or change the standard at this late period, would not be to repair injustice, but to commit it afresh. At the end of the war, the circumstances were considerably different. The standard had been really abandoned for the previous 18 years; and, perhaps, we may now say, that it would have been better, all things considered, had the mint price of bullion been raised, in 1815, to the market price. But having surmounted all the difficulties attendant upon the restoration of the old standard, and maintained it since 1821, it would be in the last degree impolitic to subject it to new alterations. Should the country become, at any future period, unable to make good its engagements, it will better consult its honour and its interest, by fairly compounding with its creditors, than by endeavouring to slip from its engagements by resorting to the dishonest expedient of enfeebling the standard.

The price of corn, which had been very much depressed in 1821 and 1822, rallied in 1823; and this circumstance contributed, along with others peculiar to that period, to promote an extraordinary rage for speculation. The issues of the country banks being in consequence far too much extended, the currency became redundant in the autumn of 1824; and the exchanges having been depressed, a drain for gold began to operate upon the Bank of England. But the directors of the Bank having entered, in the early part of that year, into an engagement with government to pay off such holders of 4 per cent. stock as might dissent from its conversion into a $3\frac{1}{2}$ per cent. stock, they were obliged to advance a considerable sum on this account after the depression of the exchange. This tended to counteract the effect of the drain on the Bank for gold; and, in consequence, the London currency was not very materially diminished till September, 1825. When, however, the continued demand of the public on the Bank for gold had rendered money scarce in the metropolis, the pressure speedily extended to the country. Such of the provincial banks — and they were a numerous class — as had been originally established without sufficient capital, or had conducted their business upon erroneous principles, began to give way the moment they experienced an increased difficulty of obtaining pecuniary accommodations in London. The alarm, once excited, soon became general; and confidence and credit were, for a while, almost wholly suspended. In the short space of 6 weeks, above 70 banking establishments were destroyed, notwithstanding the very large advances made to them by the Bank of England; and the run upon the Bank, for cash to supply the exigencies of the country banks, was so heavy, that she was well nigh drained of all the coin in her coffers, and obliged, as already remarked, to issue about a million of 1*l.* and 2*l.* notes.

In order to guard against a recurrence of the wide-spread mischief and ruin, produced by this and the previous bankruptcies of the country banks, it was resolved, in 1826, with consent of the Bank of England, to make a change in the law of 1708, limiting the number of partners in banking establishments to 6 only. And it was accordingly enacted, that thenceforth any number of partners might form themselves into associations, to carry on the business of banking, including the issue of notes, any where not within *sixty-five miles* of London. The directors of the Bank of England came, at the same time, to the resolution of establishing branches in some of the principal towns; and, at this moment, branch banks are established in Gloucester, Manchester, Birmingham, Leeds, Liverpool, Bristol, Exeter, Newcastle-upon-Tyne, Hull, Norwich, &c.

The branch banks cannot fail of being highly useful: but we believe that the benefit resulting from the formation of joint stock banks will not be nearly so great as has been anticipated. — (See *post*, Banks (English Provincial).) So long as every one is allowed to issue notes without any sort of check or control, a thousand devices may be fallen upon to insure a certain circulation to those that are most worthless. At best, this measure is but a feeble palliative of inveterate disorders. It is quite illusory to expect to make any real improvement upon the system of country banking in England, by the mere introduction of a plan for *allowing* banking establishments with large capitals to be set on foot. There have always been, and are at this moment, a great number of such establishments in England. What is really wanted, is the adoption of a system, that will exclude the possibility of notes being discredited, by *preventing* all individuals or associations from issuing such as have not been previously guaranteed.

Besides attempting to lessen the frequency of bankruptcy among the country banks, by repealing the law limiting the number of partners, it was further resolved, in 1826, to prohibit the future issue of 1*l.* notes. The policy and effects of this measure have given rise to much dispute. It seems clear, that it has gone far to shut up one of the most convenient channels by which the inferior class of country bankers contrived to get their notes into circulation, and must, in so far, do good. But there are many other channels still open to them; and to imagine that this measure will place the provincial currency on that solid basis on which it ought to be placed, is quite visionary. There were no notes under 5*l.* in circulation in 1792; and yet fully *one third* of the country banks then in existence became bankrupt! The truth is, as already stated, that it is not possible to guard against loss and fraud, from the proceedings of the country bankers, otherwise than by compelling them to give security for their issues; and, as security may as easily be given for 1*l.* notes as for those of 5*l.*, the suppression of the former does not appear to have been at all essential. No doubt can, however, be entertained, that the representations as to the extreme injury occasioned by the withdrawal of the 1*l.* notes have been very greatly exaggerated; — though it is at the same time obvious, that the means of the bankers to make advances, as well as the profit derived from making them, must both have been diminished by the suppression of the small notes; and it would be foolish to deny that this circumstance must have occasioned some loss and inconvenience to many individuals.

These remarks are meant to apply only to the case of the country banks. The extraordinary extent to which the forgery of the 1*l.* notes of the Bank of England was carried, affords, perhaps, a sufficient vindication of the policy of their suppression. But the comparatively limited circulation of the country banks, and, perhaps we may add, the greater attention paid to the manner in which their notes were engraved, hindered their forgery from becoming injuriously prevalent.

(2.) *Cash kept by the Bank. Regulation of her Issues.* — Of late, the Bank directors have endeavoured, as a general rule, to have *as much coin and bullion in their coffers as may together amount, when the exchange is at par, to a third part of the Bank's liabilities, including deposits as well as issues;* so that, in the event of the notes afloat, and the public and private deposits in the coffers of the Bank, amounting to 27,000,000*l.* or 30,000,000*l.*, they would not consider the establishment in a perfectly satisfactory state, unless she was, generally speaking, possessed of about 9,000,000*l.* or 10,000,000*l.* of coin and bullion. Such a supply seems to afford every requisite security; and now that the notes of the Bank are made legal tender, and that she must be less exposed than formerly to drains during panics, it may, probably, be found to be unnecessarily large.

The issues of the Bank are wholly governed, at least in all ordinary cases, by what Mr. Horsley Palmer expressively calls "the action of the public:" — that is, they are increased during a favourable exchange, or when bullion is sent to the Bank to be exchanged for notes, and diminished during an unfavourable exchange, or when notes are sent to the Bank to be paid. If the exchange were so favourable that the Bank was accumulating considerably more bullion than was equivalent to the third part of her liabilities, the directors would seem to be justified in adding to the currency by buying a larger amount of government securities, or by increasing their discounts, &c.; and conversely, if the exchange were so unfavourable as to depress the supply of coin and bullion considerably below the average proportion. But the most intelligent directors seem to think that this would be an undue interference; and, in all but extraordinary cases, the rule of the Bank is, to *allow the public to regulate the currency for itself through the action of the exchange.**

It is frequently said that the value of money, and, consequently, that the price of all sorts of property, depends on the fiat of the Bank, by which it is capriciously elevated at one time and depressed at another. But the account now given of the mode in which the issues of the Bank are regulated completely disproves such statements; and independently of this, every one who knows that the Bank must pay her notes in coin when presented, and that coin may be at all times obtained from the Mint, without any charge, in exchange for bullion, must know that the very supposition of their being true involves a contradiction.

(3.) *Bank of England in its Connexion with Government and the Public.* — The Bank of England conducts the whole banking business of the British government. "It acts not only," says Dr. Smith, "as an ordinary bank, but as a great engine of state. It receives and pays the greater part of the annuities, which are due to the creditors of the public; it circulates Exchequer bills; and it advances to government the annual

* Mr. Horsley Palmer's evidence before the late committee of the House of Commons on the Bank charter contains by far the best exposition ever given to the public, of the mode in which the business of the Bank of England is conducted. It is also highly deserving of attention, from its general ability, and the strong and steady light which it throws on the principles of banking and currency.

amount of the land and malt taxes, which are frequently not paid till some years thereafter."

(4.) *Advances by the Bank in Discounts, &c.* — The greater part of the paper of the Bank has generally been issued in the way of advances or loans to government, upon security of certain branches of the revenue, and in the purchase of Exchequer bills and bullion; but her issues through the medium of discounts to individuals have, notwithstanding, been at all times considerable, while, during war and in periods of distress, they have been occasionally very great. Generally speaking, however, the directors do not think it advisable to enter into competition with private bankers in the transacting of ordinary banking business, or in the discounting of mercantile paper. Mr. Horsley Palmer is decidedly of opinion, that all banking business, apart from the issue of notes, is better transacted by private bankers than by public bodies. — (*Min. of Evidence*, p. 37.) He also thinks, that were the Bank to come fairly into competition, at all times, with the private bankers and other individuals in discounting, it would be very apt to lead, every now and then, to an excess of the currency, and a fall of the exchange, producing fluctuations that could not fail to be most injurious. At present, therefore, and generally since the peace, the rate of interest charged by the Bank for loans has been somewhat above the market rate. The consequence is, that, in ordinary periods, very few applications are made to her for discounts. But, at the same time, every one who has any reasonable security to offer, knows where they may always be had; while the rate of interest charged by the Bank necessarily forms a *maximum* rate which no other establishment can exceed. When, however, any circumstances occur to occasion a pressure in the money market, or a difficulty of obtaining accommodations in the usual channels, the market rate of interest immediately rises to the rate fixed by the Bank; and on such occasions, the private bankers, and the public generally, resort to the Bank for aid. She then becomes, as it were, a *bank of support;* and has, as such, on many trying occasions, particularly in 1793, 1815 and 1816, and 1825–26, rendered the most essential service to public credit, and to the commercial interests of the country. The usual limited amount of the Bank's discounts does not, therefore, proceed, as has been absurdly enough stated, from any indisposition on the part of the directors to render every assistance in their power to the commercial classes, but is, in fact, the effect of such disposition. They consider, and we believe justly, that, except under peculiar circumstances, the business of discounting and banking is best conducted by private parties; and that, by abstaining from coming into competition with them, they are better able to act as a bank of support — that is, to sustain public and private credit by making extraordinary advances in seasons of distress and difficulty. This is not to neglect the interests of the mercantile classes, but to promote them in the best and most efficient manner, even though it should be at the expense of the Bank.

No. XIV. of the accounts subjoined to this article shows the average annual amount of commercial paper discounted by the Bank in London, from 1795 down to 1831. But the subjoined account will probably be deemed still more interesting, from its exhibiting in detail the variations in the discounts by the Bank during the 17 years ending with 1831. The sudden increase and immense amount of the discounts, in the last quarter of 1825 and the first quarter of 1826, show the vast importance of the assistance then rendered by the Bank to the trading interests. Had this assistance been withheld, or the Bank not been in a situation to render it, it is not easy to estimate the consequences.

Account of the Average Amount of Bills and Notes discounted by the Bank of England, in each Quarter of each of the Seventeen Years ending with 1831. — (*Appen. to Rep. on Bank Charter*, No. 56.)

Years.	1st Quarter, ending 31st of March.	2d Quarter, ending 30th of June.	3d Quarter, ending 30th of September.	4th Quarter, ending 31st of December.
	£	£	£	£
1815	13,611,500	13,846,500	16,613,200	15,717,300
1816	14,315,900	13,380,400	10,569,400	7,399,800
1817	5,823,500	4,148,300	3,329,300	2,541,200
1818	2,976,900	2,847,800	4,610,400	6,865,700
1819	8,363,700	6,632,300	6,021,600	5,042,200
1820	4,810,700	3,605,500	3,987,600	3,130,700
1821	3,238,300	2,715,100	2,294,100	2,459,300
1822	3,137,000	3,216,500	3,388,700	3,724,600
1823	4,107,200	3,252,200	2,801,400	2,334,200
1824	2,226,800	2,553,500	2,449,800	2,248,900
1825	2,466,800	3,973,700	5,486,000	7,839,500
1826	9,586,700	5,037,400	2,950,500	2,164,800
1827	2,198,600	1,226,400	1,107,500	1,239,800
1828	1,298,400	1,165,600	1,170,800	2,157,200
1829	3,952,900	3,283,700	2,611,800	2,152,700
1830	1,860,500	1,414,600	1,275,000	1,930,700
1831	2,549,200	3,240,200	3,422,500	3,771,500

The annual average loss by bad debts on the discounts of the Bank of England in London, from 1791 to 1831, both inclusive, has been 31,698*l.* — (*Appen. to Rep. on Bank Charter*, No. 60.)

(5.) *Advances by the Bank to Government.* — These are made on account of the produce of taxes not yet received, and on the security of Exchequer bills, &c. They varied, from 1792 down to 1810, from about 10,000,000*l.* to about 16,000,000*l.* During the remainder of the war, and down to 1820, they were a good deal larger; they were, at an average of each of the 7 years ending with that last mentioned, as follows: —

	£		£
1814 - - -	30,149,000	1818 - - -	28,061,000
1815 - - -	26,494,000	1819 - - -	24,636,975
1816 - - -	23,544,000	1820 - - -	21,915,825 *
1817 - - -	27,347,000		

But in these are included about 1,000,000*l.* a year paid to government out of the sums issued on account of the dividends, but not claimed. This can hardly be regarded as an advance by the Bank.

In 1819, provision was made for reducing the amount of these advances; and they do not at present, excluding the permanent advance on account of the dead weight, exceed a third of their amount in 1820. They are represented by the Exchequer bills and deficiency bills in the hands of the Bank; and the average amount of these in her possession during the 4 years ending with 1831, was as follows: —

	£		£
1828 - - -	9,367,630	1830 - - -	8,783,730
1829 - - -	8,664,020	1831 - - -	6,733,260

(*Appen. to Rep. on Bank Charter*, No. 64.)

(6.) *Balances of Public Money.* — In point of fact, however, a very large part of these advances has been nominal only, or has been virtually cancelled by the balances of public money in the hands of the Bank. Thus, from 1806 to 1810, both inclusive, the average advances to government amounted to 14,492,970*l.* But the average balance of public money in possession of the Bank during the same period amounted to about 11,000,000*l.*; so that the real advance was equal only to the difference between these two sums, or to about 3,500,000*l.* This statement completely negatives, as Mr. Tooke has justly stated, the supposition so commonly entertained and reasoned upon as a point beyond doubt, that the Bank was rendered, by the restriction, a mere engine in the hands of government for facilitating its financial operations. — (*First Letter to Lord Grenville*, p. 64.)

The Bank being enabled to employ the greater part of the balances of public money in her hands as capital, they have formed one of the main sources of the profit she has derived from her transactions with the public. This subject was brought very prominently forward in the Second Report of the Committee of the House of Commons on Public Expenditure in 1807. And it was agreed in the same year, that the Bank should, in consideration of the advantages derived from the public balances, continue the loan of 3,000,000*l.* made to government in 1800 for 6 years, without interest, on the same terms, till 6 months after the signature of a definitive treaty of peace. In 1816, this sum was finally incorporated with the debt due by government to the Bank, at an interest of 3 per cent. In 1818, the public balances had fallen to about 7,000,000*l.*; and they have been still further reduced, in consequence of measures that were then adopted. They amounted, at an average of the 3 years ending with 1831, to 4,157,570*l.* — (See Table XII.)

A part of the public balances is formed of the dividends payable at the Bank, but unclaimed. The balance arising from this source has sometimes amounted to above 1,000,000*l.*; but in 1808 and 1811, arrangements were made by which the balances growing out of this fund have been much reduced.

(7.) *Management of Public Debt.* — Previously to 1786, the Bank received an allowance on this account — that is, for trouble in paying the dividends, superintending the transfer of stock, &c. — of 562*l.* 10*s.* a million. In 1786, this allowance was reduced to 450*l.* a million, the Bank being, at the same time, entitled to a considerable allowance for her trouble in receiving contributions on loans, lotteries, &c. This, however, though long regarded as a very improvident arrangement on the part of the public, was acquiesced in till 1808, when the allowance on account of management was reduced to 340*l.* a million on 600,000,000*l.* of the public debt; and to 300*l.* a million on all that it exceeded that sum, exclusive of some separate allowances for annuities, &c. The impression, however, was still entertained, that the allowances for management should be further reduced; and the act 3 & 4 Will. 4. c. 98., for the renewal of the charter, has directed that 120,000*l.* a year shall be deducted from their amount. During the year ended the 5th of April, 1832, the Bank received 251,461*l.* for the management of

* These are the averages of the total advances on the 26th of February, and the 26th of August, each year.

the public debt, and annuities. This item may, therefore, be taken for the future at about 130,000*l.* a year.* — (*Report on Bank Charter, Appen.* p. 35.)

It should be observed, that the responsibility and expense incurred by the Bank in managing the public debt are very great. The temptation to the commission of fraud in transferring stock from one individual to another, and in the payment of the dividends, is well known; and notwithstanding the skilfully devised system of checks adopted by the Bank for its prevention, she has frequently sustained very great losses by forgery and otherwise. In 1803, the Bank lost, through a fraud committed by one of her principal cashiers, Mr. Astlett, no less than 340,000*l.*; and the forgeries of Fauntleroy the banker cost her a still larger sum! At an average of the 10 years ending with 1831, the Bank lost, through forgeries on the public funds, 40,204*l.* a year.† — (*Report on Bank Charter, Appen.* p. 165.)

The total sum paid by the public to the Bank on account of the loans raised, Exchequer bills funded, transfer of 3½ per cent. stock, &c. from 1793 to 1820, both included, amounted to 426,795*l.* 1*s* 11*d.* — (*Parl. Paper*, No. 81. Sess. 1822.)

(8.) *Dead Weight.* — Besides the transactions alluded to, the Bank entered, on the 20th of March, 1823, into an engagement with government with respect to the public pensions and annuities, or, as they have been more commonly termed, the *dead weight.* At the end of the war, the naval and military pensions, superannuated allowances, &c. amounted to above 5,000,000*l.* a year. They would, of course, have been gradually lessened and ultimately extinguished by the death of the parties. But it was resolved, in 1822, to attempt to spread the burden equally over the whole period of *forty-five* years, during which it was calculated the annuities would continue to decrease. To effect this purpose, it was supposed that, upon government offering to pay 2,800,000*l.* a year for 45 years, capitalists would be found who would undertake to pay the entire annuities, according to a graduated scale previously determined upon, making the first year a payment of 4,900,000*l.* and gradually decreasing the payments until the forty-fifth and last year, when they were to amount to only 300,000*l.* This supposition was not, however, realised. No capitalists were found willing to enter into such distant engagements. But in 1823 the Bank agreed, on condition of receiving an annuity of 585,740*l.* for *forty-four* years, commencing on the 5th of April, 1823, to pay, on account of the pensions, &c., at different specified periods, between the years 1823 and 1828, both inclusive, the sum of 13,089,419*l.* — (4 *Geo.* 4. c. 22.)

(9.) *Rate of Discount.* — The Bank discounted private bills at 5 per cent. during nearly the whole period from her establishment till 1824, when the rate was reduced to 4 per cent. In 1825, it was raised to 5 per cent.; but was again reduced to 4 per cent. in 1827, at which it continues. It may well be doubted, however, whether the rate of discount ought not to be more frequently varied, as occasion may require. When the currency happens, from any cause, to become redundant, its contraction, always a matter of some difficulty, is to be effected only by the sale of bullion or public securities by the Bank, or by a diminution of the usual discounts, or all. But were the Bank to throw any considerable amount of public securities upon the market, the circumstance would be apt to excite alarm; and, even though it did not, it would be difficult to dispose of them without a heavy loss. Hence, when a reduction is determined upon, it is most commonly effected partly by a contraction of discounts; and it is plain, that such con-

* See Table VI. for an account of the sums paid by the public to the Bank, for the management of the public debt during the year 1829.

† We subjoin an abstract of the principal provisions in the late statute with respect to the forgery of bank notes, powers of attorney, &c.

It is enacted, 1 Will. 4. c. 66., that if any person shall forge or alter, or shall offer, utter, dispose of, or put off, knowing the same to be forged or altered, any Exchequer bill or Exchequer debenture, or any indorsement on or assignation of any such bill or debenture, or any East India bond, or indorsement upon or assignation of the same, or any note or bill of the Bank of England, or a bank post bill, or any indorsement on or assignment of any bank note, bank bill of exchange, or bank post bill, with intent to defraud any person whatsoever, he shall be guilty of felony, and shall upon conviction suffer death as a felon. — § 3.

Persons making false entries in the books of the Bank of England, or other books in which accounts of public stocks or funds are kept, with intent to defraud, shall suffer death as felons. — § 5.

By the same act, the forging of any transfer of any share of, or interest in, or dividend upon, any public stock, or of a power of attorney to transfer the same, or to receive dividends thereon, is made capital. If any person, falsely personating the owner of any share, interest, or dividend of any of the public funds, thereby transfer such share, &c., and receive the money due to the lawful owner, he shall upon conviction suffer death as a felon. — § 6.

And any person *endeavouring* by such false personation to procure the transfer of any share, interest, &c. in the public funds, may, upon conviction, be transported beyond seas for life, or for any term not less than seven years, or be imprisoned for any term not more than four, nor less than two years.— § 7.

The forgery of the attestation to any power of attorney for the transfer of stock is to be punished by transportation for seven years, or by imprisonment for not more than two and not less than one year. — § 8.

Clerks or servants of the Bank of England knowingly making out or delivering any dividend warrant for a greater or less amount than the party in whose behalf such warrant is made out is entitled to, may, upon conviction, be transported beyond seas for the term of seven years, or imprisoned for not more than two nor less than one year. — § 9.

traction cannot be made except by rejecting altogether some of the bills sent in for discount, or, which is in effect the same thing, by shortening their dates, or by raising the rate of interest, so that fewer may be sent in. Of these methods, the last seems to be in every respect the most expedient. When bills are rejected for no other reason than that the currency may be contracted, the greatest injury is done to individuals, who, entertaining no doubt of getting their usual accommodations from the Bank, may have entered into transactions which they are thus deprived of the means of completing. Were the reduction made by raising the rate of interest, it would principally affect those who are *best able to bear it;* at the same time that its operation, instead of being, like the rejection of bills, arbitrary and capricious, would be uniform and impartial. It does, therefore, seem that the Bank should never throw out good bills that she may contract her issues; but that when she has resolved upon such a measure, she should, provided the contraction cannot be made by the sale of bullion and public securities, raise the rate of discount. The Bank could not, however, act in the way now suggested, until the usury laws were modified; but the act 3 & 4 Will. 4. cap. 98. has exempted all bills not having more than 3 months to run from their operation; and it is to be hoped that this serious inroad on these antiquated, unjust, and impolitic laws may be followed by their total repeal.

The dividends on Bank stock, from the establishment of the Company to the present time, have been as follows: —

Years.	Dividend.	Years.	Dividend.
1694	8 per cent.	Michaelmas - 1732	5½ per cent.
1697	9 —	Lady-day - - 1747	5 —
1708 }	Varied from 9 to	Ditto - - 1753	4½ —
1729 }	5½ per cent.	Michaelmas - 1764	5 —
Lady-day - - 1730	6 —	Ditto - - 1767	5½ —
Michaelmas - 1730	5½ —	Ditto - - - 1781	6 —
Lady-day - - 1731	6 —	Lady-day - - 1788	7 —
Michaelmas - 1731	5½ —	Ditto - - - 1807	10 —
Lady-day - - 1732	6 —	Ditto - - 1823	8 —

Previously to 1759, the Bank of England issued no notes for less than 20*l.* She began to issue 10*l.* notes in 1759; 5*l.* notes in 1793; and 1*l.* and 2*l.* notes in March, 1797. The issue of the latter ceased in 1821.

(10.) *Interest on Deposits.* — The Bank of England does not allow, either in London, or at her branches, any interest on deposits; but it would be exceedingly desirable if she could safely make some alteration in this respect. The want of the power readily to invest small sums productively, and, at the same time, with perfect security, tends to weaken the motives to save and accumulate. Nothing has contributed more to diffuse a spirit of economy, and a desire to save, amongst all classes of the population of Scotland, than the readiness with which deposits of small sums are received by banks of undoubted solidity in that part of the country, and the allowance of interest upon them. — (See Banks (Scotch).) This advantage is in some degree, indeed, secured in England, by the institution of savings banks. These, however, are but a very inadequate substitute. They are not open to all classes of depositors; and of those to whom they are open, no one can deposit more than 30*l.* in a year, and 150*l.* in all.—(See Banks (Savings).) But it is desirable that every facility should be given to safe and profitable investments. "Were the English banks, like the Scotch banks, to receive deposits of 10*l.* and upwards, and allow interest upon them at about 1 per cent. less than the market rate, they would confer an immense advantage upon the community, and open a source of profit to themselves. This is, in fact, a part of the proper business of a bank. A banker is a dealer in capital, an intermediate party between the borrower and the lender. He borrows of one party, and lends to another; and the difference between the terms at which he borrows and those at which he lends is the source of his profit. By this means, he draws into active operation those small sums of money which were previously unproductive in the hands of private individuals, and at the same time furnishes accommodation to another class, who have occasion for additional capital to carry on their commercial transactions." — (See *Gilbart's Practical Observations on Banking*, p. 52.)

In further corroboration of what has now been stated, it may be mentioned that it was estimated by a very well-informed witness (Sir J. G. Craig), before the Lords' Committee on Scotch and Irish Banking, in 1826, that the deposits in the Scotch banks, at that period, amounted to about 24,000,000*l.*, of which more than a half consisted of sums from 10*l.* to 200*l.*! This is a most satisfactory proof of the vast importance of the system. Perhaps it is not going too far to affirm, that but for the receiving of deposits by the banks, and the allowing of interest upon them, not one third of the sums under 200*l.*, and not one half of those above it, would ever have been accumulated.— (See Banks (Scotch).)

We are not, however, able to say whether the Bank of England could offer interest on deposits without having so large a sum forced upon her as might endanger her

stability. And it were better that the system should continue as at present, than that any risk of this sort should be incurred.

Since 1826, the private deposits in the hands of the Bank have nearly doubled. Their increase is mainly ascribable to the preceding panic, and the loss that was then occasioned by the failure of private banks.

The composition paid by the Bank at the rate of 3,500*l.* per million, as an equivalent for the stamp duty on her notes, amounts, at an average, to about 70,000*l.* a year.

(11.) *Method of conducting Business at the Bank.* — All accounts kept at the Bank with individuals are termed *drawing accounts;* those with whom they are opened being entitled to draw checks upon them, and to send the bills and drafts in their favour to be presented by the Bank, exactly as if they dealt with private bankers. There is no fixed sum with which an individual must open a drawing account; nor is there any fixed sum which the Bank requires him to keep at his credit to indemnify them for their trouble in answering his drafts, &c. Mr. Horsley Palmer gave in his evidence the following statement as to the facilities granted by the Bank in drawing accounts since 1825:—

1. The Bank receive dividends by power of attorney for all persons having drawing accounts at the Bank.
2. Dividend warrants are received at the Drawing-office for ditto.
3. Exchequer bills and other securities are received for ditto; the bills exchanged, the interest received, and the amount carried to their respective accounts.
4. Checks may be drawn for 5*l.* and upwards, instead of 10*l.* as heretofore.
5. Cash-boxes taken in, contents unknown, for such parties as keep accounts at the Bank.
6. Bank notes are paid at the counter, instead of drawing tickets for them on the pay clerks as heretofore.
7. Checks on city bankers paid in by three o'clock may be drawn for between four and five; and those paid in before four will be received and passed to account the same evening.
8. Checks paid in after four are sent out at nine o'clock the following morning, received and passed to account, and may be drawn for as soon as received.
9. Dividend warrants taken in at the Drawing-office until five in the afternoon, instead of three as heretofore.
10. Credits paid into account are received without the Bank book, and are afterwards entered therein without the party claiming them.
11. Bills of exchange accepted payable at the Bank are paid with or without advice; heretofore with advice only.
12. Notes of country bankers payable in London are sent out the same day for payment.
13. Checks are given out in books, and not in sheets as heretofore.

A person having a drawing account *may* have a *discount account;* but no person can have the latter without, at the same time, having the former. When a discount account is opened, the signatures of the parties are entered in a book kept for the purpose, and powers of attorney are granted, empowering the persons named in them to act for their principals. No bill of exchange drawn in the country is discounted by the Bank *in London* under 20*l.*, nor London *note* under 100*l.*, nor for a longer date, under existing regulations, than three months.

The number of holidays formerly kept at the Bank has recently been reduced about a half, in the view, as stated by the directors, of preventing the interruption of business. There are no holidays in the months of March, June, September, and December, excepting Christmas; Easter Monday and Tuesday are no longer kept.

We subjoin an account of the days for transferring stock, and when the dividends are due at the Bank, the South Sea House, and the East India House:—

Transfer Days at the Bank.	Dividends due.
Bank Stock. — Tues. Thurs. and Frid.	April 5. Oct. 10.
3 per Cent. Red. — Tues. Wed. Thurs. and Frid.	
3½ per Cent. 1818. — Tues. Thurs. and Frid.	
3 per Cent. 1726. — Tues. and Thurs.	Jan. 5. July 5.
3 per Cent. Cons. — Tues. Wed. Thurs. and Frid.	
3½ per Cent. Red. — Tues. Wed. Thurs. and Frid.	April 5. Oct. 10.
Long Annuit. to Jan. 1860. — Mond. Wed. and Sat.	
4 per Cent. 1826. — Mond. Wed. and Frid.	April 5. Oct. 10.
New 3½ per Cent. Annuit. — Tues. Wed. Thurs. and Frid.	Jan. 5.
New 5 per Cent. Annuit. — Tues. Wed. and Frid.	July 5.
Annuit. for Terms of Years, ending 10th of Oct. 1859, pursuant to 10 Geo. 4. — Tues. Thurs. and Sat.	April 5. Oct. 10.
Annuit. for Terms of Years, ending 5th of Jan. 1860, pursuant to 10 Geo. 4. — Tues. Thurs. and Sat.	Jan. 5. July 5.
Life Annuit., if transferred between Jan. 5. and April 4., or between July 5. and Oct. 9.	Jan. 5. July 5.
Life Annuit., if transferred between April 5. and July 4., or between Oct. 10. and Jan. 4.	April 5. Oct. 10.

At the South Sea House.	
3½ per Cents. — Mond. Wed. and Frid.	Jan. 5. July 5.
3 per Cent. Old Annuit. — Mond. Wed. and Frid.	April 5. Oct. 10.
3 per Cent. New Annuit. — Tues. Thurs. and Sat.	Jan. 5.
3 per Cent. 1751. — Tues. and Thurs.	July 5.

At the East India House.	
India Stock. — Tues. Thurs. and Sat.	Jan. July.
Interest on India Bonds, due	Mar. 31. Sept. 30.

Tickets for preparing transfer of stock must be given in at each office before one o'clock: at the East India House, before two o'clock. Private transfers may be made at other times than as above, the books not being shut, by paying, at the Bank and India House, 2*s.* 6*d.* extra for each transfer; at the South Sea House, 3*s.* 6*d.*

Transfer at the Bank must be made by half-past two o'clock: at the India House, by three: at the South Sea House, by two: on Saturday, by one.

Expense of transfer in Bank Stock, for 25*l.* and under, 9*s.*; above that sum, 12*s.*
India Stock, for 10*l.* ..... 1*l.* 10*s.* ..... 1*l.* 14*s.*
South Sea Stock, if under 100*l.*.....9*s.* 6*d.* ..... 12*s.*

Powers of attorney for the sale or transfer of stock to be left at the Bank, &c. for examination, one day before they can be acted upon; if for receiving dividends, present them at the time the first dividend is payable.

The expense of a power of attorney is 1*l.* 1*s.* 6*d.* for each stock; but for Bank, India, and South Sea stock, 1*l.* 11*s.* 6*d.* If wanted for the same day, half-past twelve o'clock is the latest time for receiving orders. The boxes for receiving powers of attorney for sale close at two.

Probates of wills, letters of administration, and other proofs of decease, must be left at the Bank, &c. for registration, from two or three clear days, exclusive of holidays.

Stock cannot be added to any account (whether single or joint) in which the decease of the individual, or one or more of a joint party, has taken place; and the decease to be proved as soon as practicable. Powers of attorney, in case of the death of a party or parties granting it, become void.

The unaltered possession of 500*l.* or upwards Bank stock, for six months clear, gives the proprietor a vote.

(12.) *Branch Banks of the Bank of England.* — The Bank of England, as already observed, has within these few years established branch banks at several of the most considerable towns throughout the country. The mode and terms of conducting business at these establishments have been described as follows: —

"The branch bank (of Swansea, and the same is true of those established in other places) is to be a secure place of deposit for persons having occasion to make use of a bank for that purpose; such persons are said to have *drawing accounts*: to facilitate to the mercantile and trading classes the obtaining discounts of good and unexceptionable bills, founded upon real transactions, two approved names being required upon every bill or note discounted; these are called *discount accounts*. The application of parties who desire to open discount accounts at the branch are forwarded every Saturday to the parent establishment for approval, and an answer is generally received in about ten days. When approved, good bills may be discounted at the branch without reference to London. Bills payable at Swansea, London, or any other place where a branch is established, are discounted under this regulation. The dividends on any of the public funds, which are payable at the Bank of England, may be received at the branch, by persons who have opened 'drawing accounts,' after signing powers of attorney for that purpose, which the branch will procure from London. No charge is made in this case, except the expense of the power of attorney and the postages. Purchases and sales of every description of government securities are effected by the branch at a charge of $\frac{1}{4}$ per cent., which includes brokerage in London, and all expenses of postage, &c. A charge of $\frac{1}{4}$ per cent. is also made on paying at the Bank of England, bills accepted by persons having drawing accounts at Swansea, such bills to be advised by the branch; also for granting letters of credit on London, or on the other branches. The branch grants bills on London, payable at 21 days' date, without acceptance, for sums of 10*l.* and upwards. Persons having drawing accounts at Swansea may order money to be paid at the Bank in London to their credit at this place, and *vice versâ*, without expense. The branch may be called upon to change any notes issued and *dated* at Swansea; but they do not change the notes of the Bank in London, nor receive them in payment, unless as a matter of courtesy where the parties are known. Bank post bills, which are accepted and due, are received at the branch from parties having drawing accounts, and taken to account without any charge for postage; but unaccepted Bank post bills, which must be sent to London, are subject to the charge of postage, and taken to account when due. No interest is allowed on deposits. No advance is made by the branch upon any description of landed or other property, nor is any account allowed to be overdrawn. The notes are the same as those issued by the parent establishment, except being dated Swansea, and made payable there and in London. No note issued exceeds the sum of 500*l.*, and none are for a less amount than 5*l.*"

(13.) *Act for the Renewal of the Charter.* — We subjoin a full abstract of the act 3 & 4 Will. 4. c. 98., continuing the charter, and regulating the exclusive privileges of the Bank of England.

The first section, after referring to the acts 39 & 40 Geo. 3. c. 28., and the 7 Geo. 4. c. 46., goes on to declare that it is expedient that certain exclusive privileges of banking be continued to the Governor and Company of the Bank of England, for the period, and upon the terms and conditions herein-after mentioned. — § 1.

No Banking Company of more than 6 Persons to issue Notes payable on Demand within London, or 65 Miles thereof. — That during the continuance of the said privilege, no body politic or corporate, and no society or company, or persons united or to be united in covenants or partnerships, exceeding 6 persons, shall make or issue in London, or within 65 miles thereof, any bill of exchange or promissory note, or engagement for the payment of money on demand, or upon which any person holding the same may obtain payment on demand: provided always, that nothing herein or in the said act of the 7 Geo. 4. c. 46. contained shall be construed to prevent any body politic or corporate, or any society or company, or incorporated company or corporation, or co-partnership, carrying on and transacting banking business at any greater distance than 65 miles from London, and not having any house of business or establishment as bankers in London, or within 65 miles thereof, (except as herein-after mentioned,) to make and issue their bills and notes, payable on demand or otherwise, at the place at which the same shall be issued, being more than 65 miles from London, and also in London, and to have an agent or agents in London, or at any other place at which such bills or notes shall be made payable, for the purpose of payment only, but no such bill or note shall be for any sum less than 5*l.*, or be re-issued in London, or within 65 miles thereof. — § 2.

Companies or Partnerships may carry on Banking in London, or within 65 *Miles thereof.* — And whereas the intention of this act is, that the Bank of England should, during the period stated in this act (subject nevertheless to such redemption as is described in this act), continue to hold and enjoy all the exclusive privileges of banking given by the act 39 & 40 Geo. 3. c. 28. as regulated by the act 7 Geo. 4. c. 46. or any prior or subsequent act or acts of parliament, but no other or further exclusive privilege of banking: and whereas doubts have arisen as to the construction of the said acts, and as to the extent of such exclusive privilege; and it is expedient that all such doubts should be removed, be it therefore declared and enacted, that any body politic or corporate, or society, or company, or partnership, although consisting of more than 6 persons, may carry on the trade or business of banking in London, or within 65 miles thereof, provided that such body politic or corporate, or society, or company, or partnership, do not borrow, owe, or take up in England any sum or sums of money on their bills or notes payable on demand, or at any less time than 6 months from the borrowing thereof, during the continuance of the privileges granted by this act to the said Governor and Company of the Bank of England. — § 3.

All Bank of England Notes payable on Demand issued out of London payable at the Place where issued, &c. — From and after the 1st of August, 1834, all promissory notes payable on demand of the Governor and Company of the Bank of England issued at any place in England out of London, where the trade and business of banking shall be carried on for and on behalf of the said Governor and Company, shall be made payable at the place where such promissory notes shall be issued; and it shall not be lawful for the said Governor and Company, or any committee, agent, cashier, officer, or servant of the same, to issue at any place out of London, any promissory note payable on demand not made payable at the place where the same shall be issued, any thing in the said act 7 Geo. 4. c. 46. to the contrary notwithstanding. — § 4.

Exclusive Privileges to end upon One Year's Notice at the end of 10 *Years after August,* 1834. — Upon one year's notice given within 6 months after the expiration of 10 years from the 1st of August, 1834, and upon repayment by parliament to the said Governor and Company, or their successors, of all principal money, interest, or annuities which may be due from the public to the said Governor and Company at the time of the expiration of such notice, as is herein-after stipulated and provided in the event of such notice being deferred until after the 1st of August, 1855, the exclusive privileges of banking granted by this act shall cease and determine at the expiration of such year's notice; and any vote or resolution of the House of Commons, signified by the Speaker of the said house in writing, and delivered at the public office of the said Governor and Company, or their successors, shall be deemed and adjudged to be a sufficient notice. — § 5.

Bank Notes to be a legal Tender, except at the Bank and Branch Banks. — From and after the 1st of August, 1834, unless and until parliament shall otherwise direct, a tender of a note or notes of the Governor and Company of the Bank of England, expressed to be payable to bearer on demand, shall be a legal tender, to the amount expressed in such note or notes, and shall be taken to be valid as a tender to such amount for all sums above 5*l.* on all occasions on which any tender of money may be legally made, so long as the Bank of England shall continue to pay on demand their said notes in legal coin: provided always, that no such note or notes shall be deemed a legal tender of payment by the Governor and Company of the Bank of England, or any branch bank of the said Governor and Company; but the said Governor and Company are not to become liable or be required to pay and satisfy, at any branch bank of the said Governor and Company, any note or notes of the said Governor and Company not made specially payable at such branch bank; but the said Governor and Company shall be liable to pay and satisfy at the Bank of England in London all notes of the said Governor and Company, or of any branch thereof. — § 6.

Bills not having more than 3 *Months to run, not subject to Usury Laws.* — No bill of exchange or promissory note made payable at or within 3 months after the date thereof, or not having more than 3 months to run, shall, by reason of any interest taken thereon or secured thereby, or any agreement to pay or receive or allow interest in discounting, negotiating or transferring the same, be void, nor shall the liability of any party to any bill of exchange or promissory note be affected by reason of any statute or law in force for the prevention of usury; nor shall any person or persons drawing, accepting, indorsing, or signing any such bill or note, or lending or advancing any money, or taking more than the present rate of legal interest in Great Britain and Ireland respectively for the loan of money on any such bill or note, be subject to any penalties under any statute or law relating to usury, or any other penalty or forfeiture; any thing in any law or statute relating to usury in any part of the United Kingdom to the contrary notwithstanding. — § 7.

Accounts of Bullion and of Notes in Circulation to be sent weekly to the Chancellor of the Exchequer. — An account of the amount of bullion and securities in the Bank of England belonging to the said Governor and Company, and of notes in circulation, and of deposits in the said Bank, shall be transmitted weekly to the Chancellor of the Exchequer for the time being, and such accounts shall be consolidated at the end of every month, and an average state of the Bank accounts of the preceding 3 months, made from such consolidated accounts as aforesaid, shall be published every month in the next succeeding London Gazette. — § 8.

Public to pay the Bank ¼ *Part of* 14,686,800*l.* — One fourth part of the debt of 14,686,800*l.*, now due from the public to the Governor and Company of the Bank of England, shall and may be repaid to the said Governor and Company. — § 9.

Capital Stock of the Bank may be reduced. — A general court of proprietors of the said Governor and Company of the Bank of England shall be held some time between the passing of this act and the 5th of October, 1834, to determine upon the propriety of dividing and appropriating the sum of 3,638,250*l.* out of or by means of the sum to be repaid to the said Governor and Company as before mentioned, or out of or by means of the fund to be provided for that purpose amongst the several persons, bodies politic or corporate, who may be proprietors of the capital stock of the said Governor and Company on the said 5th of October, 1834, and upon the manner and the time for making such division and appropriation, not inconsistent with the provisions for that purpose herein contained; and in case such general court, or any adjourned general court, shall determine that it will be proper to make such division, then, but not otherwise, the capital stock of the said Governor and Company shall be, and the same is hereby declared to be reduced from the sum of 14,553,000*l.*, of which the same now consists, to the sum of 10,914,750*l.*, making a reduction or difference of 3,638,250*l.* capital stock, and such reduction shall take place from and after the 5th of October, 1834; and thereupon, out of or by means of the sum to be repaid to the said Governor and Company as herein-before mentioned, or out of or by means of the fund to be provided for that purpose, the sum of 3,638,250*l.* sterling, or such proportion of the said fund as shall represent the same, shall be appropriated and divided amongst the several persons, bodies politic or corporate, who may be proprietors of the said sum of 14,553,000*l.* Bank stock on the said 5th of October, 1834, at the rate of 25*l.* sterling for every 100*l.* of Bank stock which such persons, bodies politic and corporate, may then be proprietors of, or shall have standing in their respective names in the books kept by the said Governor and Company for the entry and transfer of such stock, and so in proportion for a greater or lesser sum. — § 10.

Governor, Deputy, or Directors not to be disqualified by Reduction of their Share of the Capital Stock. — The reduction of the share of each proprietor in the capital stock of the said Governor and Company of the Bank of England, by the repayment of such ¼ part thereof, shall not disqualify the present governor, deputy governor, or directors, or any or either of them, or any governor, deputy governor, or director who may be chosen in the room of the present governor, deputy governor, or directors at any time before the general court of the said Governor and Company to be held between the 25th of March and the 25th of April, 1835: provided that at the said general court, and from and after the same, no governor, deputy governor, or director of the said corporation shall be capable of being chosen such governor, deputy

governor, or director, or shall continue in his or their respective offices, unless he or they respectively shall at the time of such choice have, and during such his respective office continue to have, in his and their respective name, in his and their own right, and for his and their own use, the respective sums or shares of and in the capital stock of the said corporation in and by the charter of the said Governor and Company prescribed as the qualification of governor, deputy governor, and directors respectively. — § 11.

Proprietors not to be disqualified. — Provided also, and be it enacted, that no proprietor shall be disqualified from attending and voting at any general court of the said Governor and Company to be held between the said 5th of October, 1834, and the 25th of April, 1835, in consequence of the share of such proprietor of the capital stock of the said Governor and Company having been reduced by such repayment as aforesaid below the sum of 500*l.* of the said capital stock; provided such proprietor had in his own name the full sum of 500*l.* of the said capital stock on the said 5th of October, 1834; nor shall any proprietor be required, between the said 5th of October, 1834, and the 25th of April, 1835, to take the oath of qualification in the said charter. — § 12.

Bank to deduct 120,000*l. from Sum allowed for Management of National Debt.* — From and after the 1st of August, 1834, the said Governor and Company, in consideration of the privileges of exclusive banking given by this act, shall, during the continuance of such privileges, but no longer, deduct from the sums now payable to them, for the charges of management of the public unredeemed debt, the annual sum of 120,000*l.*, any thing in any act or acts of parliament or agreement to the contrary notwithstanding: provided always, that such deduction shall in no respect prejudice or affect the right of the said Governor and Company to be paid for the management of the public debt at the rate and according to the terms provided by the act 48 Geo. 3. c. 4., intituled "An Act to authorize the advancing for the public Service, upon certain Conditions, a Proportion of the Balance remaining in the Bank of England for Payment of unclaimed Dividends, Annuities, and Lottery Prizes, and for regulating the Allowances to be made for the Management of the National Debt." — § 13.

Provisions of Act of 39 *&* 40 *Geo.* 3. *to remain in force, except as altered by this Act.* — All the powers, authorities, franchises, privileges, and advantages given or recognised by the said recited act of the 39 & 40 Geo. 3. c. 28. aforesaid, as belonging to or enjoyed by the Governor and Company of the Bank of England, or by any subsequent act or acts of parliament, shall be and the same are hereby declared to be in full force, and continued by this act, except so far as the same are altered by this act, subject nevertheless to such redemption upon the terms and conditions following; (that is to say,) that at any time, upon 12 months' notice to be given after the 1st of August, 1855, and upon repayment by parliament to the said Governor and Company, or their successors, of the sum of 11,015,100*l.*, being the debt which will remain due from the public to the said Governor and Company after the payment of the ¼ of the debt of 14,686,804*l.* as herein-before provided, without any deduction, discount, or abatement whatsoever, and upon payment to the said Governor and Company and their successors of all arrears of the sum of 100,000*l.* per annum in the said act of 39 & 40 Geo. 3. aforesaid mentioned, together with the interest or annuities payable upon the said debt or in respect thereof, and also upon repayment of all the principal and interest which shall be owing unto the said Governor and Company and their successors upon all such tallies, exchequer orders, exchequer bills, or parliamentary funds which the said Governor and Company, or their successors, shall have remaining in their hands or be entitled to at the time of such notice to be given as last aforesaid, then and in such case, and not till then, (unless under the proviso herein-before contained,) the said exclusive privileges of banking granted by this act shall cease and determine at the expiration of such notice of 12 months. — § 14.

Tables exhibiting a View of the Circulation, Deposits, Profits, &c. of the Bank of England.

No. I.—A Return of the Number of Persons convicted of Forgery, or passing forged Notes and Post Bills of the Bank of England, in each Year, from 1791 to 1829, inclusive.

Years.	Capital Convictions.	Convictions for having forged Bank Notes in Possession.	Total Number of Convictions each Year.	Years.	Capital Convictions.	Convictions for having forged Bank Notes in Possession.	Total Number of Convictions each Year.
1791—1796	nil.	nil.	nil.	1813	9	49	58
1797	1	- -	1	1814	5	39	44
1798	11	- -	11	1815	8	51	59
1799	12	- -	12	1816	20	84	104
1800	29	- -	29	1817	33	95	128
1801	32	1	33	1818	62	165	227
1802	32	12	44	1819	33	160	193
1803	7	1	8	1820	77	275	352
1804	13	8	21	1821	41	93	134
1805	10	14	24	1822	16	- -	16
1806	nil.	9	9	1823	6	- -	6
1807	16	24	40	1824	5	- -	5
1808	9	23	32	1825	2	- -	2
1809	23	29	52	1826	18	4	22
1810	10	16	26	1827	24	- -	24
1811	5	19	24	1828	10	- -	10
1812	26	26	52	1829	13	1	14

The Bank of England does not possess the means of stating or distinguishing the punishments inflicted for the said crimes.

No. II. — A Return of the Number of Persons convicted of Forgery on the Bank of England connected with the Public Funds, Bills of Exchange, or otherwise, except Bank Notes, &c., in each Year, from 1791 to 1829, inclusive.

Convictions.		Convictions.		Convictions.		Convictions.	
1790	1	1800	1	1810	nil.	1820, 1821	nil.
1791	nil.	1801	nil.	1811	2	1822	1
1792	2	1802	1	1812	nil.	1823	nil.
1793, 1794, 1795	nil.	1803	1	1813	2	1824	1
1796	2	1804	1	1814	1	1825, 1826, 1827	nil.
1797	nil.	1805	1	1815	nil.	1828	
1798	3	1806	nil.	1816	2	1829	2
1799	nil.	1807	1	1817	3		
		1808	nil.	1818, 1819	nil.		
		1809	1				

The Bank of England does not possess the means of stating or distinguishing the punishments inflicted for the said crimes. — (20th of May, 1830.

No. III.—An Account of the Average Market Price of Bullion in each Year, from 1800 to 1821 (taken from official Documents), of the Average Value per Cent. of the Currency, estimated by the Market Price of Gold for the same Period, and of the Average Depreciation per Cent.

Years.	Average Price of Gold per oz.	Average per Cent. of the Value of the Currency.	Average Depreciation per Cent.	Years.	Average Price of Gold per oz.	Average perCent. of the Value of the Currency.	Average Depreciation per Cent.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.
1800	3 17 10½	100 0 0	Nil.	1811	4 4 6	92 3 2	7 16 10
1801	4 5 0	91 12 4	8 7 8	1812	4 15 6	79 5 3	20 14 9
1802	4 4 0	92 14 2	7 5 10	1813	5 1 0	77 2 0	22 18 0
1803	4 0 0	97 6 10	2 13 2	1814	5 4 0	74 17 6	25 2 6
1804	4 0 0	97 6 10	2 13 2	1815	4 13 6	83 5 9	16 14 3
1805	4 0 0	97 6 10	2 13 2	1816	4 13 6	83 5 9	16 14 3
1806	4 0 0	97 6 10	2 13 2	1817	4 0 0	97 6 10	2 13 2
1807	4 0 0	97 6 10	2 13 2	1818	4 0 0	97 6 10	2 13 2
1808	4 0 0	97 6 10	2 13 2	1819	4 1 6	95 11 0	4 9 0
1809	4 0 0	97 6 10	2 13 2	1820	3 19 11	97 8 0	2 12 0
1810	4 10 0	86 10 6	13 9 6	1821	3 17 10½	100 0 0	Nil.

No. IV.—Account of the Debts and Assets (exclusive of the Bank Capital) of the Bank of England; exhibiting, on the one hand, the Amount of Bank Notes, Post Bills, &c. in Circulation, and of the public and private Deposits in the Hands of the Bank; and, on the other, the Amount of the various public and private Securities, and of the Bullion held by the Bank, on the 31st of August, in each Year, from 1778 to 1831 inclusive.—(From the *Appendix, No. 5. of Report on Bank Charter.*)

31 August, 1778.	£	31 August, 1778.	£	£
Circulation - -	6,758,070	Securities - { Public -	6,540,433 }	9,627,970
Deposits - -	4,715,580	{ Private -	3,087,537 }	
	11,473,650	Bullion - - - -		3,128,420
		- - - Rest, 1,282,740*l.*		12,756,390
31 August, 1779.		31 August, 1779.		
Circulation - -	7,276,540	Securities - { Public -	7,493,649 }	9,849,840
Deposits - -	5,201,040	{ Private -	2,356,191 }	
	12,477,580	Bullion - - - -		3,983,300
		- - - Rest, 1,355,560*l.*		13,833,140
31 August, 1780.		31 August, 1780.		
Circulation - -	6,341,600	Securities - { Public -	6,740,514 }	10,345,540
Deposits - -	6,655,800	{ Private -	3,605,026 }	
	12,997,400	Bullion - - - -		4,179,370
		- - - Rest, 1,527,510*l.*		14,524,910
31 August, 1781.		31 August, 1781.		
Circulation - -	6,309,430	Securities - { Public -	6,609,457 }	11,110,510
Deposits - -	5,921,630	{ Private -	4,501,053 }	
	12,231,060	Bullion - - - -		2,862,590
		- - - Rest, 1,742,040*l.*		13,973,100
31 August, 1782.		31 August, 1782.		
Circulation - -	6,759,310	Securities - { Public -	8,987,573 }	13,483,790
Deposits - -	6,759,450	{ Private -	4,496,217 }	
	13,518,760	Bullion - - - -		1,956,550
		- - - Rest, 1,921,580*l.*		15,440,340
30 August, 1783.		30 August, 1783.		
Circulation - -	6,307,270	Securities - { Public -	9,566,037 }	13,841,800
Deposits - -	6,105,650	{ Private -	4,275,763 }	
	12,412,920	Bullion - - - -		590,080
		- - - Rest, 2,018,960*l.*		14,431,880
31 August, 1784.		31 August, 1784.		
Circulation - -	5,592,510	Securities - { Public -	8,435,777 }	12,524,380
Deposits - -	6,267,130	{ Private -	4,088,603 }	
	11,859,640	Bullion - - - -		1,539,830
		- - - Rest, 2,204,570*l.*		14,064,210
31 August, 1785.		31 August, 1785.		
Circulation - -	6,570,650	Securities - { Public -	6,725,891 }	9,944,570
Deposits - -	6,252,030	{ Private -	3,218,679 }	
	12,822,680	Bullion - - - -		5,487,040
		- - - Rest, 2,608,930*l.*		15,431,610
31 August, 1786.		31 August, 1786.		
Circulation - -	8,184,330	Securities - { Public -	7,988,241 }	10,378,780
Deposits - -	5,867,240	{ Private -	2,390,539 }	
	14,051,570	Bullion - - - -		6,311,050
		- - - Rest, 2,638,260*l.*		16,689,830

Amount of Notes in Circulation, and Deposits, and Securities held by the Bank — *continued.*

31 August, 1787.	£	31 August, 1787.	£	£
Circulation - -	9,685,720	Securities - { Public -	8,066,303 }	11,853,660
Deposits - -	5,631,540	{ Private -	3,787,357 }	
	15,317,260	Bullion - - - -		6,293,000
		- - - Rest, 2,829,400*l.*		18,146,660
30 August, 1788.		30 August, 1788.		
Circulation - -	10,002,880	Securities - { Public -	8,840,068 }	11,570,320
Deposits - -	5,528,640	{ Private -	2,730,252 }	
	15,531,520	Bullion - - - -		6,899,160
		- - - Rest, 2,937,960*l.*		18,469,480
31 August, 1789		31 August, 1789.		
Circulation - -	11,121,800	Securities - { Public -	9,661,859 }	11,697,760
Deposits - -	6,402,450	{ Private -	2,035,901 }	
	17,524,250	Bullion - - - -		8,645,860
		- - - Rest, 2,819,370*l.*		20,343,620
31 August, 1790.		31 August, 1790.		
Circulation - -	11,433,340	Securities - { Public -	10,047,257 }	12,003,520
Deposits - -	6,199,200	{ Private -	1,956,263 }	
	17,632,540	Bullion - - - -		8,386,330
		- - - Rest, 2,757,310*l.*		20,389,850
31 August, 1791.		31 August, 1791.		
Circulation - -	11,672,320	Securities - { Public -	10,921,300 }	12,819,940
Deposits - -	6,437,730	{ Private -	1,898,640 }	
	18,110,050	Bullion - - - -		8,055,510
		- - - Rest, 2,765,400*l.*		20,875,450
31 August, 1792.		31 August, 1792.		
Circulation - -	11,006,300	Securities - { Public -	10,715,041 }	13,905,910
Deposits - -	5,526,480	{ Private -	3,190,869 }	
	16,532,780	Bullion - - - -		5,357,380
		- - - Rest, 2,730,510*l.*		19,263,290
31 August, 1793.		31 August, 1793.		
Circulation - -	10,865,050	Securities - { Public -	10,381,838 }	14,809,680
Deposits - -	6,442,810	{ Private -	4,427,842 }	
	17,307,860	Bullion - - - -		5,322,010
		- - - Rest, 2,823,830*l.*		20,131,690
30 August, 1794.		30 August, 1794.		
Circulation - -	10,286,780	Securities - { Public -	8,863,048 }	12,446,460
Deposits - -	5,935,710	{ Private -	3,583,412 }	
	16,222,490	Bullion - - - -		6,770,110
		- - - Rest, 2,994,080*l.*		19,216,570
31 August, 1795.		31 August, 1795.		
Circulation - -	10,862,200	Securities - { Public -	13,250,904 }	16,989,920
Deposits - -	8,154,980	{ Private -	3,739,016 }	
	19,017,180	Bullion - - - -		5,136,350
		- - - Rest, 3,109,090*l.*		22,126,270
31 August, 1796.		31 August, 1796.		
Circulation - -	9,246,790	Securities - { Public -	10,875,347 }	17,025,470
Deposits - -	6,656,320	{ Private -	6,150,123 }	
	15,903,110	Bullion - - - -		2,122,950
		- - - Rest, 3,245,310*l.*		19,148,420
31 August, 1797.		31 August, 1797.		
Circulation - -	11,114,120	Securities - { Public -	8,765,224 }	18,261,170
Deposits - -	7,765,350	{ Private -	9,495,946 }	
	18,879,470	Bullion - - - -		4,089,620
		- - - Rest, 3,471,320*l.*		22,350,790
31 August, 1798.		31 August, 1798.		
Circulation - -	12,180,610	Securities - { Public -	10,930,038 }	17,349,640
Deposits - -	8,300,720	{ Private -	6,419,602 }	
	20,481,330	Bullion - - - -		6,546,100
		- - - Rest, 3,414,410*l.*		23,895,740
31 August, 1799.		31 August, 1799.		
Circulation - -	13,389,490	Securities - { Public -	9,452,955 }	16,930,440
Deposits - -	7,642,240	{ Private -	7,477,485 }	
	21,031,730	Bullion - - - -		7,000,780
		- - - Rest, 2,899,490*l.*		23,931,220

Amount of Notes in Circulation, and Deposits, and Securities held by the Bank — *continued.*

30 August, 1800.	£	30 August, 1800.	£	£
Circulation - -	15,047,180	Securities - { Public -	13,586,590 }	22,138,420
Deposits - -	8,335,060	{ Private -	8,551,830 }	
		Bullion - - - -		5,150,450
	23,382,240	- - - Rest, 3,906,630*l.*		27,288,870
31 August, 1801.		31 August, 1801.		
Circulation - -	14,556,110	Securities - { Public -	11,926,873 }	22,209,570
Deposits - -	8,133,830	{ Private -	10,282,697 }	
		Bullion - - - -		4,335,260
	22,689,940	- - - Rest, 3,854,890*l.*		26,544,830
31 August, 1802.		31 August, 1802.		
Circulation - -	17,097,630	Securities - { Public -	13,528,599 }	27,113,360
Deposits - -	9,739,140	{ Private -	13,584,761 }	
		Bullion - - - -		3,891,780
	26,836,770	- - - Rest, 4,168,370*l.*		31,005,140
31 August, 1803.		31 August, 1803.		
Circulation - -	15,983,330	Securities - { Public -	13,336,179 }	26,918,840
Deposits - -	9,817,240	{ Private -	13,582,661 }	
		Bullion - - - -		3,592,500
	25,800,570	- - - Rest, 4,710,770*l.*		30,511,340
31 August, 1804.		31 August, 1804.		
Circulation - -	17,153,890	Securities - { Public -	14,993,395 }	25,826,680
Deposits - -	9,715,530	{ Private -	10,833,285 }	
		Bullion - - - -		5,879,190
	26,869,420	- - - Rest, 4,836,450*l.*		31,705,870
31 August, 1805.		31 August, 1805.		
Circulation - -	16,388,400	Securities - { Public -	11,413,266 }	27,772,850
Deposits - -	14,048,080	{ Private -	16,359,584 }	
		Bullion - - - -		7,624,500
	30,436,480	- - - Rest, 4,960,870*l.*		35,397,350
31 August, 1806.		31 August, 1806.		
Circulation - -	21,027,470	Securities - { Public -	14,167,772 }	29,473,100
Deposits - -	9,636,330	{ Private -	15,305,328 }	
		Bullion - - - -		6,215,020
	30,663,800	- - - Rest, 5,024,320*l.*		35,688,120
31 August, 1807.		31 August, 1807.		
Circulation - -	19,678,360	Securities - { Public -	13,410,055 }	29,936,950
Deposits - -	11,789,200	{ Private -	16,526,895 }	
		Bullion - - - -		6,484,350
	31,467,560	- - - Rest, 4,953,740*l.*		36,421,300
31 August, 1808.		31 August, 1808.		
Circulation - -	17,111,290	Securities - { Public -	14,956,394 }	29,244,090
Deposits - -	13,012,510	{ Private -	14,287,696 }	
		Bullion - - - -		6,015,940
	30,123,800	- - - Rest, 5,136,230*l.*		35,260,030
31 August, 1809.		31 August, 1809.		
Circulation - -	19,574,180	Securities - { Public -	15,307,673 }	33,435,270
Deposits - -	12,257,180	{ Private -	18,127,597 }	
		Bullion - - - -		3,652,480
	31,831,360	- - - Rest, 5,256,390*l.*		37,087,750
31 August, 1810.		31 August, 1810.		
Circulation - -	24,793,990	Securities - { Public -	17,198,677 }	40,973,770
Deposits - -	13,617,520	{ Private -	23,775,093 }	
		Bullion - - - -		3,191,850
	38,411,510	- - - Rest, 5,754,110*l.*		44,165,620
31 August, 1811.		31 August, 1811		
Circulation -	23,286,850	Securities - { Public -	21,884,248 }	37,083,280
Deposits - -	11,075,660	{ Private -	15,199,032 }	
		Bullion - - - -		3,243,300
	34,362,510	- - - Rest, 5,964,070*l.*		40,326,580
31 August, 1812.		31 August, 1812.		
Circulation - -	23,026,880	Securities - { Public -	21,165,190 }	38,176,120
Deposits - -	11,848,910	{ Private -	17,010,930 }	
		Bullion - - - -		3,099,270
	34,875,790	- - - Rest, 6,399,600*l.*		41,275,390

Amount of Notes in Circulation, and Deposits, and Securities held by the Bank — *continued.*

31 August, 1813.	£	31 August, 1813.	£	£
Circulation - -	24,828,120	Securities - { Public - 25,591,336 / Private - 14,514,744 }		40,106,080
Deposits - -	11,159,730	Bullion - - - -		2,712,270
	35,987,850	- - - Rest, 6,830,500*l.*		42,818,350
31 August, 1814.		31 August, 1814.		
Circulation - -	28,368,290	Securities - { Public - 34,982,485 / Private - 13,363,475 }		48,345,960
Deposits - -	14,849,940	Bullion - - - -		2,097,680
	43,218,230	- - - Rest, 7,225,410*l.*		50,443,640
31 August, 1815.		31 August, 1815.		
Circulation - -	27,248,670	Securities - { Public - 24,194,086 / Private - 20,660,094 }		44,854,180
Deposits - -	12,696,000	Bullion - - - -		3,409,040
	39,944,670	- - - Rest, 8,318,550*l.*		48,263,220
31 August, 1816.		31 August, 1816.		
Circulation - -	26,758,720	Securities - { Public - 26,097,431 / Private - 11,182,109 }		37,279,540
Deposits - -	11,856,380	Bullion - - - -		7,562,780
	38,615,100	- - - Rest, 6,227,220*l.*		44,842,320
30 August, 1817.		30 August, 1817.		
Circulation - -	29,543,780	Securities - { Public - 27,098,238 / Private - 5,507,392 }		32,605,630
Deposits - -	9,084,590	Bullion - - - -		11,668,260
	38,628,370	- - - Rest, 5,645,530*l.*		44,273,890
31 August, 1818.		31 August, 1818.		
Circulation - -	26,202,150	Securities - { Public - 27,257,012 / Private - 5,113,748 }		32,370,760
Deposits - -	7,927,730	Bullion - - - -		6,363,160
	34,129,880	- - - Rest, 4,604,040*l.*		38,733,920
31 August, 1819.		31 August, 1819.		
Circulation - -	25,252,690	Securities - { Public - 25,419,148 / Private - 6,321,402 }		31,740,550
Deposits - -	6,304,160	Bullion - - - -		3,595,360
	31,556,850	- - - Rest, 3,779,060*l.*		35,335,910
31 August, 1820.		31 August, 1820.		
Circulation - -	24,299,340	Securities - { Public - 19,173,997 / Private - 4,672,123 }		23,846,120
Deposits - -	4,420,910	Bullion - - - -		8,211,080
	28,720,250	- - - Rest, 3,336,950*l.*		32,057,200
31 August, 1821.		31 August, 1821.		
Circulation - -	20,295,300	Securities - { Public - 15,752,953 / Private - 2,722,587 }		18,475,540
Deposits - -	5,818,450	Bullion - - - -		11,233,590
	26,113,750	- - - Rest, 3,595,380*l.*		29,709,130
31 August, 1822.		31 August, 1822.		
Circulation - -	17,464,790	Securities - { Public - 13,668,359 / Private - 3,622,151 }		17,290,510
Deposits - -	6,399,440	Bullion - - - -		10,097,960
	23,864,230	- - - Rest, 3,524,240*l.*		27,388,470
30 August, 1823.		30 August, 1823.		
Circulation - -	19,231,240	Securities - { Public - 11,842,677 / Private - 5,624,693 }		17,467,370
Deposits - -	7,827,350	Bullion - - - -		12,658,240
	27,058,590	- - - Rest, 3,067,020*l.*		30,125,610
31 August, 1824.		31 August, 1824.		
Circulation - -	20,132,120	Securities - { Public - 14,649,187 / Private - 6,255,343 }		20,904,530
Deposits - -	9,679,810	Bullion - - - -		11,787,430
	29,811,930	- - - Rest, 2,880,030*l.*		32,691,960
31 August, 1825.		31 August, 1825.		
Circulation - -	19,398,840	Securities - { Public - 17,414,566 / Private - 7,691,464 }		25,106,030
Deposits - -	6,410,560	Bullion - - - -		3,634,320
	25,809,400	- - - Rest, 2,930,950*l.*		28,740,350

Amount of Notes in Circulation, and Deposits, and Securities held by the Bank—*continued.*

	£			£	£
31 August, 1826.			31 August, 1826.		
Circulation - -	21,563,560	Securities -	Public -	17,713,881	25,083,630
Deposits - -	7,199,860		Private -	7,369,749	
	28,763,420	Bullion - - - -			6,754,230
		- - - Rest, 3,074,440*l.*			31,837,860
31 August, 1827.			31 August, 1827.		
Circulation - -	22,747,600	Securities -	Public -	19,809,595	23,199,320
Deposits - -	8,052,090		Private -	3,389,725	
	30,799,690	Bullion - - - -			10,463,770
		- - - Rest, 2,863,400*l.*			33,663,090
30 August, 1828.			30 August, 1828.		
Circulation - -	21,357,510	Securities -	Public -	20,682,776	23,905,530
Deposits - -	10,201,280		Private -	3,222,754	
	31,558,790	Bullion - - - -			10,498,880
		- - - Rest, 2,845,620*l.*			34,404,410
31 August, 1829.			31 August, 1829.		
Circulation - -	19,547,380	Securities -	Public -	20,072,440	24,661,810
Deposits - -	9,035,070		Private -	4,589,370	
	28,582,450	Bullion - - - -			6,795,530
		- - - Rest, 2,874,890*l.*			31,457,340
30 August, 1830.			30 August, 1830.		
Circulation - -	21,464,700	Securities -	Public -	20,911,616	24,565,690
Deposits - -	11,620,840		Private -	3,654,074	
	33,085,540	Bullion - - - -			11,150,480
		- - - Rest, 2,630,630*l.*			35,716,170
31 August, 1831.			31 August, 1831.		
Circulation - -	18,538,630	Securities -	Public -	18,056,552	23,905,030
Deposits - -	9,069,310		Private -	5,848,478	
	27,607,940	Bullion - - - -			6,439,760
		- - - Rest, 2,736,850*l.*			30,344,790

No. V.—An Account of the total Amount of Outstanding Demands on the Bank of England, and likewise the Funds for discharging the same; 30th of January, 1819.

Dr. - - The Bank, - -		30th January, 1819. - -	Cr.
	£		£
To Bank notes out - -	26,094,430	By advances on government securities; viz.	
To other debts; viz.		On Exchequer bills, on malt, &c. 1818 - - -	
Drawing accounts - -		Bank loan, 1808 - - -	
Audit roll - - -	7,800,150	Supply, 1816, at 4*l.* per cent. -	
Exchequer bills deposited -		Growing produce of the consolidated fund to 5th of April, 1819, and interest due, and loans to government on unclaimed dividends - -	8,438,660
And various other debts -			
	33,894,580	By all other credits, viz.	
Balance of surplus in favour of the Bank of England, exclusive of the debt from government, at 8*l.* per cent. £11,686,800		Cash and bullion - -	
		Exchequer bills purchased, and interest - - -	
And the advance to government, per 56 Geo. 3. cap. 96. at 3*l.* per cent. £3,000,000	5,202,320	Bills and notes discounted -	30,658,240
		Treasury bills for the service of Ireland - - -	
		Money lent, and various other articles - - -	
	£ 39,096,900		£ 39,096,900
		By the permanent debt due from government, for the capital of the Bank, at 3*l.* per cent. per annum - - - -	£ 11,686,800
		By the advance to government, per act 56 Geo. 3. cap. 96. at 3*l.* per cent. per annum -	£ 3,000,000

Bank of England,
22d of February, 1819.

William Dawes,
Accountant General.

No. VI. — An Account of Money paid or payable at the Bank of England, for the Management of the Public Debt, in the Year 1829, together with an Account of all the Allowances made by the Public to the Bank, or charged by the Bank against the Public, for transacting any Public Service in the Year 1829; describing the Nature of the Service, and the Amount charged thereon in the said Year, and including any Sum under the Denomination of House-money, or House Expenses; and also, any Sum under the Denomination of Charges of Management on South Sea Stock, and stating the aggregate Amount of the whole.

Denomination of Payments.	Amount. £	s.	d.
Charge for management of the unredeemed public debt for one year, ending the 5th of April, 1830, being the annual period at which the accounts are made up, as directed by the act 48 Geo. 3. c. 4.	248,417	17	2¾
Ditto, ditto, for one year ending ditto, on sundry annuities, transferred to the Commissioners for the Reduction of the National Debt, for the purchase of life annuities per act 48 Geo. 3. and subsequent acts	2,922	11	9
Charges of management, being part of an entire yearly fund of 100,000*l.* enjoyed by the Governor and Company of the Bank of England, originally by the act of the 5th and 6th of William and Mary, c. 20., confirmed to the said Governor and Company by several subsequent acts, and lastly by the Act of the 39th and 40th Geo. 3. c. 28., as per Return made to the Honourable House of Commons, on the 21st of June, 1816	4,000	0	0
Ditto, ditto, on 4,000,000*l.* South Sea stock, purchased by the Governor and Company of the Bank of England of the South Sea Company, and transferred by them to the said Governor and Company, in pursuance of the act of the 8th Geo. 1. c. 21., and which charges of management were assigned by the said South Sea Company to the said Governor and Company, out of a sum of 8,397*l.* 9*s.* 6*d.* per annum then paid by the public to the said South Sea Company for charges of management on their funds, as per Return made to the Honourable House of Commons, on the 21st of June, 1816	1,898	3	5
	£257,238	12	4¼

Bank of England, 11th of March, 1830. T. Rippon, Chief Cashier.

No. VII. — The following is an Account of all Distributions made by the Bank of England amongst the Proprietors of Bank Stock, whether by Money Payments, Transfer of 5 per Cent. Annuities, or otherwise, under the Heads of Bonus, Increase of Dividend, and Increase of Capital, betwixt the 25th of February, 1797, and 31st of March, 1832, in addition to the ordinary Annual Dividend of 7 per Cent. on the Capital Stock of that Corporation, existing in 1797, including therein the whole Dividend paid since June, 1816, on their increased Capital; stating the Period when such Distributions were made, and the aggregate Amount of the whole. — (*Appen. No.* 29.)

Denomination and Periods of Distribution.	Amount. £
In June, 1799: 10*l.* per cent. bonus in 5 per cents. 1797, on 11,642,400*l.*, is	1,164,240
May, 1801: 5*l.* per cent. ditto, in Navy 5 per cents. ditto	582,120
November, 1802: 2*l.* 10*s.* per cent. ditto, ditto, ditto	291,060
October, 1804: 5*l.* per cent. ditto, cash, ditto	582,120
October, 1805: 5*l.* per cent. ditto, ditto, ditto	582,120
October, 1806: 5*l.* per cent. ditto, ditto, ditto	582,120
From April, 1807, to Oct. 1822, both inclusive — Increase of dividends at the rate of 3*l.* per cent. per annum on 11,642,400*l.*, is, 16 years	5,588,352
From April, 1823, to Oct. 1829, both inclusive — Increase of dividend at the rate of 1*l.* per cent. per annum on 11,642,400*l.*, is, 7 years	814,968
In June, 1816 — Increase of capital at 25 per cent., is	2,910,600
From Oct. 1816, to Oct. 1822, both inclusive — Dividend at the rate of 10*l.* per cent. per annum on 2,910,600*l.*, increased capital, is, 6⅓ years	1,891,890
From April, 1823, to Oct. 1831, both inclusive — Dividend at the rate of 8*l.* per cent. per annum on 2,910,600*l.* increased capital, is, 9 years	2,095,632
Aggregate amount of the whole	£17,318,070
Annual dividend payable on Bank stock in 1797, on a capital of 11,642,400*l.* at the rate of 7*l.* per cent. per annum	£ 814,968
Annual dividend payable since June, 1816, on a capital of 14,553,000*l.*, to October, 1822, inclusive, at the rate of 10*l.* per cent. per annum	£ 1,455,300
Annual dividend payable from April, 1823, to the 31st of March, 1832, both inclusive, on a capital of 14,553,000*l.*, at the rate of 8*l.* per cent. per annum	£ 1,164,240

Bank of England, 27th of June, 1832. William Smee, Dep. Acct.

No. VIII. — An Account of the Profits of the Bank of England, in the Year ending 29th of February, 1832; stating the Description of the Securities held by the Bank, and the Sources from which the said Profits have accrued. — (*No.* 15. *Appen. to Report.*)

	£
Interest on commercial bills	130,695
Interest on Exchequer bills	204,109
Annuity for 45 years (the dead-weight account)	451,415
Interest on capital received from government	446,502
Allowance received for management of the public debt	251,896
Interest on loans on mortgages	60,684
Interest on stock in the public funds	15,075
Interest on private loans	56,941
Profit on bullion, commission, rent, receipts on discounted bills unpaid, management of the business of the Banks of Ireland, of Scotland, and Royal Bank of Scotland, and sundry items	71,859
	£1,689,176

No. IX. — Expenses of the Bank of England, for the Year ending 29th of February, 1832.

Dr.	£	Cr.	£
National debt department	164,143	Salaries and pensions	218,003
Bank notes	106,092	House expenses	39,187
Banking department	69,165	Directors' allowance	8,000
		Rent	40,000
		Expenses at eleven branches, arising from the banking department	5,702
		Expenses attending the circulation of 2,500,000*l.* of branch Bank of England notes, at eleven branches	28,508
	£ 339,400		£ 339,400

No. X. — An estimated Account of Profit derived by the Bank from Circulation of Promissory Notes, and from Government Business. — (*Appen. No. 23.*)

	£
Circulation	20,000,000
Government deposits	4,000,000
	24,000,000, of which two thirds are estimated to be invested in securities, and one third in bullion.

		£	£	£
Securities of 16,000,000*l.*; viz.				
9,000,000 Exchequer bills	at 2¼ per cent.	202,500		
800,000 stock	— 3 —	24,000		
1,000,000 advances for circulation on discount	— 3 —	30,000		
500,000 country discount	— 3½ —	17,500		
4,700,000	— 4⅓ —	193,875		
			467,875	
16,000,000				
Deduct,				
Expense of circulation		106,000		
Expense of government deposits		10,000		
Stamp duty on circulation		70,000		
1 per cent. on capital (held by government at 3 per cent.)		147,000		
			333,000	
				134,875
The Public Debt.				
Amount received from government for management of the public debt, for the year ending 5th of April, 1832, including life annuities		251,000		
Management of life annuities, supposed to be transferred		3,000		
			248,000	
Deduct,				
Expenses for management of the national debt		164,000		
Average of forgeries per annum, during the last ten years		40,000		
			204,000	
				44,000
	Estimated profit			£ 178,875

No. XI. — State of the Affairs of the Bank of England, 29th of February, 1832.

Dr.	£	£	Cr.	£	£
To Bank notes outstanding		18,051,710	By advances on government securities; by Exchequer bills on the growing produce of the consolidated fund in the quarter ending 5th of April, 1832	3,428,340	
To public deposits, viz.			Ditto, 5th of July, 1832	697,000	
Drawing accounts	2,034,790		Exchequer bills on supplies, 1825	7,600	4,134,940
Balance of audit roll	550,550		Ditto for 10,500,000*l.* for 1825	2,000	
Life annuities unpaid	85,030	3,198,730	By the advances to the trustees appointed by the act 3 Geo. 4. c. 51. towards the purchase of an annuity of 585,740*l.* for 44 years from 5th of April, 1823		10,897,880
Annuities for terms of years unpaid	38,360		By other credits; viz.		
Exchequer bills deposited	490,000		Exchequer bills purchased	2,700,000	
To private deposits, viz.			Stock purchased	764,600	
Drawing accounts	5,683,870	5,738,430	City bonds	500,000	
Various other debts	54,560		Bills and notes discounted	2,951,970	9,166,860
To the Bank of England for the capital		14,553,000	Loans on mortgages	1,452,100	
To balance of surplus in favour of the Bank of England		2,637,760	London Dock Company	227,500	
			Advances on security, and various articles	570,690	
			By cash and bullion		5,293,150
			By the permanent debt due from government		14,686,800
		£ 44,179,630			£ 44,179,630
			Rest or surplus brought down		2,637,760
			Bank capital due to proprietors		14,553,000
					£ 17,190,760

No. XII. — An Account of the Average aggregate Amounts of Public Deposits in the Hands of the Bank, from the Year 1800; distinguishing each Year. — (*Appen. No.* 24.)

Year.	Amount.	Year.	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£		£
1807	12,647,551	1814	12,158,227	1820	3,713,442	1826	4,214,271
1808*	11,761,448	1815	11,737,436	1821	3,920,157	1827	4,223,867
1809	11,093,648	1816	10,807,660	1822	4,107,853	1828	3,821,697
1810	11,950,047	1817	8,699,133	1823	5,526,635	1829	3,862,656
1811	10,191,854	1818	7,066,887	1824	7,222,187	1830	4,761,952
1812	10,390,130	1819	4,538,373	1825	5,347,314	1831	3,948,102
1813	10,393,404						

N. B.—The Bank is unable to furnish correctly the aggregate amount of public deposits previous to the year 1807; the public accounts prior to that period not being required generally to be kept at the Bank; and many of the public accounts at that time were in the names of individuals, without reference to that part of the public service to which the accounts applied.

No. XIII. — An Account of the Average aggregate Amounts of Private Deposits in the Hands of the Bank, from the Year 1807; distinguishing each Year. — (*Appen. No.* 32.)

Year.	Amount.	Year.	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£		£
1807	1,582,720	1814	2,374,910	1820	1,325,060	1826†	3,322,070
1808	1,940,630	1815	1,690,490	1821	1,326,020	1827	3,931,370
1809	1,492,190	1816	1,333,120	1822	1,373,370	1828	5,701,280
1810	1,428,720	1817	1,672,800	1823	2,321,920	1829	5,217,210
1811	1,567,920	1818	1,640,210	1824	2,369,910	1830	5,562,250
1812	1,573,950	1819	1,790,860	1825	2,607,900	1831	5,201,370
1813	1,771,310						

N. B. — The Bank is unable to return the average aggregate amounts of private deposits for the years prior to 1807, as the public and private drawing accounts were not kept separately till that period, when distinct offices were established.

No. XIV. — An Account of the annual Average Amount of Commercial Paper under Discount at the Bank, in London, in each Year, from the Year 1795. — (*Appen. No.* 59.)

Year.	Amount.	Year.	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£		£
1795	2,946,500	1805	11,366,500	1814	13,285,800	1823	3,123,800
1796	3,505,000	1806	12,380,100	1815	14,947,100	1824	2,369,800
1797	5,350,000	1807	13,484,600	1816	11,416,400	1825	4,941,500
1798	4,490,600	1808	12,950,100	1817	3,960,600	1826	4,908,300
1799	5,403,900	1809	15,475,700	1818	4,325,200	1827	1,240,400
1800	6,401,900	1810	20,070,600	1819	6,515,000	1828	1,167,400
1801	7,905,100	1811	14,355,400	1820	3,883,600	1829	2,250,700
1802	7,523,300	1812	14,291,600	1821	2,676,700	1830	919,900
1803	10,747,600	1813	12,330,200	1822	3,366,700	1831	1,533,600
1804	9,982,400						

No. XV. — An Account of the Notes, Post-Bills, &c. of the Bank of England in Circulation, on the 28th of February and 31st of August in each Year, from 1698 to 1792 both included, as near as the same can be made up.

Year	28th Feb.	31st Aug	Year	28th Feb.	31st Aug.	Year	28th Feb.	31st Aug.	Year	28th Feb.	31st Aug.
	£	£		£	£		£	£		£	£
1698	1,221,290	1,240,400	1722	2,365,640	3,006,430	1746	3,383,720	3,842,500	1770	5,237,210	5,736,780
1699	743,850	519,150	1723	3,516,110	3,482,210	1747	4,107,420	3,652,310	1771	6,822,780	6,014,110
1700	938,240	781,430	1724	3,232,830	3,857,710	1748	3,894,650	3,789,720	1772	5,962,160	5,987,570
1701	298,860	763,860	1725	3,734,480	3,343,400	1749	3,737,110	4,183,390	1773	6,037,060	6,362,220
1702	920,730	1,030,900	1726	3,076,850	3,152,340	1750	3,964,970	4,318,490	1774	7,550,780	9,886,220
1703	933,760	1,214,040	1727	3,888,180	4,677,640	1751	4,022,160	5,195,310	1775	9,135,930	8,398,310
1704	961,990	946,010	1728	4,574,920	4,513,790	1752	4,444,960	4,750,350	1776	8,699,720	8,551,090
1705	556,610	1,043,150	1729	4,152,590	4,199,910	1753	4,401,580	4,420,290	1777	8,712,230	7,753,590
1706	996,840	805,410	1730	3,998,280	4,416,870	1754	4,062,870	4,081,280	1778	7,440,330	6,758,070
1707	959,820	824,860	1731	4,451,720	5,249,880	1755	3,950,650	4,115,280	1779	9,012,610	7,276,540
1708	648,680	598,940	1732	4,251,660	4,592,400	1756	4,106,790	4,516,360	1780	8,410,790	6,341,600
1709	707,470	691,350	1733	4,385,060	4,543,000	1757	5,319,130	5,149,940	1781	7,092,450	6,309,430
1710	601,580	480,920	1734	4,203,070	4,671,930	1758	5,320,590	4,864,110	1782	8,028,880	6,759,310
1711	477,510	573,230	1735	4,627,990	4,738,550	1759	4,586,840	4,809,790	1783	7,675,090	6,307,270
1712	738,920	2,025,200	1736	4,907,750	5,077,570	1760	4,969,250	4,936,280	1784	6,202,760	5,592,510
1713	1,221,880	800,810	1737	5,215,010	4,414,690	1761	5,632,350	5,246,680	1785	5,923,090	6,570,650
1714	623,640	1,651,780	1738	4,766,280	4,609,420	1762	5,741,090	5,886,980	1786	7,581,960	8,184,330
1715	972,160	978,840	1739	4,347,270	4,152,420	1763	5,999,910	5,314,600	1787	8,329,840	9,685,720
1716	1,460,660	1,579,730	1740	4,550,980	4,444,000	1764	5,501,800	6,210,680	1788	9,561,120	10,002,880
1717	2,053,150	2,188,030	1741	4,841,840	4,084,450	1765	6,316,670	5,356,490	1789	9,807,210	11,121,800
1718	2,782,420	1,806,640	1742	4,471,510	4,911,390	1766	5,617,570	5,246,410	1790	10,040,540	11,433,340
1719	1,807,010	1,939,550	1743	4,654,890	4,250,180	1767	5,510,990	4,883,440	1791	11,439,200	11,672,320
1720	2,466,880	3,032,460	1744	4,253,610	4,270,590	1768	5,778,990	5,415,530	1792	11,307,380	11,006,300
1721	2,244,280	2,206,260	1745	4,279,610	3,465,350	1769	5,707,190	5,411,450			

N. B.—No previously published table of the circulation of the Bank of England extends further back than 1777: we are indebted to the Court of Directors for being able to supply this striking defect, and to exhibit, for the first time, the circulation of the Bank, from within four years of its establishment down to the present day.

* The Bank advanced, in March, 1808, 3,000,000*l.*, without interest, for the public service, which so continued till April, 1818, on account of public balances.

† The increased amount of deposits in this and the following years, arose from the increase of accounts.

No. XVI. — An Account of the Amount of Bank Notes in Circulation on the undermentioned Days; distinguishing the Bank Post Bills, and the Amount of Notes under Five Pounds, with the Aggregate of the whole.

	Notes of 5*l.* and upwards.	Bank Post Bills.	Bank Notes under 5*l.*	Total.
	£	£	£	£
1792 February 25	10,394,106	755,703	- - -	11,149,809
August 25	10,281,071	725,898	- - -	11,006,969
1793 February 26	10,780,643	647,738	- - -	11,428,381
August 26	10,163,839	674,375	- - -	10,838,214
1794 February 26	10,079,165	618,759	- - -	10,697,924
August 26	10,060,248	567,972	- - -	10,628,220
1795 February 26	12,968,707	570,456	- - -	13,539,163
August 26	10,939,880	518,502	- - -	11,458,382
1796 February 26	10,266,561	643,133	- - -	10,909,694
August 26	8,981,645	549,690	- - -	9,531,335
1797 February 25	8,167,949	474,615	- - -	8,601,964
August 26	9,109,614	524,587	934,015	10,568,216
1798 February 26	10,856,188	551,549	1,442,348	12,850,085
August 25	9,997,958	553,236	1,639,831	12,191,025
1799 February 26	10,576,510	607,907	1,451,728	12,636,145
August 26	11,260,675	653,766	1,345,432	13,259,873
1800 February 25	13,106,368	723,600	1,406,708	15,236,676
August 26	12,221,451	823,366	1,690,561	14,735,378
1801 February 26	12,975,006	954,982	2,647,526	16,577,514
August 26	11,715,665	759,270	2,495,386	14,970,321
1802 February 26	12,038,970	803,499	2,616,407	15,458,876
August 26	12,801,746	772,577	3,312,790	16,887,113
1803 February 26	11,796,424	820,039	2,960,469	15,576,932
August 26	12,413,924	776,030	3,846,005	17,035,959
1804 February 25	12,054,943	848,894	4,673,515	17,577,352
August 25	11,766,628	743,841	4,813,525	17,323,994
1805 February 26	11,403,290	1,029,580	4,801,596	17,234,466
August 26	11,182,188	718,510	4,395,480	16,296,178
1806 February 25	11,994,350	725,736	4,428,360	17,148,446
August 26	14,141,510	702,425	4,228,958	19,072,893
1807 February 26	12,274,629	724,485	4,206,230	17,205,344
August 26	15,077,013	725,262	4,231,837	20,034,112
1808 February 26	13,746,598	742,671	4,103,785	18,593,054
August 26	12,440,930	795,102	4,129,234	17,365,266
1809 February 25	12,730,999	944,727	4,338,951	18,014,677
August 26	13,255,599	880,104	5,221,538	19,357,241
1810 February 26	13,650,592	907,620	5,871,069	20,429,281
August 25	16,078,390	1,145,832	7,221,953	24,446,175
1811 February 26	15,110,688	1,133,419	7,140,726	23,384,833
August 26	15,203,611	1,016,303	7,573,201	23,793,115
1812 February 26	14,523,049	1,059,854	7,415,294	22,998,197
August 26	14,873,705	987,880	7,621,325	23,482,910
1813 February 26	14,567,267	1,034,882	7,705,322	23,307,471
August 26	14,975,479	1,015,616	8,033,774	24,024,869
1814 February 26	15,632,250	1,091,242	8,371,923	25,095,415
August 26	18,066,180	1,246,479	9,667,217	28,979,876
1815 February 25	16,394,359	1,184,459	9,094,552	26,673,370
August 26	16,332,275	1,115,079	9,576,695	27,024,049
1816 February 26	15,307,228	1,336,467	9,036,374	25,680,069
August 26	16,686,087	1,286,429	9,103,338	27,075,854
1817 February 26	17,538,656	1,376,416	8,143,506	27,058,578
August 26	20,388,502	1,712,807	7,998,599	30,099,908
1818 February 26	19,077,951	1,838,600	7,362,492	28,279,043
August 26	17,465,628	1,627,427	7,509,782	26,602,837
1819 February 26	16,307,000	1,622,330	7,317,360	25,246,690
August 26	16,972,140	1,468,920	7,216,530	25,657,590
1820 February 26	15,402,830	1,421,160	6,745,160	23,569,150
August 26	16,047,390	1,633,730	6,772,260	24,453,380
1821 February 26	14,372,840	1,615,600	6,483,010	22,471,450
August 26	16,095,020	1,634,260	2,598,460	20,327,740
1822 February 26	15,178,490	1,609,620	1,384,360	18,172,470
August 26	15,295,090	1,610,600	862,650	17,768,340
1823 February 26	15,751,120	1,742,190	683,160	18,176,479
August 26	17,392,260	1,763,650	550,010	19,705,920
1824 February 26	17,244,940	2,198,260	486,600	19,929,800
August 26	18,409,230	2,122,760	443,970	20,975,960
1825 February 26	18,308,990	2,334,260	416,880	21,060,130
August 26	17,091,120	2,061,010	396,670	19,548,800
1826 February 26	21,100,400	2,487,080	1,367,560	24,955,040
August 26	18,172,160	2,040,400	1,175,450	21,388,010
1827 February 26	18,787,330	2,052,310	668,910	21,508,550
August 26	19,253,890	2,270,110	483,060	22,007,060
1828 February 26	19,428,010	2,329,880	416,890	22,174,780
August 26	19,016,980	2,417,440	382,860	21,817,280
1829 February 26	17,402,470	2,444,660	357,170	20,204,300
August 26	17,164,940	2,030,280	334,190	19,529,410
1830 February 26	17,862,990	2,284,520	320,550	20,468,060
August 26	19,403,610	2,217,870	313,460	21,934,940
1831 February 26	17,566,140	1,777,790	306,900	19,650,830
August 26	16,774,890	1,621,350	302,480	18,698,720
1832 February 25	16,201,890	1,641,990	299,190	18,143,070
August 25	16,068,370	1,533,970	294,940	17,897,280
1833 February 26	17,507,320	1,603,710	292,450	19,403,480
August 26	17,827,150	1,604,590	289,720	19,721,460

No. XVII. — An Account of the aggregate Circulation of the Branch Banks of the Bank of England, from their first Establishment, on the 28th of February and 31st of August in each Year.

	£		£		£
1827 February	322,150	1830 February	1,482,160	1832 February	2,748,280
August	559,870	August	2,019,770	August	2,800,650
1828 February	585,820	1831 February	2,272,360	1833 February	3,088,670
August	649,740	August	2,433,860	August	3,313,850
1829 February	807,450				
August	1,165,390				

III. Banks (English Private and Provincial).

Besides charging the usual rate of interest on bills discounted, the provincial bankers are mostly in the habit of charging *5s.* or *6s.* per cent. as commission. They also charge a commission on all payments; and derive a profit from charges for the transmission of money, &c. They usually allow from 2 to 3 per cent. on money deposited; but the numerous failures that have taken place amongst them have, by generating a feeling of insecurity in the minds of the depositors, confined this branch of their business within comparatively narrow limits. When their customers overdraw their accounts, they are charged with interest at the rate of *5* per cent.

Country banks established by individuals possessed of adequate funds, and managed with due discretion, are productive of the greatest service. They form commodious reservoirs, where the floating and unemployed capital of the surrounding districts is collected, and from which it is again distributed, by way of loan, to those who will employ it to the best advantage. It is, therefore, of the utmost importance, in a public point of view, that these establishments should be based upon solid foundations. But in England, unfortunately, this has been but little attended to; and the destruction of country banks has, upon three different occasions, — in 1792, in 1814, 1815, and 1816, and in 1825 and 1826, — produced an extent of bankruptcy and misery that has never, perhaps, been equalled, except by the breaking up of the Mississippi scheme in France. Government is bound to interfere to hinder the recurrence of such disastrous results. The repeal of the act of 1708, preventing the association of more than six persons for carrying on the trade of banking, has already led to the formation of joint stock banking companies in a few of the large towns; but it remains to be seen in how far this should be regarded as an improvement. It is, indeed, quite visionary to suppose that the power to establish such banks is *all* that is required to establish the provincial currency on a secure foundation. What is really wanted, is not a regulation to *allow* banks with large capitals to be set on foot, (for there have, at all times, been many such banks in England,) but a regulation to *prevent* any bank, be its partners few or many, from issuing notes without previously giving security for their payment. This would render the bankruptcy of such banks impossible, and would give a degree of security to the money system of the country that it can never otherwise attain. — (The reader is referred, for a full discussion of this important question, to the Note on *Money*, in my edition of the *Wealth of Nations*, vol. iv. pp. 280—292.)

The following is an account of the number of commissions of bankruptcy issued against country bankers in England, from 1809 to 1830, both inclusive: —

Years.	Commissions.	Years.	Commissions.	Years.	Commissions.	Years.	Commissions.
1809	4	1815	25	1821	10	1826	43
1810	20	1816	37	1822	9	1827	8
1811	4	1817	3	1823	9	1828	3
1812	17	1818	3	1824	10	1829	3
1813	8	1819	13	1825	37	1830	14
1814	27	1820	4				

(*Appen. to Report on Bank Charter*, p. 116.)

Exclusive of the above, many banks stopped payments, to the great injury of their creditors and the public, that afterwards resumed them; at the same time that the affairs of some bankrupt concerns were arranged without a commission. During the whole of this period, not a single Scotch bank gave way.

The stamp duties on country bank notes have been already specified (p. 69.).

Besides the stamp duties payable on notes, each individual or company issuing them must take out a licence, renewable annually, which costs *30l.* This licence specifies the names and places of abode of the body corporate, person, or persons, in the firm to whom it is granted, the name of such firm, the place where the business is carried on, &c.; and a separate licence is to be taken out for every town or place where any notes shall be issued by or on account of any banker, &c. Unless the licence granted to persons in partnership set forth the names and places of abode of all persons concerned in the partnership, whether their names appear on the notes issued by them or not, such licence shall be absolutely void. — (*55 Geo.* 3. c. 184. s. 24.) For the regulations as to the issue of unstamped notes, see *antè*, p. 69.

The issue of notes for less than *5l.* was prohibited in England, as previously shown, from 1777 to 1797; but they continued to be issued from the latter period down to the 5th of April, 1829, when their further issue ceased in consequence of an act passed in 1826. This act did not extend to Scotland or Ireland, and was intended to give greater stability to the system of country banking in England, by shutting up one of the principal channels through which the inferior class of bankers had been in the habit of getting their notes into circulation. But notwithstanding it will certainly have this effect, the policy of the measure seems very doubtful. It is idle, indeed, to imagine that it can give that stability to the banking system which is so desirable; and in proof of this, it is sufficient to state, that though none of the country banks existing in 1793 had any notes for less than *5l.* in circulation, upwards of *one third* of their entire number stopped payment during the revulsion that then took place. The truth is, that nothing but the exacting of security for payment of notes can ever place the country issue of notes on that solid foundation on which it ought to stand; and as security may be taken for *1l.* notes as easily as for those of *5l.*, there would, were such a system adopted, be no ground for suppressing the former.

Metropolitan Joint Stock Banks. — It was for a lengthened period generally understood, that the act of 1708, and the other acts conveying exclusive privileges to the Bank of England, not only prevented any company with more than 6 partners from issuing notes payable on demand; but that they also prevented such companies from undertaking ordinary banking business, — that is, from receiving the money of individuals and paying their drafts, &c. Recently, however, strong doubts began to be entertained whether companies with numerous bodies of partners, established for the mere business of banking, and without issuing notes, were really prohibited by the acts in question. During the discussions on the late renewal of the charter of the Bank of England, the point was submitted for the consideration of the Attorney and Solicitor Generals, who gave it as their decided opinion, that such banks might be legally established within the limits to which the exclusive privileges of the Bank of England were restricted by the act 7 & 8 Geo. 4. c. 46. But as the opinion of other eminent lawyers differed from theirs, a clause has been inserted in the act 3 & 4 Will. 4. c. 98., which removes all doubts on the subject, by expressly authorising the establishment of banks not issuing notes, with any number of partners, any where within the district to which the exclusive privileges of the Bank of England, as a bank of issue, are now restricted. — (See *antè*, p. 84.)

Down to this period (September, 1833), no advantage has been taken of this declaratory enactment, by the formation of a joint stock bank in the metropolis; but several projects of the kind have been made public, and it seems most likely that some of them will be matured. It is not easy to form beforehand any certain conclusions as to the probable working of such establishments. Provided, however, that they possess large paid up capitals, and numerous bodies of partners, individually liable, as at present, for the debts of the company, it may, one should think, be fairly concluded, that they will afford comparatively safe places for the deposit of money; and in so far their institution will be advantageous. But it is not easy to discover in what other respects they will have any superiority over the present banks. There is great weight in the following statement made by Mr. Jones Loyd before the committee on the Bank of England charter: — "I think that joint stock banks are deficient in every thing requisite for the conduct of banking business, except extended responsibility; the banking business requires peculiarly persons attentive to all its details, constantly, daily, and hourly watchful of every transaction, much more than mercantile or trading businesses. It also requires immediate, prompt decisions upon circumstances when they arise, — in many cases a decision that does not admit of delay for consultation; it also requires a discretion to be exercised with reference to the special circumstances of each case. Joint stock banks being, of course, obliged to act through agents, and not by a principal, and, therefore, under the restraint of general rules, cannot be guided by so nice a reference to degrees of difference in the character or responsibility of parties; nor can they undertake to regulate the assistance to be granted to concerns under temporary embarrassment by so accurate a reference to the circumstances, favourable or unfavourable, of each case." — (*Min. of Evid.* p. 236.)

We confess, too, that we have great doubts whether the competition of such banks with each other, and with the private banks, may not be productive of much inconvenience. It will be very apt, at times, to occasion an artificial reduction of the rate of interest, and a redundancy of the currency, which must, of course, be followed by a fall of the exchange, and a period of more or less difficulty. It is stated, that the metropolitan joint stock banks are to give interest on deposits; and if they can do so without endangering their stability, it will be an important advantage. But we have yet to learn how it is possible that a joint stock bank should be able to do what would seem to exceed the power of the wealthiest and best managed private establishments.

As already remarked, the only circumstance in which joint stock banks seem to have any decided superiority over private companies, consists in their greater responsibility. But this is not a necessary attribute of *all* joint stock companies. Associations of this sort may, and indeed do, exist, that are in all respects inferior to respectable private companies. And it seems indispensable, in order to the prevention of fraud, that such regulations should be adopted as may make the public fully aware of the real nature of all joint stock associations, and of their claims to credit and confidence.

Proposed Measures as to Joint Stock Banks. — The future intentions of government as to the regulation of private banking companies in England were supposed to be partially developed by the Chancellor of the Exchequer in his speech introducing the bill for the renewal of the charter of the Bank of England. According to the statement then made, it appears to have been intended that half the subscribed capital of all banks for the issue of notes should be paid up and vested in such securities as parliament should direct; that the responsibility of the partners in such banks should be unlimited; and that their accounts should be periodically published. In the case of banks not issuing notes, only a fourth part of their subscribed capital was to be paid up, and *the responsibility of their shareholders was to be limited.*

But with the exception of that part of the above plan which relates to the publication of the accounts of banks of issue, the consideration of the remainder was deferred to a more convenient opportunity; and notwithstanding our respect for the quarter whence it proceeded, we hope it may never be revived. The adoption of the proposed regulations would not have amended any one of the principal defects in the present system of English country banking, while there are not a few which it would have materially aggravated. There is not so much as the shadow of a ground for interfering with the concerns of such banks as do not issue notes, further than to let the public know with whom they are dealing, and the real amount of their *paid up* capital; and the proposed interference in the case of banks that do issue notes, could have been productive of nothing but mischief. On this point we shall take leave to quote a conclusive paragraph from a Memorial drawn up by the directors of the Manchester and Liverpool District Banking Company: — "We contend, first, that, except in so far as the issue of notes is concerned, banking is essentially a *private business*, with which the state has no more title to interfere than it has to interfere with any other description of mercantile agency. If A. choose to deposit money in the hands of B., who lends it to others, why is the interference of government more necessary than if A. had deposited it in the hands of C., who employs it in manufactures or agriculture? It is the duty of parliament to take care that coins, and the paper notes issued as substitutes for them, be always of their professed value; but assuredly it is no part of its duty to inquire into the solvency of those into whose hands coins or paper may come. We contend, secondly, that, admitting it to be right to exact security from banks of issue, that should not be done by the compulsory investment of a portion of their capital. The issues of one bank may be more than twice or three times the amount of its capital; while those of another, placed in a different situation, or conducted in a different way, may be under a third or a fourth part of its capital. What, then, could be more unequal as respects the banks, and more illusory as respects the public, than to oblige both these establishments to give security for their issues by vesting *half their capital* in government stock? Were the first bank to stop payment, the security in the hands of government would not afford the holders of its notes more than from 3*s*. 4*d*. to 5*s*. in the pound; while, were the latter in the same predicament, the holders of its notes would be paid in full out of the government securities, and there would be a large surplus over. It is clear, therefore, that the security to be given by a bank of issue ought to be *proportioned to its issues*, and not to its capital. The former mode will effectually protect the public from loss; the latter gives little, or rather no protection whatever." It is, in fact, quite ludicrous to tamper with a subject of this sort. Nothing short of the obligation to give security for their issues can ever give the public that effectual guarantee for the integrity of the currency that is so essential; nor is there any other plan at once fair and equal as respects different banks.

Distinction between subscribed and paid up Capital. Expediency of suppressing all Reference to the former. — An immediate stop ought, we think, to be put to the practice now so prevalent among joint stock banking companies, of representing their capitals as consisting, not of what has been *actually paid up by the shareholders*, but of what they have subscribed for. Not a few institutions have recently been set on foot in England, professing to have capitals of 1,000,000*l*., 2,000,000*l*., or more, when, in point of fact, their capital does not really consist of a tenth part of that sum. The practice is to organise a company with some 5,000 or 10,000 shares of 100*l*. each; but it is perfectly understood that not more than 5 or at most 10 per cent. of each share is to be called up; and if more were demanded, it is most probable it could not be paid, at least without much difficulty. This practice is pregnant with mischief. In the first place, it tends

to deceive the public, who imagine there can be no risk in dealing with a bank professing to possess 1,000,000*l.* of capital, who yet might hesitate about having any thing to do with it, were they aware that the capital paid into its coffers, and on which it carries on business, does not really exceed 50,000*l.* or 100,000*l.* In the second place, this system tends to deceive the mass of the partners. These are tempted to embark in such hazardous concerns, imagining that they are to be large shareholders with but little outlay, and that they will derive a considerable dividend upon the nominal amount of their shares! We mistake if a good many such persons be not in the end grievously disappointed. Banking, in an ordinary state of things, is not a business in which large profits can be expected. It is true that many banking houses made immense sums during the war, but they did this more as dealers in the funds, and particularly by their rise on the return of peace, than as bankers. But it is needless to say that no prudently conducted banking establishment will now count much upon this source of emolument. At present, the dividend on the stock of the best established Scotch banks varies, we believe, from about 5 to 6 per cent.; and as they might invest their capital at $3\frac{1}{2}$ or 4 per cent., it appears that the real profits of banking, even in the best managed concerns, can hardly be estimated at more than from $1\frac{1}{2}$ to $2\frac{1}{2}$ per cent.

It is, besides, a radical mistake to suppose that any banking concern can ever be established on a solid foundation, that is not possessed of a pretty large amount of paid up and available capital. We believe, however, that several of the joint stock companies recently established in England take a different view of this matter; and that they trust more to deposits and credit, than to their command of capital of their own. There can be no objection to these, or, indeed, to any associations whatever, being allowed to issue notes, provided they give full security for their payment: but government and parliament will be alike neglectful of their duty to the public if they do not take immediate steps to compel this being done; and to secure the currency of the country from being disturbed by the fraud, mismanagement, or insufficient capital of its issuers. The system of advertising subscribed instead of paid up capitals ought also to be put an end to; nor ought any association to be allowed to say that its capital exceeds what has actually been paid into its coffers.

Responsibility ought not, in any Case, to be limited. — We protest against the proposal for allowing the partners in banks not issuing notes to limit their responsibility. Such a measure would be good for nothing, except to serve as a premium on every species of fraud. What check would there be, under such a system, to hinder the partners of a bank going on for a series of years dividing large profits, when, perhaps, they were really incurring a loss, until every farthing of its capital and deposits was absorbed? To talk of subjecting such persons to punishment as fraudulent bankrupts, on evidence derived from their books, is absurd; for, supposing that it was the intention of the parties to defraud, they might easily keep their books so that they could afford no information that was not false or misleading. The annexed list of joint stock banking companies shows that there is no disinclination on the part of individuals to engage in such concerns even with the present unlimited responsibility. And the way in which some of them are conducted, proves sufficiently, if any such proof were wanted, that the serious liabilities incurred by the partners are not more than enough for the protection of the public. To lessen them would be an act of gratuitous folly. If we are to interfere, let them be increased, not diminished. But in the case of banks not issuing notes, enough is done if measures be taken to prevent deception, by letting the public know the partners in them, and making sure that they shall have no means of evading the responsibility attaching to their engagements. The first object may be secured by compelling all banking associations whatever to publish annually a list of the names and addresses of their partners, with the amount of their paid up capital; and to accomplish the latter object, we have merely to abstain from interference, and to let the law take its natural course.

Accounts of Issues. — The act 3 & 4 Will. 4. c. 83. directs that all persons or associations carrying on banking business, and issuing promissory notes payable on demand, shall keep weekly accounts of their issues; and shall, within a month of each of the quarters ending with the 1st of April, 1st of July, 1st of October, and 1st of January, make up, from the weekly accounts, an *average* account, verified on oath, of their issues during the preceding quarter, which shall be transmitted to the Stamp-office in London. Penalty for neglecting or refusing to make and transmit such account, 500*l.* on the corporation, company, persons, &c. issuing the notes, and 100*l.* on the secretary so offending. The wilful sending a false return to be punished as perjury.

Drawing on London. — The act 3 & 4 Will. 4. c. 83. repeals the regulation in the 7 Geo. 4. c. 46., prohibiting banks with more than 6 partners from drawing on London on demand, or otherwise, for sums of less than 50*l.* — § 2.

No. I.—An Account of the Number of Licences taken out by Country Bankers in England and Wales, in each Year since 1809.

Years.	Licences.	Years.	Licences.	Years.	Licences.	Years.	Licences.
1809	702	1815	916	1821	781	1827	668
1810	782	1816	831	1822	776	1828	672
1811	779	1817	752	1823	779	1829	677
1812	825	1818	765	1824	788	1830	671
1813	922	1819	787	1825	797	1831	641
1814	940	1820	769	1826	809	1832	636

N. B.—The years in this account end on the 10th of October. The account for 1832 only comes down to the 26th of June.

Stamp Office, 26th of June, 1832.

No. II.—An Account of all Places where United or Joint Stock Banks have been established under the Act 7 Geo. 4. c. 46., together with the Number of Partners therein; also, the Nominal Capital* of each such Bank, and the Amount of Capital paid up.—(*Parl. Paper*, No. 504. Sess. 1833.)

Places.	Banks.	Number of Partners.
Birmingham	The Bank of Birmingham	203
Liverpool	The Bank of Liverpool	427
Manchester and Bolton in Lancashire, and Stockport in Cheshire.	The Bank of Manchester	578
Kendal	The Bank of Westmorland	129
Barnsley	The Barnsley Banking Company	119
Birmingham	The Birmingham Banking Company	295
Bradford, Yorkshire	The Bradford Banking Company	173
Bradford, Yorkshire	The Bradford Commercial Joint Stock Banking Company.	131
Bristol	The Bristol Old Bank	8
Workington, Cockermouth, Maryport, Wigton, Carlisle and Penrith.	The Cumberland Union Banking Company	158
Darlington, Stockton and Barnard Castle, in Durham; Northallerton and Stokesley in Yorkshire.	The Darlington District Joint Stock Banking Company.	274
Gloucester	The Gloucestershire Banking Company	130
Halifax	The Halifax Joint Stock Banking Company	172
Huddersfield	The Huddersfield Banking Company	285
Knaresborough, Wetherby, Ripon, Easingwold, Helmsley, Thirsk, Boroughbridge, Masham, Pately Bridge, Otley and Harrogate.	The Knaresborough and Claro Banking Company.	160
Lancaster, Ulverston and Preston	The Lancaster Banking Company	81
Leeds	The Leeds Banking Company	496
Leicester and Hinckley	The Leicestershire Banking Company	53
Carlisle	The Leith Banking Company	14
Liverpool	The Liverpool Commercial Banking Company.	104
Manchester, Liverpool, Oldham, Ashton, Warrington, Bury, Preston, Blackburn and Wigan, in Lancashire; Stockport and Nantwich in Cheshire; Hanley, Stafford, Cheadle, Lane End and Rugeley, in Staffordshire; Market Drayton in Shropshire, and Glossop in Derbyshire.	The Manchester and Liverpool District Banking Company.	857
Mirfield, Huddersfield, Wakefield, Dewsbury and Dobcross.	The Mirfield and Huddersfield District Banking Company.	213
Norwich, Swaffham, Foulsham, East Dereham, Fakenham, Lynn, Harleston and Watton, in Norfolk; and Bungay in Suffolk.	The Norfolk and Norwich Joint Stock Banking Company.	131
Newcastle-upon-Tyne in Northumberland, and Sunderland in Durham.	North of England Joint Stock Banking Company.	505
Plymouth, Devonport and Kingsbridge	Plymouth and Devonport Banking Company	132
Saddleworth, Ashton and Oldham	The Saddleworth Banking Company	113
Sheffield	The Sheffield Banking Company	154
Stamford, Spalding, Market Deeping, Boston, Bourn and Grantham, in Lincolnshire; Oundle, Kettering, Thrapstone and Peterborough, in Northamptonshire; Oakham and Uppingham, in Rutlandshire; Melton Mowbray and Market Harborough, in Leicestershire; Huntingdon in Hunts, and Wisbeach in Cambridgeshire.	The Stamford and Spalding Joint Stock Banking Company.	74
Bristol, Bridgewater, Taunton, Chard, Crewkerne, Ilminster, Langport, Wells, Bruton and Shepton Mallet.	Stuckey's Banking Company	12
Wakefield	The Wakefield Banking Company	217
Whitehaven and Penrith	The Whitehaven Joint Stock Banking Company.	225
Wolverhampton	The Wolverhampton and Staffordshire Banking Company.	239
York, Malton, Selby, Howden, Scarborough and Goole.	The York City and County Banking Company.	286
York, Bridlington and Great Driffield	The York Union Banking Company	200

* This department is not in possession of any information which enables a statement to be made as to the nominal capital of each such Bank, and the amount of capital paid up.

' Stamps and Taxes, Somerset Place, 4th of July, 1833.

It is not possible to obtain any accurate account of the number of country notes in circulation at different periods. But the following table, drawn up by the late Mr. Mushet, of the Mint, founded partly on official returns, and partly on the estimates of Mr. Sedgwick, late chairman of the Board of Stamps, is, so far as it goes, the most complete and comprehensive hitherto published.

No. III. — An Account of the Number of Country Bank Notes, of all Denominations, stamped in each Year, ending Oct. 10., from 1804 to 1825 inclusive, with the Percentage of Increase and Decrease, comparing each Year with the Year preceding; together with an Estimate of the total Amount in Circulation, according to Mr. Sedgwick's Tables, in each Year, from 1804 to 1825 inclusive; with the Percentage of Increase and Decrease, comparing each Year with the Year preceding.

Years.	The Amount of Country Bank Notes of all Denominations stamped in each year, ending Oct. 10., from 1804 to 1825.	The Percentage of Increase, comparing each year with the year preceding.	The Percentage of Decrease, comparing each year with the year preceding.	The Amount of Country Bank Notes in Circulation, according to Mr. Sedgwick's Tables, in each year, ending Oct. 10., from 1804 to 1825 inclusive.	The Percentage of Increase, comparing each year with the year preceding.	The Percentage of Decrease, comparing each year with the year preceding.
1805	11,342,413					
1806	11,480,547	1·2				
1807	6,587,398	-	42·6	18,021,900		
1808	8,653,077	23·8	-	16,871,524	-	6·3
1809	15,737,986*	81·8	-	23,702,493	40·5	
1810	10,517,519	-	33·1	23,893,868	·8	
1811	8,792,433	-	16·4	21,453,000	-	1·6
1812	10,577,134	20·3	-	19,944,000	-	7·
1813	12,615,509	19·2	-	22,597,000	13·3	
1814	10,773,375	-	14·6	22,709,000	·5	
1815	7,624,949	-	29·2	19,011,000	-	16·3
1816	6,423,466	-	15·7	15,096,000	-	20·6
1817	9,075,958	41·1	-	15,898,000	5·3	
1818	12,316,868	35·7	-	20,507,000	29·	
1819	6,130,313	-	50·2	17,366,875	-	15·3
1820	3,574,894	-	41·7	11,767,391	-	32·2
1821	3,987,582	11·5	-	8,414,281	-	28·5
1822	4,217,241	5·7	-	8,067,260	-	4·1
1823	4,657,589	10·4	-	8,798,277	9·	
1824	6,093,367	30·8	-	10,604,172	20·5	
1825	8,532,438	40·	-	14,147,211	23·4	

No. IV. — An Account of the Value of Country Bank Notes, of all Denominations, stamped in each Year from 1826 to 1832, both inclusive.

Years.	Value.	Years.	Value.
	£		£
1826	1,239,755	1830	1,955,430
1827	1,970,595	1831	2,217,915
1828	2,842,130	1832	1,751,685
1829	2,403,700		

(*Parl. Paper*, No. 456. Sess. 1833.)

N. B. — No 1*l.* and 2*l.* notes were stamped after the 3d of February, 1826.

IV. Banks (Scotch).

The act of 1708, preventing more than 6 individuals from entering into a partnership for carrying on the business of banking, did not extend to Scotland. In consequence of this exemption, several banking companies, with numerous bodies of partners, have always existed in that part of the empire.

Bank of Scotland. — This institution was projected by Mr. John Holland, merchant of London, and was established by act of the Scotch parliament (Will. 3. Parl. 1. § 5.) in 1695, by the name of the Governor and Company of the Bank of Scotland. Its original capital was 1,200,000*l.* Scotch, or 100,000*l.* sterling, distributed in shares of 1,000*l.* Scotch, or 83*l.* 6*s.* 8*d.* sterling, each. The act exempted the capital of the bank from all public burdens; and gave it the exclusive privilege of banking in Scotland for 21 years. The objects for which the bank was instituted, and its mode of management, were intended to be, and have been, in most respects, similar to those of the Bank of England. The responsibility of the shareholders is limited to the amount of their shares.

The capital of the bank was increased to 200,000*l.* in 1744; and was enlarged by subsequent acts of parliament, the last of which (44 Geo. 3. c. 23.) was passed in 1804, to 1,500,000*l.*, its present amount. Of this sum, 1,000,000*l.* has been paid up. The last mentioned act directed that all sums relating to the affairs of the bank should henceforth be rated in sterling money, that the former mode of dividing bank stock by shares should be discontinued, and that, for the future, it should be transferred in any sums or parcels. On the union of the two kingdoms in 1707, the Bank of Scotland undertook the recoinage, and effected the exchange of the currency in Scotland: it was also the organ of government, in the issue of the new silver coinage in 1817.

* In 1809, the duty on 1*l.* notes was increased from 3*d.* to 4*d.*, and may account for the great increase in this year, the notes bearing a 3*d.* stamp being no longer issuable.

The Bank of Scotland is the only Scotch bank constituted by act of parliament. It began to establish branches in 1696; and issued notes for 1*l.* so early as 1704. The bank also began, at a very early period, to receive deposits on interest, and to grant credit on cash accounts; a minute of the directors with respect to the mode of keeping the latter, being dated so far back as 1729. It is, therefore, entitled to the credit of having introduced and established the distinctive principles of the Scotch banking system, which, whatever may be its defects, is probably superior to every other system hitherto established. Generally speaking, the Bank of Scotland has always been conducted on sound and liberal principles; nor can there be a doubt that it has been productive, both directly and as an example to other banking establishments, of much public utility and advantage.

It may be worth mentioning, that the act of Will. 3., establishing the Bank of Scotland, declared that all foreigners who became partners in the bank, should, by doing so, become, to all intents and purposes, naturalised Scotchmen. After being for a long time forgotten, this clause was taken advantage of in 1818, when several aliens acquired property in the bank in order to secure the benefit of naturalisation But after being suspended, the privilege was finally cancelled in 1822.

We subjoin an *official* abstract of the constitution and objects of the Bank of Scotland, printed for the use of the proprietors in 1818; — the terms and mode of transacting business are, of course, sometimes altered, according to circumstances.

I. The Bank of Scotland is a public national establishment; erected and regulated by the legislature alone: and expressly as a public Bank in this kingdom; for the benefit of the nation, and for the advancement of agriculture, commerce, and manufactures; and for other objects of public policy. — (*Will.* Parl. 1. § 5.; 14 *Geo.* 3. c. 32.; 24 *Geo.* 3. c. 8.; 32 *Geo.* 3. c 25.; 34 *Geo.* 3. c. 19.; 44 *Geo.* 3. c. 23.)

II. The statutory capital is at present 1,500,000*l.* sterling. It is raised by voluntary subscription; and has been subscribed for. 1,000,000*l.* has been called for, and paid in. — (44 *Geo.* 3. c. 23.)

III. Subscribers, if not under obligation to the Bank, may, at pleasure, transfer their right. If under obligation to the Bank, the obligation must be previously liquidated; or, the proceeds of the sale, at a price to the satisfaction of the directors, must be applied towards such liquidation. Transfers are made by a short assignment and acceptance thereof, both in a register appointed for that purpose. The expense, beside the government stamp, is 1l*s.* — (*Will.* Parl. 1. § 5.)

IV. Bank of Scotland stock may be acquired, in any portions, by any person, community, or other lawful party whatsoever; without selection, exclusion, or limitation of numbers. — (*Will.* Parl. 1. § 5.; 44 *Geo.* 3. c. 23.)

V. Bank of Scotland stock may be conveyed by latter will, and, if specially mentioned, without expense of confirmation. It cannot be arrested: the holder's right may be adjudged. Dividends may be arrested. — (*Will.* Parl. 1. § 5.)

VI. The Bank of Scotland is a public corporation by act of parliament. The Bank's transactions are distinct from those of the stockholders; and theirs from those of the Bank. — (*Will.* Parl. 1. § 5.)

VII. The establishment is expressly debarred from any other business than that of banking. — (*Will.* Parl. 1. § 5.)

VIII. The management is vested, by statute, in a governor, deputy governor, twelve ordinary, and twelve extraordinary directors. They are chosen annually, on the last Tuesday of March, by the stockholders having 250*l.* of stock or upwards. Those above 250*l.* have a vote for every 250*l.*; to 5,000*l.*, or 20 votes. No person can have more than 20 votes. The governor must hold, at least, 2,000*l.* of stock; the deputy governor 1,500*l.*; and each director 750*l.* They swear to be equal to all persons: and cannot hold any inferior office in the Bank. — (*Will.* Parl. 1. § 5.; 14 *Geo.* 3. c. 32.; 44 *Geo.* 3. c. 23.)

IX. The executive part is conducted by a treasurer, secretary, and other public officers, all sworn. Those having the official charge of cash find due security. — (*Will.* Parl. 1. § 5.)

X. The Board of directors sits for the general administration of the Bank, at the Bank's Public Head Office in Edinburgh. The local business of that district is also conducted at that office. For the local business in the other parts of the kingdom, the Bank has its regular public offices in the principal towns. At each of these offices, there is the Bank agent or cashier, who gives due security, and conducts the Bank's business for that district, in the manner after mentioned. There is also the Bank's accountant for that office; who is appointed by the directors. — (*Will.* Parl. 1. § 5.)

XI. The Bank takes in money, at all its public offices, on deposit receipts or promissory notes, or on current deposit account.* At the Head Office, draughts on London, or on any of the agencies, are given: at each agency, draughts on London, or on the Head Office, are given. All these documents are on *the Bank's check* (and *sealed with the Bank's seal* †). They bear, in words, to be "For the Bank of Scotland;" or, "For the Governor and Company of the Bank of Scotland." These documents are signed, if at Edinburgh, by the treasurer, and countersigned by the principal accountant: if at an agency, they must be signed by the Bank's agent *as agent*, and *countersigned by the Bank's accountant* for that agency; otherwise they infer no obligation on the Bank. — (*Resolution of Court*, 28th Feb. 1793.)

XII. Bills on London, Edinburgh, or any town where the Bank has its official correspondents, are discounted and purchased at all the Bank's public offices. The Bank's agents judge, in ordinary cases, of the bills presented; so that parties meet with no delay. The Bank does not sell, at any of its offices, the bills which it has discounted and purchased. Its agents cannot indorse its bills, unless officially to the treasurer. — (*Resolution of Court*, 23d Feb. 1789.)

XIII. Government stock and other public funds, transferable in London, may be purchased or sold, and dividends thereon may be received, through the Bank.

XIV. The Bank gives credit on cash accounts at any of its offices, on bond, with security. The security may be personal co-obligants, conjunctly and severally; or Bank of Scotland stock; or both: or such other security as may be specially agreed on. Applications for cash accounts are given in to the office where the cash account is wanted, and must specify the credit desired, and the security proposed; and the individual partners, where copartneries are proposed. Cash accounts are granted by the directors only; and are not recalled unless by their special authority. It is understood that these credits are not used as dead loans, to produce interest only. In the fair course of business, the advantage of the Bank

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* The Bank has always allowed interest on deposits. The rate allowed varies, of course, with the variations in the market rate. During the greater part of the late war it was as high as 4 per cent.; but at present it is only 2 per cent.

† The seal is now dispensed with, except on the Bank's notes.

is consulted by an active circulation of its notes, and by frequent repayments to it in a way least affecting that circulation.—(*Resolution of Court*, 6th Nov. 1729, and 23d Feb. 1789.)

XV. The Bank's dividend of profits has for some time been 9½ per cent. per annum (at present, 1833, it is 6 per cent.) on that part of its capital stock, or 1,000,000*l.* sterling, paid in. The dividends are paid regularly twice a year, without expense. They may be drawn either at the Bank's Head Office, or at any of its other offices, as most agreeable to the stockholder.

By Order of the Court of Directors.
6th Nov. 1818.

Most of the other Scotch banks are conducted on the same principles and in the same way as the Bank of Scotland, so that the details as to its management will nearly apply to them all.

The *Royal Bank of Scotland* was established in 1727. Its original capital was 151,000*l.* At present it amounts to 2,000,000*l.*

The *British Linen Company* was incorporated in 1746, for the purpose, as its name implies, of undertaking the manufacture of linen. But the views in which it originated were speedily abandoned; and it became a banking company only. Its capital amounts to 500,000*l.*

None of the other banking companies established in Scotland are chartered associations, with limited responsibility; the partners being jointly and individually liable, to the whole extent of their fortunes, for the debts of the firms. Some of them, such as the National Bank, the Commercial Banking Company, the Dundee Commercial Bank, the Perth Banking Company, &c., have very numerous bodies of partners. Their affairs are uniformly conducted by a Board of directors, annually chosen by the shareholders.

The Bank of Scotland began, as already stated, to issue 1*l.* notes so early as 1704; and their issue has since been continued without interruption. "In Scotland," to use the statement given in the Report of the Committee of the House of Commons of 1826, on the Promissory Notes of Scotland and Ireland, "the issue of promissory notes payable to the bearer on demand, for a sum of not less than 20*s.* has been at all times permitted by law; nor has any act been passed, limiting the period for which such issue shall continue legal in that country. In *England*, the issue of promissory notes for a less sum than 5*l.* was prohibited by law from the year 1777 to the period of the Bank Restriction in 1797. It has been permitted since 1797; and the permission will cease, as the law at present stands, in April, 1829."

There have been comparatively few bankruptcies among the Scotch banks. In 1793 and 1825, when so many of the English provincial banks were swept off, there was not a single establishment in Scotland that gave way. This superior stability seems to be ascribable partly to the formation of so many banks with numerous bodies of partners, which tends to prevent any company with only a few partners, unless they are known to possess considerable fortunes, from getting paper into circulation; partly to the less risk attending the business of banking in Scotland; and partly to the facility afforded by the law of Scotland of attaching a debtor's property, whether it consist of land or moveables, and making it available to the payment of his debts.

In the Report already quoted, the last-mentioned topic is touched upon as follows:—"The general provisions of the law of Scotland bearing upon this subject are calculated to promote the solidity of banking establishments, by affording to the creditor great facilities of ascertaining the pecuniary circumstances of individual partners, and by making the private fortunes of those partners available for the discharge of the obligations of the bank with which they are connected. There is no limitation upon the number of partners of which a banking company in Scotland may consist; and, excepting in the case of the Bank of Scotland and the two chartered banks, which have very considerable capitals, the partners of all banking companies are bound jointly and severally, so that each partner is liable, to the whole extent of his fortune, for the whole debts of the company. A creditor in Scotland is empowered to attach the real and heritable, as well as the personal estate of his debtor, for payment of personal debts, among which may be classed debts due by bills and promissory notes; and recourse may be had, for the purpose of procuring payment, to each description of property at the same time. Execution is not confined to the real property of a debtor merely during his life, but proceeds with equal effect upon that property after his decease.

"The law relating to the establishment of records gives ready means of procuring information with respect to the real and heritable estate of which any person in Scotland may be possessed. No purchase of an estate in that country is secure until the seisine (that is, the instrument certifying that actual delivery has been given) is put on record, *nor is any mortgage effectual until the deed is in like manner recorded.*

"In the case of conflicting pecuniary claims upon real property, the preference is not regulated by the date of the transaction, but *by the date of its record.* These records are accessible to all persons; and thus the public can with ease ascertain the effective means which a banking company possesses of discharging its obligations; and the partners in that company are enabled to determine, with tolerable accuracy, the degree of risk and responsibility to which the private property of each is exposed."

Deposits. — As was previously observed, all the Scotch banks receive deposits of so low a value as 10*l.*, and sometimes lower, and allow interest upon them.

"The interest," say the committee, "allowed by the Bank upon deposits varies from time to time according to the current rate of interest which money generally bears. At present (1826) the interest allowed upon deposits is 4 per cent." (At this moment (1833) the interest allowed on deposits is only 2 or $2\frac{1}{2}$ per cent.) "It has been calculated that the aggregate amount of the sums deposited with the Scotch banks amounts to about 20,000,000*l.* or 21,000,000*l.*" (It is believed to be now, (1833,) little if any thing under 24,000,000*l.*) "The precise accuracy of such an estimate cannot of course be relied on. The witness by whom it was made thought that the amount of deposits could not be less than 16,000,000*l.*, nor exceed 25,000,000*l.*, and took an intermediate sum as the *probable amount.* Another witness, who had been connected for many years with different banks in Scotland, and has had experience of their concerns at Stirling, Edinburgh, Perth, Aberdeen, and Glasgow, stated that *more than one half of the deposits in the banks with which he had been connected were in sums from ten pounds to two hundred pounds.* Being asked what class of the community it is that makes the small deposits, he gave the following answer, from which it appears that the mode of conducting this branch of the banking business in Scotland has long given to that country many of the benefits derivable from the establishment of savings banks.

"*Question.* What class of the community is it that makes the smallest deposits? — *Answer.* They are generally the labouring classes in towns like Glasgow: in country places, like Perth and Aberdeen, it is from servants and fishermen, and that class of the community, who save small sums from their earnings, till they come to be a bank deposit. There is now a facility for their placing money in the Provident Banks, which receive money till the deposit amounts to 10*l.* When it comes to 10*l.*, it is equal to the minimum of a bank deposit. The system of banking in Scotland is an extension of the Provident Bank system. Half-yearly or yearly those depositors come to the bank, and add the savings of their labour, with the interest that has accrued upon the deposits from the previous half year or year, to the principal; and in this way it goes on without being at all reduced, accumulating (at compound interest) till the depositor is able either to buy or build a house, when it comes to be 100*l.*, or 200*l.*, or 300*l.*, or till he is able to commence business as a master in the line in which he has hitherto been a servant. A great part of the depositors of the bank are of that description, and *a great part of the most thriving of our farmers and manufacturers have arisen from such beginnings.*"

Cash Accounts, or Credits. — The loans or advances made by the Scotch banks are either in the shape of discounts, or upon cash credits, or, as they are more commonly termed, *cash accounts.*

This species of account does not differ in principle from an over-drawing account at a private banker's in England. A cash credit is a credit given to an individual by a banking company for a limited sum, seldom under 100*l.* or 200*l.*, upon his own security, and that of two or three individuals approved by the bank, who become sureties for its payment. The individual who has obtained such a credit is enabled to draw the whole sum, or any part of it, when he pleases; replacing it, or portions of it, according as he finds it convenient; interest being charged upon such part only as he draws out. "If a man borrows 5,000*l.* from a private hand, besides that it is not always to be found when required, he pays interest for it whether he be using it or not. His bank credit costs him nothing, except during the moment it is of service to him; and this circumstance is of equal advantage as if he had borrowed money at a much lower rate of interest."—(*Hume's Essay on the Balance of Trade.*) This, then, is plainly one of the most commodious forms in which advances can be made. Cash credits are not, however, intended to be a *dead loan;* the main object of the banks in granting them is to get their notes circulated, and they do not grant them except to persons in business, or to those who are frequently drawing out and paying in money.

The system of cash credits has been very well described in the Report of the Lords' Committee of 1826, on Scotch and Irish Banking. "There is also," say their lordships, "one part of their system, which is stated by all the witnesses (and, in the opinion of the committee, very justly stated) to have had the best effects upon the people of *Scotland,* and particularly upon the middling and poorer classes of society, in producing and encouraging habits of frugality and industry. The practice referred to is that of cash credits. Any person who applies to a bank for a cash credit, is called upon to produce two or more competent sureties, who are jointly bound; and after a full inquiry into the character of the applicant, the nature of his business, and the sufficiency of his securities, he is allowed to open a credit, and to draw upon the bank for the whole of its amount, or for such part as his daily transactions may require. To the credit of the account he pays in such sums as he may not have occasion to use, and interest is charged or credited

upon the daily balance, as the case may be. From the facility which these cash credits give to all the small transactions of the country, and from the opportunities which they afford to persons, who begin business with little or no capital but their character, to employ profitably the minutest products of their industry, it cannot be doubted that the most important advantages are derived to the whole community. The advantage to the banks who give these cash credits arises from the call which they continually produce for the issue of their paper, and from the opportunity which they afford for the profitable employment of part of their deposits. The banks are indeed so sensible, that in order to make this part of their business advantageous and secure, it is necessary that their cash credits should (as they express it) be frequently operated upon, that they refuse to continue them unless this implied condition be fulfilled. The total amount of their cash credits is stated by one witness to be 5,000,000*l.*, of which the average amount advanced by the banks may be one third."

The expense of a bond for a cash credit of 500*l.* is 4*l.* stamp duty, and a charge of from 5*s.* to 10*s.* 6*d.* per cent. for filling it up.

Circulation, &c. — According to a demi-official return given in the Commons' Report already referred to, the total number of notes in circulation in Scotland, in the early part of 1826, amounted to 3,309,082; of which 2,079,344 were under 5*l.*, and 1,229,838, 5*l.* and upwards.

The Scotch banks draw on London at 20 days' date. This is denominated the par of exchange between London and Edinburgh.

Most of the great Scotch banks, such as the Bank of Scotland, the Royal Bank, &c., have established branches in other towns besides that where the head office is kept.

By the act 9 Geo. 4. c. 65., to restrain the negotiation in England of Scotch or Irish promissory notes and bills under 5*l.*, it is enacted, that if any body politic or corporate, or person, shall, after the 5th of April, 1829, publish, utter, negotiate, or transfer, in any part of England, any promissory or other note, draft, engagement, or undertaking, payable on demand to the bearer, for any sum less than 5*l.*, purporting to have been made or issued in Scotland or Ireland, every such body politic or corporate, or person, shall forfeit for every such offence not more than 20*l.* nor less than 5*l.*

Nothing contained in this act applies to any draft or order drawn by any person on his or her banker, or on any person acting as such banker, for the payment of money held by such banker or person for the use of the person by whom such draft or order shall be drawn.

No. I. — The following Table contains an Account of the Number of Banks in Scotland; the Names of the Firms or Banks; Dates of their Establishment; Places of the Head Offices; Number of Branches; Number of Partners; and the Names of their London Agents.—(Extracted principally from the *Appendix*, p. 19. *to the Commons' Report of* 1826, *on Scotch and Irish Banking.*)

	Names of Firms or Banks.	Date.	Head Office.	No. of Branches.	No. of Partners.	London Agents.
1	Bank of Scotland - -	1695	Edinburgh	16	Act of P.	Coutts and Co.
2	Royal Bank of Scotland -	1727	Ditto	1	Charter	Bank of England, and ditto.
3	British Linen Company -	1746	Ditto	27	Ditto	Smith, Payne, and Co.
4	Aberdeen Banking Company	1767	Aberdeen	6	80	Glyn and Co.
5	Aberdeen Town and Coun. Bk.	1825	Ditto	4	446	Jones, Loyd, and Co.
6	Arbroath Banking Company	1825	Arbroath	2	112	Glyn and Co.
7	Carrick and Co. or Ship Bank	1746	Glasgow	None	3	Smith, Payne, and Co.
8	Com. Bank. Comp. of Scotland	1810	Edinburgh	31	521	Jones, Loyd, and Co.
9	Commercial Banking Comp.	1778	Aberdeen	None	15	Kinloch and Sons.
10	Dundee Banking Company -	1777	Dundee	None	61	Kinloch and Sons.
11	Dundee New Bank - -	1802	Ditto	1	6	Ransom and Co.
12	Dundee Commercial Bank -	1825	Ditto	None	202	Glyn and Co.
13	Dundee Union Bank - -	1809	Ditto	4	85	Glyn and Co.
14	Falkirk Banking Company -	1787	Falkirk	1	5	Remington and Co.
15	Greenock Banking Company	1785	Greenock	3	14	Kay and Co.
16	Glasgow Banking Company -	1809	Glasgow	1	19	Ransom and Co., Glyn and Co.
17	Hunters and Co. - -	1773	Ayr	3	8	Herries and Co.
18	Leith Banking Company -	1792	Leith	4	15	Barnet and Co.
19	National Bank of Scotland -	1825	Edinburgh	8	1,238	Glyn and Co.
20	Montrose Bank - -	1814	Montrose	2	97	Barclay and Co.
21	Paisley Banking Company -	1783	Paisley	4	6	Smith, Payne, and Co.
22	Paisley Union Bank - -	1788	Ditto	3	4	Glyn and Co.
23	Perth Banking Company -	1766	Perth	5	147	Barclay and Co.
24	Perth Union Bank - -	—	Ditto	—	69	Remington and Co.
25	Ramsay's, Bonar's, and Co. -	1738	Edinburgh	None	8	Coutts and Co.
26	Renfrewshire Banking Comp.	1802	Greenock	5	6	Kay and Co.
27	Shetland Bank - - -	—	Lerwick	—	4	Barclay and Co.
28	Sir Wm. Forbes and Co. -	—	Edinburgh	—	7	Barclay & Co., Coutts & Co.
29	Stirling Banking Company -	1777	Stirling	2	7	Kinloch and Sons.
30	Thistle Bank - -	1761	Glasgow	None	6	Smith, Payne, and Co.

Private Banking Companies in Edinburgh who do not issue Notes.

	Names of Firms or Banks.	Date.	Head Office.	No. of Branches.	No. of Partners.	London Agents.
1	Messrs. Kinnear, Smith, & Co.	1830	Edinburgh	None		Smith, Payne, and Co.
2	Robert Allan and Son - -	1776	Ditto	None		Bosanquet and Co.
3	James Inglis and Co. - -		Ditto	None		Bosanquet and Co.

No. II. — An Account of the Number of Licences taken out by Country Bankers in Scotland for the Years ending the 10th of October, 1824, 1825, 1826, and 1827; specifying such as have been given to Firms carrying on Business in more Places than one.

	1824.	1825.	1826.	1827.
Number of licences issued to bankers who issue notes at one place only -	10	13	9	9
Ditto to bankers who issue notes at two different places - - -	10	12	12	6
Ditto to bankers who issue notes at three different places - - -	6	6	12	6
Ditto to bankers who issue notes at four or more places - -	52	52	56	60
	78	83	89	81

Certified. THOMAS PENDER, Compt.
Stamp Office, Edinburgh, 4th of March, 1828.

No. III. — Statement of the Number of Persons convicted of Forgery of all Instruments connected with the Chartered and other Banks of Scotland; whether of Bank Notes, of Post Bills, Bills of Exchange, or otherwise, from 1791 to 1829, both inclusive; particularising the Capital Convictions upon which Execution took place, and the Cases of mitigated Punishment.

For Forging.	For Uttering.	Total Number Convicted.	Number were Pains of Law restricted, and Sentence short of Death pronounced.	Number on whom Capital Sentence pronounced.	Number whose Sentences were mitigated by His Majesty.		Number Executed.
					Pardoned.	Commuted.	
49	150	199	172	27	2	11	16

Edinburgh, 18th of June, 1830. Certified by JA. ANDERSON, Depute Clerk of Justiciary.

V. BANKS (IRISH).

"In no country, perhaps," says Sir Henry Parnell, "has the issuing of paper money been carried to such an injurious excess as in Ireland. A national bank was established in 1783, with similar privileges to those of the Bank of England, in respect to the restriction of more than 6 partners in a bank; and the injury that Ireland has sustained from the repeated failure of banks may be mainly attributed to this defective regulation. Had the trade of banking been left as free in Ireland as it is in Scotland, the want of paper money that would have arisen with the progress of trade would, in all probability, have been supplied by joint stock companies, supported with large capitals, and governed by wise and effectual rules.

"In 1797, when the Bank of England suspended its payments, the same privilege was extended to Ireland; and after this period the issues of the Bank of Ireland were rapidly increased. In 1797, the amount of the notes of the Bank of Ireland in circulation was 621,917*l.*; in 1810, 2,266,471*l.*; and in 1814, 2,986,999*l.*

"These increased issues led to corresponding increased issues by the private banks, of which the number was 50 in the year 1804. The consequence of this increase of paper was a great depreciation of it; the price of bullion and guineas rose to 10 per cent. above the mint price; and the exchange with London became as high as 18 per cent., the par being $8\frac{1}{3}$. This unfavourable exchange was afterwards corrected; not by any reduction in the issues of the Bank of Ireland, but by the depreciation of the British currency in the year 1810, when the exchange between London and Dublin settled again at about par.

"The loss that Ireland has sustained by the failure of banks may be described in a few words. It appears by the Report of the Committee on Irish Exchanges in 1804, that there were at that time in Ireland 50 registered banks. Since that year, a great many more have been established; but *the whole have failed*, one after the other, involving the country from time to time in immense distress, with the following exceptions: — first, a few that withdrew from business; secondly, four banks in Dublin; thirdly, three at Belfast; and, lastly, one at Mallow. These eight banks, with the new Provincial Bank, and the Bank of Ireland, are the only banks now existing in Ireland.

"In 1821, in consequence of 11 banks having failed nearly at the same time, in the preceding year, in the south of Ireland, government succeeded in making an arrangement with the Bank of Ireland, by which joint stock companies were allowed to be established at a distance of 50 miles (Irish) from Dublin, and the bank was permitted to increase its capital 500,000*l.* The act of 1 & 2 Geo. 4. c. 72. was founded on this agreement.

"But ministers having omitted to repeal in this act various restrictions on the trade of banking that had been imposed by 33 Geo. 2. c. 14., no new company was formed. In 1824, a party of merchants of Belfast, wishing to establish a joint stock company, petitioned parliament for the repeal of this act of Geo. 2.; and an act was accordingly passed in that session, repealing some of the most objectionable restrictions of it (the 5 Geo. 4. c. 73.).

"In consequence of this act, the Northern Bank of Belfast was converted into a joint stock company, with a capital of 500,000*l.*, and commenced business on the 1st of

January, 1825. But the remaining restrictions of 33 Geo. 2., and certain provisions contained in the new acts of 1 & 2 Geo. 3. and 5 Geo. 4., obstructed the progress of this company, and they found it necessary to apply to government to remove them; and a bill was accordingly introduced, which would have repealed all the obnoxious clauses of the 33 Geo. 2., had it not been so altered in the committee as to leave several of them in force. In 1825, the Provincial Bank of Ireland commenced business, with a capital of 2,000,000*l.*; and the Bank of Ireland has of late established branches in all the principal towns in Ireland.

"The losses that have been sustained in Ireland by abusing the power of issuing paper have been so great, that much more is necessary to be done, by way of protecting the public from future loss, than the measure proposed last session (1826) by ministers, of abolishing small notes; and the measure already adopted, of allowing joint stock companies to be established in the interior of the country. As the main source of the evil consists in the interference of the law in creating a national bank with exclusive privileges, the first step that ought to be taken for introducing a good system into Ireland is the getting rid of such a bank, and opening the trade of banking in Dublin. The next measure should be the requiring of each bank to give security for the amount of paper that is issued; for after the experience of the ignorance with which the Irish banks have conducted their business, and the derangement of the natural course of the trade by the long existence of the Bank of Ireland, it would be unwise to calculate upon a sound system of banking speedily supplanting that which has been established.

"Under the circumstances in which Ireland is placed, nothing would so much contribute to her rapid improvement in wealth, as the introducing of the Scotch plan of cash credits, and of paying interest on deposits. By cash credits, the capital which now exists would be rendered more efficient, and the paying of interest on small deposits would lead to habits of economy, and to the more rapid accumulation of new capital.

"The charter of the Bank of Ireland has still to run till the year 1838."—(*Observations on Paper Money, &c., by Sir Henry Parnell*, pp. 171—177.)

The capital of the Bank of Ireland at its establishment in 1783 amounted to 600,000*l.*; but it has been increased at various periods; and has, since 1821, amounted to 3,000,000*l.* At present, no bank having more than 6 partners can be established any where within 50 Irish miles of Dublin; nor is any such bank allowed to draw bills upon Dublin for less than 50*l.*, or at a shorter date than 6 months. This enactment seems to amount to a virtual prohibition of the drawing of such bills. The Bank of Ireland draws on London at 20 days' date. She neither grants cash credits, nor allows any interest on deposits. She discounts at the rate of 5*l.* per cent.

In 1828, the currency of Ireland was assimilated to that of Great Britain. Previously to that period, the currency of the former was $8\frac{1}{3}$ per cent. less valuable than that of the latter.

Account of Bank of Ireland Notes in Circulation, including Bank Post Bills, in each Half Year, commencing with the Half Year ending 1st of January, 1797, to 1st of January, 1819, inclusive.

Years.	January 1.	July 1.	Years.	January 1.	July 1.
	£	£		£	£
1797	[733,763	785,101	1809	3,002,699	3,144,677
1798	1,081,512	1,245,214	1810	3,170,064	3,171,607
1799	1,363,710	1,557,737	1811	3,331,892	3,472,781
1800	1,928,381	2,317,235	1812	3,616,476	3,763,229
1801	2,350,133	2,323,901	1813	3,957,920	4,199,474
1802	2,431,152	2,587,187	1814	4,165,906	4,281,449
1803	2,662,405	2,617,144	1815	4,528,041	4,434,455
1804	2,798,767	2,859,977	1816	4,179,549	4,193,853
1805	2,817,697	2,778,635	1817	4,277,018	4,304,040
1806	2,560,271	2,517,581	1818	4,387,155	4,413,463
1807	2,693,796	2,789,544	1819	4,477,019	
1808	2,746,717	2,798,835			

An Account of the Average Amount of Bank of Ireland Notes, including Bank Post Bills, issued during the Six Years ending with 1825.

Years.	Notes and Bills	Irish Currency.		Years.	Notes and Bills	Irish Currency.	
		£ s.	£ s.			£ s.	£ s.
1820	of 5*l.* and upwards	2,894,777 5		1823	of 5*l.* and upwards	3,528,625 7	
	under 5*l.* - -	1,314,806 15			under 5*l.* - -	1,588,764 7	
			4,209,584 0				5,117,389 14
1821	of 5*l.* and upwards	3,501,119 11		1824	of 5*l.* and upwards	3,890,337 8	
	under 5*l.* - -	1,710,603 3			under 5*l.* - -	1,732,118 6	
			5,211,792 14				5,622,455 14
1822	of 5*l.* and upwards	3,618,111 1		1825	of 5*l.* and upwards	4,446,995 0	
	under 5*l.* - -	1,552,321 2			under 5*l.* - -	1,964,354 8	
			5,170,432 3				6,411,349 8

(*Commons Report of* 1826, p. 29.)

There is no later account of the circulation of the Bank of Ireland, or of the other Irish banks. The entire paper circulation of Ireland may now, probably, amount to between 7,000,000*l.* and 8,000,000*l.* sterling.

It appears from the statements given in the Report of the Commons' Committee of 1826, that the average value of the notes and post bills of the Bank of Ireland of *5l.* and upwards in circulation, during the five years ending with 1825, amounted to 3,646,660*l.* Irish currency; and that the average value of the notes and post bills under *5l.* in circulation during the same period amounted to 1,643,828*l.* Irish currency. The average value of the notes of all descriptions issued by the other banking establishments in Ireland, in 1825, amounted to 1,192,886*l.*

Provincial Bank of Ireland. — This important establishment was, as already stated, founded in 1825. Its subscribed capital consists of 2,000,000*l.*, divided into 20,000 shares of 100*l.* each, of which 25 per cent., or 500,000*l.*, has been paid up. Its head office is in London; and at present it has subordinate offices in Cork, Limerick, Clonmel, Londonderry, Sligo, Wexford, Waterford, Belfast, Galway, Armagh, Athlone, Coleraine, Kilkenny, Ballina, Tralee, Youghall, Enniskillen, Monaghan, Banbridge, and Ballymena. The last 5 have been opened since 1831. The entire management of the establishment is vested in the court of directors in London. The business of the branch banks is conducted, under the control of the head office, by the managers, with the advice and assistance of 2 or more gentlemen of respectability in the district, each holding 10 shares in the bank. The business consists of discounting bills; granting cash credits, after the manner of the Scotch banks; receiving deposits, on which interest, varying according to circumstances, is allowed; in drawing and giving letters of credit on other places of Ireland, Great Britain, &c.; and of other details incident to banking. It has had several pretty severe runs to sustain. In the course of a single week, in October, 1828, about 1,000,000*l.* in gold was sent from England to Ireland on account of the Provincial Bank! This prompt and ample supply effectually maintained the credit of the establishment, and did much to restore confidence.

The notes of the Provincial Bank have always been payable at the places where they are issued. The Bank of Ireland began to establish branches in 1825; but the notes issued by her branches were not, at first, payable except at the head office in Dublin. This distinction, which tended to throw the principal pressure of runs in the country on the Provincial Bank, and other private companies, was abolished by the act 9 Geo. 4. c. 81., which made it obligatory on *all* banks to pay their notes at the place of issue. Notes of the Provincial Bank are received by the Treasury in payment of taxes, in the same way as those of the Bank of Ireland; and it is the bank of government for the excise, post-office, and stamp revenues for those parts of the country beyond the exclusive privileges of the Bank of Ireland. The dividends have been at the rate of 4, 5, and, since the 25th of December, 1832, of 6 per cent. per annum. Its stock is now at a high premium, the *25l.* paid up shares fetching *35l.* or *36l.*

Northern Banking Company. — This establishment has its head office in Belfast, and its branches are distributed throughout Ulster. Its capital and operations are on a much less extensive scale than those of the Provincial Bank, but in other respects they are conducted nearly in the same way.

There are very few private banking establishments at present existing in Ireland, at least compared with those in this country.

VI. Banks (Foreign).

To attempt giving any detailed account of the principal foreign banks would very far exceed our limits; we shall, therefore, only notice a few of the more celebrated.

The *Bank of Venice* seems to have been the first banking establishment in Europe. It was founded so early as 1171, and subsisted till the subversion of the republic in 1797. It was essentially a deposit bank; and its bills bore at all times a premium or *agio* over the current money of the city.

The *Bank of Amsterdam* was established in 1659. It was a deposit bank; and payments were made by writing off sums from the account of one individual to those of another. According to the principles on which the bank was established, it should have had at all times in its coffers bullion equal to the full amount of the claims upon it. But the directors privately lent about 10,500,000 florins to the states of Holland and Friesland. This circumstance transpired when the French invaded Holland, and caused the ruin of the bank. — (See my edition of the *Wealth of Nations*, vol. ii. p. 338.)

The *Bank of the Netherlands* was established in 1814. It is formed on the model of the Bank of England; and was to enjoy for 25 years the exclusive privilege of issuing notes. The original capital of 5,000,000 florins was doubled in 1819. The king holds *one tenth* of the shares. The affairs of the bank are managed by a president, secretary, and 5 directors, who are chosen every 6 months, but may be indefinitely re-elected. This bank discounts bills of exchange with three responsible signatures; it takes continuations on stock, and sometimes lends on bullion at such a rate of interest and to such an extent as may be agreed upon. It occasionally, also,

makes loans on merchandise, but never at less than 5 per cent. Its notes vary from 1,000 florins to 25 florins, that is, from 83⅓*l.* to 2 1/12*l.* The dividends have varied from 3 to 7 per cent. The shares are each 1,000 florins, and are at present worth 25 per cent. premium ex dividend. The responsibility of the shareholders is limited to the amount of their stock.—(*Consul's Answer to Circular Queries.*)

The *Bank of Hamburgh* is a deposit bank, and its affairs are managed according to a system that insures the fullest publicity. It receives no deposits in coin, but only in bullion of a certain degree of fineness. It charges itself with the bullion at the rate of 442 schillings the mark, and issues it at the rate of 444 schillings; being a charge of ½ths, or nearly ½, per cent. for its retention. It advances money on jewels to ¾ths of their value. The city is answerable for all pledges deposited with the bank; they may be sold by auction, if they remain 1 year and 6 weeks without any interest being paid. If the value be not claimed within 3 years, it is forfeited to the poor. The Bank of Hamburgh is universally admitted to be one of the best managed in Europe.

The *Bank of France* was founded in 1803. The exclusive privilege of issuing notes payable to bearer was granted to it for 40 years. The capital of the bank consisted at first of 45,000,000 fr., but it was subsequently increased to 90,000,000 fr., divided into 90,000 shares or *actions* of 1,000 fr. each. Of these shares, 67,900 are in the hands of the public; 22,100, being purchased up by the bank, form part of her capital. The notes issued by the bank are for 1,000 and 500 fr. The dividend varies from 4 to 5 per cent.; and there is, besides, a *reserve* retained from the profits, which is vested in the 5 per cents. A bonus of 200 fr. a share was paid out of this reserve to the shareholders in 1820. The reserve in possession of the bank in 1828, amounted to 6,623,000 fr. No bills are discounted that have more than 3 months to run. The customary rate of discount is 4 per cent., but it varies according to circumstances. The discounts in 1827 amounted to 621,000,000 fr. The bank is obliged to open a *compte courant* for every one who requires it; and performs services for those who have such accounts, similar to those rendered by the private banks of London to their customers. She is not allowed to charge any commission upon current accounts, so that her only remuneration arises out of the use of the money placed in her hands by the individuals whose payments she makes. This branch of the business is said not to be profitable. There are about 1,600 accounts current at the bank; and of the entire expenses of the establishment, amounting to about 900,000 fr. a year, *two thirds* are said to be incurred in this department. The bank advances money on pledges of different kinds, such as foreign coin or bullion, government or other securities, &c. It also undertakes the care of valuable articles, as plate, jewels, bills, title-deeds, &c. The charge is ⅛ per cent. of the value of each deposit for every period of 6 months or under.

The administration of the bank is vested in a council general of 20 members, viz. 17 regents, and 3 censors, who are nominated by 200 of the principal proprietors. The king appoints the governor and deputy governor. The first must be possessed of 150, and the latter of 50 shares. A *compte rendu* is annually published, and a report by the censors, which together give a very full exposition of the affairs of the bank. The institution is flourishing, and enjoys unlimited credit.—(For further details with respect to the Bank of France, see *Storch, Cours d'Economie Politique*, Paris, 1823, tom. iv. pp. 168—180., and the *Comptes Rendus* of the different years.)

Banks have also been established at Berlin, Copenhagen, Vienna, and Petersburgh. Those who wish for detailed information with respect to these establishments, may consult the work of M. Storch, to which we have just referred. In the 4th volume, there is an admirable account of the paper money of the different continental states. The objects we have in view will be accomplished by laying before our readers the following details with respect to the *Commercial Bank* of Russia, established in 1818:—

"This bank receives deposits in gold and silver, foreign as well as Russian coin, and in bars and ingots. It has a department for transferring the sums deposited with it, on the plan of the Hamburgh Bank. It discounts bills, and lends money on deposits of merchandise of Russian produce or origin. Its capital consists of 30,000,000 of bank-note rubles. It is administered by a governor and 4 directors appointed by government, and 4 directors elected by the commercial body of Petersburgh. The property in the bank is protected against all taxation, sequestration, or attachment; and it is enacted, that subjects of countries with which Russia may be at war shall be entitled at all times to receive back their deposits without any reservation. It is also declared, that at no time shall the bank be called upon for any part of its capital to assist the government. All deposits must be made for 6 months at least, and be repayable at or before that period, and not be less than 500 rubles: sums so deposited to pay ¼ per cent. The deposits, if in bars, ingots, or foreign specie, are estimated in Russian silver coin, and so registered in the attestation; and if not demanded back within 15 days of the expiration of 6 months, or the necessary premium paid for the prolongation, the owner loses the right of claiming his original deposit, and must take its estimated value in Russian silver

coin. No bills are discounted that have less than 8 days or more than 6 months to run. The rate of discount is 6 per cent. No interest is allowed on money deposited in the bank, unless notice be given that it will be allowed to lie for a year, and 3 months' notice be given of the intention to draw it out, when *six* per cent. interest is allowed." — (*Kelly's Cambist*, vol. i. p. 303.) This bank has branches at Archangel, Moscow, Odessa, Riga, &c.

The *Bank of the United States* was incorporated in 1816. Its capital is 35,000,000 dollars, divided into 350,000 shares of 100 dollars each. Seven millions were subscribed by the United States, and the remaining 28,000,000 by individuals, companies, corporations, &c. In 1832, 84,000 shares were held by foreigners. The bank issues no note for less than 5 dollars; all its notes are payable in specie on demand. It discounts bills and makes advances on bullion at the rate of 6 per cent. The management is under 25 directors; 5 of whom, being holders of stock, are annually appointed by the President of the United States. Seven directors, including the president, constitute a Board.

The principal office of the bank is in Philadelphia; but in January, 1830, it had *twenty-seven* subordinate offices, or branch banks, established in different parts of the Union. Subjoined is a statement of some of the items in the affairs of the Bank of the United States, on the 1st of April, 1830, and the 2d of November, 1832.

	1830.	1832.
Notes discounted	32,138,270·89 dol.	45,726,934·95 dol.
Domestic bills discounted	10,506,882·54	16,304,498·48
Funded debt held by the bank	11,122,530·90	4,747,696·45
Real estate	2,891,890·75	1,822,721·51
Funds in Europe, equal to specie	2,789,498·54	2,885,016·26
Specie	9,043,748·97	8,026,055·45
Public deposits	8,905,501·87	6,957,621·54
Private deposits	7,704,256·87	7,622,898·84
Circulation	16,083,894·00	17,968,733·36

The total liabilities of the bank to the public on the 1st of November, 1832, including its notes in circulation, deposits, and debts to the holders of public funds, were 37,296,950·20 dollars; and its assets, including specie, cash in Europe, debts from individuals, banking companies, &c. were 79,593,870·97 dollars; leaving a surplus of 42,296,920·77 dollars, showing the stability of the bank to be equal to that of any institution of the sort in the world. — (*Report to Secretary of Treasury on Affairs of the Bank of the United States*, Dec. 4. 1832.) The charter of the bank expires in 1836. A bill for its renewal passed both houses of Congress in 1832, but was rejected by the President. The probability, however, seems to be, that the measure will still pass. Of its expediency no reasonable doubt can be entertained.

The establishment of the Bank of the United States has been of material service, by affording a currency of undoubted solidity, readily accepted in all parts of the Union. At the period when it was organised, nothing could be in a less satisfactory condition than the paper currency of the United States; in fact, with the exception perhaps of England and Ireland, they have suffered more than any other country from the abuse of banking. In 1814, all the banks south and west of New England stopped payment; and it appears, from the official returns, that in all, no fewer than 165 banks were in this predicament between the 1st of January, 1811, and the 1st of January, 1830! It is of importance to observe, that most of these banks were joint stock companies. At present, indeed, there are no strictly private banking companies in the United States. They are *all* incorporated by law, with a fixed capital, the shareholders being only liable in most cases, though not uniformly, to the extent of their shares. They all issue notes of 5 dollars; but the issue of notes of a lower value has been forbidden in Pennsylvania, Maryland, and Virginia. A good deal has been said in this country of the flourishing state of the New England banks, particularly those of Massachusetts, and they have been held up as a model for our imitation. But, bad as our system of country banking undoubtedly is, we should be exceedingly sorry to see any attempt made to improve it, by the adoption of even the best parts of the American system. Among other regulations, an act of the legislature of Massachusetts provides that no bank for the issue of notes can go into operation in any way, until at least half its capital stock shall be paid in gold and silver into the bank, and be actually existing in its coffers; and the cashier of every bank is bound to make specific returns once a year of its debts and assets, on being required to do so by the secretary of state. But such regulations are found, in practice, to be nearly if not wholly worthless. Instances have occurred of banks having borrowed an amount of dollars equal to half their capital, *for a single day;* and of such dollars having been examined by the commissioners appointed for that purpose, and reported by them, and *sworn by a majority of the directors* to be the first instalment paid by the stockholders of the bank, and intended

to remain in it! — (*Gouge's Paper Money and Banking in the United States*, part ii. p. 157.) We do not, of course, imagine that such disgraceful instances can be of common occurrence; but a system which permits of frauds of this sort being perpetrated under cover of authority, must be altogether vicious. The publicity, too, to which the banks are subject, is injurious rather than otherwise. They know when they are to be called upon to make their returns: and in order to render them as favourable as possible, they are in the habit, for a month or two previously, of narrowing their discounts, to the great inconvenience of those with whom they deal; and endeavour by every means in their power, through temporary loans, and all manner of devices, to swell the amount of bullion in their coffers on the day of examination. If the banks were obliged to make regular weekly or even monthly returns of their situation, they might afford some little useful information; but it is abundantly obvious, that that which is derived from the present returns must be, even when not so intended, misleading and deserving of very little attention. The truth cannot be too often repeated, that it is quite impossible ever to organise secure banks of issue, — and it is with such only that the legislature has any right to interfere, — except by obliging them to give security for their notes. Every other scheme, how carefully soever it may be devised, is sure in the end to prove nugatory and to be defeated. That part of the American system which limits the responsibility of the partners in a bank to the amount of their shares, seems to us to be in the last degree objectionable. It affords a strong temptation to the commission of fraud, and we have yet to learn that it possesses a single countervailing advantage. We have been assured by those well acquainted with the facts, that it has been productive of the most mischievous consequences. Six of the Massachusetts banks, having, or professing to have, a capital of 800,000 dollars, failed between the 1st of January, 1811, and the 1st of July, 1830.

We subjoin an official abstract of the state of the 84 banks existing in Massachusetts, on the first Saturday of August, 1832.

Abstract Account of the Massachusetts Banks.

	Dollars.		Dollars.
Capital stock paid in	24,520,200·00	Bills of banks in this State	1,027,362·03
Bills in circulation	7,122,856·00	Bills of banks elsewhere	174,568·62
Nett profits on hand	1,031,900·16	Balances due from other banks	2,307,784·26
Balances due to other banks	1,993,904·15	Due to the banks, excepting balances	38,889,727·24
Cash deposited, &c., not bearing interest	2,938,970·33	Total resources of the banks	44,042,006·54
Cash deposited, bearing interest	6,268,584·61	Amount of last dividend	689,275·00
Due from the banks	43,996,900·00	— reserved profits	436,708·74
Gold, silver, &c. in banks	902,205·78	Debts secured by pledge of stock	944,761·73
Real estate	738,612·64	— due, and considered doubtful	211,914·78

Rate of dividend on amount of capital of the banks, as existing when dividend was made, 3·125 per cent.

Mr. Gallatin has given the following account of the number and capital of the banking establishments existing in the United States on the 1st of January, 1830: —

States.	Number of Banks.	Capital.	States.	Number of Banks.	Capital.
		Dollars.			Dollars.
Massachusetts	66	20,420,000	North Carolina	3	3,195,000
Maine	18	2,050,000	South Carolina	5	4,631,000
New Hampshire	18	1,791,670	Georgia	9	4,203,029
Vermont	10	432,625	Louisiana	4	5,665,980
Rhode Island	47	6,118,397	Alabama	2	643,503
Connecticut	13	4,485,177	Mississippi	1	950,600
New York	37	20,083,353	Tennessee	1	737,817
New Jersey	18	2,017,009	Ohio	11	1,454,386
Pennsylvania	33	14,609,963	Michigan	1	10,000
Delaware	4	830,000	Florida	1	75,000
Maryland	13	6,250,495	Delaware	2	
District of Columbia	9	3,875,794			
Virginia	4	5,571,100	Total	330	110,101,898

For further information with respect to the banks of the United States, see the Report, 12th of February, 1820, of the Secretary of the Treasury (W. H. Crawford, Esq.) to Congress; the pamphlet of Albert Gallatin, Esq. on the Currency and Banking System of the United States, Philadelphia, 1831; *Gouge's Account of Paper Money and Banking in the United States, &c.* And for further details as to foreign banks, see Bordeaux, Calcutta, Christiania, Copenhagen, Naples, &c.

VII. Banks for Savings,

Are banks established for the receipt of small sums deposited by the poorer class of persons, and for the accumulation of such sums at compound interest. They are managed by individuals, who derive no benefit whatever from the deposits. All monies paid into any Savings Bank established according to the provisions of the act 9 Geo. 4. c. 92., are

ordered to be paid into the Banks of England and Ireland, and vested in Bank annuities or Exchequer bills. The interest payable to depositors is not to exceed $2\frac{3}{4}d.$ per cent. *per diem*, or 3*l.* 8*s.* $5\frac{1}{4}d.$ per cent. *per annum*. No depositor can contribute more than 30*l.*, exclusive of compound interest, to a Savings Bank in any one year; and the total deposits to be received from any one individual are not to exceed 150*l.*; and whenever the deposits, and compound interest accruing upon them, standing in the name of any one individual, shall amount to 200*l.*, no interest shall be payable upon such deposit so long as it shall amount to 200*l.* Since the establishment of this system in 1817, down to January, 1831, the sums received from depositors, and the interest accruing upon them, amounted to 20,760,228*l.*, of which the depositors had received, in principal and interest, 5,648,838*l.*; leaving, at the period in question, a balance due to the depositors of 15,111,890*l.* The commissioners for the reduction of the national debt have the disposal of the sums vested in the public funds on account of Savings Banks.

The principle and object of these institutions cannot be too highly commended. In the metropolis, and many other parts of England, public banks do not receive small deposits, and upon none do they pay any interest. And even in Scotland, where the public banks allow interest upon deposits, they do not generally receive less than 10*l.* But few poor persons are able to save so large a sum, except by a lengthened course of economy. The truth, therefore, is, that until Savings Banks were established, the poor were every where without the means of securely and profitably investing those small sums they are not unfrequently in a condition to save; and were consequently led, from the difficulty of disposing of them, to neglect opportunities for making savings, or if they did make them, were tempted, by the offer of high interest, to lend them to persons of doubtful characters and desperate fortunes, by whom they were, for the most part, squandered. Under such circumstances, it is plain that nothing could be more important, in the view of diffusing habits of forethought and economy amongst the labouring classes, than the establishment of Savings Banks, where the smallest sums are placed in perfect safety, are accumulated at compound interest, and are paid, with their accumulations, the moment they are demanded by the depositors. The system is yet only in its infancy; but the magnitude of the deposits already received, sets its powerful and salutary operation in a very striking point of view.

We subjoin a copy of the rules of the St. Pancras Savings Bank, which may be taken as a model for similar institutions, inasmuch as they have been drawn up with great care, and closely correspond with the provisions in the act 9 Geo. 4. c. 92.

1. *Management.* — This Bank is under the management of a president, vice-presidents, trustees, and not less than fifty managers, none of whom are permitted to derive any benefit whatsoever, directly or indirectly, from the deposits received, or the produce thereof. One or more of the managers attend when the Bank is open for business.

2. *Superintending Committee.* — A committee of not less than ten managers, three of whom form a quorum, is empowered to superintend, manage, and conduct the general business of this Bank; to add to their number from among the managers; to fill up vacancies in their own body, and to appoint a treasurer or treasurers, agent or agents, auditors, an actuary and clerks, and other officers and servants, and to withdraw any such appointments, and to appoint others, should it be considered necessary so to do. — The proceedings of this committee are regularly laid before the general meetings of the Bank.

3. *Elections.* — The superintending committee is empowered to add to the number of managers, until they amount to one hundred and twenty, exclusively of the president, vice-presidents, and trustees. And any vacancies of president, vice-presidents, and trustees, are to be filled up at a general meeting.

4. *General Meetings.* — A general meeting of the president, vice-presidents, trustees, and managers of this Bank shall be held once a year, in the month of February. The superintending committee shall lay before every such meeting a report of the transactions of the bank, and state of the accounts. The superintending committee for the succeeding year shall be elected at such general meeting; and failing such election, the former committee shall be considered as reappointed.

5. *Special Meetings.* — The superintending committee are authorised to call special general meetings when they think proper; and also, on the requisition of any ten managers, delivered in writing to the actuary, or to the manager in attendance at the Bank; and of such meeting seven days' notice shall be given.

6. *Liability of Trustees, Managers, Officers, &c.* — No trustee or manager shall be personally liable except for his own acts and deeds, nor for any thing done by him in virtue of his office, except where he shall be guilty of wilful neglect or default; but the treasurer or treasurers, the actuary, and every officer intrusted with the receipt or custody of any sum of money deposited for the purposes of this Institution, and every officer, or other person, receiving salary or allowance for their services from the funds thereof, shall give good and sufficient security, by bond or bonds, to the clerk of the peace of the county of Middlesex, for the just and faithful execution of such office of trust.

7. *Investment and Limitation of Deposits.* — Deposits of not less than *one shilling*, and not exceeding *thirty pounds* in the whole, exclusive of compound interest, from any one depositor, or trustee of a depositor, during each and every year ending on the 20th of November, will be received and invested, pursuant to 9 Geo. 4. c. 92. s. 11., until the same shall amount to *one hundred and fifty pounds* in the whole; and when the principal and interest together shall amount to *two hundred pounds*, then no interest will be payable on such deposit, so long as it shall continue to amount to that sum. But depositors, whose accounts amounted to, or exceeded, *two hundred pounds*, at the passing of the said act, on the 28th of July, 1828, will continue to be entitled to interest and compound interest thereon.

8. *Interest to be allowed to Depositors.* — In conformity with the 24th clause of the 9 Geo. 4. c. 92., an interest at the rate of $2\frac{1}{4}d.$ per cent. per day, being 3*l.* 8*s.* $5\frac{1}{4}d.$ per cent. per annum (*the full amount authorised by the said act*), will be allowed to depositors, and placed to their accounts as a cash deposit, in the month of *November* in each year. Depositors demanding payment of the whole amount of their deposits in this Bank, will be allowed the interest due on such deposits up to the day on which notice of withdrawing shall be given, but no interest will be allowed, in any case, on the fractional parts of a pound sterling.

9. *Description and Declaration.* — Every person desirous of making any deposit in this Bank, shall, at

the time of making their first deposit, and at such other times as they shall be required so to do, declare their residence, occupation, profession, or calling, and sign (either by themselves, or, in case of infants under the age of seven years, by some person or persons to be approved of by the trustees or managers, or their officer), a declaration that they are not directly or indirectly entitled to any deposit in, or benefit from, the funds of any other Savings Bank in England or Ireland, nor to any sum or sums standing in the name or names of any other person or persons in the books of this Bank. And in case any such declaration shall not be true, every such person (or the person on whose behalf such declaration may have been signed) shall forfeit and lose all right and title to such deposits, and the trustees and managers shall cause the sum or sums so forfeited to be paid to the commissioners for the reduction of the national debt; but no depositor shall be subject or liable to any such forfeiture, on account of being a trustee on behalf of others, or of being interested in the funds of any Friendly Society legally established.

10. *Trustees on Behalf of others.*—Persons may act as trustees for depositors, whether such persons are themselves depositors in any Savings Bank or not, provided that such trustee or trustees shall make such declaration on behalf of such depositor or depositors, and be subject to the like conditions in every respect, as are required in the case of persons making deposits on their own account, and the receipt and receipts of such trustee or trustees, or the survivor of them, or the executors or administrators of any sole trustee, or surviving trustee, with or without (as may be required by the managers) the receipt of the person on whose account such sum may have been deposited, shall be a good and valid discharge to the trustees and managers of the Institution.

11. *Minors.* — Deposits are received from, or for the benefit of, minors, and are subject to the same regulations as the deposits of persons of 21 years of age and upwards.

12. *Friendly and Charitable Societies.* — Friendly Societies, legally established previous to the 28th of July, 1828, may deposit their funds through their treasurer, steward, or other officer or officers, without any limitation as to the amount. But Friendly Societies formed and enrolled after that date, are not permitted to make deposits exceeding the sum of 300*l.*, principal and interest included; and no interest will be payable thereon, whenever the same shall amount to, or continue at, the said sum of 300*l.* or upwards.

Deposits are received from the trustees or treasurers of Charitable Societies, not exceeding 100*l.* per annum, provided the amount shall not at any time exceed the sum of 300*l.*, exclusive of interest.

13. *Deposits of Persons unable to attend.* — Forms are given at the office, enabling persons to become depositors who are unable to attend personally; and those who have previously made a deposit, may send additional sums, *together with their book*, by any other person.

14. *Depositors' Book.* — The deposits are entered in the books of the Bank at the time they are made, and the depositor receives a book with a corresponding entry therein; which book must be brought to the office every time that any further sum is deposited, also when notice is given for withdrawing money, and at the time the repayment is to be made, so that the transactions may be duly entered therein.

15. *Withdrawing Deposits.* — Depositors may receive the whole or any part of their deposits on any day appointed by the managers, not exceeding *fourteen* days after notice has been given for that purpose; but such deposits can only be repaid to the depositor personally, or to the bearer of an order under the hand of the depositor, signed in the presence of either the minister or a churchwarden of the parish in which the depositor resides, of a justice of the peace, or of a manager of this Bank.

☞ *The Depositor's Book must always be produced when notice of withdrawing is given.*

16. *Money withdrawn may be re-deposited.* — Depositors may withdraw any sum or sums of money, and re-deposit the same at any time or times within any one year, reckoning from the 20th day of November, provided such sum or sums of money re-deposited, and any previous deposit or deposits which may have been made by such depositor in the course of the year, taken together, shall not exceed, at any time in such year, the sum of 30*l.*, additional principal money bearing interest.

17. *Return or Refusal of Deposits.* — This Bank is at liberty to return the amount of the deposits to all or any of the depositors, and may refuse to receive deposits in any case, where it shall be deemed expedient so to do.

18. *Deposits of a deceased Depositor exceeding Fifty Pounds.* — In case of the death of any depositor in this Bank, whose deposits, and the interest thereon, shall exceed in the whole the sum of *fifty pounds*, the same shall only be paid to the executor or executors, administrator or administrators, on the production of the probate of the will, or letters of administration.

19. *Deposits of a deceased Depositor not exceeding Fifty Pounds.* — In case a depositor in this Bank shall die, whose deposits, including interest thereon, shall not exceed the sum of fifty pounds, and that the trustees or managers shall be satisfied that no will was made and left, and that no letters of administration will be taken out, they shall be at liberty to pay the same to the relatives or friends of the deceased, or any or either of them, or according to the statute of distribution, or require the production of letters of administration, at their discretion. And the Bank shall be indemnified by any such payments from all and every claim in respect thereof by any person whatsoever.

20. *Certificate.* — In all cases wherein certificates shall be required of the amount of deposits in this Bank belonging to depositors therein, for the purpose of obtaining, free of stamp duties, a probate of will, or letters of administration, such certificate shall be signed by a manager, and countersigned by the actuary for the time being, as a true extract from the Ledger of the Institution.

21. *Arbitration of Differences.* — In case any dispute shall arise between the trustees or managers of this Bank, or any person or persons acting under them, and any individual depositor therein, or any trustee of a depositor, or any person claiming to be such executor, administrator, or next of kin, then, and in every such case, the matter so in dispute shall be referred to the barrister at law appointed by the commissioners for the reduction of the national debt, under the authority of the 9 Geo. 4. c. 92. s. 45.; and whatever award, order, or determination shall be made by the said barrister, shall be binding and conclusive upon all parties, and shall be final, to all intents and purposes, without any appeal.

Purchase of Government Annuities by Depositors in Savings Banks. — The act 2 & 3 *Will.* 4. c. 14. enables depositors in Savings Banks and others to purchase government annuities for life or for years, and either immediate or deferred. At present these annuities are limited to 20*l.* a year. The money advanced is returnable in case the contracting party does not live to the age at which the annuity is to become payable, or is unable to continue the monthly or annual instalments. That this measure was benevolently intended, and that it may be productive of advantage to many individuals, cannot be doubted; but we look upon all attempts, and particularly those made by government, to get individuals to exchange capital for annuities, as radically objectionable; and as being subversive of principles which ought to be strengthened rather than weakened. — (See FUNDS.)

Summary of Savings Banks, &c. in England, Wales, and Ireland, November, 1832.

In *England* there were, on the 10th of November, 1832, 384 Savings Banks: of these, 7 have made no return, the remaining Banks contain,

Depositors.		Amount.
£	No.	£
Under 20	195,035	1,410,792
— 50	102,536	3,146,753
— 100	47,903	3,235,083
— 150	17,031	2,042,425
— 200	7,908	1,338,233
Above 200	3,756	930,953
	374,169	12,161,607*
Friendly Societies	4,162	623,273
Charitable ditto	1,996	131,148
Accounts	380,327	12,916,028

Average amount of each deposit in England, 32*l.*

* This is the amount given in the table whence this abstract has been taken, but it does not quite agree with the items.

In *Wales* there were on the 10th of November, 1832, 22 Savings Banks: 1 has made no return; the remaining Banks contain,

Depositors.	No.	Amount. £
Depositors	10,374	322,573
Friendly Societies	167	23,385
Charitable ditto	53	3,836
Accounts	10,594	349,794

Average amount of each deposit in Wales, 31*l.*

In *Ireland* there were, on the 10th of November 1832, 77 Savings Banks: 7 have made no return; the remaining Banks contain,

Depositors.	No.	Amount. £
Depositors	37,898	1,004,189
Friendly Societies	234	10,689
Charitable ditto	347	31,027
Accounts	38,479	1,045,825

Average amount of each deposit in Ireland, 26*l.*

Grand Total in England, Wales, and Ireland, on the 10th of November, 1832.

Savings Banks.	Accounts.	Amount.	Average Amount of each Deposit.
		£	£
483	429,400	14,311,647	30

(From the *Statistical Table* compiled by *John Tidd Pratt, Esq.*)

BANGKOK, the capital of the kingdom of Siam, situated about 20 miles from the sea, on both sides of the river Menam, but chiefly on its left or eastern bank, in lat. 13° 40′ N., long. 101° 10′ E. The Menam opens in the centre nearly of the bottom of the Gulf of Siam. There is a bar at its mouth, consisting, for the most part, of a mud flat 10 miles in depth. The outer edge of this flat, which is little more than 200 yards broad, is sandy and of harder materials than the inner part; which is so soft, that when a ship grounds on it during the ebb, she often sinks 5 feet in the mud and clay, which supports her upright, so that she is but little inconvenienced. The highest water on the bar of the Menam, from February to September, is about 13½ feet; and in the remaining 4 months, somewhat more than 14 feet,—a difference probably produced by the accumulation of water at the head of the bay after the south-west monsoon, and by the heavy floods of the rainy season. On account of the deficiency of water on the bar, vessels sent to Bangkok had better, perhaps, not exceed 200 or 250 tons burden. In all other respects, the river is extremely safe and commodious. Its mouth is no sooner approached, than it deepens gradually; and at Paknam, two miles up, there are 6 and 7 fathoms water. This depth increases as you ascend, and at Bangkok is not less than 9 fathoms. The only danger is, or rather was, a sand bank off Paknam, bare at low water; but on this a fort or battery has been erected within the last few years, affording at all times a distinct beacon. The channel of the river is so equal, that a ship may range from one side to another, approaching the banks so closely that her yards may literally overhang them. The navigation is said to be equally safe all the way up to the old capital of Yuthia, 80 miles from the mouth of the river.

The city of Bangkok extends along the banks of the Menam to the distance of about 2½ miles; but is of no great breadth, probably not exceeding 1½ mile. On the left bank there is a long street or row of floating houses; each house or shop, for they are in general both, consisting of a distinct vessel, which may be moored any where along the banks. Besides the principal river, which at the city is about a quarter of a mile broad, the country is intersected by a great number of tributary streams and canals, so that almost all intercourse at Bangkok is by water. The population has been computed at 50,000 or 60,000, half of whom are Chinese settlers.

The total area of the kingdom of Siam has been estimated at 190,000 square miles, and the population at only 2,790,500, principally resident in the rich valley of the Menam. Of the entire population, it is supposed that not less than 440,000 are Chinese. The common necessaries of life at Bangkok are exceedingly cheap. A cwt. of rice may always be had for 2*s.* and very often for 1*s.* Other necessaries, such as salt, palm-sugar, spices, vegetables, fish, and even flesh, are proportionally cheap. The price of good pork, for example, is 2½*d.* per lb. A duck may be had for 7*d.* and a fowl for 3*d.* The neighbourhood of Bangkok is one of the most productive places in the world for fine

fruits; for here are assembled, and to be had in the greatest perfection and abundance, the orange and lichi of China, the mangoe of Hindostan, and the mangostein, durian, and shaddock of the Malay countries.

Monies, Weights, and Measures. — Gold and copper are not used as money in Siam, and the currency consists only of cowrie shells and silver. The denominations are as follow: — 200 bia or cowries make 1 p'hai-nung; 2 p'hai-nungs, 1 sing-p'hai; 2 sing-p'hais, 1 fuang; 2 fuangs, 1 salung; 4 salungs, 1 bat or tical; 80 ticals, 1 cattie; 100 catties, 1 picul.

The standard coin is the bat, which Europeans have called a tical; but there are also coins, though less frequently, of the lower denominations. These are of a rude and peculiar form. They are, in fact, nothing more than small bits of a silver bar bent, and the ends beaten together. They are impressed with two or three small stamps, not covering the whole surface of the coin. The cattie and picul are, of course, only used in speaking of large sums of money. Gold and silver are weighed by small weights, which have the same denominations as the coins. The p'hai-nung, the lowest of these, is in this case subdivided into 32 sagas, or red beans, the *Abrus precatorius* of botanists.

The bat, or tical, was assayed at the mint of Calcutta; it was found to weigh 236 grains; its standard, however, was uncertain, and the value of different specimens varied from 1 rupee 3 anas and 3 pice, to 1 rupee 3 anas and 7 pice. The value, therefore, in sterling money, is about 2*s.* 6*d.*, and it is so considered.

In respect to ordinary measures, the Siamese cattie is double the weight of the Chinese cattie, which, as is well known, is equal to 1⅓ lb. avoirdupois. The picul, however, is of the same weight, consisting in the one case of 50 catties only, and in the other of 100. In weighing rice and salt, a large measure is used, consisting, in respect to the first of 22 piculs, and of the last of 25 piculs. Rice is also measured by the basket, of which 100 go to the large measure above-mentioned.

The long measures are as follow: — 12 finger breadths make 1 span; 2 spans, 1 cubit; 4 cubits, 1 fathom; 20 fathoms, 1 sen; and 100 sen, 1 yuta, or, as it is more commonly pronounced by the Siamese, yut. The fathom is the measure of most frequent use, and the Siamese have a pole of this length divided into its fractional parts. This, as nearly as can be ascertained, is equal to about 6 feet 6 inches. The sen appears to be also used in the admeasurement of land, and to be the name of a square measure of 20 fathoms to the side.

Port Regulations and Duties. — As soon as a European ship reaches the bar of Siam, she must, according to the regulations of the country, communicate with the chief of the village of Paknam, at the mouth of the Menam, and from him obtain a pilot. At Paknam, the rule is to land ammunition, cannon, and small arms; but this regulation is not very rigidly insisted on. The duties and other imposts levied on external trade are somewhat complex, and differ in some degree according to the class of vessels subjected to them, and which consist of junks carrying on trade with China Proper, junks of the island of Hai-nan, junks trading to the Malay islands, and European shipping. The imposts consist of a duty on the measurement or dimensions of the vessel; an *ad valorem* duty upon imports; and a rated tariff in most cases, with an *ad valorem* duty in a few, on exports. The first-named class of vessels, viz. the large junks trading with the principal ports of China, pay no measurement or import duties, because these are vessels belonging to the king, or to the princes, or courtiers, licensed to engage freely in this branch of trade. The Hai-nan junks pay 40 ticals per Siamese fathom, on the extreme breadth of the vessel. The junks trading to the Malay countries, in lieu of measurement duty, pay 130 ticals each, without regard to size. Neither of these vessels pay import duties. The measurement duties on European vessels are estimated at 118 ticals per fathom, besides an inconsiderable impost in the form of an anchorage fee. The cargoes of these alone pay an import duty, which is reckoned at 8 per cent. *ad valorem*, levied in kind.

The tariff on exports consists of specific duties, of which the following are specimens: —

Ivory	per picul	2½ ticals.
Stick lac		½
Sugar, if exported under a European flag		1⅓
Ditto — an Indian flag		1
Cotton wool		½

Trade. — The foreign trade of Siam is conducted with China, Cochin China, Cambogia, and Tonquin, Java, Singapore, and the other British ports within the Straits of Malacca, with an occasional intercourse with Bombay and Surat, England and America. The most important branch of the foreign trade is that with China. This is wholly carried on in vessels of Chinese form, navigated by Chinese, but the greater portion of them are built in Siam. The whole of the Chinese trade centres in Bangkok, with the exception of a few junks, which trade to Sungora and Ligor. The ports of China which carry on trade with Siam are, Canton, Kiang-mui, and Changlim, in the province of Quantong; Amoi, or Emwi, in Fokien; Limpo, or Nimpo, in Chekiang; with Siang-hai, and Saochen, in Kiang-nan; besides several ports of the great island Hai-nan. These junks are expected in Siam in the following order; — those of the island of Hai-nan usually arrive in January; and those from the provinces of Canton, Fokien, and Chekiang, in the latter end of February, and down to the beginning of April. They all sail from the Menam in the months of June and July, when the south-west monsoon is at its height, and, of course, there is but one voyage performed yearly. The imports from China are very numerous, consisting of what are called in commercial language "assorted cargoes." The following is a list of the principal commodities: — Coarse earthenware and porcelain, spelter, quicksilver, tea, lacksoy (vermicelli), dried fruits, raw silk, crapes, satins, and other silk fabrics, nankeens, shoes, fans, umbrellas, writing paper, sacrificial paper, incense rods, and many other minor articles. Not the least valuable part of the importations are immigrants.

The exports from Siam are also very various, but the following list comprehends the most considerable: — Black pepper, sugar, tin, cardamoms, eagle-wood, sapan-wood, red mangrove bark, rose-wood for furniture and cabinet work, cotton, ivory, stick lac, rice, areca nuts, salt fish; the hides and skins of oxen, buffaloes, elephants, rhinoceroses, deer, tigers, leopards, otters, civet cats, and pangolins; of snakes, and rays, with the belly-shell of a species of land tortoise; the horns of the buffalo, ox, deer, and rhinoceros; the bones of the ox, buffalo, elephant, rhinoceros, and tiger; dried deer's sinews; the feathers of the pelican, of several species of storks, of the peacock and kingfisher, &c.; and, finally,

esculent swallows' nests. The tonnage carrying on the China trade amounts in all to probably about 130 junks in number, a few of which are of 1,000 tons burden, and the whole shipping is not short of 35,000 tons.

The trade with the different countries of the Malay Archipelago forms the next most important branch of the Siamese commerce; and the only one respecting which it can be necessary to give any particulars in this place. It is conducted with the following ports: — Patani, Kalantan, Tringano, Pahang, Rhio, Singapore, Malacca, Penang, Batavia, Samarang, Cheribon, Palembang, and Pontianak. In this intercourse, the staple exports of Siam are sugar, salt, oil, and rice; to which may be added the minor articles of stick lac, iron pans, coarse earthenware, hogs' lard, &c. The returns are British and Indian piece goods, opium, with a little glass ware, and some British woollens from the European settlements, with commodities suited for the Chinese market, such as pepper, tin, dragon's blood, rattans, biche-de-mer, esculent swallows' nests, and Malay camphor from the native ports.

The following are believed to be the quantities of the two greatest staple articles of Siamese export; viz. clayed sugar, 10,000 tons; black pepper, 3,525 tons.

[We are indebted for this, as we have been for many other excellent communications, to our esteemed friend, John Crawfurd, Esq., who ascertained the particulars on the spot.]

BANKRUPT AND BANKRUPTCY. In the general sense of the term, bankrupt is equivalent to insolvent, and is applied to designate any individual unable to pay his debts. But in the law of England bankrupts form that particular class of insolvents who are engaged in trade, or who "seek their living by buying and selling," and who are declared, upon the oath of one or more of their creditors, to have committed what the law has defined to be an *act of bankruptcy*. At present, however, we shall merely lay before the reader a few observations with respect to the principles and leading provisions embodied in the law as to bankruptcy and insolvency; referring the reader to the article INSOLVENCY AND BANKRUPTCY, for a detailed statement of these and the other provisions in that law.

"All classes of individuals, even those who have least to do with industrious undertakings, are exposed to vicissitudes and misfortunes, the occurrence of which may render them incapable of making good the engagements into which they have entered, and render them bankrupt or insolvent. But though bankruptcy is most frequently, perhaps, produced by uncontrollable causes, it is frequently also produced by the thoughtlessness of individuals, or by their repugnance to make those retrenchments which the state of their affairs demands; and sometimes also by fraud or bad faith. Hence it is, that the laws with respect to bankruptcy occupy a prominent place in the judicial system of every state in which commerce has made any progress, and credit been introduced. They differ exceedingly in different countries and stages of society; and it must be acknowledged that they present very many difficulties, and that it is not possible, perhaps, to suggest any system against which pretty plausible objections may not be made.

"The execrable atrocity of the early Roman laws with respect to bankruptcy is well known. According to the usual interpretation of the law of the twelve tables, which Cicero has so much eulogised*, the creditors of an insolvent debtor might, after some preliminary formalities, cut his body to pieces, each of them taking a share proportioned to the amount of his debt; and those who did not choose to resort to this horrible extremity, were authorised to subject the debtor to chains, stripes, and hard labour; or to sell him, his wife, and children, to perpetual foreign slavery *trans Tyberim!* This law, and the law giving fathers the power of inflicting capital punishments on their children, strikingly illustrate the ferocious and sanguinary character of the early Romans.

"There is reason to think, from the silence of historians on the subject, that no unfortunate debtor ever actually felt the utmost severity of this barbarous sentence; but the history of the republic is full of accounts of popular commotions, some of which led to very important changes, that were occasioned by the exercise of the power given to creditors of enslaving their debtors, and subjecting them to corporal punishments. The law, however, continued in this state till the year of Rome 427, 120 years after the promulgation of the twelve tables, when it was repealed. It was then enacted, that the persons of debtors should cease to be at the disposal of their creditors, and that the latter should merely be authorised to seize upon the debtor's goods, and sell them by auction in satisfaction of their claims. In the subsequent stages of Roman jurisprudence, further changes were made, which seem generally to have leaned to the side of the debtor; and it was ultimately ruled, that an individual who had become insolvent without having committed any fraud, should, upon making a *cessio bonorum*, or a surrender of his entire

* Fremant omnes, licet! dicam quod sentio; bibliothecas, mehercule, omnium philosophorum unus mihi videtur duodecim tabularum libellus; siquis legum fontes et capita viderit et authoritatis pondere et utilitatis ubertate superare. — *De Oratore*, lib. i.

property to his creditors, be entitled to an exemption from all personal penalties.—(*Terasson, Histoire de la Jurisprudence Romaine*, p. 117.)

"The law of England distinguishes between the insolvency of persons engaged in trade, and that of others. The former can alone be made bankrupts, and are dealt with in a comparatively lenient manner. 'The law,' says Blackstone, 'is cautious of encouraging prodigality and extravagance by indulgence to debtors; and therefore it allows the benefit of the laws of bankruptcy to none but actual traders, since that set of men are, generally speaking, the only persons liable to accidental losses, and to an inability of paying their debts without any fault of their own. If persons in other situations of life run in debt without the power of payment, they must take the consequences of their own indiscretion, even though they meet with sudden accidents that may reduce their fortunes; for the law holds it to be an unjustifiable practice for any person but a trader to encumber himself with debts of any considerable value. If a gentleman, or one in a liberal profession, at the time of contracting his debts has a sufficient fund to pay them, the delay of payment is a species of dishonesty, and a temporary injustice to his creditors; and if at such time he has no sufficient fund, the dishonesty and injustice are the greater: he cannot, therefore, murmur if he suffer the punishment he has voluntarily drawn upon himself. But in mercantile transactions the case is far otherwise; trade cannot be carried on without mutual credit on both sides: the contracting of debts is here not only justifiable, but necessary; and if, by accidental calamities, as by the loss of a ship in a tempest, the failure of brother traders, or by the nonpayment of persons out of trade, a merchant or trader becomes incapable of discharging his own debts, it is his misfortune and not his fault. To the misfortunes, therefore, of debtors, the law has given a compassionate remedy, but denied it to their faults; since at the same time that it provides for the security of commerce, by enacting that every considerable trader may be declared a bankrupt, for the benefit of his creditors as well as himself, it has also, to discourage extravagance, declared that no one shall be capable of being made a bankrupt but only a trader, nor capable of receiving the full benefit of the statutes but only an *industrious* trader.'—(*Commentaries*, book ii. cap. 31.)

"After the various proceedings with respect to bankruptcy have been gone through, if nothing be discovered to impeach the honesty of the debtor, he is allowed a certificate or discharge, provided *three out of five* of his creditors both in number and value agree to sign it. The bankrupt is then entitled to a reasonable allowance out of his effects; which is however, made to depend partly on the magnitude of his dividend. Thus, if his effects will not pay half his debts, or 10*s.* in the pound, he is left to the discretion of the commissioners and assignees, to have a competent sum allowed him, not exceeding 3 per cent. upon his estate, or 300*l.* in all; but if his estate pay 10*s.* in the pound, he is to be allowed 5 per cent., provided such allowance do not exceed 400*l.*; 12*s.* 6*d.* then 7½ per cent. under a limitation as before of its not exceeding 500*l.*; and if 15*s.* in the pound, then the bankrupt shall be allowed 10 per cent. upon his estate, provided it do not exceed 600*l.*

"According to our present law, when a person not a trader becomes insolvent, he may, after being actually imprisoned at the suit of some of his creditors for fourteen days, present a petition to the court to be relieved; and upon surrendering his entire property, he is, unless something fraudulent be established against him, entitled to a discharge. While, however, the certificate given to the bankrupt relieves him from all future claims on account of debts contracted previously to his bankruptcy, the discharge given to an insolvent only relieves him from imprisonment; in the event of his afterwards accumulating any property, it may be seized in payment of the debts contracted anterior to his insolvency. This principle was recognised in the *cessio bonorum* of the Romans, of which the insolvent act is nearly a copy.

"It may be questioned, however, notwithstanding what Blackstone has stated, whether there be any good ground for making a distinction between the insolvency of traders and other individuals. There are very few trades so hazardous as that of a farmer, and yet should he become insolvent, he is not entitled to the same privileges he would have enjoyed had he been the keeper of an inn, or a commission agent! The injustice of this distinction is obvious; but, without dwelling upon it, it seems pretty clear that certificates should be granted indiscriminately to all honest debtors. Being relieved from all concern as to his previous incumbrances, an insolvent who has obtained a certificate is prompted to exert himself vigorously in future, at the same time that his friends are not deterred from coming forward to his assistance. But when an insolvent continues liable to his previous debts, no one, however favourably disposed, can venture to aid him with a loan; and he is discouraged, even if he had means, from attempting to earn any thing more than a bare livelihood; so that, while creditors do not, in one case out of a hundred, gain the smallest sum by this constant liability of the insolvent, his energies and usefulness are for ever paralysed.

"The policy of imprisoning for debt seems also exceedingly questionable. Notwith-

standing the deference due to the great authorities who have vindicated this practice, I confess I am unable to discover any thing very cogent in the reasonings advanced in its favour. Provided a person in insolvent circumstances intimate his situation to his creditors, and offer to make a voluntary surrender of his property to them, he has, as it appears to me, done all that should be required of him, and ought not to undergo any imprisonment. If he had deceived his creditors by false representations, or if he conceal or fraudulently convey away any part of his property, he should of course be subjected to the pains and penalties attached to swindling; but when such practices are not alleged, or cannot be proved, sound policy, I apprehend, would dictate that creditors ought to have no power over the persons of their debtors, and that they should be entitled only to their effects. The maxim, *carcer non solvit*, is not more trite than true. It is said, that the fear of imprisonment operates as a check to prevent persons from getting into debt; and so no doubt it does. But then it must, on the other hand, be borne in mind, that the power to imprison tempts individuals to trust to its influence to enforce payment of their claims, and makes them less cautious in their inquiries as to the condition and circumstances of those to whom they give credit. The carelessness of tradesmen, and their extreme earnestness to obtain custom, are, more than any thing else, the great causes of insolvency; and the power of imprisoning merely tends to foster and encourage these habits. If a tradesman trust an individual with a loan of money or goods, which he is unable to pay, he has made a bad speculation. But why ought he, because he has done so, to be allowed to arrest the debtor's person? If he wished to have perfect security, he either should not have dealt with him at all, or dealt with him only for ready money: such transactions are, on the part of tradesmen, perfectly voluntary; and if they place undue confidence in a debtor who has not misled them by erroneous representations of his affairs, they have themselves only to blame.

"It would really, therefore, as it appears to us, be for the advantage of creditors, were all penal proceedings against the persons of honest debtors abolished. The dependence placed on their efficacy is deceitful. A tradesman ought rather to trust to his own prudence and sagacity to keep out of scrapes, than to the law for redress: he may deal upon credit with those whom he knows; but he should deal for ready money only with those of whose circumstances and characters he is either ignorant or suspicious. By bringing penal statutes to his aid, he is rendered remiss and negligent. He has the only effectual means of security in his own hands; and it seems highly inexpedient that he should be taught to neglect them, and put his trust in prisons.

"It is pretty evident, too, that the efficacy of imprisonment in deterring individuals from running into debt has been greatly overrated. Insolvents who are honest, must have suffered from misfortune, or been disappointed in the hopes they entertained of being able, in one way or other, to discharge their debts. The fear of imprisonment does not greatly influence such persons; for when they contract debts, they have no doubt of their ability to pay them. And though the imprisonment of *bonâ fide* insolvents were abolished, it would give no encouragement to the practices of those who endeavour to raise money by false representations; for these are to be regarded as swindlers, and ought as such to be subjected to adequate punishment. (See Credit.)

"But the regulations with respect to bankruptcy and insolvency differ radically in other important respects. An individual cannot be subjected to the insolvent law, except by *his own act*, that is, his petitioning for relief from actual imprisonment for debt; and, on the other hand, an individual cannot be made a bankrupt and subjected to the bankrupt law, except by the act of *another*, that is, of a petitioning creditor*, as he is called, swearing that the individual in question is indebted to him, and that he believes he has committed what is termed an act of bankruptcy. These differences, coupled with the refinements introduced into other branches of the law, give rise to very extraordinary results.

"While the law of England gives the creditor an unnecessary degree of power over the debtor's person, it does not give him sufficient power over his property. In this respect, indeed, it is so very defective, that one is almost tempted to think it had been intended to promote the practices of fraudulent debtors. The property of persons subjected to the bankrupt laws, as well as those who *choose to subject themselves* to the insolvent laws, is placed at the disposal of assignees or trustees for the benefit of their creditors; but when a person possessed of property, but not subject to the bankrupt laws, contracts debts, if he go abroad, or live within the rules of the King's Bench or the Fleet, or remain in prison without petitioning for relief (in neither of which cases can he be subjected to the insolvent laws), he may most probably continue to enjoy the income arising from that property without molestation.

"It is true, the law says that the creditors shall be authorised to seize the debtors'

* One creditor, whose debt is to the amount of upwards of 100*l.*; or two, whose debts amount to 150*l.*; or three, whose debts amount to 200*l.*

lands and goods,—a description which an unlearned person would be apt to conclude was abundantly comprehensive; but the law is so interpreted, that neither funded property, money, nor securities for money, are considered goods. If the debtor have a copyhold estate, it cannot be touched in any way whatever; if his estate be freehold, the creditor may, after a tedious process, receive the rents and profits, but no more, during the life-time of his debtor. Should the debtor die before judgment against him in a court has been obtained, then, unless the debt be on bond, the creditor has no recourse upon the land left by the debtor, whatever may be its tenure: 'nay, though his money borrowed on note or bill has been laid out in buying land, the debtor's heir takes that land, wholly discharged of the debt!'"—(*Lord Brougham's Speech on the State of the Law*, p. 100.)

"In consequence of this preposterously absurd system, an individual known to have a large income, and enjoying a proportionally extensive credit, may, if he go to Paris or Brussels, or confine himself within the rules of the King's Bench or Fleet, defraud his creditors of every farthing he owes them, without their being entitled to touch any part of his fortune. All owners of funded, monied. and copyhold property, have a licence given them to cheat with impunity; and the only wonder is, not that some do, but that a vast number more do not, avail themselves of this singular privilege. In point of fact, therefore, the power of imprisonment is operative only on the really necessitous—on those from whom it can extract little or nothing. The rich debtor is seldom subjected to its operation; he resorts, before a writ can be executed against him, either to the Continent or the rules, and then laughs at the impotent wrath of those he has defrauded, and perhaps ruined. That such a system of law should be suffered to exist in a commercial country, and so little outcry be raised against it, is truly astonishing, and strikingly exemplifies the power of habit in reconciling us to the most pernicious absurdities. Can any one wonder at the frequency of fraudulent bankruptcy, when it is thus fostered and encouraged?

"A reform of the bankrupt law on the principles already mentioned, seems, therefore, to be imperiously called for. Its evils were forcibly stated by Mr. Brougham (now Lord Brougham) in his 'Speech on the State of the Law.' He has also pointed out the remedial measures necessary to be adopted to render this important department of commercial jurisprudence consistent with the obvious principles of justice and common sense. 'Let the whole,' says he, 'of every man's property, real and personal—his real, of what kind soever, copyhold, leasehold, freehold; his personal, of whatever nature, debts, money, stock, chattels—be taken for the payment of all his debts equally, and, in cases of insolvency, let all be distributed rateably; let all he possesses be sifted, bolted from him unsparingly, until all his creditors are satisfied by payment or composition; but let his person only be taken when he conceals his goods, or has merited punishment by fraudulent conduct.'—(pp. 106—110.) Were these measures adopted, and a certificate given to every man who has been divested of his property for behoof of his creditors, and against whom no charge of fraud has been established, there would be little room for improvement in the principles of the law of bankruptcy."—(See my *Principles of Political Economy*, 2d ed. pp. 264—274.)

BARCALAO, OR BACALAO, the Spanish name for cod.

BARCELONA, the capital of Catalonia, and the principal town of Spain, on the Mediterranean, in lat. 41° 22′ N., and long. 2° 10′ E. It is a strongly fortified, well-built city. The population is supposed to amount to about 150,000. Barcelona is eminently distinguished in the history of the middle ages for the zeal, skill, and success with which her citizens prosecuted commercial adventures at a very early period. She would seem also to be entitled to the honour of having compiled and promulgated the famous code of maritime law known by the name of the *Consolato del Mare*; and the earliest authentic notices of the practice of marine insurance and of the negotiation of bills of exchange are to be found in her annals.* Catalonia has continued, amidst all the vicissitudes it has undergone, to be the most industrious of the Spanish provinces; and several valuable and extensive manufactures have been established at Barcelona. Latterly, however, her commerce, owing to a variety of causes, but principally to oppressive restrictions on the importation of foreign goods, and the emancipation of South America, has very much declined.

The Harbour, which is naturally bad, is formed by a mole or jetty, which has recently been a good deal enlarged, running out to a considerable distance in a southerly direction, and having a light-house and some batteries near its extremity. The depth of water within the mole is from 18 to 20 feet; but there is a bar between the mole and Monjui, which has frequently not more than 10 feet water; and which

* For proofs of this, see the articles MARITIME LAW, INSURANCE, &c. in this Dictionary. The *Memorias Historicas sobre la Marina, Comercio, &c. de Barcelona*, by Capmany, in 4 vols. 4to, is one of the most valuable and authentic works that has ever been published on the commerce, arts, and commercial and maritime legislation of the middle ages. The first volume is the most interesting, at least to the general reader; the others consisting principally of extracts from the archives of the city. There is a brief but pretty good account of the early trade of Barcelona, drawn principally from Capmany, in the work of Depping, *Histoire du Commerce entre le Levant et l'Europe depuis les Croisades, &c.* tom. i. c. 5.

would, it is believed, entirely shut up the harbour, were it not occasionally lowered by means of dredging machines. Vessels in the harbour moor at a short distance from the mole; where, though exposed to the southerly gales, they are so well protected that no accident of any consequence has taken place since the dreadful storm of 1821. Large ships must anchor outside the mole, and in winter are much incommoded by winds. Vessels entering the harbour are under no obligation to take a pilot on board; but they are always in attendance, and it is generally deemed safest to have their assistance in passing the bar.

Tariff.—Of prohibited articles, the most important are tobacco, cotton goods, salt, gunpowder, brandy, carpets, leather, baizes, soap, wearing apparel, hemp, fire-arms, copper, beds, mattresses, furniture, manufactured tin, flour, and all sorts of grain and pulse, manufactured cast iron, earthenware, blankets, paper, oil cloths, sealing-wax, &c.

The following were the duties on the principal articles allowed to be imported into Barcelona in 1833:—

Articles.	Span. Wts.	National Flag.	Foreign Flag.	Eng. Wts.	Nat. Flag.	For. Flag.	Articles.	Span. Wts.	National Flag.	Foreign Flag.	Eng. Wts.	National Flag.	For. Flag.
					Sterl.	Sterl.						Sterling.	Sterl.
					s. d.	*s. d.*						*s. d.*	*s. d.*
Cotton	lb.	16 maravs.	25 maravs.	lb.	0 1·1	0 1·8	Dyewoods	quintal	61 maravs.	6 reals	—	0 4	1 2
Sugar	arroba	4 reals	8 reals	—	0 0·4	0 0·8	Fish	do.	36 reals	48 reals	—	7 2	9 7
Hides	do.	8½ maravs.	1 real	—	0 0·6	0 2·2	Iron hoops	do.	26 reals	35 reals	—	5 2	7 0
Cocoa	lb.	10 maravs.	20 maravs.	—	0 0·7	0 1·4	Staves	1,000	20 reals	40 reals	1,000	4 0	8 0
Coffee	quintal	8 reals	20 reals	cwt.	1 7	4 0	Cheese	quintal	12½ reals	17½ reals	cwt.	2 6	3 6
Beeswax	lb.	36 maravs.	59 maravs.	—	0 2½	0 4	Tar	arroba	3 maravs.	1 real	lb.	0 0·01	0 2·4
Horns	quintal	5 reals	20 reals	cwt.	1 0	4 0	Butter	lb.	1½ reals	2½ reals	—	0 3½	0 6

All articles whatever, the produce of the soil, or the manufacture of the country, may at present be exported; and, in most instances, without paying any duty. In this respect there is nothing in the legislation of Spain to which to object; but the government seems, like many others, to have forgotten that reciprocity is the beginning, the middle, and the end of commerce,—that there can be no exportation without an equivalent importation; and that, to prohibit or restrict the latter is, in fact, to prohibit or restrict the former.

Custom house and Warehousing Regulations, same as at ALICANT; which see.

Port Charges.—The following are the various charges of a public nature that would be paid by a Spanish and a British ship, each of 300 tons burden, unloading and loading mixed cargoes in Barcelona:—

Spanish Vessel.	Reals.	British Vessel.	Reals.
Anchorage	75	Anchorage	75
New do.	15	Double do.	75
Cleaning of port	10	New do.	15
Lantern	6	Cleaning of port	10
Captain of the port	8	Lantern	6
Light-house of Tarrifa	105	Captain of the port	8
Loading (1 real per ton)	300	Light-house of Tarrifa	211
Extraordinary contribution	40	New mole (8 reals per ton)	2,400
New mole	16	Loading (1 real per ton)	300
		Extraordinary contribution	40
			3,140
		Consular fees usually required	160
Total	575	Total	3,300

Taking the real at 4*d.*, this would be 9*l.* 11*s.* 2*d.* on the Spanish ship, and 55*l.* on the British do.

Commission is at the rate of 2½ per cent. on goods shipped, and 2 per cent. on those received on consignment. Goods are sometimes sold for ready money, and sometimes on credit for 3 or 4 months; mercantile discount is ½ per cent. per month. There are no banking establishments in Barcelona.

Insurance on ships is effected by individuals, but insurances on houses, lives, &c. are unknown here.

Tares.—At the Custom-house, real tares only are allowed; and the nett weights must be rigorously manifested. A surplus of 3 per cent. is, however, allowed, to cover any inexactness in the proportion between foreign and Spanish weights; but if the weight of any parcel should turn out to be 3 per cent. greater than is marked in the manifest, the surplus is seized, at the same time that the importer loses the benefit of the 3 per cent. allowed by law, and becomes liable to the penalties of smuggling. The tares usually allowed by merchants are, on Havannah sugar 13 per cent.; on coffee 2 per cent., exclusive of the barrel, bag, &c. in which it is contained; on cocoa and pepper 2 per cent.; Pernambuco cotton 4 lbs. per bale; other cotton 1 lb. per cwt.

Sea-stores of all sorts are dear at Barcelona, but they may always be obtained. Beef costs about 7*d.* per lb., and biscuit about 8 dollars per cwt.

Money.—Accounts are kept in *libras* of 20 *sueldos*, 240 *dineros*, or 480 *mallas*. The libra is likewise divided into *reals de plata Catalan*, of 3 *sueldos* each; and into *reales ardites*, of 2 *sueldos* each. Hence, 6·7 of the former, or 10 of the latter, = 1 *libra Catalan*.

The *libra Catalan* is = 2*s.* 4*d.* sterling nearly.

The *peso dûro*, or hard dollar, is valued at 37½ *sueldos Catalan*, eight such dollars making 15 *libras*.

Weights and Measures.—There are endless discrepancies amongst the weights and measures in the different Spanish provinces, and there is a very great discrepancy in the accounts of the authors who have written upon them. The following statements are taken from Nelkenbrecher:—

The quintal is divided into 4 *arrobas*, or 104 lbs. of 12 oz. to the pound. The pound = 6,174 English grains = 4 kilog. = 8325·6 as of Holland. 100 lbs. of Barcelona = 88·215 lbs. avoirdupois.

The yard, named *cana*, is divided into 8 *palmos*, of 4 *quartos*, and is = 21 inches very nearly. Hence, 100 canas = 55·499 metres = 77·5 yards of Amsterdam = 58·514 English yards.

The *quartera*, or measure for grain, is divided into 12 *cortanes* and 48 *picolins*. 100 quarteras = 23·536, or 23½ Winchester quarters.

The *carga*, or measure for liquids, is divided into 12 *cortanes* or *arrobas*, 24 *cortarinas*, and 72 *miladellas*. It is = 32·7 English wine gallons. 4 cargas = 1 *pipe*. The pipe of Majorca oil contains 107 cortanes.

Imports.—Account of the Quantity and Value of the principal Foreign Articles imported into Barcelona during the Three Years ending with 1831.

Articles.	In 1829.	Value in Sterling Money.	In 1830.	Value in Sterling Money.	In 1831.	Value in Sterling Money.
		£		£		£
Cotton	18,600 bales	100,000	22,900 bales	137,000	43,400 bales	260,000
Sugar	14,100 boxes	112,000	23,600 boxes	188,000	20,300 boxes	160,000
Hides	67,500	54,000	82,400	62,000	75,000	56,000
Cocoa	4,100 bags	25,000	8,300 bags	50,000	7,300 bags	44,000
Coffee	1,400 cwt.	2,800	2,030 cwt.	4,500	620 cwt.	1,200
Bees'-wax	1,200 cwt.	4,200	700 cwt.	1,100	460 cwt.	2,400
Horns	111,000	2,200	133,600	2,600	95,000	2,000
Specie	51,400 dollars	10,300	39,286 dollars	7,900	380,700 dollars	76,200
Dye woods	15,000 cwt.	9,000	5,000 cwt.	3,000	16,000 cwt.	9,600
Fish	70,000 cwt.	84,000	42,000 cwt.	50,000	64,300 cwt.	77,000
Iron hoops	22,000 bundles	17,000	6,000 bundles	5,000	4,000 bundles	3,200
Staves	400,000	6,400	820,600	14,850	702,000	16,000
Cheese	2,000 cwt.	6,000	1,000 cwt.	3,000	2,000 cwt.	6,000
Tar	700 barrels	800	180 barrels	200	—	—
Butter	50 cwt.	200	—	—	—	—
Indigo	200 cwt.	8,000	750 cwt.	30,000	900 cwt.	36,000
Pepper	600 cwt.	1,200	800 cwt.	1,600	700 cwt.	1,400
Cinnamon	250 cwt.	10,000	800 cwt.	32,000	1,000 cwt.	40,000

Grain is usually represented as forming an important article in the imports into Barcelona; but its importation from abroad is prohibited; and the wants of the city are supplied either by land carriage from the interior, or by coasting vessels from the Spanish ports more to the north.

Of the imports specified above, the greater portion are furnished by Cuba and Porto Rico. The imports from France are also considerable. Those from England, which were once very large, have dwindled to almost nothing. The only goods now openly imported from Great Britain, are iron hoops, hardware, and woollen stuffs, and these in too small quantities to deserve notice. Fish is principally supplied by Sweden and Denmark. Smuggling, particularly in tobacco and printed cottons, is carried on to a considerable extent.

Exports.—The principal exports are wrought silks, soap, fire-arms, paper, hats, laces, ribands, steel, &c. But no vessels, except a few that take on board manufactured goods for the Spanish West Indies, are loaded here; and even this trade is much fallen off. Upwards of 2,000 hands used formerly to be employed in the city in the manufacture of shoes for the colonies; but their export has now nearly ceased. The cotton manufacture has made some progress in the town and its vicinity, and is increasing. The principal articles of native produce that Catalonia has to export are most conveniently shipped at Villanova, Tarragona, and Salon. They consist of wine, brandy, nuts, almonds, cork bark, wool, fruits, &c. Of these, Cuba takes annually about 12,000 pipes of wine, worth at an average 4*l.* per pipe, and about 3,000 pipes of brandy, worth 8*l.* per do.; South America, 16,000 pipes of wine, and 6,000 do. brandy; the north of Europe, 2,000 pipes of wine, and 2,000 do. brandy. A good deal of brandy is sent to Cadiz and Cette: most part of the former finds its way into the wine vaults of Xeres; and the latter, being conveyed by the canal of Languedoc to the Garonne, is used in the preparation of the wines of Bordeaux. From 25,000 to 30,000 bags of nuts are annually sent from Tarragona to England. Tarragona also exports about 12,000 bags of almonds.

In 1831, only 128 foreign ships, of the burden of 15,130 tons entered Barcelona. Of these, 31 were Tuscan, 24 Sardinian, 19 Swedish, 18 English, 14 French, 8 American, &c. The ships belonging to the port carry on no foreign trade except to the Spanish West Indies; they are few in number, and are daily decreasing. Those engaged in the coasting trade are usually of very small burden. The customs duty in the same year did not exceed 100,000*l.*

(We have derived these details from various sources; but principally from the *Consul's Answer to Circular Queries*, and from *Ingliss's Spain in* 1830, vol. ii. pp. 384-387. and 362.)

BARILLA (Du. *Soda;* Fr. *Soude, Barille;* Ger. *Soda, Barilla;* It. *Barriglia;* Port. *Solda, Barrilha;* Rus. *Socianka;* Sp. *Barrilla;* Arab. *Kali*), carbonate of soda—(see ALKALIES), is found native in Hungary, Egypt, and many other countries. It is largely used by bleachers, manufacturers of hard soaps, glass-makers, &c. The barilla of commerce consists of the ashes of several marine and other plants growing on the sea-shore. The best, or Alicant barilla, is prepared from the *Salsola soda*, which is very extensively cultivated for this purpose in the *huerta* of Murcia, and other places on the eastern shores of Spain.—(*Townsend's Travels in Spain*, vol. iii. p. 195.) The plants are gathered in September, dried, and burned in furnaces heated so as to bring the ashes into a state of imperfect fusion, when they concrete into hard, dry, cellular masses of a greyish blue colour. Sicily and Teneriffe produce good barilla, but inferior to that of Alicant and Carthagena. Kelp, which is a less pure alkali, is formed by the incineration of the common sea-wrack.—(See KELP.)

The Saracens established in Spain seem to have been the first who introduced the manufacture of barilla into Europe. They called the plants employed in its preparation *kali;* and this, with the Arabic article *al* prefixed, has given rise to the modern chemical term alkali.

Of 184,649 cwt. of barilla imported into Great Britain in 1831, 61,921 cwt. came from Spain, 95,995 from Teneriffe, and 23,867 from Sicily. The values of these species are, for the most part, in the proportion of about 12, 9, and 10; that is, if Spanish barilla fetch 12*l.* a ton, Teneriffe barilla will fetch 9*l.*, and Sicilian 10*l.* Prime quality in barilla is to be distinguished by its strong smell when wetted, and by its whitish colour. Particular attention should be paid to have as little small or dust as possible. The duties on barilla have recently been very considerably reduced.—(See TARIFF.)

At an average of the three years ending with 1831, the barilla entered for home consumption amounted to 255,289 cwt. a year. In 1832, it produced 15,329*l.* 8*s.* 2*d.* nett revenue.

BARK, the outer rind of plants. There is an immense variety of barks known in commerce, as cinnamon, Peruvian bark, oak bark, quercitron, &c. The term "bark" is, however, generally employed to express either Peruvian bark, or oak bark; and it is these only that we shall describe in this place.

1. *Peruvian or Jesuits' Bark* (Fr. *Quinquina;* Ger. *Kron-china;* Du. *China-bast;* Sp. *Quina, Quinquina;* Lat. *Quinquina, Cortex Peruvianus*). There are three principal species of this bark known in commerce, which have been elaborately described by Dr. A. T. Thomson, from whose account the following particulars are selected.

The first species is the *pale* bark of the shops. It is the produce of the *Cinchona lancifolia*, and is the original cinchona of Peru. It is now very scarce. It is imported in chests covered with skins, each containing about 200 lbs., well packed, but generally mixed with a quantity of dust and other heterogeneous matter. It consists of pieces 8 or 10 inches long, some of them being scarcely one tenth of an inch thick, singly and doubly quilled, or rolled inwards; the quills, generally, being in size from a swan's quill to an inch and a half. It is internally of a pallid fawn or cinnamon hue; but approximates, on being moistened, to the colour of a pale orange. When in substance it has scarcely any odour; but during decoction the odour is sensible, and agreeably aromatic. The taste is bitter, but not unpleasant, acidulous, and austere.

The second species, or red bark, is obtained from the *Cinchona oblongifolia*, growing on the Andes. It is imported in chests containing from 100 to 150 lbs. each. It consists

of variously sized pieces, most of them flat, but some partially quilled or rolled. The internal part is woody, and of a rust red colour: it has a weak peculiar odour; and its taste is much less bitter, but more austere and nauseous, than that of the other barks.

The third species, or yellow bark of the shops, is obtained from the *Cinchona cordifolia*, growing in Quito and Santa Fé. It is imported in chests containing from 90 to 100 lbs. each, consisting of pieces 8 or 10 inches long, some quilled, but the greater part flat. The interior is of a yellow colour, passing to orange. It has nearly the same odour in decoction as the pale; the taste is more bitter and less austere, and it excites no astringent feeling when chewed. The goodness decreases when the colour varies from orange yellow to pale yellow; when of a dark colour, between red and yellow, it should be rejected.

It is needless to add, that bark is one of the most valuable medical remedies. The Indians were unacquainted with its uses, which seem to have been first discovered by the Jesuits. It was introduced into Europe in 1632, but was not extensively used till the latter part of the seventeenth century. According to M. Humboldt, the Jesuits' bark annually exported from America amounts to from 12,000 to 14,000 quintals. Of these, 2,000 are furnished by Santa Fé, and 110 by Loxa; Peru furnishing the remainder, which is shipped at Callao, Guayaquil, &c.

2. *Oak Bark* (Fr. *Ecorce de la Chêne;* Ger. *Eichenrinde;* It. *Corteccia della Quercia;* Lat. *Quercûs cortex*). The bark of the common oak is a powerful astringent, and is preferred to all other substances for tanning leather. The bark of the larch is now, however, used for the same purpose. The import of oak bark is very considerable; but owing to the cork tree being a species of oak (*Quercus Suber*), bark for tanning and cork bark are usually mixed together in the parliamentary returns. The latter, however, does not amount to a tenth part of the whole quantity imported. The imports of both sorts amounted, in 1831, to 931,075 cwt., which is about the average importation. Of this quantity, no less than 608,304 cwt. were brought from the Netherlands (Holland and Belgium), 62,437 cwt. from Germany, &c. Cork bark is almost entirely imported from Italy, Spain, and Portugal; the imports from them being, in the above-mentioned year, Italy 95,163 cwt., Spain 78,067 cwt., and Portugal only 187 cwt. The quality of bark varies according to the size and age of the tree, the season when it is barked, &c., so much, that the price varies, at this moment, from about 5*l.* to about 10*l.* per ton. The duty, which is 13*s.* 4*d.* a ton, produced in 1832, in Great Britain, 22,251*l.* 0*s.* 5*d.* nett.

Quercitron is the bark of a species of oak tree (*Quercus tinctoria*). It is not used, at least in this country, for tanning, but for imparting a yellow dye to silk and wool. It is principally imported from North America. The price varies, at present, according to the quality, from about 12*s.* 6*d.* to 15*s.* a cwt., duty (1*s.*) included. At an average of the three years ending with 1831, the entries for home consumption were 25,015 cwt. a year.

We are indebted for the discovery and application of the useful properties of quercitron to Dr. Bancroft. The doctor obtained a patent for his invention in 1775; but the American war breaking out soon after, deprived him of its advantages. In consideration of this circumstance, parliament passed, in 1785, an act (25 Geo. 3. c. 38.) securing to him the privileges conveyed by his patent for 14 years. At the expiration of the latter period, the House of Commons agreed to extend the doctor's privilege for an additional 7 years; but the House of Lords rejected the bill. Like too many discoverers, Dr. Bancroft profited but little by his invention, though it has been of great use to the arts and manufactures of the country. — (See *Bancroft on Permanent Colours*, vol. ii. p. 112., and the *Report of the Committee of the House of Commons on Patents, Appendix*, p. 175.)

Oak bark, the produce of Europe, is not to be imported into the United Kingdom for home consumption, except in British ships, or in ships of the country of which it is the produce, or in ships of the country from which it is imported, on pain of forfeiting the goods, and 100*l.* by the master of the vessel. — (7 & 8 *Geo.* 4. c. 58.)

BARLEY (Fr. *Orge;* Ger. *Gerstengraupen;* Du. *Ryg;* It. *Orzo;* Sp. *Cebada;* Rus. *Fatschmea;* Lat. *Hordeum;* Arab. *Dhourra;* Hind. *Jow*), a species of bread-corn (*Hordeum* Lin.), of which there are several varieties. It is extensively cultivated in most European countries, and in most of the temperate districts of Asia and Africa. It may also be raised between the tropics; but not at a lower elevation than from 3,000 to 4,000 feet, and then it is not worth cultivating. Large quantities of barley have been, for a lengthened period, raised in Great Britain. Recently, however, its cultivation has been supposed, though probably on no good grounds, to be declining. In 1765, Mr. Charles Smith estimated the number of barley consumers in England and Wales at 739,000; and as a large proportion of the population of Wales, Westmoreland, and Cumberland continue to subsist chiefly on barley bread, we are inclined to think that this estimate may not, at present, be very wide of the mark. But the principal demand

for barley in Great Britain is for conversion into malt, to be used in the manufacture of ale, porter, and British spirits; and though its consumption in this way has not certainly increased proportionally to the increase of wealth and population, still there does not seem to be any grounds for supposing that it has diminished. Barley is also extensively used in fattening black cattle, hogs, and poultry. It now generally follows turnips, and is a very important crop in the rotation best adapted to light soils. The principal barley counties of England are Norfolk, Suffolk, Cambridge, Bedford, Herts, Leicester, Nottingham, the upper parts of Hereford, Warwick, and Salop. The produce varies, according to soil, preparation, season, &c., from about 20 to 60 or 70 bushels an acre. The most usual crop is from 28 to 36 or 38 bushels. The Winchester bushel of good English barley generally weighs about 50 lbs., but the best Norfolk barley sometimes weighs 53 or 54 lbs. Its produce in flour is about 12 lbs., to 14 lbs. grain. Barley is a tender plant, and easily hurt in any stage of its growth. It is more hazardous than wheat, and is, generally speaking, raised at a greater expense; so that its cultivation should not be atttempted except when the soil and climate are favourable for its growth. — (For details as to the prices of barley, the quantities imported and exported, &c., see Corn Laws and Corn Trade. And for further details as to its consumption and culture, see *Smith's Tracts on the Corn Trade*, 2d ed. p. 182.; *Brown on Rural Affairs*, vol. ii. p. 42.; *Loudon's Encyc. of Agriculture*, &c.)

BARLEY-SUGAR (Fr. *Sucre d'orge*; Ger. *Gerstenzucker*; It. *Pennito*; Sp. *Alfenique*; Lat. *Alphenix*), a preparation of sugar, candied with orange or lemon peel.

BARRATRY, in navigation, is, in its most extensive sense, any fraudulent or unlawful act committed by the master or mariners of a ship, contrary to their duty to their owners, and to the prejudice of the latter. It appears to be derived from the Italian word *barratrare*, to cheat. It may be committed by running away with a ship, wilfully carrying her out of the course prescribed by the owners, delaying or defeating the voyage, deserting convoy without leave, sinking or deserting the ship, embezzling the cargo, smuggling, or any other offence whereby the ship or cargo may be subjected to arrest, detention, loss, or forfeiture.

It is the practice, in most countries, to insure against barratry. Most foreign jurists hold, that it comprehends every fault which the master and crew can commit, whether it arise from fraud, negligence, unskilfulness, or mere imprudence. But in this country it is ruled, that no act of the master or crew shall be deemed barratry, unless it proceed from a *criminal* or *fraudulent* motive.

"Barratry can only be committed by the master and mariners by some act contrary to their duty, in the relation in which they stand to the owners of the ship. It is, therefore, an offence against them, and consequently an owner himself cannot commit barratry. He may, by his fraudulent conduct, make himself liable to the owner of the goods on board, but not for *barratry*. Neither can barratry be committed against the owner, *with his consent*; for though he may be liable for any loss or damage occasioned by the misconduct of the master to which he consents, yet this is not barratry. Nothing is more clear than that a man can never set up as a crime, an act done by his own direction or consent." — (*Marshall on Insurance*, book i. c. 12. § 6.)

When, therefore, the owner of a ship is also the master, no act of barratry can be committed; for no man can commit a fraud against himself.

It is a maxim in law, that fraud shall not be presumed, but must be clearly proved; and it is a rule in questions of insurance, that he who charges barratry must substantiate it by conclusive evidence.

It is not necessary, to render an act barratrous, that it should be committed with a criminal intent as respects the owners, in order to injure them, or to benefit the captain or crew. It may even be committed with a view to promote the owner's interests; for *an illegal act* done without the authority or privity of the owners, and which proves detrimental to them, is barratry, whatever be the motives in which it originated. Lord Ellenborough, in an able judgment, has laid it down as clear law, "that a breach of duty by the master in respect of his owners, with a fraudulent or criminal intent, or *ex maleficio*, is barratry; that it makes no difference whether this act of the master be induced by motives of advantage to himself, malice to the owner, or *a disregard of those laws which it was his duty to obey*; and that it is not for him to judge or suppose, in cases not intrusted to his discretion, that he is not breaking the trust reposed in him, when he endeavours to advance the interests of his owners by means which the law forbids, and which his owners also must be taken to have forbidden."

The circumstance of the owners of ships being permitted to insure against the barratry of the master and mariners can hardly fail, it may be not uncharitably presumed, of rendering them less scrupulous in their inquiries with respect to their character than they would otherwise be. Perhaps, therefore, it might be expedient to prohibit such insurances, or to lay some restrictions upon them. They were, indeed, expressly forbidden by the Ordinance of Rotterdam; and Lord Mansfield, whose authority on all

points connected with the law of insurance is so deservedly high, seems to have thought that it would be well to exclude barratry entirely from policies, and to cease "making the underwriter become the insurer of the conduct of the captain whom he does not appoint, and cannot dismiss, to the owners who can do either." But though it were expedient to prevent the owners from making an insurance of this sort, nothing can be more reasonable than that third parties, who freight a ship, or put goods on board, should be allowed to insure against such a copious source of loss. — (For a further discussion of this subject, see the article MARINE INSURANCE; and *Marshall on Insurance*, book i. c. 12. § 6., and *Park on Insurance*, c. 5.)

Owners, masters, or seamen, who wilfully cast away, burn, or destroy ships, to the prejudice of freighters or insurers, incur the penalty of death. — (See SEAMEN.)

BARREL, a cask or vessel for holding liquids, particularly ale and beer. Formerly the barrel of beer in London contained only 32 ale gallons = 32½ Imperial gallons: but it was enacted by 43 Geo. 3. c. 69., that 36 gallons of beer should be taken to be a barrel; and by the 6 Geo. 4. c. 58. it is enacted, that whenever any gallon measure is mentioned in any excise law, it shall always be deemed and taken to be a standard Imperial gallon. At present, therefore, the barrel contains 36 Imperial gallons. It may be worth while observing that the barrel or cask is exclusively the produce of European ingenuity; and that no such article is known to any nation of Asia, Africa, or America, who have not derived it from Europeans.

BARWOOD, a red dye wood brought from Africa, particularly from Angola, and the river Gaboon. The dark red which is commonly seen upon British Bandana handkerchiefs is for the most part produced by the colouring matter of barwood, saddened by sulphate of iron.—(*Bancroft on Colours.*) The imports of barwood, in 1829, amounted to 246 tons 15 cwt. It fetches at present (October, 1833) from 9*l.* to 11*l.* a ton (duty 5*s.* included) in the London market.

BASKETS (Fr. *Corbeilles*; Ger. *Körbe*; It. *Paniere*; Sp. *Canastas, Canastos*; Rus. *Korsinü*) are made, as every one knows, principally of the interwoven twigs of willow, osier, birch, &c., but frequently also of rushes, splinters of wood, straw, and an immense number of other articles. They are used to hold all sorts of dry goods, and are constructed of every variety of quality and shape. Besides the vast quantities produced at home, some of the finer kinds are imported under an *ad valorem* duty of 20 per cent. In 1832, this duty produced 1,044*l.* 7*s.* 9*d.*, showing that the value of the foreign baskets entered for home consumption in the same year had been 5,221*l.* 18*s.* 9*d.*

BAST, for straw hats or bonnets. See HATS.

BATAVIA, a city of the island of Java, the capital of the Dutch possessions in the East Indies, and the principal trading port of the Oriental islands, in lat. 6° 12′ S., long. 106° 54′ E., situated in the north-west part of the island, on an extensive bay. The harbour, or rather road, lies between the main land and several small uninhabited islands, which, during the boisterous or north-western monsoon, afford sufficient shelter and good anchorage. Ships of from 300 to 500 tons anchor at about a mile and a half from shore. A small river runs through the town, navigable for vessels of from 20 to 40 tons, from the sea, a couple of miles inland; a number of canals branch off from it into different parts of the town, affording great conveniences for trade. Batavia was formerly so notorious for its insalubrity, that General Daendels was anxious to transfer the seat of government to Sourabaya; but being thwarted in this, he set about building a new town, a little further inland, on the heights of Weltevreden, whither the government offices were immediately removed. Most of the principal merchants have now their residences in the new town, repairing only to the old city, when business requires it, during a portion of the day. In consequence, the old town is at present principally occupied by Chinese, and the descendants of the ancient colonists, several of its streets having been deserted and demolished. Recently, however, the Baron Capellen, whose enlightened administration will long be gratefully remembered in Java, sensible of the superior advantages of the old town as a place of trade, exerted himself to prevent its further decay, by removing the causes of its unhealthiness; to accomplish which, he widened several of the streets, filled up some of the canals, and cleaned others, demolished useless fortifications, &c.; and the effect of these judicious measures has been, that Batavia is now as healthy as any other town in the island. The population, according to an accurate census taken in 1824, consisted of 3,025 Europeans and their descendants, 23,108 natives, 14,708 Chinese, 601 Arabs, and 12,419 slaves; in all, 53,861 persons, exclusive of the garrison. As the population has increased since, it may at present be estimated at about 60,000, independently of the military, of which there are always a considerable number. Among the principal merchants are Dutch, English, Americans, French, and Germans. The island of Java forms the most important portion of the Dutch possessions in the East, and is, in fact, one of the finest colonies in the world. It contains an area of 50,000 square miles, with a population of 6,000,000 individuals, or 120 to the square mile. The annual revenue of the Dutch government, which possesses

about two thirds of the island, amounts to about 3,000,000*l.* sterling; and the military force amounts to about 15,000; of which not less than 8,000 are European troops, being about one third of the whole European force in British India, which has a population of 90,000,000, and an area of between 1,200,000 and 1,300,000 square miles of territory.

The staple products of the island are rice (of which 25,500 tons were exported in 1828), a variety of pulses, vegetable oils, tobacco, sugar, and coffee. The production of sugar is rapidly increasing. In 1832 the exports were estimated at 200,000 piculs (12,000 tons); but it was supposed that the exports in 1833 would not fall short of 18,000 tons; and as the Dutch authorities have made extensive contracts with the owners of large tracts of land to take sugar at very remunerating prices for some years to come, it has been calculated that the exports of 1834 would amount to 400,000 piculs, or about 24,000 tons. The production of indigo, cocoa, tea, and raw silk, is making considerable progress. The tin exported from Batavia is brought from Banca, the copper from Japan, the finer spices from the Moluccas, and the pepper from Sumatra.

In 1828, the exports from and imports into Batavia were, in quantity and value, as follows:—

Exports.			Imports.		
Articles.	Piculs of 136lbs. each.	Florins.	Articles.	Piculs of 136 lbs. each.	Florins.
Coffee	416,171	8,024,039	Cotton manufactures, Netherlands	-	2,940,635
Mace	600	96,078	English	-	1,819,435
Cloves	1,832	229,107	French	-	18,679
Nutmegs	1,647	221,121	Woollen ditto Netherlands	-	246,545
Rice	419,199	1,194,486	English and French	-	16,861
Tin	19,554	866,521	Provisions from England only	-	522,312
Sugar*	25,869	456,084	Brandy and geneva	-	322,606
Birds' nests	-	541,592	Wines	-	1,154,868
Piece goods	-	499,470	Opium, Levant	559	717,529
Java tobacco	-	401,002	Bengal	110	311,500
Pepper	8,226	151,737	Lead	2,891	76,612
Rattans	31,301	141,506	Copper, Europe	354	45,119
Salt	24,950	119,890	Japan	11,631	988,635
Japan and sandal wood	7,240	96,171	Steel from the Netherlands	726	22,965
Indigo*	188	94,542	England	404	12,625
Arrack	Leg. 533	86,552	Sweden	186	5,812
Hides	-	52,140	Iron from Sweden	3,200	23,275
Turmeric	5,412	42,038	England	4,593	45,050
Horses 384 (to the Isle of France)	-	55,975	Netherlands	9,035	158,003
Tortoiseshell	37	57,941	Cotton piece goods, Bengal and Madras	-	787,917
Japan camphor	489	43,200	Cotton yarn from the Netherlands	99	1,146
Articles not specified	-	2,859,336	Ditto English	245	41,430
Treasure	-	1,209,294	Gambir (terra Japonica)	-	477,854
			Rattans	-	223,667
Total	-	17,499,341	Tripang (Holothurion)	-	380,964
			Silk and cotton piece goods, Chinese manufacture	-	366,701
			Marine stores	-	264,226
			Articles not specified	-	3,383,596
			Treasure	-	2,616,707
			Total	-	17,976,094

The following Table shows the different Countries with which Batavia carries on Trade, and the Value of the Export and Import Trade with each, in 1828.

Imports.				Exports.			
From	Merchandise.	Treasure.	Total.	To	Merchandise.	Treasure.	Total.
	Florins.	*Florins.*	*Florins.*		*Florins.*	*Florins.*	*Florins.*
Netherlands	6,459,852	1,001,913	7,461,765	Netherlands	9,188,929	279,601	9,398,530
England	2,166,515	-	2,166,515	England	200,962	165,750	366,712
France	139,302	-	139,302	France	102,628	7,650	110,278
Hamburgh	59,932	16,830	76,762	Hamburgh	85,174	-	85,174
Gibraltar	18,275	89,250	107,525	Sweden	23,652	-	23,652
Sweden	30,384	-	30,384	U. S. of America	120,880	-	120,880
U. S. of America	305,161	697,210	1,002,371	Cape of Good Hope	1,970	-	1,970
Cape of Good Hope	1,624	-	1,624	Isle of France	88,547	62,523	151,070
Isle of France	21,051	-	21,051	Mocha	28,481	-	28,481
Persian Gulf	1,510	-	1,510	Persian Gulf	112,957	-	112,957
Bengal	737,424	10,200	747,624	Bombay	3,055	-	3,055
Siam	131,004	-	131,004	Bengal	77,497	2,040	79,537
Cochin China	4,909	-	4,909	Siam	77,451	22,785	100,236
China	585,566	5,408	590,974	Cochin China	21,883	-	21,883
Macao	65,628	-	65,628	China	1,474,486	87,167	1,561,653
Manilla	29,989	-	29,989	Macao	78,361	15,536	93,897
Japan	1,067,231	-	1,067,231	Manilla	35,240	37,500	72,740
New Holland	7,613	2,550	10,163	Japan	291,263	22,050	313,313
Eastern Archipelago	3,526,415	793,346	4,319,761	New Holland	75,083	1,377	76,460
				Eastern Archipelago	271,544	505,314	4,776,858
Total	15,359,387	2,616,707	17,976,094	Total	16,290,046	1,209,294	17,499,341

* The quantity of sugar exported in 1829 had risen to 80,000 piculs, and the indigo to 1,200 lbs.

The Exports and Imports under different Flags were as follow: —

Imports.			Exports.		
	Florins.	*Cent.*		*Florins.*	*Cent.*
Netherlands	12,843,901	88	Netherlands	11,986,049	26
English	1,928,743		English	2,312,449	24
American (U. States)	1,715,306	27	French	165,025	50
Chinese	472,093	50	American (U. States)	1,324,570	34
Siamese	314,802	94½	Siamese	314,802	94
Native	473,083	73	Chinese	951,133	97
Various other flags	228,163	22½	Portuguese	103,822	85
			Various other foreign	334,487	
	17,976,094	55		17,499,341	12

In 1828, the Number of Ships and Amount of Tonnage entering Inwards and clearing Outwards under different Flags were as follow: —

Outwards.			Inwards.		
Flag.	Number of Vessels.	Tonnage in Lasts.	Flag.	Number of Vessels.	Tonnage in Lasts.
Netherlands	843	45,689	Netherlands	801	45,684
English	68	14,778½	English	54	10,799½
French	9	861⅓	French	8	692½
Hamburgh	1	137	Hamburgh	1	137
Danish	1	85	Danish	1	85
Swedish	1	66	Swedish	1	66
Russian	1	153	Russian	1	153
Spanish	2	420	Spanish	3	505
Portuguese	4	962½	Portuguese	4	962½
American	19	3,116	American	14	2,087
Chinese	8	805	Chinese	8	805
Siamese	7	308	Siamese	9	497⅓
Other Asiatic	26	813	Other Asiatic	55	804
	1,026	68,194⅓		960	63,278

Note. — Taking the last at 2 tons, the quantity of tonnage which cleared outwards will be 136,389, and inwards 126,556 tons.

Port Regulations. — The following is the substance of the port regulations of Batavia: — 1st. The commander of a ship arriving in the roads, is not to land himself, or permit any of his crew or passengers to land, until his vessel be visited by a boat from the guard-ship. — 2d. The master, on landing, is first to wait on the master attendant, and afterwards report himself at the police office. — 3d. A manifest of the whole cargo must be delivered at the Custom-house within 24 hours of the ship's arriving in the roads. — 4th. The master of a vessel must lodge the ship's papers with the master attendant when he first lands, which are duly delivered up to him when he receives his port clearance from the same authority. — 5th. No goods can be shipped or landed after sunset, under a penalty of 500 florins. — 6th. No goods can be shipped on Sunday without a special permission from the water fiscal, which, however, is never refused on application. — 7th. No muskets or ammunition can be imported; but the prohibition does not extend to fowling pieces exceeding 100 florins value.

Tariff. — With respect to the tariff, all foreign woollens and cottons, being the manufacture of countries to the westward of the Cape of Good Hope, imported under a foreign flag, pay an *ad valorem* duty of 26¼ per cent., and under the Netherlands flag, of 12½ per cent., that is, a duty upon the wholesale price at Batavia, not in bond. With the exception of wines, spirits, and opium, which pay a rated duty, all other articles, if imported under a foreign flag, pay an *ad valorem* duty, rated on the invoice value, of 16·38 per cent., and if under the Netherlands flag, of 8·19 per cent. Cottons and woollens, the manufacture of the Netherlands, if accompanied by a certificate of origin, are duty free; but since the separation of Belgium and Holland, there have been no importations of cotton manufactures claiming this privilege. The export duty on coffee, if exported on a foreign bottom to a foreign country, is 5 florins per picul; if on a foreign bottom to a port in the Netherlands, 4 florins; and if on a Netherlands bottom to a Netherlands port, 2 florins. Sugar, if exported on a foreign bottom to whatever country, pays 1 florin per picul; but if exported on a Netherlands bottom to a Netherlands port, is duty free. Rice, on whatever bottom exported, and to whatever country, pays a duty of 3 florins per coyang of 27 piculs. Tin, exported on a foreign ship to whatever port, 4 florins per picul; and by a Netherlands ship, 2 florins per picul. The trade in spices is now monopolised by the Netherlands Trading Company.

Goods are received in *entrepôt* not only at Batavia, but at the ports of Samarang, Sourabaya, and Anjier in Java, and Rhio in the Straits of Malacca, on payment of a duty of 1 per cent. levied on the invoice value.

Money. — Accounts are kept, at Batavia, in the florin or guilder, divided into centimes, or 100 parts, represented by a copper coinage or doits. The florin is a new coin made expressly for India, but of the same value as the florin current in the Netherlands. It is usually estimated at the rate of 12 to the pound sterling, but the correct par is 11 florins 58 centimes per pound. Doubleons, and the coins of Continental India, are receivable at the Custom-house at a fixed tariff; the Spanish dollar, for example, at the rate of 100 for 260 florins.

Weights. — The Chinese weights are invariably used in commercial transactions at Batavia, and throughout Java and the other Dutch possessions in India. These are the picul, and the cattie, which is its hundredth part. The picul is commonly estimated at 125 Dutch, or 133⅓ lbs. avoirdupois, but at Batavia it has been long ascertained and considered to be equal to 136 lbs. avoirdupois. — (*Hogendorp, Coup d'Œil sur l'Ile de Java*, cap. 8. &c.; *Evidence of Gillian Maclaine, Esq. before the Select Committee of the House of Commons on the Affairs of the East India Company*, 1831, and *private communications* from the same.)

BATTEN, a name in common use for a scantling of wood 2½ inches thick and 7 wide. If above 7 inches wide, it is called deal.

BAZAAR, a term used in the East to designate a market, or building in which various articles of merchandise are exposed for sale. Bazaars are now met with in most large cities of Europe. There are several in London, of which the one in Soho-square is the most considerable.

BDELLIUM (Arab. *Aflatoon*), a gum-resin, semi-pellucid, and of a yellowish brown or dark brown colour according to its age, unctuous to the touch, but brittle; soon, however, softening between the fingers; in appearance it is not unlike myrrh, of a bitterish taste, and moderately strong smell. Two kinds have been distinguished: the *opocalpasum* of the ancients, which is thick like wax; and the common dark sort. It is found in Persia and Arabia, but principally in the latter; all that is met with in India is of Arabic origin. The tree which produces it has not been clearly ascertained. — (*Ainslie's Materia Indica.*)

BEACONS, in commerce and navigation, public marks or signals to give warning of rocks, shoals, &c. No man is entitled to erect a light-house, beacon, &c., without being empowered by law. The Trinity House corporation are authorised to set up beacons in whatever places they shall think fit; and any person who shall wilfully remove or run down any buoy, beacon, &c. belonging to the Trinity House, or to any other corporation, individual or individuals, having authority to establish it, shall, besides being liable to the expense of replacing the same, forfeit a sum of not less than 10*l.* nor more than 50*l.* for every such offence. — (6 *Geo.* 4. c. 125. § 91.) — (See Buoys.)

BEADS (Fr. *Rosaires;* Ger. *Rosenkränze;* Du. *Paternosters;* It. *Corone;* Sp. *Coronas*), small globules or balls used as necklaces, and made of different materials; as pearl, steel, amber, garnet, coral, diamonds, crystal, glass, &c. Roman Catholics use beads in rehearsing their Ave Marias and Paternosters. Glass beads or bugles are imported in large quantities into India and Africa, and also into Borneo and Sumatra. They are brought partly from Europe, and partly from China and the Persian Gulf. The glass beads sent from England are all imported, principally, we believe, from Venice. Their non-manufacture in this country is said to be a consequence of the excise regulations on the manufacture of glass.

BEANS (Fr. *Fèves;* Ger. *Bohnen;* It. *Fave;* Rus. *Boobü;* Sp. *Habas;* Lat. *Fabæ*), a well-known vegetable of the pulse species, largely cultivated both in gardens and fields. Its cultivation is of much importance in rural economy, inasmuch as it has gone far to supersede fallows on strong loams and clays.

BEAVER. See Skins.

BEECH (*Fagus sylvatica*), a forest tree to be met with every where in England. There is only one species, the difference in the wood proceeding from the difference of soil and situation. A considerable quantity of beech is grown in the southern parts of Bucks. It is not much used in building, as it soon rots in damp places; but it is used as piles in places where it is constantly wet. It is manufactured into a great variety of tools, for which its great hardness and uniform texture render it superior to all other sorts of wood; it is also extensively used in making furniture.

BEEF, as every one knows, is the flesh of the ox. It is used either fresh or salted. Formerly it was usual for most families, at least in the country, to supply themselves with a stock of salt beef in October or November, which served for their consumption until the ensuing summer; but in consequence of the universal establishment of markets where fresh beef may be at all times obtained, the practice is now nearly relinquished, and the quantity of salted beef made use of as compared with fresh beef is quite inconsiderable. Large supplies of salted beef are, however, prepared at Cork and other places for exportation to the East and West Indies. During the war, large supplies were also required for victualling the navy. The vessels engaged in the coasting trade, and in short voyages, use only fresh provisions.

The English have at all times been great consumers of beef; and at this moment more beef is used in London, as compared with the population, than any where else. — (For further details with respect to the consumption of beef, &c., see Cattle.)

BEER. See Ale and Beer.

BELL-METAL (Fr. *Metal de Fonte ou de Cloches;* Ger. *Glockengut;* Du. *Klokspys;* Sp. *Campanil;* Rus. *Kolokinaja mjed*), a composition of tin and copper, usually consisting of 3 parts of copper and 1 of tin. Its colour is greyish white; it is very hard, sonorous, and elastic. Less tin is used for church bells than for clock bells; and in very small bells, a little zinc is added to the alloy. — (*Thomson's Chemistry.*)

BENZOIN. See Balsam.

BERGEN, the first commercial city of Norway, situated at the bottom of a deep bay, in lat. 60° 24′ N., long. 5° 20′ E. Population 21,000. The bay is inclosed on all sides by rugged rocks and islands: the water is deep; but, owing to the number and intricacy of the passages, the access to the town is attended at all times with a good deal of difficulty, and should never be attempted without a pilot. Codfish, salted or dried, is one of the principal articles of export; when dried, it is called stock-fish, and goes chiefly to Italy and Holland. The cod fishery employs several thousand persons during the months of February and March; and the exports amounted, in 1829, to 184,064 barrels. The herring fishery, which used to be very successfully carried on upon the coasts of Norway, has, for a good many years, been comparatively unproductive. Whale oil,

skins, bones, tar, with immense numbers of lobsters, &c., are exported. The exports of timber from Bergen are inconsiderable, and none has latterly gone to England. Norway timber is not so large as that brought from Prussian ports, nor so free from knots; but, being of slower growth, it is more compact, and less liable to rot. The planks are either red or white fir or pine: the red wood is produced from the Scotch fir; the white wood, which is inferior in price and estimation, is the produce of the spruce fir: each tree yields three pieces of timber of 11 or 12 feet in length; and is 70 or 80 years of age before it arrives at perfection. The planks or deals of Bergen are, however, a good deal inferior to those of Christiania. The imports into Bergen principally consist of grain from the Baltic; and salt, hardware, coffee, sugar, &c. from England.

For *Monies*, *Weights*, and *Measures*, see CHRISTIANIA; where there are further details as to the trade and navigation of Norway.

We subjoin an account of the principal exports from Bergen in 1829.

Bones	50 tons.	Oil, whale	2,402 tuns.
Fish, Lobsters	250,000 number.	Skins, goat, buck, and deer	440 cwt.
Cod, smoked and dry	15,373 tons.	sheep and lamb	75 do.
— salt	184,064 barrels.	fox, martin, otter, &c.	97 skins.
— roe, ditto	13,927 do.	Tar	451 barrels.
Pickled sprats	1,912 kegs.	Wood, timber and deals	380 tons.
Horns, ox and cow	178 cwt.	staves	800 number.
Moss, rock	131 tons.		

(*Private information.*)

BERRIES (*Baccæ*), the fruits or seeds of many different species of plants. The berries quoted in London Price Currents are bay, juniper, Turkey, and Persian.

1. *Bay Berries* (Fr. *Baies de Laurier*; Ger. *Lorbeeren*; It. *Bacchi di Lauro*; Sp. *Bayas*), the fruit of the *Laurus nobilis*. This tree is a native of the south of Europe, but is cultivated in this country, and is not uncommon in our gardens. The berry is of an oval shape, fleshy, and of a dark purple colour, almost black; it has a sweet fragrant odour, and an aromatic astringent taste. Bay berries, and the oil obtained by boiling them in water, are imported from Italy and Spain. — (*Thomson's Dispensatory.*)

2. *Juniper Berries* (Fr. *Genévrier*; Du. *Sevenboom*; It. *Ginepro*; Sp. *Embro*), the fruit of the common juniper (*Juniperus communis*). They are round, of a black purple colour, and require two years to ripen. They have a moderately strong, not disagreeable, but peculiar smell, and a warm, pungent, sweetish taste, which, if they be long chewed, or previously well bruised, is followed by a considerable bitterness. They are found in this country; but most of those made use of here are imported from Holland, Germany, and Italy. They should be chosen fresh, not much shrivelled, and free from mouldiness, which they are apt to contract in keeping. On distillation with water, they yield a volatile essential oil, very subtile and pungent, and in smell greatly resembling the berries. The peculiar flavour and diuretic qualities of Geneva depend principally on the presence of this oil. English gin is said to be, for the most part, flavoured with oil of turpentine. — (*Lewis's Mat. Med.*; *Thomson's Dispensatory.*)

The duty on juniper berries, previously to 1832, was 11*s.* 1*d.* a cwt., being more than 100 *per cent. on their price in bond.* The oppressiveness of this duty seems to have been the principal reason why turpentine, which in point of flavour and all other respects is so inferior, has been largely used in preference to juniper berries in the preparation of gin. This oppressive duty was reduced, in 1832, to 2*s.*, and we entertain little doubt that this wise and liberal measure will at no distant period occasion the receipt of a greater amount of revenue, at the same time that it cannot fail materially to improve the beverage of a large proportion of the people.

Italian juniper berries fetch at present (Sept. 1833), in the London market, from 9*s.* 6*d.* to 10*s.* 6*d.* a cwt., duty included; and German and Dutch ditto, from 8*s.* to 9*s.*

3. *Turkey Yellow Berries*, the unripe fruit of the *Rhamnus infectorius* of Linnæus. They are used as a dye drug, in preparing a lively but very fugitive yellow, for topical application in calico-printing. Considerable quantities of them are exported from Salonica, to which they are brought from Thessaly and Albania. An inferior sort is produced in France. — (*Bancroft on Colours.*) The duty on Turkey berries is 2*s.*; and their price, duty included, in the London market, is (Sept. 1833) 34*s.* to 36*s.* a cwt.

4. *Persian Yellow Berries* are said by the merchants to be of the same species as the Turkey yellow berries. The colours which they yield are more lively and lasting. They are high priced, fetching (duty 2*s.* included) from 110*s.* to 130*s.* a cwt. Hitherto the imports have been very inconsiderable; the whole yellow berries (Turkey as well as Persian) entered for home consumption during the 3 years ending with 1831, being only 1,939 cwt. a year. The nett revenue derived from all sorts of berries imported in 1832, was 3,062*l.* 12*s.* 4*d.*

BERYL, called by the jewellers *Aquamarine*. This stone was suspected by Pliny to be a variety of the emerald; a conjecture which modern mineralogists have completely confirmed. The term emerald is applied to that particular variety which presents its own peculiar colour, or *emerald green*; while that of beryl is given indiscriminately to

all the other varieties; as the sea green, pale blue, golden yellow, and colourless. Pliny says that the beryl is found in India, and rarely elsewhere; but besides India, it is found in Peru and Brazil; at Nantes and Limoges, in France; in the Wicklow mountains, in Ireland; in the district of Cairngorm, in Scotland; and in various other places. — (*Plin. Hist. Nat.* lib. xxxvii. cap. 5.; *Ency. Brit.* new edit.)

"Those only which are of good colour and sufficient depth are manufactured; they have a pretty, lively effect, if in good proportion and well polished. Large stones, from one to three and four ounces, are not uncommon, but from their bulk are only in request as specimens for the cabinet: smaller stones suitable for necklaces may be bought at low prices, within the reach of every description of purchasers: ring stones may be had at a few shillings each; and larger, for brooches or seals, from 1*l.* to 5*l.* and often lower." — (*Mawe on Diamonds, &c.* 2d edit.)

BETEL-NUT, or ARECA (Sans. and Hind. *Supari;* Malay, *Pinang;* Javan. *Jambi*), the fruit of the *Areca catechu*, a slender and graceful palm, rising to the height of about 30 or 40 feet; it produces fruit at the age of five or six years, and continues bearing till its 25th or 30th year. The fruit, which is the only part of the palm that is made use of, is eaten both in its unripe and in its mature state. When ripe, it is of the size of a small egg, and of an orange colour; the exterior part consists of a soft, spongy, fibrous matter, inclosing a nucleus resembling a nutmeg in shape, internal structure, and colour, but usually larger, and always harder. A single tree produces, according to its situation, age, culture, &c., from 200 to 800 nuts. They are objects of great importance in the East, forming the principal ingredient of a compound in universal use as a masticatory in all Central and Tropical Asia. The other ingredients are the leaf of the Betel pepper — (which see), in which the areca nut is wrapped; a little Chunam — (which see); and generally, but not always, a little *catechu* or terra japonica — (see Catechu). The whole compound is called *betel*, and is used to an extent of which it is difficult for a European to form a just idea. All individuals, without exception of age or sex, begin at an early period to accustom themselves to betel. They are unceasingly masticating it, and derive a gratification from its use that strangers can neither understand nor explain. It reddens the saliva, gives a bright hue to the lips, and, in course of time, renders the teeth quite black. It is said to dispel nausea, excite appetite, and strengthen the stomach. Besides being used as an article of luxury, it is a kind of ceremonial which regulates the intercourse of the more polished classes of the East. When any person of consideration visits another, after the first salutations, betel is presented: to omit it on the one part would be considered neglect, and its rejection would be judged an affront on the other. No one of inferior rank addresses a dignified individual without the previous precaution of chewing betel; two people seldom meet without exchanging it; and it is always offered on the ceremonious interviews of public missionaries. The areca nut is, in consequence, an article of very extensive trade. The countries which yield it most largely for exportation are Malabar, Ceylon, and Sumatra. Of the extent of this trade, some notion may be formed from the fact, that the imports of areca into Bengal in 1829–30, were 695 tons, and into Canton 2,894 tons, though Bengal and Southern China are countries in which areca is largely produced. — (See the article *Betel* in the new edition of the *Ency. Britannica; Bell's Review of the External Commerce of Bengal; Crawfurd's Indian Archipelago*, vol. i. p. 102., vol. iii. p. 414.; *Chinese Kalendar and Register for* 1832, &c.)

BETEL-LEAF (Hind. *Pān;* Malay, *Sireh;* Javan. *Suro*), the leaf alluded to in the foregoing article. It is the produce of a species of pepper vine (*Piper betel*), and somewhat resembles the ivy leaf. In their fresh state, betel leaves form an important article of Eastern traffic, being every where used in the preparation of betel. The *Piper Betle* is a scandent plant, and poles are placed in the ground, round which it twines itself. In consequence of the great consumption of its leaves, it is extensively cultivated throughout Tropical Asia. It grows in the greatest perfection in rich soils close to the equator; and is raised with more difficulty the further we recede from it. — (*Ency. Britannica*, new edition, article *Betel; Crawfurd's Indian Archipelago*, vol. i. p. 403.)

BEZOAR (Arab. *Faduj;* Hind. *Zeher-morah;* Pers. *Padzehr Kanie*), a concretion found in the stomach of an animal of the goat kind; it has a smooth glossy surface, and is of a dark green or olive colour: the word bezoar, however, has lately been extended to all the concretions found in animals; — such as the *hog bezoar*, found in the stomach of the wild boar in India; the *bovine bezoar*, found in the gall-bladder of the ox, common in Nepaul; and the *camel bezoar*, found in the gall-bladder of the camel: this last is much prized as a yellow paint by the Hindoos. The finest bezoar is brought to India from Borneo and the sea-ports of the Persian Gulf; the Persian article is particularly sought after, and is said to be procured from animals of the goat kind, *Capra Gazella*. Many extraordinary virtues were formerly ascribed to this substance, but without any sufficient reason. — (*Ainslie's Materia Indica.*)

BILBAO, or (as it is commonly, though incorrectly, written in this country) BILBOA, a sea-port town of Spain, in the province of Biscay, on the river Ybai Cabal, about 9 miles from Portugalete. Population 14,500.

Port. — The bay of Bilbao lies between *Punto Galea* on its east, and *Punto Luzuero* on its western side, distant about 3 miles. It stretches S.E. to within ¾ of a mile of Portugalete, in lat. 43° 20′ 10″ N., long. 2° 54¾′ W., near the mouth of the river on which Bilbao is built. The water in the bay varies from 5 to 10 and 14 fathoms. There is a bar at the mouth of the river, between Santurce and Portugalete, on which there is not above 4 feet water at ebb tide. High water at full and change at 3 h. P. M. Spring tides rise about 13 feet; and large ships taking advantage of them sometimes ascend the river as far as Bilbao; but they usually load and unload by lighters, either at Portugalete, or at Olaviaga, 4 miles below the town. Pilots are to be had at Santurce, without the bar. In winter, a heavy sea sometimes sets into the bay; but if the pilot cannot go off, he places himself on one of the batteries to the N.W. of Santurce, and makes signals with a red flag, so as to direct the ship to the best anchorage ground. — (See *Laurie's* excellent *Chart of the Bay of Biscay*, with the *Sailing Directions* that accompany it.)

Trade. — Bilbao is favourably situated for commerce. The Biscayans are distinguished for the zeal and courage with which they have defended their peculiar privileges, and for their industry and activity. Bilbao and Santander are the principal ports through which the extensive province of Old Castile, and large portions of Leon and Navarre, most easily communicate with foreign countries. They have, in consequence, particularly the former, a pretty considerable foreign trade. Wool is one of the principal articles of export; but since the introduction of Merino sheep into Germany, and their extraordinary increase in that country, this branch of Spanish commerce, though still of a good deal of importance, has materially declined. Since the abolition, in 1820, of all restrictions on the exportation of corn, flour, &c., the shipments of wheat from Bilbao have been, in some years, very considerable. The supplies are principally brought from the provinces of Palencia, Valladolid, and Zamora, which yield immense quantities of wheat. The distance is from 130 to 140 English miles; and owing to the badness of the roads, and the deficient means of transport, the rate of carriage advances enormously when there is any extraordinary foreign demand. If the *Canal of Castile*, intended to unite the Douro with Reynosa, Bilbao, and Santander, were completed, it would make a considerable revolution in this trade. The *campos*, or plains, on the south side of the Douro, are amongst the finest wheat countries in the world; the crops being frequently so abundant, that the peasants decline reaping the fields at a distance from the villages! In 1831, 146,234 quarters of Spanish wheat, principally from Bilbao, were imported into Great Britain. The iron manufactures of Biscay are in a state of considerable activity, and some part of the produce is exported. The principal articles of importation are wove fabrics, cod-fish, cutlery, and jewellery; sugar, coffee, cacao, and other colonial products, spices, indigo, &c. In 1831, 210 foreign ships, of the burden of 18,822 tons, entered the port of Bilbao. The countries to which these ships belonged are not mentioned; but in 1828, 49 British ships, of the burden of 6,051 tons, entered the port. — (We have derived these details from the *Foreign Quarterly Review*, No. 9. art. *Spain*; the *Annuaire du Commerce Maritime* for 1833, p. 265.; the *Parl. Paper*, No. 550. Sess. 1833; and *private information*.)

Monies, Weights, and Measures, same as those of CADIZ; which see. We may mention, however, that the fanega, or measure for grain, is equivalent to 1·65 Winchester quarters.

BILL OF EXCHANGE. See EXCHANGE.

BILL OF HEALTH, a certificate or instrument signed by consuls or other proper authorities, delivered to the masters of ships at the time of their clearing out from all ports or places suspected of being particularly subject to infectious disorders, certifying the state of health at the time that such ships sailed. A *clean* bill imports, that at the time that the ship sailed no infectious disorder was known to exist. A *suspected* bill, commonly called a *touched* patent or bill, imports that there were rumours of an infectious disorder, but that it had not actually appeared. A *foul* bill, or the absence of clean bills, imports that the place was infected when the vessel sailed. — (See QUARANTINE.)

BILL OF LADING, is a *formal receipt* subscribed by the master of a ship in his capacity of carrier, acknowledging that he has received the goods specified in it on board his ship, and binding himself (under certain exceptions) to deliver them, in the like good order as received, at the place, and to the individual named in the bill, or his assigns, on his or their paying him the stipulated freight, &c. When goods are sent by a ship hired by a charterparty, the bills of lading are delivered by the master to the merchant by whom the ship is chartered; but when they are sent by a *general ship*,—that is, by a ship not hired by charterparty, but employed as a general carrier, — each individual who sends goods on board, receives a bill of lading for the same. In all cases, therefore, the bill of lading is the evidence of and title to the goods shipped.

The liability of a carrier, at common law to deliver the goods intrusted to his care, is cancelled only by "the act of God and the king's enemies." But to limit this responsibility, the following exception is now, invariably almost, introduced into the clause in bills of lading, binding the master to the delivery of the goods: — "*The act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, excepted.*"

Bills of lading are not, in general, immediately given by the master on receiving the goods. The usual practice is for the master or his deputy to give a common receipt

for the goods, which is delivered up on receiving the bill of lading. The latter should always be required within 24 hours after the goods are received on board.

Three sets of all bills of lading are made out on stamped paper: one of these should be remitted by the first post to the person to whom the goods are consigned, a second being sent to him by the ship; the third is retained by the shipper of the goods. The master ought always to retain copies of the bills of lading for his government. A stamp duty of 3*s.* is charged on all bills of lading, whether for goods exported or carried coastwise.

The usual form of a bill of lading is as follows: —

W. B. } *N. B.* — SHIPPED, in good order and well conditioned, by *A. B.* merchant, in and upon the
No. 1. *a.* 10. } good ship called whereof *C. D.* is master, now in the river Thames, and bound
for , the goods following, viz. [*here describe the goods,*] marked and numbered
as *per* margin, to be delivered, in the like good order and condition, at
aforesaid, (*the act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, excepted,*)
unto the said *A. B.* or his assigns, he or they paying for the said goods at the rate of
per piece freight, with primage and average accustomed. In witness whereof, I the
said master of the said ship, have affirmed to three bills of lading, of this tenour and date;
any one of which bills being accomplished, the other two are to be void.
London, this day of , 1834. C. D., *Master.*

But in the case of ships homeward bound from the West Indies, which send their boats to fetch the cargo from the shore, the exception in the bill of lading is usually expressed as follows: — "The act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, *save risk of boats, so far as ships are liable thereto,* excepted." Other exceptions may be and are sometimes introduced; but the above is the general form.

Transfer of Bills of Lading. — Bills of lading are transferable either by blank or special indorsement, like bills of exchange. And whatever may be the character of the person to whom the goods are consigned, whether he be a buyer, or merely the factor, agent, or broker of the consignor, the *bonâ fide* holder of a bill of lading indorsed by the consignee, is entitled to the goods, and may claim them from the master, if he can prove that he has purchased the bill for a *good consideration;* but unless he can do this, he is not entitled to the goods. — (*Holt, Law of Shipping,* 2d ed. p. 363.)

Formerly, a factor, though he might sell, could not *pledge* the goods of his principal. But the hardship and inconvenience arising from this rule were such, that it was set aside by the act 6 Geo. 4. c. 94. The second section of this act declares, that any person in possession of a bill of lading shall be deemed the true owner of the goods specified in it, so as to make a sale or pledge by him of such goods or bill of lading valid, unless the person to whom the goods are sold or pledged has notice that the seller or pledger is not the actual and *bonâ fide* owner of the goods. — (See FACTOR.)

Delivery under Bill of Lading. — It being usual to sign and deliver three bills of lading, it is possible that there may be conflicting demands upon the captain by the different holders. Nothing, however, is, in such a case, required of him, except that he act with good faith, and to the best of his judgment; and that he make delivery of the goods to the person who first demands them of him, upon presentment of the bill of lading, *provided the circumstances be not such as to justify a suspicion* of his having unfairly got possession of it. If he act differently, he is answerable, according to the peculiarities of the case, to the person injured by his negligence; the bill of lading being not only the instructions of the merchant to him, as his carrier or servant, but his own especial agreement to deliver according to its conditions.

Where several bills of lading of a different import have been signed, no regard is to be paid to the time when they were first signed by the master; but the person who first gets legal possession of one of them from the owner or shipper, has a right to the consignment; and where such bills of lading, though different upon the face of them, are constructively the same, and the master has acted *bonâ fide,* a delivery according to such legal title will discharge him from all. — (*Holt,* p. 375. and 377.)

BILL OF SALE, a contract under seal, by which an individual conveys or passes away the right and interest he has in the goods or chattels named in the bill. The property of ships is transferred by bill of sale. — (See REGISTRY.)

BILL OF SIGHT. When a merchant is ignorant of the real quantities or qualities of any goods assigned to him, so that he is unable to make a perfect entry of them, he must acquaint the collector or comptroller of the circumstance; and they are authorised, upon the importer or his agent making oath that he cannot, for want of full information, make a perfect entry, to receive an entry by *bill of sight,* for the packages, by the best description which can be given, and to grant warrant that the same may be landed and examined by the importer in presence of the officers; and within 3 days after any goods shall have been so landed, the importer shall make a perfect entry, and shall either pay down the duties, or shall duly warehouse the same. — (3 & 4 *Will.* 4. c. 52. § 24.)

In default of perfect entry within 3 days, such goods are to be taken to the king's

warehouse; and if the importer shall not, within 1 month, make perfect entry, and pay the duties thereon, or on such parts as can be entered for home use, together with charges of moving and warehouse rent, such goods shall be sold for payment of the duties. — § 25.

The East India Company are authorised, without the proof before-mentioned, to enter goods by bill of sight, and to make perfect entry, and pay the duties within 3 months. — § 26.

BILL OF STORE, is a licence granted by the Custom-house, to merchants, to carry such stores and provisions as are necessary for a voyage, free of duty.

By the act 3 & 4 Will. 4. c. 52., returned goods may be entered by bill of store, as follows: —

From 5th January, 1826, it shall be lawful to re-import into the United Kingdom, from any place, in a ship of any country, any goods (except as herein-after excepted) which shall have been legally exported from the United Kingdom, and to enter the same by bill of store, referring to the entry outwards, and exportation thereof; provided the property in such goods continue in the person by whom or on whose account the same have been exported; and if the goods so returned be foreign goods which had before been legally imported into the United Kingdom, the same duties shall be payable thereon as would, at the time of such re-importation, be payable on the like goods, under the same circumstances of importation as those under which such goods had been originally imported; or such goods may be warehoused upon a first importation thereof: provided always, that the several sorts of goods enumerated or described in the list following shall not be re-imported into the United Kingdom for *home use*, upon the ground that the same had been legally exported from thence, but that the same shall be deemed to be *foreign* goods, whether originally such or not, and shall also be deemed to be imported for the first time into the United Kingdom; viz.

Goods exported, which may not be re-imported for Home Use.

Corn, grain, meal, flour, and malt; hops, tobacco, tea.

Goods for which any bounty or any drawback of excise had been received on exportation, unless by special permission of the commissioners of customs, and on repayment of such bounty or such drawback.

All goods for which bill of store cannot be issued in manner herein-after directed, except small remnants of British goods, by special permission of the commissioners of customs, upon proof to their satisfaction that the same are British, and had not been sold. — § 33.

The person in whose name any goods so re-imported were entered for exportation, shall deliver to the searcher, at the port of exportation, an exact account signed by him of the particulars of such goods, referring to the entry and clearance outwards, and to the return inwards of the same, with the marks and numbers of the packages both inwards and outwards; and thereupon the searcher, finding that such goods had been legally exported, shall grant a bill of store for the same; and if the person in whose name the goods were entered for exportation was not the proprietor thereof, but his agent, he shall declare upon oath on such bill of store the name of the person by whom he was employed as such agent; and if the person to whom such returns are consigned shall not be such proprietor and exporter, he shall declare upon oath on such bill of store the name of the person for whose use such goods have been consigned to him; and the real proprietor, ascertained to be such, shall make oath upon such bill of store to the identity of the goods so exported and so returned, and that he was at the time of exportation and of re-importation the proprietor of such goods, and that the same had not during such time been sold or disposed of to any other person; and such affidavits shall be made before the collectors or comptrollers at the ports of exportation and of importation respectively, and thereupon the collector and comptroller shall admit such goods to entry by bill of store, and grant their warrant accordingly. — § 34.

BILLINGSGATE, a market for fish, contiguous to the Custom-house in London. It is held every lawful day, and was established in 1699 by stat. 10 & 11 Will. 3. c. 24. Every person buying fish in Billingsgate market, may sell the same in any other market-place or places within the city of London or elsewhere, by retail, with this condition, that none but fishmongers be permitted to sell in fixed shops or houses. No person or persons shall purchase at Billingsgate any quantity of fish, to be divided by lots or in shares amongst any fishmongers or other persons, in order to be afterwards put to sale by retail or otherwise; nor shall any fishmonger engross, or buy in the said market, any quantity of fish, but what shall be for his own sale or use, under the penalty of 20*l*. No person is to have in his possession, or expose to sale, any spawn of fish, or fish unsizeable, or out of season. — (36 *Geo.* 3. c. 118.) The minimum size of the lobsters to be sold at Billingsgate is fixed by statute. — (See Lobster.)

No fish of foreign taking or curing, or in foreign vessels, is to be imported into the United Kingdom, under penalty of forfeiture, except turbots and lobsters, stock-fish, live eels, anchovies, sturgeon, botargo, and caviare. Fresh fish of British taking, and imported in British ships, and turbot, however taken or imported, may be landed without report, entry, or warrant. — (6 *Geo.* 4. c. 107.)

For some further remarks with respect to this subject, see Fish.

BIRCH (Fr. *Bouleau*; Du. *Berke*; Ger. *Birke*; It. *Betulla*; Lat. *Betula*; Pol. *Brzoza*; Rus. *Bereza*; Sp. *Abedul, Betulla*), a forest tree met with every where in the north of Europe. It is applied to various purposes. In Lapland, Norway, and Sweden, the long twigs of the birch are woven into mats and twisted into ropes; the outer bark forms an almost incorruptible covering for houses; and the inner bark is used, in periods of scarcity, as a substitute for bread. Russia leather is prepared by means of the empyreumatic oil of the birch. It is an excellent wood for the turner, being light, compact, and easily worked. Its durability is not very great. It is sometimes used in the manufacture of herring barrels.

BIRDLIME (Ger. *Vogelleim*; Fr. *Glu*; It. *Pania*; Sp. *Liga*; Rus. *Ptitschei Klei*) exudes spontaneously from certain plants, and is obtained artificially from the middle

bark of the holly. Its colour is greenish, its flavour sour, and it is glucy, shining, and tenacious. The natural is more adhesive than the artificial birdlime. — (*Thomson's Chemistry.*)

BIRDS' NESTS (Ger. *Indianische Vogelnester;* Du. *Indiaansche Vogelnestjes;* Fr. *Nids de Tunkin;* It. *Nidi di Tunchino;* Sp. *Nidos de la China;* Java. *Susu;* Malay, *Sarungburung*), the nests of a species of swallow peculiar to the Indian islands (*Hirundo esculenta*), very much esteemed in China. In shape this nest resembles that of other swallows; it is formed of a viscid substance; and in external appearance, as well as consistence, is not unlike fibrous, ill-concocted isinglass. Esculent nests are principally found in Java, in caverns that are most frequently, though not always, situated on the sea-coast. Many conflicting statements have been made as to the substance of nests; some contending that they are formed of sea-foam or other marine products, and others that they are elaborated from the food of the bird, &c. But these are points as to which nothing satisfactory is known.

We borrow from Mr. Crawfurd's valuable work on the *Eastern Archipelago* (vol. iii. pp. 432—437.), the following authentic and curious details as to the traffic in this singular production: — "The best nests are those obtained in deep damp caves, and such as are taken before the birds have laid their eggs. The coarsest are those obtained after the young are fledged. The finest nests are the whitest, that is, those taken before the nest has been rendered impure by the food and *fæces* of the young birds. They are taken twice a-year, and, if regularly collected, and no unusual injury be offered to the caverns, will produce very equally, the quantity being very little, if at all, improved by the caves being left altogether unmolested for a year or two. Some of the caverns are extremely difficult of access, and the nests can only be collected by persons accustomed from their youth to the office. The most remarkable and productive caves in Java, of which I superintended a moiety of the collection for several years, are those of *Karang-bolang*, in the province of *Baglen*, on the south coast of the island. Here the caves are only to be approached by a perpendicular descent of many hundred feet, by ladders of bamboo and rattan, over a sea rolling violently against the rocks. When the mouth of the cavern is attained, the perilous office of taking the nests must often be performed by torch-light, by penetrating into recesses of the rock where the slightest trip would be instantly fatal to the adventurers, who see nothing below them but the turbulent surf making its way into the chasms of the rock.

"The only preparation which the birds' nests undergo is that of simple drying, without direct exposure to the sun, after which they are packed in small boxes, usually of half a picul. They are assorted for the Chinese market into three kinds, according to their qualities, distinguished into *first* or *best*, *second*, and *third* qualities. Caverns that are regularly managed, will afford, in 100 parts, 53·3 parts of those of the first quality, 35 parts of those of the second, 11·7 parts of those of the third.

"The common prices for birds' nests at Canton are, for the first sort, no less than 3,500 Spanish dollars the picul, or 5*l.* 18*s.* 1½*d.* per lb.; for the second, 2,800 Spanish dollars per picul; and for the third, 1,600 Spanish dollars. From these prices it is sufficiently evident, that the birds' nests are no more than an article of expensive luxury. They are consumed only by the great; and, indeed, the best part is sent to the capital for the consumption of the court. The sensual Chinese use them, under the imagination that they are powerfully stimulating and tonic; but it is probable that their most valuable quality is their being perfectly harmless. The people of Japan, who so much resemble the Chinese in many of their habits, have no taste for the edible nests; and how the latter acquired a taste for this foreign commodity is no less singular than their persevering in it. Among the western nations there is nothing parallel to it, unless we except the whimsical estimation in which the Romans held some articles of luxury, remarkable for their scarcity rather than for any qualities ascribed to them."

Mr. Crawfurd estimates the whole quantity of birds' nests exported from the Archipelago at 242,400 lbs. worth 284,290*l.* "The value," he observes, "of this immense property to the country which produces it, rests upon the capricious wants of a single people. It is claimed as the exclusive property of the sovereign, and every where forms a valuable branch of his income, or of the revenue of the state. This value, however, is of course not equal, and depends upon the situation and the circumstances connected with the caverns in which the nests are found. Being often in remote and sequestered situations, in a country so lawless, a property so valuable and exposed is subject to the perpetual depredation of freebooters, and it not unfrequently happens that an attack upon it is the principal object of the warfare committed by one petty state against another. In such situations, the expense of affording them protection is so heavy, that they are necessarily of little value. In situations where the caverns are difficult of access to strangers, and where there reigns enough of order and tranquillity to secure them from internal depredation, and to admit of the nests being obtained without other expense than the simple labour of collecting them, the value of the property is very great. The caverns of *Karang-bolang*, in Java, are of this description. These annually afford 6,810 lbs. of nests, which are worth, at the Batavia prices of 3,200, 2,500, and 1,200 Spanish dollars the picul, for the respective kinds, nearly 139,000 Spanish dollars; and the whole expense of collecting, curing, and packing, amounts to no more than 11 per cent. on this amount. The price of birds' nests is of course a monopoly price, the quantity produced being by nature limited, and incapable of augmentation. The value of the labour expended in bringing birds' nests to market is but a trifling portion of their price, which consists of the highest sum that the luxurious Chinese will afford to pay for them, and which is a tax paid by that nation to the inhabitants of the Indian islands. There is, perhaps, no production upon which human industry is exerted, of which the cost of production bears so small a proportion to the market price." — (See also the valuable work of *Count Hogendorp, Coup d'Œil sur l'Ile de Java*, p. 201.)

BISMUTH (Ger. *Wismuth;* Du. *Bismuth, Bergsteen;* Fr. *Bismuth;* It. *Bismutto;* Sp. *Bismuth, Piedra inga;* Rus. *Wismut;* Lat. *Bismuthum*), a metal of a reddish white colour, and almost destitute of taste and smell. It is softer than copper; its specific gravity is 9·822. When hammered cautiously, its density is considerably increased; it breaks, however, when struck smartly by a hammer, and, consequently, is not malleable, neither can it be drawn out into wire; it melts at the temperature of 476°. — (*Thomson's Chemistry.*)

"Bismuth is used in the composition of pewter, in the fabrication of printers' types, and in various other metallic mixtures. With an equal weight of lead, it forms a brilliant white alloy, much harder than lead, and more malleable than bismuth, though not ductile; and if the proportion of lead be increased, it is rendered still more malleable. Eight parts of bismuth, 5 of lead, and 3 of tin, constitute the fusible metal, sometimes called Newton's, from its discoverer, which melts at the heat of boiling water, and may be fused over a candle in a piece of stiff paper without burning the paper. Pewterers' solder is formed of one part of bismuth, with 5 of lead, and 3 of tin. It forms the basis of a sympathetic ink." — (*Ure.*)

BITUMEN (Ger. *Judenpech;* Du. *Jodenlym;* It. *Asfalto;* Sp. *Asfalto;* Port. *Asphalto;* Rus. *Asfalt;* Lat. *Asphaltum, Bitumen Judaicum*). This term includes a considerable range of inflammable mineral substances, burning with flame in the open air. They differ in consistency, from a thin fluid to a solid; but the solids are for the most part liquefiable at a moderate heat. They are, — 1. *Naphtha;* a fine, white, thin, fragrant, colourless oil, which issues out of white, yellow, or black clays in Persia and Media. This is highly inflammable. Near the village of Amiano, in the state of Parma, there exists a spring which yields this substance in sufficient quantity to illuminate the city of Genoa, for which purpose it is employed. With certain vegetable oils, naphtha is said to form a good varnish. — 2. *Petroleum* is much thicker than naphtha, resembling in consistence common tar. It has a strong disagreeable odour, and a blackish or reddish brown colour. During combustion, it emits a thick black smoke, and leaves a little residue in the form of black coal. It is more abundant than the first-mentioned variety, from which it does not seem to differ, except in being more inspissated. It occurs, oozing out of rocks, in the vicinity of beds of coal, or floating upon the surface of springs. In the Birman empire, near Rainanghong, is a hill containing coal, into which 520 pits have been sunk for the collection of petroleum, the annual produce of the hill being about 400,000 hogsheads. It is used by the inhabitants of that country as a lamp oil, and, when mingled with earth or ashes, as fuel. In the United States it is found abundantly in Kentucky, Ohio, and New York, where it is known by the name of *Seneca* or *Genesee* oil. It is also obtained from wells in the island of Zante. Herodotus tells us, that he had seen these wells — (lib. iv. c. 195.); and the description he has given of them, and of the mode of obtaining the petroleum, corresponds, in all respects, with the accounts of the best modern travellers. The average annual produce of the Zante springs is about 100 barrels. — (*Chandler's Travels in Greece*, 4to ed. p. 301.; *Holland's Travels in Greece*, 4to ed. p. 18.) Petroleum is particularly abundant in Persia. "When taken from the pit, it is a thick liquid resembling pitch. The bottoms of most vessels which navigate the Euphrates and Tigris are covered with it, and it is also used in lamps, instead of oil, by the natives. The most productive fountains are those of Kerkook, Mendali, and Badku. The wells in the neighbourhood of the latter seem to be quite inexhaustible, being no sooner emptied than they again begin to fill. Some of them have been found to yield from 1,000 to 1,500 lbs. a day!" — (*Kinneir's Persian Empire*, p. 39. and 359.) — 3. *Maltha*, or *Sea-wax*, is a solid whitish substance, not unlike tallow. It melts when heated, and in cooling assumes the consistence of white cerate. This is, most probably, the *bitumen candidum* of Pliny (*Hist. Nat.* lib. xxxv. c. 15.). It is not used as pitch; but it affords a better light than petroleum, and emits a less disagreeable smell. It is found on the surface of the Baikal Lake in Siberia, at the foot of the mountains of Bucktiari in Persia, and in some other places. — 4. *Elastic Bitumen* yields easily to pressure; is flexible and elastic. It emits a strong bituminous odour, and is about the weight of water. On exposure to the air it hardens, and loses its elasticity. It takes up the traces of crayons in the same manner as caoutchouc, or Indian rubber, whence it has obtained the name of *mineral caoutchouc*. It has hitherto been found only in the lead mines of Derbyshire. — 5. *Compact Bitumen*, or *Asphaltum*, is of a shining black colour, solid, and brittle, with a conchoidal fracture. Its specific gravity varies from 1 to 1·6. Like the former varieties, it burns freely, and leaves but little residuum. It is found in India, on the shores of the Dead Sea, in France, in Switzerland, and in large deposits in sandstone in Albania; but nowhere so largely as in the island of Trinidad, where it forms a lake three miles in circumference, and of a thickness unknown. A gentle heat renders it ductile, and, when mixed with grease or common pitch, it is used for paying the bottoms of ships, and is said to protect them from the teredo of the West Indian seas. The ancients employed bitumen in the construction of their buildings. The bricks of which the walls of Babylon were built were, it is said (*Herodotus*, lib. i. § 179.), cemented with hot bitumen, which gave them unusual solidity.

BLACKING (Ger. *Schuhschwärze, Wichse;* Fr. *Noir (de cordonnier)*; It. *Nero da ugner le scarpe;* Sp. *Negro de zapatos*). A factitious article, prepared in various ways, used in the blacking of shoes. It is in very extensive demand.

BLACK-LEAD, OR PLUMBAGO (Du. *Potloot;* Fr. *Mine de plomb noir, Plomb de mine, Potelot;* Ger. *Pottloth, Reissbley;* It. *Miniera di piombo, Piombaggine, Corezolo;* Lat. *Plumbago;* Sp. *Piedra mineral de plomo*), a mineral of a dark steel grey colour, and a metallic lustre; it is soft, and has a greasy feel; it leaves a dark coloured line when drawn along paper. It is principally employed in the making of pencils; it is also employed in the making of crucibles, in rubbing bright the surface of cast-iron utensils, and in diminishing friction, when interposed between rubbing surfaces. The finest specimens of this mineral are found in the celebrated mine of Borrowdale, in Cumberland, worked since the days of Queen Elizabeth. — (*Thomson's Chemistry.*) Recently, plumbago, of a very good quality, has been imported from Ceylon.

BLACK-LEAD PENCILS (Du. *Potlootpennen;* Fr. *Crayons noirs;* Ger. *Bley-*

stifte; It. *Lapis nero;* Port. *Lapis negro;* Rus. *Karanaschii;* Sp. *Lapiz negro*), are formed of black-lead encircled with cedar.

BLOOD-STONE (Ger. *Blutstein;* Fr. *Pierre sanguine à crayon;* It. *Sanguigna;* Sp. *Piedra sanguinaria;* Lat. *Hæmatites*), or the *Lapis hæmatites*, a species of calcedony, is a mineral of a reddish colour, hard, ponderous, with long pointed needles. It is found among iron ore in great abundance. These stones are to be chosen of the highest colour, with fine striæ or needles, and as much like cinnabar as possible. Goldsmiths and gilders use it to polish their work. It is also used for trinkets.

BLUBBER (Ger. *Thran, Fischtran;* Du. *Thraan;* It. *Olio di pesce;* Sp. *Grassa, Aceite de pescado;* Rus. *Salo worwannoe, Worwan;* Lat. *Oleum piscinum*), the fat of whales and other large sea-animals, of which train oil is made. The blubber is the *adeps* of the animal: it lies under the skin, and over the muscular flesh: it is about 6 inches in thickness, but about the under lip it is 2 or 3 feet thick. The whole quantity yielded by one of these animals ordinarily amounts to 40 or 50, but sometimes to 80 or more cwt. Formerly train oil was manufactured from the blubber in the seas round Spitzbergen, and other places where whales were caught; but the practice is now to bring the blubber home in casks, and to prepare the oil afterwards.

It is enacted by the 6 Geo. 4. c. 107. § 44., that before any blubber, train oil, spermaceti oil, head matter, or whale fins, shall be entered as being entirely the produce of sea-animals caught by the crews of ships fitted out in the United Kingdom, or the islands of Jersey, Guernsey, Sark, and Man, the master of the ship importing such goods shall make oath, and the importer also shall make oath, to the best of his knowledge and belief, that the same are the produce of fish or creatures living in the sea, taken and caught wholly by the crew of such ship, or by the crew of some other ship (naming it) fitted out in the United Kingdom, or in one of the islands of Guernsey, Jersey, Alderney, Sark, or Man (naming which).

Before blubber, train oil, &c. can be entered as from a British possession, a certificate must be obtained from the Custom-house officer at such British possession, or in default of such officer being there, from two principal inhabitants, notifying that oath had been made before him or them that such blubber, &c. was the produce of fish or creatures living in the sea, and had been taken by British subjects usually residing in some part of his Majesty's dominions; and the importer is to make oath, to the best of his knowledge and belief, to the same effect.

The gauging of casks of oil and blubber is dispensed with since 1825. They are to be passed at the rate of 126 gallons the pipe, and 63 gallons the hogshead.

BOATS are open vessels, commonly wrought by oars, and of an endless variety of shapes, according to the purposes to which they are to be applied.

It is ordered by stat. 6 Geo. 4. c. 108., that every boat belonging to or attached to any other vessel, shall have painted on the outside of the stern of such boat, the name of the vessel and place to which she belongs, and the master's name within side of the transom, in white or yellow Roman letters, 2 inches long, on a black ground, under pain of forfeiture. Boats *not belonging* to vessels, are to be painted with the name of the owner and place to which they belong, under penalty of forfeiture. All boats having double sides or bottoms, or secret places for the purpose of concealing goods, or having any hole, pipe, or other device for the purpose of running goods, are to be forfeited.

Regulations of Watermen on the Thames. — From Chelsea Bridge towards Windsor, 3*d.* per half mile for scullers.

Over the water directly between Windsor and Crawley's Wharf, Greenwich (excepting the Sunday ferries), for one person, 3*d.*; two persons, 1½*d.* each; exceeding two persons, 1*d.* each.

To or from ships westward of Greenwich, for one person, 2*d.*; exceeding one person, 1*d.* each; and, where the distance to the ship does not exceed the distance across the river, the fare across the river shall be taken.

To or from ships eastward of Greenwich, at the rate of 6*d.* per half mile.

To or from vessels for passengers, for one person, 4*d.*; exceeding one person, 3*d.* each, with not exceeding 56 lbs. of luggage for each. After this at the rate of 1*s.* per cwt.

Watermen detained by passengers to be paid for time or distance, at the option of the watermen.

	s.	d.		s.	d.
By Time for a Pair of Oars. — First hour	2	0	Each succeeding hour	1	0
Second hour	1	6	For the day	12	0

To last from 7 A. M. to 5 P. M. between Michaelmas and Lady Day; and from 6 A. M. to 6 P. M. from Lady Day to Michaelmas.

SCULLER'S FARES.

The Bridges, &c. stand in the following order.

London Bridge	Nine Elms	Shadwell Dock Stairs
Southwark Bridge	Red House, Battersea	Kidney ditto
Blackfriars Bridge	Swan Stairs, Chelsea	Limehouse Hole ditto
Waterloo Bridge	Chelsea Bridge	Ditto, Torrington Arms
Westminster Bridge	Iron Gate	Deptford, George Stairs
Lambeth Stairs	Union Stairs	Ditto, Low-Water Gate
Vauxhall Bridge	King Edward ditto	Greenwich, Crawley's Wharf.

The fare from either of the above places to the next is 3*d.*, and so on in proportion.

Passage Boats. — Oars' Fare 8 Passengers. Sculler's Fare 6 Passengers.

London Bridge to	each s.	d.	London Bridge to	each s.	d.	London Bridge to	each s.	d.
Chelsea Bridge	0	6	Brentford	1	3	Walton-upon-Thames	1	9
Wandsworth	0	7	Isleworth	1	3	Shepperton	2	0
Putney	0	8	Richmond	1	3	Weybridge	2	0
Fulham	0	8	Twickenham	1	6	Laleham	2	0
Barn's Elms	0	8	Tide-end Town	1	6	Chertsey	2	0
Hammersmith	0	9	Kingston	1	6	Staines	2	6
Chiswick	0	9	Hampton Court	1	9	Datchet	3	0
Barnes	1	0	Hampton Town	1	9	Windsor	3	0
Mortlake	1	0	Sunbury	1	9			
Deptford	0	6	Blackwall	0	9	Gravesend	1	6
Greenwich	0	6	Woolwich	1	0			

For a full boat load of luggage, same as for 8 passengers.
For half a load, same as for 4 passengers.
Penalties.— Taking more than fare, not exceeding 2*l.*
Waterman to have a list of fares in his boat, and on not permitting the passenger to examine it, the passenger is discharged from paying his fare, and the waterman may be fined not exceeding 5*l.*
Refusing to take a passenger, or not answering when called by the number of his boat, not exceeding 5*l.*
Unnecessarily delaying a passenger, not exceeding 5*l.*
Refusing to permit any person to read the name and number of his boat, or to tell his Christian or surname, or the number of his boat, *on being paid his fare*, or making use of any abusive language, not exceeding 5*l.*
Rules and By-laws made by the Court of Aldermen, 15th of April, 1828.—Letting his boat remain at any stairs, while wilfully absent, or not being ready to take a passenger into his boat, not exceeding 1*l.*
Refusing to give his name or number, or that of any other waterman, not exceeding 1*l.*
Obstructing any other waterman in taking in or landing a passenger, or obstructing a passenger, not exceeding 1*l.*
Towing or being towed by any other boat without the consent of all the passengers, not exceeding 3*l.*
Agreeing to take any less sum than the rate allowed, and afterwards demanding more than the sum agreed for, not exceeding 2*l.*
Only two boats to be placed aboard any steam-boat at the same time in turn. Waterman, previous to taking turn as aforesaid, to lie with his boat upon his oars at least one boat's length distant from any other boat lying alongside, and shall not approach nearer, until after the former boat shall have proceeded two boats' length, not exceeding 5*l.*
The offices of Harbour-masters are in Little Thames Street, St. Catharine's; and Canal Office, Blackwall.

BOLE, a friable earthy substance, a species of the soapstone family. Specific gravity 1·4 to 2. It is found in the island of Lemnos, whence it is sometimes called Lemnian earth; and in Armenia, Italy, France, Silesia, various parts of South America, &c. Armenian and French boles were at one time not uncommon in this country, being used in the materia medica, but they are now entirely, or almost entirely, discarded. In India, however, Armenian bole still continues to be in extensive demand. It is brought to Bombay from the Persian Gulf. It is soft, feels greasy to the touch, adheres strongly to the tongue, and is very frangible: it is generally of a yellowish brown colour; though sometimes it is seen of a fine flesh red, which is the variety held in the highest estimation. Some savage nations, such as the Ottomaques, described by M. Humboldt, are in the habit of allaying the pains of hunger by eating boles. The Javanese, when they wish to become thin, eat cakes, called *tanaampo*, made of bole. — (*Lewis, Mat. Medica; Thomson's Chemistry; Ainslie's Mat. Indica.*)

BOHEA, a species of tea. See Tea.

BOMBAY, a sea-port on the western coast of British India, being, after Calcutta and Canton, the greatest commercial emporium in the East; lat. 18° 56′ N., long. 72° 57 E. It is situated on the south-eastern extremity of a small island of the same name, separated from the main land by an arm of the sea, forming, with the contiguous islands of Colabah, Salsette, Butcher's Island, and Caranjah, one of the best harbours in India. Bombay Island was ceded by the Portuguese to the English in 1661, as the dower of Queen Catherine, wife of Charles II., and was taken possession of in 1664; so that it has been in our occupation about 170 years, being by far the oldest of our possessions in the East. In 1668, it was transferred by the crown to the East India Company, by letters patent, in free and common soccage, on payment of the annual rent of 10*l.* But, by the present charter, it has reverted to the crown, with the rest of the Company's assets, being held by the Company in trust merely. On its cession to the crown of England, in 1661, its population did not exceed 15,000 souls, the outcasts of the natives of India. It now contains 15,474 houses, valued at 3,606,424*l.*, and a population exceeding 229,000. The following statement of the population of Bombay, at different periods, will show its progress: —

1664, when taken possession of -	15,000	1816 - - -	161,550
1716 - - - -	16,000	1830 - - -	229,000

The census of 1816 exhibits the proportion of the different classes of inhabitants as follows: —

British, not military - -	1,840	Hindoos - - - -	103,800
Ditto, military and marine - -	2,460	Parsees - - - -	13,550
Native Christians, Armenians, and descendants of Portuguese - -	11,500	Total	161,550
Jews - - - -	800		
Mohammedans - - -	28,000		

The fort stands on the south-east extremity of the island, on a narrow neck of land, immediately over the harbour. The fortifications are extensive, and on the sea side very strong.

Bombay Harbour is one of the safest and most commodious in India. It is bounded on the west and north by the island of Colabah, or Old Woman's Island, Bombay Island, and the island of Salsette. The first two are separated only by a narrow creek fordable at low water, and Bombay Island was joined to Salsette by a causeway constructed in 1805. On the east side of the harbour, between it and the main land is Butcher's Island, distant about 4 miles from Bombay; and immediately behind Butcher's Island is the famous island of Elephanta. About 3 miles south from Butcher's Island is the island of Caranjah, on the western side of which, next the harbour, is an extensive shoal. S. W. from Caranjah, distant about 5 miles, is Tull Point; between which and Colabah, or Old Woman's Island, is the entrance to the harbour. There is a light-house on the southern extremity of Colabah Island, elevated about 150 feet above the level of the sea, which in clear weather may be seen at the distance of 7 leagues. The

point on which the light-house stands is surrounded on all sides by an extensive reef of rocks divided into prongs: of these, the most dangerous is the prong stretching S.W. about 3 miles from the light-house, and forming the northern boundary of the entrance into the harbour. The reef stretching W.N.W. from Tull Point about 3¼ miles, forms the southern boundary of the entrance; the breadth of the channel between them being about 3 miles, with a depth of from 7 to 8 fathoms. In going into the harbour, it is necessary to clear a sunken rock, lying almost due east from the light-house, at about 1½ mile distant; and also a bank, called the middle ground, lying nearly opposite to and about 1¼ mile from the southern extremity of the town. — (See *Nicholson and Watson's Plan of Bombay Harbour.*)

Docks. — Bombay is the only port of consequence in British India in which the rise and fall of the tide are so considerable as to admit of the formation of extensive wet docks. At ordinary spring tides, the rise is about 14 feet, but occasionally as high as 17. The capacious docks constructed by the East India Company are their property, and are for the most part under the direction of Parsees, who, excepting the Chinese, are the most industrious and intelligent people of the East. The expense of repairing ships in them is enormous. Merchant vessels of great size, or from 1,000 to 1,200 tons burden, for the cotton trade to China, have been built in these docks. Frigates and line-of-battle ships have also been occasionally constructed in them, sometimes under the exclusive direction of Parsee artificers. Ships built at Bombay, on account of the timber being brought from a great distance, are very costly; but being, contrary to the practice in other parts of India, entirely constructed of teak, they are the most durable vessels in the world, requiring little repair, and often running 50 or 60 years. Being for the most part built by natives, without any very strict application of the rules of art, they are commonly, though not always, heavy sailers.

Monies. — Accounts are here kept in rupees; each rupee being divided into 4 quarters, and each quarter into 100 reas. The rupee is also divided into 16 annas, or 50 pice. An urdee is 2 reas; a doreea, 6 reas; a dooganey, or single pice, 4 reas; a fuddea, or double pice, 8 reas; a paunchea is 5 rupees; and a gold mohur, 15 rupees. Of these, the annas and reas only are imaginary monies. The coins of Bombay are the mohur, or gold rupee, the silver rupee, and their divisions; also the double and single pice, the urdee, and doreea, which are copper coins with a mixture of tin or lead. The following is the assay and sterling value of the present gold and silver coinage of Bombay: —

	Gross Weight.	Pure Metal.	Sterling Value.
	grs.	*grs.*	*s.*
Gold mohur	179·0	164·68	29·18
Silver rupee	179·0	164·68	2·48

In the East India Company's financial accounts rendered to parliament, the Bombay rupee is reckoned at 2*s.* 3*d.* The charge for coinage in the Bombay Mint is 2½ per cent. for gold, and 3 per cent. for silver, including the charges for refining. The machinery for this mint was sent out from England a few years ago, and is complete, but very costly. At Bombay there are no banks, as at Madras and Calcutta, and paper money is unknown in mercantile transactions.

Weights and Measures. — The weights and measures used at Bombay are as follow: —

Gold and Silver Weight.

			gr.
1 Wall	=		4·475
40 Walls	=	1 Tola	= 179

Pearl Weight.

			gr.
1 Tucka	=		0·208
13¾ Tuckas	=	1 Ruttee	= 3
24 Ruttees	=	1 Tank	= 72

Commercial Weight.

			Avoirdupois. *lbs.*	*oz.*	*dr.*
1 Tank	=		0	0	2·488
72 Tanks	=	1 Seer	= 0	11	3·2
40 Seers	=	1 Maund	= 28	0	0

These weights are used for all heavy goods, excepting salt.

Grain Measure.

			lbs.	*oz.*	*dr.*
2 Tipprees	=	1 Seer	= 0	11	3·2
4 Seers	=	1 Paily	= 2	12	12·8
7 Pailies	=	1 Parah	= 19	9	9·6
8 Parahs	=	1 Candy	= 156	12	12·8

Salt Measure.

			cubic inches.
10⅓ Adowlies	=	1 Parah	= 1607·61
100 Parahs	=	1 Anna	= 160761
16 Annas	=	1 Rash	= 2572176

The anna weighs 2½ tons, and the rash 40 tons.

Liquor Measure.

(Spirits and Country Arrack.)

The seer weighs 60 Bombay rupees, and equals 1 lb. 8 oz. 8½ dr.; and 50 seers make the maund.

Long Measure.

			English inches.
16 Tussoos	=	1 Hath	= 18
24 Tussoos	=	1 Guz	= 27

All the foregoing standards are likewise divided into halves, quarters, &c. The preceding weights and measures are generally used in Bombay; but it sometimes occurs in mercantile transactions, that calculations are made in pounds and maunds, which last weight is reckoned at 40, 40½, 41, 43¼, and 44 seers; and sometimes in Surat candies of 20, 21, and 22 maunds.

Shipping, Commerce, &c. — At Bombay there is an insurance society with a capital of 20 lacs of rupees, or about 200,000*l.* sterling; and there are also private underwriters who insure separately on ships. In 1820, and we believe the number continues about the same, there were 45 registered ships belonging to this port engaged in the trade to China and Europe, the aggregate burden of which amounted to about 20,000 tons, giving at an average 450 tons to each ship. These are for the most part navigated by Indian seamen or Lascars, those of Bombay being accounted by far the best in India; the master and superior officers only being Englishmen. Besides these large vessels, there is a numerous class of native craft, under various forms and names. In 1820, they were computed to amount in all to near 47,000 tons, of from 2 to 175 tons each. These vessels, besides furnishing the town with firewood, hay, straw, &c. from the neighbouring continent, navigate coastways from Cape Comorin to the Gulf of Cutch, and sometimes cross the sea to Muscat and the Arabian Gulf. During the eight fair

months, that is, from October to May, the largest sized vessels perform five or six trips to Damaun, Surat, Cambay, Broach, Jumbosier, and Cutch, bringing from these ports, where they sometimes winter, and where many of their owners reside, cotton, ghee, oil, pulse, wheat, cotton cloths, timber, firewood, putchok, mawah, &c.; and return to the northern ports laden with the produce of Europe, Bengal, and China. The capital employed in this trade, in the minor articles of commerce, exclusive of cotton, has been estimated to amount to 1,500,000*l.* sterling.

The island of Bombay, a small and sterile spot, containing only about 18¼ square miles, affords no produce for exportation; indeed, hardly yields a week's consumption of corn for its inhabitants. Neither is the neighbouring territory fruitful; nor does the whole presidency of Bombay, although estimated to contain about 70,000 square miles, and from 10,000,000 to 11,000,000 inhabitants, yield, with the exception of cotton and rice, any of the great colonial staples, such as coffee, sugar, and indigo; a circumstance that seems mainly ascribable to the impolitic restraints upon the employment of British settlers and capital that have been hitherto imposed by law, and acted upon with peculiar rigour in this and the sister presidency of Madras, in contradistinction to the greater latitude afforded in Bengal. Bombay is, notwithstanding, a great emporium for the exports and imports of foreign countries. Its principal trade is carried on with the countries on the Gulfs of Cambay, Persia, and Arabia; with Calcutta, China, Great Britain, and other European countries, and the United States of America. From the countries on the Gulf of Cambay it receives cotton wool and grain; and from the Persian and Arabian Gulfs, raw silk of Persia, copper from the same country, and also pearls, galls, coffee, gum Arabic, bdellium, copal, myrrh, olibanum, and asafœtida, with dates and other dried fruits, horses, and bullion. Its exports to Arabia and Persia consist of grain, raw sugar from China and Bengal, British cotton manufactures, woollens and metals, pepper and other spices. From Calcutta, Bombay receives raw silk, sugar, indigo, and grain; and exports to it oak timber, coir, or the fibre of the coco nut husk, with coco nuts and sandal-wood. The trade between Bombay and Calcutta has declined since the abolition of the restrictive system in 1815 gave to Bombay a wider intercourse with foreign countries. Previously to the opening of the trade, Calcutta was the *entrepôt* from which many of the productions of the neighbourhood of Bombay used to find a market in distant countries. In 1813 and 1814, according to the Custom-house returns of Calcutta, the value of the imports into it from Bombay amounted to 400,000*l.* sterling; in 1819 and 1820, to 360,000*l.*; and in 1827 and 1828, to 200,000*l.* The exports from Calcutta to Bombay in the first-named year amounted to 280,000*l.*; and in 1827, to only half that amount. The greatest branch of the trade of Bombay used to be that with China; but it has considerably declined of late years. The principal article of export is cotton wool, to which opium has been added since we obtained possession of the province of Malwa. The minor articles are pepper, sandal-wood, Arabian gums, salt-fish, fish maws, and sharks' fins. The imports consist of alum, camphor, cassia, nankeens, rhubarb, tea, raw sugar, vermilion and other paints, with a considerable quantity of bullion. In 1828 and 1829, the number of ships which cleared out from Bombay for Canton was 36, of the burden of 25,731 tons; but the number which entered from thence was only 30, of the burden of 17,534 tons; many of the ships which cleared out having made intermediate voyages after discharging their cargoes at Canton.

The principal export from Bombay to Great Britain is cotton wool, after which follow pepper, cardamoms, Arabian gums and drugs, and Persian raw silk. The chief imports are cotton fabrics and cotton twist, for both of which Bombay is, after Calcutta, the greatest mart in India; woollens, iron, copper, spelter, glass-ware, &c. &c. Bombay trades with France and Hamburgh, but not to any considerable amount. Neither is her trade with the United States of America of much importance. The following statements, drawn up from papers laid before parliament in 1830 and 1831, show the whole amount of the trade carried on by Bombay, including Surat, with Great Britain, foreign Europe, and America, in the years 1813 and 1814, and 1828 and 1829: —

Imports into Bombay and Surat.

	1813 and 1814.			1828 and 1829.		
	Merchandise.	Bullion.	Total.	Merchandise.	Bullion.	Total.
	£	£	£	£	£	£
From Great Britain	275,716	110	275,826	781,248	—	781,248
— France -	—	—	—	63,291	—	63,291
— Hamburgh -	—	—	—	7,329	—	7,329
— America -	—	—	—	1,461	—	1,461
Total -	275,716	110	275,826	853,394	—	853,394

Exports from Bombay and Surat.

	1813 and 1814.			1828 and 1829.		
	Merchandise.	Bullion.	Total.	Merchandise.	Bullion.	Total.
	£	£	£	£	£	£
To Great Britain -	135,342	169,811	305,154	694,654	139,113	833,767
— France - -	—	—	—	5,995	—	5,995
— Hamburgh -	—	—	—	—	—	—
— America - -	—	—	—	—	—	—
Total - -	135,342	169,811	305,154	700,649	139,113	839,762

In some of the intermediate years between 1814 and 1829 there was some trade between Bombay, Portugal, and Brazil, but not very considerable. It will appear from these statements that the present imports into Bombay from Great Britain amount to above 780,000*l.*, and the exports to near 840,000*l*; the first having increased since the opening of the free trade by 500,000*l.* sterling, or above 180 per cent., and the latter by somewhat more than that amount.

Export of Cotton from Bombay to China, England, &c. with Prices, Freights, &c., from 1824 to 1831.

Years.	To China.			To London.	To Liverpool.	To the Clyde.	To other Places than the foregoing.	Grand Total.	Price of Surat Cotton per Candy of 784 lbs.			Price of Dhollera.			Rates of Freight to England per Ton of 4½ Bales, or about 1,553 lbs.	Rates of Freight to China per Candy of 784 lbs.
	Company's Investments.	Private Trade.	Total to China.						Lowest.	Highest.	Average.	Lowest.	Highest.	Average.		
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.	Rupees.			Rupees.			£ s. £ s.	Rupees.
1824	12,106	63,407	76,786	39,331	5,834	None	640	122,591	140	170	153	135	140	138	7 0 to 9 0 11 0 — 12 10 9 0 — 7 7	30, 40, 50 60, 70, 35
1825	12,130	70,885	83,015	35,454	14,129	1,559	300	134,457	146	192	166	134	175	151	6 10 — 6 0 10 0 — 8 0	45, 40, 48
1826	14,686	103,537	118,228	21,262	7,404	4,838	2,097	153,824	125	155	137	110	128	120	9 0 — 9 0 7 0 — 6 0	45, 40, 44
1827	19,093	105,596	124,689	43,870	10,118	8,523	4,261	191,461	110	130	122	95	116	109	5 0 — 6 10 7 0 — 6 10	40, 35, 25, 37
1828	15,883	102,020	117,903	62,103	19,694	10,871	3,952	214,523	104	135	120	100	118	105	5 10 — 2 0 0 15 — 0 15	28, 25, 28
1829	14,495	86,063	100,558	23,608	11,542	11,058	3,442	150,208	115	140	125	105	128	117	1 0 — 2 0 1 5 — 1 0	20, 18, 19½
1830	22,303	117,969	140,272	17,339	14,458	7,542	2,960	182,571	114	120	116	80	110	89½	1 15 — 3 10 4 0 — 4 0	30, 32, 40
1831 to 2d Oct.	17,578	115,274	132,852	17,965	22,238	9,470	3,413	185,938	100	110	104½	70	81	75½	5 0 — 6 10 8 8 — 6 10	25, 35, 45

From 1,500 to 2,000 bales may be added to the exports to China for each year, as, after the Company's vessels are nominally loaded, the captains take from 300 to 500 bales, which are never placed upon the Custom-house records.

Dock Regulations. — At daylight the wickets of the gates are opened, and at 7 o'clock the sentry gate. Half an hour after sunset the gates are shut, the wicket of the centre gate being left open till the evening gun be fired. No boats, saving those belonging to the Company's marine department, or his Majesty's navy, are permitted to come to the dock-yard stairs; but must use the piers expressly constructed for their accommodation. No meat, stores, or baggage for the merchant shipping, of any description, are to be passed through the dock-yards. After the firing of the evening gun, nobody belonging to the ships in the harbour, below the rank of a commissioned officer, is to be allowed to land or enter the dock-yard, without the express permission of the master attendant, or other constituted authorities.

Boats' crews are not to be permitted to quit their boat at the stairs, after the hour of shutting the gates. Small craft are not to deliver firewood or any other lading within the limits of the yard, without the superintendent's sanction. The ships and vessels in dock are not to land any lumber whatever on the pier. No cargo of any description is to be landed in or passed through the yard, from or to any ship in dock, without the superintendent's permission in writing. No fire or light is allowed on board any ship or vessel in dock, without the authority of the superintendent, to whom the purposes for which either may be required, must be stated in writing.

(See *Milburn's Oriental Commerce; Hamilton's East India Gazetteer*, 1828; *Bombay Calendar and Register; Kelly's Cambist; Wilson's Review of the External Commerce of Bengal, under head "Coast of Malabar;" Parl. Papers relating to the Finances of India, and Trade of India and China*, 1830 and 1831; *Second Appendix to Report of the Select Committee on Public Departments*, 1832, p. 274.; *Circular of Beckwith & Co., &c.*)

BOMBAZINE, a kind of silk stuff, originally manufactured at Milan, and thence sent into France and other countries. Now, however, it is nowhere manufactured better, or in larger quantities, than in this kingdom.

BONES of cattle and other animals are extensively used in the arts, in forming handles for knives, and various other purposes. So long as bones are preserved fresh, a highly nutritious jelly may be obtained from them.

Bones have latterly been employed, particularly in Lincolnshire and Yorkshire, as a manure for dry soils, with the very best effect. They are commonly ground and drilled in, in the form of powder, with turnip seed. Their effect is considerably increased when

they have undergone the process of fermentation. The quantities employed are usually about 25 bushels of dust, or 40 bushels of large, to the acre. Besides the immense supplies collected at home, they have begun, within these few years, to be largely imported from the Continent, principally from the Netherlands and Germany. They occupy about 40,000 tons of small vessels belonging to these countries. Mr. Huskisson estimated the real value of those annually imported for the purpose of being used as manure at 100,000*l.*; and he contended, that it was not too much to suppose, that an advance of between 100,000*l.* and 200,000*l.* expended on this article occasioned 500,000 additional quarters of corn to be brought to market.—(*Loudon's Encyclopædia of Agriculture*; *Mr. Huskisson's Speech*, May 7. 1827.)

Account of the Declared Value of the Bones imported into Great Britain during each of the Twelve Years ending with the 5th of January, 1833; and of the Amount of Duty charged on the same. — (*Parl. Paper*, No. 708. Sess. 1833.)

Years.	Imports into									Duty.		
	England.			Scotland.			Great Britain.					
	Declared Value.			Declared Value.			Declared Value.					
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1821	15,898	12	11	69	17	0	15,968	9	11	159	14	4
1822	9,438	0	5	52	12	0	9,490	12	5	94	16	4
1823	14,395	15	8	82	0	0	14,477	15	8	144	16	1
1824	43,940	17	11	82	14	0	44,023	11	11	440	6	3
1825	86,571	5	8	139	4	6	86,710	10	2	867	4	10
1826	94,747	16	1	245	18	3	94,993	14	4	995	15	6
1827	77,956	6	8	1,798	4	6	79,754	11	2	835	1	9
1828	59,782	9	11	2,874	5	7	62,656	15	6	654	14	0
1829	59,741	11	10	12,322	4	9	72,063	16	7	748	7	11
1830	58,233	16	5	8,529	13	8	66,763	10	1	688	1	6
1831	65,623	10	0	7,073	16	0	72,697	6	0	749	9	3
1832	77,847	4	4	13,908	1	1	91,755	5	5	940	5	9

There are no means of distinguishing between the bones imported for manure and for other purposes.

BOOK, BOOKS (Ger. *Bücher*; Du. *Boeken*; Da. *Böger*; Sw. *Böcker*; Fr. *Livres*; It. *Libri*; Sp. *Libros*; Port. *Livros*; Rus. *Knigi*; Pol. *Ksiaski*, *Ksiegi*; Lat. *Libri*), a written or printed treatise or treatises on any branch of science, art, or literature, composed in the view of instructing, amusing, or persuading the reader.

Copyright is the right which the authors of books or treatises claim to the exclusive privilege of printing, publishing, and selling them.

Books are sometimes blank, as account books; but these enjoy no peculiar privileges, and do not come within the scope of our inquiries.

Books are divided into the following *classes*, according to the mode in which the sheets of the paper on which they are printed or written are folded: viz. *folio*, when the sheet is folded into two leaves; *quarto*, when folded into *four*; *octavo*, when folded into *eight*; *duodecimo*, when the sheet is folded into *twelve*, &c. In making these classifications, no attention is paid to the *size* of the sheet.

I. *Progress and present State of the Law as to the Copyright of Books.* — It has been doubted whether, in antiquity, an author had any exclusive right to a work, or whether, having once published it, he could restrain others from copying it, and selling copies. We incline to think that he could. The public sale of copies of works is often referred to in the classics; and in such a way as warrants the inference that they were productive to the author, which could not have been the case had every one been permitted to copy them at pleasure. Terence, in one of his plays (*Prol. in Eunuch.* l. 20.), says, *Fabulam, quam nunc acturi sumus, postquam ædiles emerunt*; but why should the magistrates have bought it, had it been free to every one to copy it? Martial, in one of his epigrams, says —

Sunt quidam, qui me dicunt non esse poëtam:
Sed qui me vendit, bibliopola, putat. Mart. lib. xiv. Ep. 194.

This evidently conveys the idea that he had assigned the right to sell his book to a single person, who profited by it. Passages to the same effect may be found in Horace (*De Arte Poeticâ*, line 345.), Juvenal (*Sat.* 7. line 83.), &c.

It would have been singular, indeed, had it been otherwise. Of all the species of property a man can possess, the fruits of his mental labours seem to be most peculiarly his own. And though it may, we think, be shown, that many serious inconveniences would result from giving the same absolute and interminable property over ideas that is given over material objects, these inconveniences could hardly have been perceived in antiquity.

It will also be observed, that in antiquity a copyright was of much less value than in modern times. Books could then only be multiplied by copying them with the pen; and if any one chose privately to copy a work, or to buy it of another, it must have been very difficult to hinder him: but when printing had been introduced, the greater cheap-

ness of books not only extended the demand for them in far greater proportion, and consequently rendered copyrights more valuable, but it also afforded the means of preventing their piracy. Printing is not a device by which a few copies of a book can be obtained at a cheap rate. It is productive of cheapness only when it is employed upon a large scale, or when a considerable impression is to be thrown off. And hence, after its invention, piracy could hardly be committed in secret: the pirated book had to be brought to market; the fraud was thus sure to be detected, and the offending party might be prosecuted and punished.

For a considerable time after the invention of printing, no questions seem to have occurred with respect to copyrights. This was occasioned by the early adoption of the licensing system. Governments soon perceived the vast importance of the powerful engine that had been brought into the field; and they endeavoured to avail themselves of its energies by interdicting the publication of all works not previously licensed by authority. During the continuation of this system, piracy was effectually prevented. The licensing act (13 & 14 Chas. 2. c. 2.) and the previous acts and proclamations to the same effect, prohibited the printing of any book without consent of the owner, as well as without a licence. In 1694, the licensing act finally expired, and the press then became really free. Instead, however, of the summary methods for obtaining redress for any invasion of their property enjoyed by them under the licensing acts, authors were now left to defend their rights at *common law;* and as no author or bookseller could procure any redress for a piracy at common law, except in so far as he could *prove damage*, property in books was virtually annihilated; it being in most cases impossible to prove the sale of one printed copy out of a hundred. Under these circumstances, applications were made to parliament for an act to protect literary property, by granting some speedy and effectual method of preventing the sale of spurious copies. In consequence, the statute 8 Anne, c. 19. was passed, securing to authors and their assignees the exclusive right of printing their books for 14 years certain, from the day of publication, with a contingent 14 years, provided the author were alive at the expiration of the first term. Persons printing books protected by this act, without the consent of the authors or their assignees, were to forfeit the pirated copies, and 1*d.* for every sheet of the same. Such books as were not entered at Stationers' Hall were excluded from the benefit of this act.

It had been customary, for some time previous to this period, for the libraries of the Universities of Oxford and Cambridge, &c. to get a copy of most books entered at Stationers' Hall; and the act of Anne made it imperative that one copy of all works entitled to its protection should be delivered to the following libraries: viz. the Royal Library, now transferred to the British Museum; the Libraries of Oxford and Cambridge; the Libraries of the four Scotch Universities; the Library of Sion College, London; and that of the Faculty of Advocates in Edinburgh; — in all, *nine* copies.

The act of Anne did not put to rest the questions as to copyrights. The authors contended that it did not affect their natural ownership; and that they or their assignees were entitled to proceed at *common law* against those who pirated their works after the period mentioned in the statute had expired. The publishers of spurious editions resisted these pretensions, and contended that there was either no right of property at common law in the productions of the mind; or that, supposing such a right to have existed, it was superseded by the statute of Anne. There was some difference of opinion in the courts as to these points; but Lord Mansfield, Mr. Justice Blackstone, and the most eminent Judges, were favourable to the claims of the authors. However, it was finally decided, upon an appeal to the House of Lords in 1774, that an action could not be maintained for pirating a copyright after the term specified in the statute. — (*Godson on the Law of Patents and Copyrights*, p. 205.)

The act of Queen Anne referred only to Great Britain; but in 1801, its provisions were extended to Ireland; the penalty, exclusive of forfeiture, on printing or importing books without consent of the proprietor, was also increased from 1*d.* to 3*d.* a sheet. In return for this concession, two additional copies of all works entered at Stationers' Hall were to be delivered; one to Trinity College, Dublin, and one to the King's Inns, Dublin.

Every one must be satisfied that 14 years' exclusive possession is far too short a period to indemnify the author of a work, the composition of which has required any considerable amount of labour and research; though 28 years is, perhaps, all things considered, as proper a period as could be fixed upon. Now, the grand defect of the statute of Anne consisted in its making the right to the exclusive possession for 28 years contingent on the fact of a person having lived a day more or less than 14 years after the publication of his work. This was making the enjoyment of an important right dependent on a mere accidental circumstance over which man has no control. Could any thing be more oppressive and unjust than to hinder an author from bequeathing that property to his widow and children, that would have belonged to

himself had he been alive? Nothing, indeed, as it appears to us, can be more obvious than the justice of extending all copyrights to the same period, whether the authors be dead or not.

But though the extreme hardship, not to say injustice, of the act of Queen Anne had been repeatedly pointed out, its provisions were continued down to 1814, when the existing copyright act, 54 Geo. 3. c. 156., was passed. This act extended the duration of all copyrights, whether the authors were dead or alive, to 28 years certain; with the further provision, that if the author should be alive at the end of that period, he should enjoy the copyright during the residue of his life. We subjoin the principal clauses of this statute.

Having recited the acts 8 Anne, c. 19. and 41 Geo. 3. c. 107., it enacts, that so much of the said several recited acts as requires that any copies of any books which shall be printed or published, or reprinted and published with additions, shall be delivered by the printers thereof to the warehouse-keeper of the said Company of Stationers, for the use of any of the libraries in the said act mentioned, and as requires the delivery of the said copies by the warehouse-keeper for the use of the said libraries, and as imposes any penalty on such printer or warehouse-keeper for not delivering the said copies, shall be repealed.

And that 11 printed copies of the whole of every book, and of every volume thereof, upon the paper upon which the largest number or impression of such book shall be printed for sale, together with all maps and prints belonging thereto, which from and after the passing of this act shall be printed and published, on demand thereof being made in writing to or left at the place of abode of the publisher or publishers thereof, at any time within 12 months next after the publication thereof, under the hand of the warehouse-keeper of the Company of Stationers, or the librarian or other person thereto authorised by the persons or body politic and corporate, proprietors or managers of the libraries following; *videlicet*, the British Museum, Sion College, the Bodleian Library at Oxford, the Public Library at Cambridge, the Library of the Faculty of Advocates at Edinburgh, the Libraries of the Four Universities of Scotland, Trinity College Library and the King's Inns Library at Dublin, or so many of such 11 copies as shall be respectively demanded, shall be delivered by the publishers thereof respectively, within 1 month after demand made thereof in writing as aforesaid, to the warehouse-keeper of the said Company of Stationers; which copies the said warehouse-keeper shall receive for the use of the library for which such demand shall be so made; and he is hereby required, within 1 month after any such book or volume shall be so delivered to him, to deliver the same for the use of such library. And if any such publisher or warehouse-keeper shall not observe the directions of this act, he and they so making default shall forfeit, besides the value of the said printed copies, the sum of 5*l.* for each copy not so delivered or received, together with the full costs of suit; to be recovered by action in any court of record in the United Kingdom. — § 2.

Provided always, that no such copy shall be so demanded or delivered, &c. of the second, or of any subsequent edition of any such book, unless the same shall contain additions or alterations; and in case any edition after the first shall contain any addition or alteration, no printed copy thereof shall be demanded or delivered, if a printed copy of such additions or alterations only, printed in an uniform manner with the former edition of such book, be delivered to each of the libraries aforesaid: provided also, that the copy of every book that shall be demanded by the British Museum shall be delivered of the best paper on which such work shall be printed. — § 3.

And whereas by the said recited acts it is enacted, that the author of any book, and the assigns of such author, should have the sole liberty of printing and reprinting such book for the term of 14 years, &c.; and it was provided, that after the expiration of the said term of 14 years, the right of printing or disposing of copies should return to the authors thereof, if they were then living, for another term of 14 years: and whereas it will afford further encouragement to literature, if the duration of such copyright were extended; be it enacted, that the author of any book or books composed, and not printed and published, or which shall hereafter be composed, and be printed and published, and his assigns, shall have the sole liberty of printing and reprinting such book or books, for the full term of *twenty-eight years*, to commence from the day of first publishing the same; and also, if the author shall be living at the end of that period, for the residue of his natural life; and if any bookseller or printer, or other person whatsoever, in any part of the United Kingdom of Great Britain and Ireland, in the Isles of Man, Jersey, or Guernsey, or in any other part of the British dominions, shall, from and after the passing of this act, within the times granted and limited by this act, print, reprint, or *import*, or shall cause to be printed, &c. any such book, without the consent of the author, or other proprietor of the copyright, first had in writing; or knowing the same to be so printed, &c. without such consent, shall sell, publish, or expose to sale, or cause to be sold, &c., or shall have in his possession for sale, any such book, without such consent first had and obtained; such offender shall be liable to a special action at the suit of the author or other proprietor of such copyright; and every such author or other proprietor may, in such special action, recover damages, with double costs; and every such offender shall also forfeit such book, and every sheet of such book, and shall deliver the same to the author or other proprietor, to be made waste paper of, and shall also forfeit the sum of 3*d.* for every sheet thereof either printed or printing, or published or exposed to sale; the one moiety thereof to any person who shall sue for the same. — § 4.

And in order to ascertain what books shall be from time to time published, the publishers of every book demandable under this act shall, within 1 calendar month after the day on which any such book shall be first sold, published, advertised, or offered for sale, within the bills of mortality, or within 3 calendar months in any other part of the United Kingdom, enter the title to the copy of every such book, and the names and place of abode of the publisher, in the register book of the Company of Stationers in London (for every of which several entries the sum of 2*s.* shall be paid, and no more), under a penalty of the sum of 5*l.*, together with eleven times the price at which such book shall be sold or advertised; to be recovered, together with full costs of suit, by persons authorised to sue, and who shall first sue for the same: provided, that in the case of magazines, reviews, or other periodical publications, it shall be sufficient to make such entry in the register book of the said Company within 1 month next after the publication of the first number or volume: provided, that no failure in making any such entry shall in any manner affect any copyright, but shall only subject the person making default to the penalty aforesaid under this act. — § 5.

Provided always, that if any publisher shall be desirous of delivering the copy of such book or volume, on behalf of any of the said libraries, at such library, it shall and may be lawful for him to deliver the same at such library; and such delivery shall be held as equivalent to a delivery to the said warehouse-keeper.

And if the author of any book, which shall not have been published 14 years at the time of passing this act, shall be living at the said time, and if such author shall afterwards die before the expiration of the said 14 years, then the personal representative of the said author, and the assigns of such personal representative, shall have the sole right of printing and publishing the said book for the further term of 14 years after the expiration of the first 14.

And if the author of any book which has been already published shall be living at the end of 28 years after the first publication, he or she shall, for the remainder of his or her life, have the sole right of printing and publishing the same.

Actions and suits shall be commenced within 12 months next after such offence committed, or be void and of no effect. — §§ 7, 8, 9, 10.

Musical compositions, engravings, maps, sculptures, models, &c. enjoy a similar protection.

The great practical difficulty in interpreting the copyright acts, is in distinguishing between an original work and a copy made, *animo furandi*, from one already in existence. The following is a summary of Mr. Godson's remarks on this subject: —

"The identity of a literary work consists entirely in the *sentiments* and *language*. The same conceptions, clothed in the same words, must necessarily be the same composition; and whatever method is taken of exhibiting that composition to the ear or the eye, by *recital*, or by *writing*, or by *printing*, in any number of copies, or at any period of time, the property of another person has been violated; for the new book is still the identical work of the real author.

"Thus, therefore, a transcript of nearly all the sentiments and language of a book is a glaring piracy. To copy part of a book, either by taking a few pages *verbatim*, when the sentiments are not new, or by imitation of the principal ideas, although the treatises in other respects are different, is also considered to be illegal.

"Although it was held by Ellenborough C. J. that a variance in *form* and *manner* is a variance in *substance*, and that any material alteration which is a *melioration* cannot be considered as a piracy; yet a piracy is committed, whether the author attempt an original work, or call his book an abridgment, if the principal parts of a book are servilely copied or unfairly varied.

"But if the main design be not copied, the circumstance that part of the composition of one author is found in another is not of itself piracy sufficient to support an action. A man may fairly adopt part of the work of another; he may so make use of another's labours for the promotion of science, and the benefit of the public: but having done so, the question will be, Was the matter so taken used fairly with that view, and without what may be termed the *animus furandi*?

"In judging of a quotation, whether it is fair and candid, or whether the person who quotes has been swayed by the *animus furandi*, the quantity taken, and the *manner* in which it is adopted, of course, must be considered.

"If the work complained of be *in substance* a copy, then it is not necessary to show the intention to pirate; for the greater part of the matter of the book having been purloined, the intention is apparent, and other proof is superfluous. A piracy has undoubtedly been committed.

"But if only a *small portion* of the work is quoted, then it becomes necessary to show that it was done *animo furandi*, with the intention of depriving the author of his just reward, by giving his work to the public in a cheaper form. And then the *mode* of doing it becomes a subject of inquiry; for it is not sufficient to constitute a piracy, that part of one author's book is found in that of another, unless it be nearly the whole, or so much as will show (being a question of fact for the jury) that it was done with a bad intent, and that the matter which accompanies it has been *colourably* introduced."— (pp. 215—217.)

"If a work be of such a libellous or mischievous nature as to affect the *public morals*, and that the author cannot maintain an action at law upon it, a court of equity will not interpose with an injunction to protect that which cannot be called property. Even if there be a doubt as to its evil tendency, the Lord Chancellor will not interfere." — (*Godson*, p. 212.)

II. *Expediency of limiting Copyrights to Twenty-eight Years.* — It is argued by many that copyrights should be made perpetual; that were this done, men of talent and learning would devote themselves much more readily than at present to the composition of works requiring great labour; inasmuch as the copyright of such works, were it perpetual, would be an adequate provision for a family. But we doubt much whether these anticipations would be realised. Most books or manuscripts are purchased by the booksellers, or published upon the presumption that there will immediately be a considerable demand for them; and we apprehend that when copyrights are secured for 28 years certain, very little more would be given for them were they made perpetual. When an annuity, or the rent or profit arising out of any fixed and tangible property, with respect to which there can be no risk, is sold, if the number of years for which it is to continue be considerable, the price which it is worth, and which it fetches, does not differ materially from what it would bring were it perpetual. But the copyright of an unpublished work is, of all descriptions of property in which to speculate, the most hazardous; and the chances of reaping contingent advantages from it, at the distance of 28 years, would be worth very little indeed.

Those who write books, and those who publish them, calculate on their obtaining a ready and extensive sale, and on their being indemnified in a few years. Very few authors, and still fewer booksellers, are disposed to look forward to so distant a period as 28 years for remuneration. They are mostly all sanguine enough to suppose that a much shorter term will enable them to reap a full harvest of fame and profit from the publication; and we doubt much whether there be one case in a hundred, in which an author would obtain a larger sum for a perpetual copyright, than for one that is to continue for the period stipulated in the late act.

But while the making of copyrights perpetual would not, as it appears to us, be of any material advantage to the authors, there are good grounds for thinking that it would be disadvantageous to the public. Suppose an individual calculates a table of logarithms to five or seven places; if his computations be correct, no improvement can be made upon them, to the extent at least to which they go; but is he or his assignees to be entitled, in all time to come, to prevent other individuals from publishing similar tables, on the ground of an invasion of private property? Such a pretension could not be admitted without leading to the most mischievous consequences; and yet there is no real ground (though the courts have attempted to make one) on which the claim in question and others of the same description could be resisted, were copyrights made perpetual, and

placed in all respects on the same footing as other property. We therefore, are clearly of opinion that good policy suggests the limitation of the exclusive right of printing and publishing literary works to such a reasonable period as may secure to authors the greater part of the profit to be derived from their works; and that this period being expired, they should become public property.

Perhaps the period of 28 years might be advantageously extended to 35 or 40; but we are satisfied that more injury than benefit would result to literature, by extending it beyond that term. In France, copyrights continue for 20 years after the death of the author. In most of the German states they are perpetual; this, however, until very recently, hardly indemnified the authors for the ease with which spurious copies might be obtained from other states. But by a late resolution of the Diet, a copyright secured in one state is good in all.

III. *Taxes on Literature.* — These taxes have been carried to such an extent in England as to be in the highest degree injurious. They are at once impolitic, oppressive, and unjust: impolitic, because they tend to obstruct the growth and diffusion of knowledge; oppressive, because they very frequently swallow up the entire reward of the labours of the most deserving persons; and unjust, because they are not proportioned to the value of the article on which they are laid, and are, indeed, much oftener paid out of capital than out of profit.

These taxes consist of the duty on paper — (see PAPER), the duty on advertisements — (see ADVERTISEMENTS), and the 11 copies given to the public libraries. The following statements, drawn up by a very competent authority (Mr. Rees, of the firm of Longman, Rees, and Co.), show the mode in which they operate. They refer to an octavo volume of 500 pages, the paper such as this, with the ordinary quantity of matter on the page, and sold by retail for 12*s.* a copy.

Estimate of the cost of such a volume, when 500, 750, and 1,000 copies are printed, showing what part of this cost consists of taxes.

				Cost.			Duty.		
Five Hundred Copies.				£	*s.*	*d.*	£	*s.*	*d.*
Printing and corrections				88	18	0	0	0	0
Paper				38	10	0	8	12	10
Boarding				10	0	0	3	3	8
Advertising				30	0	0	9	0	0
				167	8	0	20	16	6
11 copies to public libraries. 14 copies (say) to author.									
	£	*s.*	*d.*						
475 copies for sale at 8*s.* 5*d.*	199	17	11						
Deduct cost	167	8	0						
Profit to author and publisher, commission, and interest on capital, *when all are sold*	32	9	11						
Seven Hundred and Fifty Copies.									
Printing and corrections				95	6	0	0	0	0
Paper				57	15	0	12	19	4
Boarding				15	0	0	4	15	7
Advertising				37	0	0	11	5	0
				205	1	0	28	19	11
11 copies to public libraries. 14 copies to author.									
	£	*s.*	*d.*						
725 copies for sale at 8*s.* 5*d.*	305	2	5						
Deduct cost	205	1	0						
Profit to author and publisher, commission, and interest on capital, *when all are sold*	100	1	5						
One Thousand Copies.									
Printing and corrections				102	14	0	0	0	0
Paper				77	0	0	17	5	9
Boarding				20	0	0	6	7	5
Advertising				45	0	0	13	10	0
				244	14	0	37	3	2
11 copies to public libraries. 14 copies to author.									
	£	*s.*	*d.*						
975 copies for sale at 8*s.* 5*d.*	410	6	3						
Deduct cost	244	14	0						
Profit to author and publisher, commission, and interest on capital, *when all are sold*	165	12	3						

The following statement shows the operation of the duties on a pamphlet of 5 sheets, or 80 pages, of which 500 copies are printed: —

Pamphlet, Five Hundred Number.	£ s. d.	Cost. £ s. d.	Duty. £ s. d.
Printing	14 14 0	19 19 0	0 0 0
Extras	5 5 0		
Paper	-	6 0 0	1 0 0
Stitching	-	0 12 6	0 0 0
Advertising (say)	-	7 2 0	2 3 6
		33 13 6	3 3 6
25 copies for author and public libraries.			
475 copies for sale, 25 for 2*l.* 14*s.*	51 6 0		
Profit to author and publisher, interest, &c. after *all are sold*	£17 12 6		

These statements set the oppressive operation of the taxes on literature in a very striking point of view. Where the edition is an average one of 750 copies, the duties amount to about a *seventh*, or $14\frac{2}{3}$ *per cent.* of the cost of the edition. If the edition consist of 500 or 750 copies, the duties amount to more than the entire remuneration of the author; and if it consist of 1,000 copies, they amount to about as much!

It is essential, however, to bear in mind that the previous statements show only how the duties affect books when the *entire impression is sold off at the full publication price*; but this *seldom happens*. Excluding pamphlets, it may be truly affirmed, that, at an average, the original impression of half the books printed is hardly ever sold off, except at a ruinous reduction of price. Now, if we suppose, in the previous example of an edition of 750 copies, that only 625 instead of 725 were sold, the result would be that only 57*l.* 19*s.* would remain as profit to the author and publisher, and as a compensation for interest, the risk of bad debts, &c. Were only 500 copies sold, the cost would not be more than balanced; and there would be nothing whatever to remunerate the author for his labour, or the bookseller for the use of his capital. Were only 400 copies sold, government would have received 28*l.* 19*s.* 11*d.* of duty from a speculation by which the author had lost all his labour, and the bookseller 36*l.* 15*s.* of his capital! The mere possibility of such a supposition being realised, would be a sufficient ground for a revision of the duties; but, in point of fact, such cases, instead of being merely possible or rare, are *of every day occurrence!*

There is a radical difference between the demand for books, or of food for the mind, and food for the body. The latter is always sure, under any circumstances, to command a sale. The demand for it is comparatively constant; it cannot be dispensed with. If a tax be laid on malt, hats, or shoes, it will, perhaps, somewhat lessen the demand for these articles; but the quantities of them brought to market, in future, will sell for such an advanced price as will leave the customary rate of profit to their producers. But with books the case is altogether different. The taste for them is proverbially capricious; so much so, that the most sagacious individuals are every day deceived in their anticipations as to the success of new works, and even as to the sale of new editions. But if a book do not take, it is so very ruinous an affair, that a publisher is glad to dispose of the greater part of an impression at a fourth or fifth part of its regular price; and is often, indeed, obliged to sell it as *waste paper* to the trunk-maker or the tobacconist.

On a late investigation into the affairs of an extensive publishing concern, it was found, that of 130 works published by it in a given time, *fifty had not paid their expenses.* Of the 80 that did pay, 13 only had arrived at a second edition; but, in most instances, these second editions had not been profitable. In general it may be estimated, that of the books published, a *fourth* do not pay their expenses; and that only *one in eight or ten can be reprinted with advantage.* As respects pamphlets, we know we are within the mark, when we affirm that not *one in fifty* pays the expenses of its publication!

Now, when such is the fact, can any thing be more glaringly unjust than to impose the same duty on all works before they are published? In a *very few* cases, such duty may fall principally on the buyers, and be only a reasonable deduction from the profits of the author and publisher; but in a vast number more it swallows them up entirely; and in very many cases there are no profits for the duty to absorb, so that it falls wholly on the capital of the unfortunate author or publisher. Were the judges of the courts of law to decide cases by a throw of the dice, there would be quite as much of reason and justice in their decisions, as there has been in the proceedings of our finance ministers as to taxes on literature. If books *must* be taxed, let publishers be put under the *surveillance* of the excise; let them be obliged to keep an account of the books they sell, and let them be taxed accordingly; but do not let the loss arising from an unsuccessful literary speculation — and more than half such speculations are unsuccessful — be aggravated to a ruinous degree by the pressure of a system of taxation, than which there is nothing, even in Algiers, more unequal or oppressive.

The reduction of the advertisement duty has done something to lessen this injustice.

But the above statements, which apply to the reduced duty, show that the relief is most inadequate. It acknowledges, without correcting, the evil. Instead of being reduced, this duty ought to have been entirely repealed. Before the reduction it only amounted to about 170,000*l.* a year; and there cannot be a doubt that the loss of revenue occasioned by its repeal, and by the repeal of half the paper duty, would, at no distant period, be made up by the greater productiveness of the remaining duty on paper, resulting from its greater consumption. The advertisement duty presses very severely on all sorts of works, but particularly on pamphlets: it may, indeed, be said to have utterly destroyed the latter class of publications, in so far at least as they are a source of profit.

But we object altogether to the imposition of taxes on books previously to their being published. It is not possible, for the reasons already stated, that such taxes can be otherwise than *unjust*. This objection to them might, indeed, be removed by imposing the duties according to the number and value of the copies actually sold. Still such duties must, however imposed, by raising the price of books, and preventing the diffusion of knowledge among the poorer and least instructed classes, be in the utmost degree injurious; at the same time that they can never be rendered considerably productive. They seem, in fact, to have every quality that taxes ought not to have, and hardly one that they should have.

The delivery of *eleven* copies to public libraries is exceedingly burdensome upon the more expensive class of works, of which small impressions only can be printed; eleven copies of such works would in many instances be a very fair profit for the author; and the obligation to make such a sacrifice has frequently, indeed, caused their publication to be abandoned. A tax of this sort would not be tolerable, even were it imposed for a public purpose; but such is not the object of its imposition. Though called *public*, the libraries which receive the eleven copies are, with the exception of the British Museum, private establishments, belonging to particular corporations or institutions, and *accessible only to their members*. Why, when an author produces a book, should he be compelled to bestow copies of it on the lawyers of Edinburgh and Dublin, and on the Universities? On what principle can these bodies pretend to demand from him a portion of his property? Perhaps it might be expedient, in order to insure the preservation of every work, that copies of it should be deposited, one in London, one in Edinburgh, and one in Dublin. Even this would be calling upon authors to make a considerable sacrifice for the public-advantage. But to call upon them to sacrifice *ten* copies, exclusive of that given to the British Museum, for the benefit of so many *private institutions*, is a proceeding utterly at variance with every principle of justice.

The law of other countries is, in this respect, far preferable to ours. In America, Prussia, Saxony, and Bavaria, only *one* copy of any work is required from the author; in France and Austria, *two* copies are required; and in the Netherlands, *three*. The governments of the most despotical states treat authors better than they have hitherto been treated by the legislature of England.

IV. *Book Trade of Great Britain.*—London is the great centre of the British book trade; the number of new publications that issue from its presses being far greater than all that appear in the rest of the empire. Within the course of the last forty years, however, many very important works have been published at Edinburgh; but the latter, as well as those that appear at Oxford, Cambridge, Glasgow, &c., are principally disposed of by the London trade. The booksellers of Edinburgh, and of all the provincial towns, have agents in London to whom they consign a certain number of copies of every work they publish; and to whom, also, they address their orders for copies of such new or old works as they have occasion for. The London booksellers, who act as agents for those in the country, are in the habit of regularly despatching parcels to their correspondents on the last day of each month, with the magazines and other monthly publications; but if any new work of interest appears in the interim, or orders be received from the country that cannot be conveniently deferred to the end of the month, a parcel is immediately forwarded by coach. The booksellers of Edinburgh and Dublin act as agents for those of London, and supply the Scotch and Irish country trade with the metropolitan publications.

The price of new works is fixed by the publishers, who grant a deduction to the retail dealers of from 20 to 25 per cent. on the price of *quartos*, and from 25 to 30 per cent. on that of *octavos*, and those of smaller size. The credit given by the publishers to the retailers varies from seven to twelve months; a discount being allowed for prompt payment at the rate of 5 per cent. per annum.

From inquiries we have made, we believe it may be laid down that about 1,500 *volumes* of new publications (exclusive of reprints, pamphlets, and periodical publications not in volumes) are annually produced in Great Britain: and, estimating the average impression of each volume at 750 copies, we have a grand total of 1,125,000 volumes; the value of which, if sold at an average publication price of 9*s.* a volume, would be 506,250*l.* The number of reprinted volumes, particularly of school-books, is very great;

and if to these we add the reviews, magazines, pamphlets, and all other publications, exclusive of newspapers, the total *publication value* of the new works of all sorts, and new copies of old works, that are annually produced, may be estimated at about 750,000*l*. At an average of the three years ending with 1831, 1,176 new works were annually entered in Stationers' Hall; but, as no account is kept of the size or price of these works, this return furnishes no clue by which to judge of the number of volumes, their magnitude, or value. This deficiency might easily be supplied either by the Stationers' Hall or the British Museum keeping an account of the size and price of all the new books coming into their hands, and making an annual abstract of the same.

The old book trade carried on in Great Britain is very extensive, and employs many dealers. The price of old books depends very much on their condition; but, independently of this circumstance, it is very fluctuating and capricious; equally good copies of the same works being frequently to be had in some shops for a half or a third of what they can be bought for in others.

V. *Regulations as to Importation of Works.* — For the duties, see TARIFF. To prevent foreign books and maps, the property of individuals, from being charged with duty more than once, the proprietor shall, on each importation subsequent to the original one, make oath that the duties were paid when they were first imported, or that he purchased them in this country in a fair way of trade; that they are the identical books or maps he exported from this kingdom, and that they are now brought back for his private use, and not for sale. — (*Treasury Order*, 3d, and *Customs Order*, 8th of October, 1818.)

No books, first composed, written, or printed in the United Kingdom, imported for sale, except books not reprinted in the United Kingdom within 20 years, or being parts of collections, the greater part of which had been composed or written abroad, shall be imported into the United Kingdom, under forfeiture thereof. — (3 & 4 *Will.* 4. c. 52. § 58.)

Books first composed or written, or printed and published, in the United Kingdom, and reprinted in any other country or place, may not be entered to be warehoused. — § 59.

The permission to import English works reprinted abroad for private use, is limited to a *single copy* of each work, brought as a part of a passenger's baggage, for the private use of the parties themselves. — (*Treasury Order*, 29th of June, 1830.)

Account of the Amount of Duty paid upon the Foreign Books imported into the United Kingdom during each of the Ten Years ending with 1830. — (*Parl. Paper*, No. 146. Sess. 1832.)

Year.	Amount.	Year.	Amount.	Year.	Amount.
	£ s. d.		£ s. d.		£ s. d.
1821	12,987 8 9	1825	17,095 18 6	1828	11,026 18 1
1822	13,035 7 11	1826	10,785 3 8	1829	11,400 8 2
1823	15,339 1 5	1827	11,133 2 5	1830	11,865 4 4
1824	17,237 17 3				

VI. *Book Trade of France.* — The activity of the French press has been very greatly increased since the downfall of Napoleon. The Count Daru, in a very instructive work (*Notions Statistiques sur la Librairie*) published in 1827, estimated the number of printed sheets, exclusive of newspapers, produced by the French press in 1816, at 66,852,883; and in 1825, at 128,011,483! and we believe that the increase from 1825 down to the present period has been little if any thing inferior. The quality of many of the works that have recently issued from the French press is also very superior; and it may be doubted whether such works as the *Biographie Universelle*, the new and enlarged edition of the *Art de vérifier les Dates*, in 38 vols. octavo, and the two octavo editions of *Bayle's Dictionary*, could have been published in any other country. The greater number of new French works of merit, or which it is supposed will command a considerable sale, are immediately reprinted in the Netherlands or Switzerland, but principally in the former. To such an extent has this piratical practice been carried, that it is stated in the *Requête* presented by the French booksellers to government in 1828, that a single bookseller in Brussels had, in 1825 and 1826, and the first six months of 1827, reprinted 318,615 volumes of French works! Having nothing to pay for copyright, these counterfeit editions can be afforded at a lower price than those that are genuine. This is a very serious injury to French authors and publishers, not only by preventing the sale of their works in foreign countries, but from the ease with which spurious copies may be introduced into France.

All the French booksellers are *brevetés*, that is, licensed, and sworn to abide by certain prescribed rules. This regulation is justly complained of by the publishers, as being vexatious and oppressive; and as tending to lessen the number of retail booksellers in the country, and to prevent that competition which is so advantageous.

The discount allowed by the French publishers to the retail dealers is not regulated, as in England, by the size of the volumes, but by the subjects. The discount on the sale of books of history, criticism, and general literature, is usually about 25 per cent.; in the case of mathematical and strictly scientific works, it is seldom more than 10 or 15 per cent.; while upon romances, tales, &c. it is often as high as 50 or 60 per cent.

VII. *German Book Trade.* — "This trade is very much facilitated by the book fairs at Leipsic; the Easter fair being frequented by all the booksellers of Germany, and by those of some of the neighbouring countries, as of France, Switzerland, Denmark, Livonia, &c., in order to settle their mutual accounts, and to form new connections. The German publisher sends his publications to the keeper of assortments *à condition*, that is, on commission, for a certain time, after which the latter pays for what have been sold, and may return the remainder. This is not so favourable for the publisher as the custom in the French and English book trades, where the keepers of assortments take the quantity they want at a fixed rate. In the German book trade, it is the custom for almost every house, either in the country or abroad, which publishes or sells German books, to have its agent at Leipsic, who receives and distributes its publications. A., of Riga, who publishes a book calculated for the German trade, has his agent B., in Leipsic, to whom he sends, free of expense, a number of copies of his publication, that he may distribute the new work to all the booksellers with whom he is connected, from Vienna to Hamburgh, and from Strasburgh to Königsberg, each of whom has his agent in Leipsic. Instructions are also given as to the number of copies to be sent to each. B. delivers those copies in Leipsic to the agents, who send them every week, or more or less frequently, by the post or by carriers, at the expense of the receiver. C., of Strasburgh, who finds that he has not received copies enough, writes for an additional number of copies to his agent D., of Leipsic: D. gives this order to B., who delivers the number wanted to D., to be transmitted to C. This arrangement is advantageous to the German book trade, as well as to Leipsic. The dealer receives every thing from Leipsic; and as a great number of packets, with books from all parts of Germany, arrive there for him every week, he can have them packed together and sent at once. The carriage is thus much less than if the packets were sent to him separately from the different places; and the whole business is simplified. The booksellers are also enabled to agree with ease on a certain discount per cent. No such intimate connection of the booksellers has yet been formed in any other country. The German booksellers rarely unite, as is the practice in England, in undertaking the publication of extensive works." — (*German Conversations-Lexicon*, American edition.)

The literary deluge which commenced in Germany in 1814 still continues to increase. For the 2,000 works which were then about the annual complement, we have now about 6,000. The catalogue of the Leipsic fair for Michaelmas, 1830, contains 3,444 articles, of which 2,764 are actually published; and if these are added to the 3,162 announced in the Easter catalogue, the number of books published in 1830 will amount to 5,926. The number published in 1829 was 5,314; in 1828, 5,654; in 1827, 5,108; previously to which, the number had never exceeded 5,000. Magazines and popular Encyclopædias have increased in the same proportion; and the public has shown as great a desire to read, as the learned have to write. Private libraries are diminishing, while the public ones are daily increasing.—(*Foreign Quarterly Review*, No. XIV. p.551.)

BOOK-KEEPING, the art of keeping the accounts and books of a merchant. Book-keeping by double entry means that mode or system in which every entry is double, that is, has both a debtor and a creditor. It is called also the Italian method, because it was first practised in Venice, Genoa, and other towns in Italy, where trade was conducted on an extensive scale at a much earlier date than in England, France, or other parts of Europe. This method, however familiar to merchants and book-keepers, seems intricate to almost all who have not practised it; nor is the dryness and difficulty of the task much lessened by the printed works on the subject, which, having been compiled more by teachers than by practical merchants, contain a number of obsolete rules and unnecessary details. The most effectual mode of giving clearness and interest to our remarks will be, first, to state a few mercantile transactions, and then to explain the nature of the accounts and entries which result from them.

The Journal of a mercantile house ought to open, at the beginning of each year, with an enumeration of their assets and debts, as follows: —

Folio of Ledger.	SUNDRIES Drs. to STOCK. For the following, being the assets of the house.	£	s.	d.
1	Cash; amount at the bankers' this day (1st Jan.)	2,550	0	0
1	Exchequer Bills; amount in hand	5,310	0	0
7	Bills Receivable; in hand, as per bill book	7,300	15	0
1	Three and a half per Cent. Stock, 6,000*l.*, valued at 90*l.* per 100*l.* stock	5,400	0	0
8	Debenture Account; drawbacks receivable at the Custom-house	513	0	0
6	Ship Amelia; our three eighths of that vessel	3,000	0	0
7	Adventure in Irish Linen; amount in hand, computed at cost price	2,467	0	0
7	James Bailey & Co., Liverpool; due by them	1,350	10	0
7	Thomas Watson & Co., Dublin; do.	3,530	12	0
7	William Spence & Co., Plymouth; do.	970	0	10
		£32,391	17	10

Folio of Ledger.	STOCK Dr. to SUNDRIES. For the debts of the house, as follows: —	£	s.	d.
6	To Bills Payable; amount of acceptances at this date	2,350	10	0
3	To Insurance; amount of premiums due to underwriters	1,880	15	0
9	To Morris Pitman, Trinidad; balance due to him	1,370	5	0
4	To James Forbes, Demerara; do.	720	5	0
7	To Simon Frazer, London; do.	960	15	0
2	To James Allan & Co., Kingston, Jamaica; do.	1,150	10	0
8	To George and William Fox, Falmouth; do.	320	15	0
		8,753	15	0
	Balance, being the present capital of the house	23,638	2	10
		£32,391	17	10

Let the transaction to be first explained be an order for goods from a correspondent abroad. A house in Jamaica sends instructions to the house at home to buy and ship a quantity of manufactured articles, suited to the Jamaica market, as follows: —

Order from James Allan & Co., of Kingston, Jamaica, to Henry Barclay & Co., of London.

J. A. & Co.

Linen; Lint Strelitz Osnaburgs, 14 bales, about 6*d.* ℔ yard.
Best tow Strelitz do., 9 bales, 4*d.* or 4½*d.*
Best white Platillas, 1 case.
Linen tick assorted, ¾ths width, 9*d.*, 1*s.*, 1*s.* 3*d.*; 10 pieces each, cut up in 22-yard lengths.
Woollens; 5 bales Penistones, ⅝ths wide, best indigo blue, 1*s.* a yard.
Cottons; 50 pieces stout calico, 28 yards each, ¾ths wide, 4*d.* a yard.
50 do. do. do. ⅞ths, superior, 5*d.* a yard.
100 do. stout calico shirting, ⅞ths wide, superior, 6*d.* a yard.
Hats; 4 dozen gentlemen's superfine black, 20*s.* each.
2 do. do. drab, 20*s.* each.
1 do. youths' do. black, 15*s.* each.
20 do. felt hats, for negroes, 22*s.* ℔ dozen.
Shoes; 10 dozen prime calf-skin shoes, full size, 65*s.* ℔ dozen.
10 do. youths' do. 52*s.* ℔ dozen.
5 do. gentlemen's dress do. 72*s.* ℔ dozen.

This order the London merchant divides among six, seven, or more wholesale dealers, according to their respective lines of business. Each dealer, or tradesman, as he is commonly called, provides his portion of the order in the course of the fortnight, three weeks, or month, allowed him by the merchant; and when the goods are packed and ready to ship, he sends in his account, or bill of parcels, thus: —

London, 20th February, 1831.

Messrs. Henry Barclay & Co.

Bought of Simon Frazer.

J. A. & Co. No. 8.		£	s.	d.
	10 pieces best tow Strelitz Osnaburgs, 146 yards each, at 4*d.* ℔ yard	24	6	8
	Inside wrapper, 16 yards, at 3*d.*	0	4	0
	Cord, bale, and press packing	0	10	0
		25	0	8
	Then follow, stated in like manner, the particulars of 8 bales, No. 9. to 16. both inclusive, amounting to	212	4	2
		£237	4	10

London, 20th February, 1831.

Messrs. Henry Barclay & Co.

Bought of J. Borradaile & Co.

J. A. & Co.		£	s.	d.	£	s.	d.
39.	Case, 1 dozen and 2 youths' hats and bands, at 15*s.* each	10	10	0			
	Case (small)	0	4	0			
					10	14	0
40.	Case, 9 dozen felt hats for negroes, at 22*s.* ℔ dozen	9	18	0			
	Case (large)	0	16	0			
					10	14	0
41.	Do. the same				10	14	0
					£32	2	0

The merchant, having received the whole of the bills of parcels, fixed on a vessel, and agreed for the freight, proceeds to make an entry at the Custom-house, and to ship the goods. That done, the next step is to prepare the Invoice, or general account of the shipment, as follows: —

INVOICE of Goods shipped by HENRY BARCLAY & Co., in the *Rawlins*, J. Thomson, from London to Kingston in Jamaica, on account and risk of Messrs. JAMES ALLAN & Co. of Kingston.

J. A. & Co.		£	s.	d.	£	s.	d.
No. 1.	Puncheon strong calf-skin shoes, ℔ J. Johnson's bill of parcels	93	7	0			
2.	Do. do. ℔ do.	94	16	4			
3.	French calf-skin shoes, ℔ do.	23	9	0			
4, 5, 6.	3 trunks do. ℔ do.	67	3	7			
					278	15	11
7.	Case linen tick assorted, ℔ J. Wilson's bill of parcels				42	0	0
8. to 16.	9 bales best tow Osnaburgs, 10 pieces each, ℔ Simon Frazer's bill of parcels				236	5	0
17.	1 case white Platillas, ℔ Molling & Co.'s bill of parcels				41	0	8
18. to 24.	7 cases the same, ℔ do.				287	4	8
25. to 38.	14 bales lint Osnaburgs, ℔ J. Mackenzie's bill of parcels				367	10	0
39.	1 case youths' hats and bands, ℔ J. Borradaile & Co.'s bill of parcels				10	14	0
40, 1.	2 cases felt hats, do. ℔ do.				21	8	0
					1,284	18	3

	£	s.	d.	£	s.	d.
Entry; duty on part at ½ per. cent.; bond and debenture	4	8	0			
Cartage, wharfage, and shipping charges	7	9	6			
Freight and primage 38*l.* 7*s.*; bills of lading 3*s.* 6*d.*	38	10	6			
Insurance on 1,500*l.* at 40*s.* ℔ 100*l.* £30 0 0						
Policy duty 3 18 9						
	33	18	9			
Commission, 5 ℔ cent. on 1,335*l.*	66	15	0			
Do. ½ ℔ cent. on 1,500*l.* insured	7	10	0			
				158	11	9
				£1,443	10	0

Errors excepted.

At 6 months' credit; due 6th of September.
London, 6th of March, 1830. HENRY BARCLAY & Co.

This invoice, being sent out by the vessel to Messrs. Allan & Co., conveys to them a number of particulars in a short space; viz. the mark, the numbers, the value, and the contents of each package. In former times it was the practice to make an invoice very long, inserting in it a literal copy of each bill of parcels, but it has now become usual to make each tradesman deliver a duplicate of his account, to be sent abroad with the goods; in which case the invoice may be, like the above, little more than a summary of the bills of parcels. This method has two advantages: it saves time at the counting-house of the exporter; and it affords to his correspondent an assurance that no more is charged to him than has been actually paid for the articles.

An invoice ought to be made out with the utmost care, for it is a document of great importance in several respects: first, between the exporting merchant and his correspondent abroad; and next, when in the hands of the latter, it may and generally does form a voucher for calculating the import duty, as well as for the sales effected to retailers or other dealers.

The sum insured by the exporting merchant generally exceeds the amount of the invoice by 2 per cent., because the recovery of a loss from insurers involves a charge of fully that amount. It is thus necessary to cover not only the price of the goods, and the charges of shipping, insurance, and freight, but such further sum as may enable the shipper, in case of loss, to carry to the credit of his correspondent the amount of the invoice, clear of any deduction.

JOURNAL ENTRIES resulting from the foregoing Invoice.

Folio of Ledger.	JAMES ALLAN & Co. Drs. to SUNDRIES. For goods shipped to them in the *Rawlins*, Thomson, for Jamaica.	£	s.	d.
1	To JAMES JOHNSON; amount of shoes, ℔ his bills of parcels	278	15	11
1	To JOHN WILSON; linen tick ℔ do.	42	0	0
1	To SIMON FRAZER; tow Osnaburgs ℔ do.	236	5	0
1	To JOHN MACKENZIE; lint Osnaburgs ℔ do.	367	10	0
2	To JAMES BORRADAILE & Co.; hats ℔ do.	32	2	0
2	To MOLLING & Co.; for Platillas ℔ do.	328	5	4
3	To FREIGHT ACCOUNT; freight, primage, and bills of lading	38	10	6
3	To INSURANCE; premium, and policy	33	18	9
3	To CHARGES; entry outward, duty, and shipping charges	11	17	6
3	To PROFIT AND LOSS; for commission	74	5	0
		£1,443	10	0

The preceding invoice, being for account of a mercantile house, who sell again to dealers, comprises a variety of articles: as a further specimen, we subjoin two short invoices, for account of sugar planters, and confined to articles consumed on their estates.

INVOICE of Plantation Stores, shipped by HENRY BARCLAY & Co. in the *Adventure*, J. Williamson, Master, for Kingston, Jamaica, by order of Mr. JAMES THOMSON, Planter, and for his account and risk.

		£ s. d.
J. T. 1. to 6.	6 bales lint Osnaburgs, ℔ bill of parcels from James Anderson - - - - £240 0 0	
	Then follow, in like manner, the mark, number, and contents of various other packages of plantation stores (hats, shoes, nails, &c.), composing the shipment; amounting in all to - - -	2,352 10 0
	CHARGES. £ s. d.	
	Custom-house entry, and shipping charges - - 2 12 6	
	Freight, primage, and bills of lading - - 18 7 6	
	Commission on 2,374*l.* at 2½ ℔ cent. - - - 59 7 0	
		80 7 0
	Insurance on 2,550*l.* at 2*l.* ℔ cent. - - - 51 0 0	
	Policy duty - - - 6 10 0	
	Commission, ½ ℔ cent. - - - - 12 15 0	
		70 5 0
		£ 2,503 2 0

Errors excepted.

London, 2d of October, 1830. HENRY BARCLAY & Co.

INVOICE of 60 Barrels of Herrings, shipped by HENRY BARCLAY & Co. of London, in the *Barclay*, James Ferrier, bound to Barbadoes, by order, and for account and risk of JOHN HENDERSON, Esq., Planter, and consigned to him at Bridgetown, Barbadoes.

London, 18th of Feb. 1824.

J. H.	60 barrels prime white herrings, deliverable at Bridgetown, Barbadoes, free of charges, at 21*s.* ℔ barrel - - - -	£ 63 0 0

This invoice is very short; the agreement having been, that the herrings should be delivered at a fixed price, all charges included.

ACCOUNT OF SALES. — We come now to a transaction of a different kind; to the sale of goods imported from abroad. A merchant in England receives from a correspondent, whether in India, the West Indies, or North America, notice of a shipment of sugar, coffee, rice, or other produce, about to be made to England, with instructions to effect insurance on the computed value. This is the first step in the transaction; on the arrival of the vessel the goods are entered, landed, and warehoused; and a broker is instructed to report on the state and prospects of the market. On a sale taking place, an account is made out and forwarded to the correspondent abroad, as follows: —

ACCOUNT SALE of 7 Hhds. Sugar, by the *Ceres*, from Trinidad, for Account of MORRIS PITTMAN, Esq., of Trinidad.

	£ s. d.			cwt. qrs. lbs.	£ s. d.
Insurance on 175*l.* at 60*s.*		M.P. 1. to 7.	7 Hhds. weighing	87 3 21	
℔ 100*l.* - - £5 5 0			Deduct draft -	0 0 14	
Policy - - 0 10 6				87 3 7	
	5 15 6		Deduct tare -	9 3 7	
Freight of 79 cwt. 25 lbs. at 6*s.* ℔ cwt.	23 15 4		Nett 78 0 0 at 60*s.* ℔ cwt.		234 0 0
Primage, pierage, and trade - -	0 9 7				
Duty on 79 cwt. 25 lbs. at 27*s.* ℔ cwt.	106 19 0				
Entry - - - -	0 6 0				
Dock dues - - -	2 12 10				
Landwaiters and entry - -	0 16 0				
Warehouse rent, 19 weeks - -	1 15 2				
Sampling - -	0 3 6				
Insurance from fire - -	0 6 0				
Interest on freight and duty -	1 12 3				
Brokerage, 1 ℔ cent. - -	2 6 9				
Commission, 2 ℔ cent. - -	4 13 4				
½ ℔ cent. on 175*l.* insured - -	0 17 6				
	152 8 9				
Nett proceeds, due 2d of May, 1830 -	81 11 3				
	£234 0 0				£234 0 0

Errors excepted.

London, 2d of April, 1831. HENRY BARCLAY & Co.

We have here, on one side of the account, the quantity and value of the goods sold; on the other, the various charges attending the bringing home, the warehousing, and the sale of the articles.

The quantity of goods accounted for in an account sale must be the same as in the invoice; if it be less, whether through damage at sea, through waste, or any other cause, the extent of the deficiency should be explicitly stated. By the "overtaker" in the following sale is meant the additional barrel or package required for the coffee taken out of such of the tierces as have been opened on account of breakage or other damage.

Allowances of Weight. — The tare is the weight of the cask, and differs, of course, in almost every package: but trett (see the following sale) is a fixed allowance of 5 lbs. per tierce in the case of coffee, intended, like draft in the case of sugar, to insure good weight to the buyer, and to enable him to do the same to those who purchase again from him.

ACCOUNT SALE of 20 Tierces Coffee, ℔ *Vittoria*, from Demerara, for Account of JAMES FORBES, Esq., Demerara.

CHARGES.	£	s.	d.
Insurance on 20 tierces at 35*l.* a tierce, 700*l.* at 50*s.*; policy, 36*s.* 9*d.*	19	6	9
Freight on 114 cwt. at 7*s.* 6*d.* ℔ cwt. £42 15 0			
Primage, pierage, and trade 1 7 6			
	44	2	6
Dock dues	10	9	1
Landwaiters, entry, and part of bond	1	2	6
Insurance from fire	0	19	6
Public sale charges	1	7	6
Brokerage, 1 ℔ cent.	6	16	7
Commission, 2½ ℔ cent. on 676*l.*	16	18	0
Commission, ½ ℔ cent. on 700*l.* insured	3	10	0
	104	12	5
Nett proceeds, due 3d of May, 1831	571	13	1
	£676	5	6

J. F. No. 1. to 20.

	Gross Weight. Cwt. qrs. lbs.	Tare. Cwt. qrs. lbs.	£	s.	d.
5 tierces	30 1 7	3 2 15			
5 do.	32 2 5	4 0 5			
4 do.	24 2 4	2 3 16			
	87 1 16	10 2 8			
		Trett 0 2 14			
		11 0 22			
Deduct	11 0 22				
Nett	76 0 22 at 121*s.* 6*d.* ℔ cwt.		462	17	9
3 tierces	17 1 1	2 0 9			
3 do.	19 3 15	2 1 15			
	37 0 16	4 1 24			
		Trett 0 1 1			
		4 2 25			
Deduct	4 2 25				
Nett	32 1 19 at 120*s.* ℔ cwt.		194	9	4
Overtaker	5 1 9	0 3 9			
		Trett 0 0 11			
		0 3 20			
Deduct	0 3 20				
Nett	4 1 17 at 117*s.* ℔ cwt.		25	15	0
			683	2	1
		Discount, 1 ℔ cent.	6	16	7
		Gross proceeds	£676	5	6

London, 3d of April, 1831. Errors excepted. HENRY BARCLAY & Co.

Freight is charged on the weight of the produce only; not of the produce and packages together. This allowance is of old standing, and is to be traced less to the reasen of the case, than to the competition prevailing among shipmasters.

JOURNAL ENTRIES resulting from the preceding Accounts of Sale.

Folio of Ledger.	June 1831.	£	s.	d.
4	THOMAS KEMBLE & Co. Drs. to SUNDRIES.			
2	To SUGAR ℔ *Ceres.*			
	Proceeds of 7 hhds., M. P. 1. to 7., sold by them at one month's credit, from 2d of April	234	0	0
4	To COFFEE ℔ *Vittoria.*			
	Proceeds of 20 tierces, J. F. 1. to 20., sold at one month's credit, from 3d of April	676	5	6
		910	5	6
2	SUGAR ℔ CERES Dr. to SUNDRIES.			
3	To INSURANCE ACCOUNT; for premium and policy	5	15	6
3	To FREIGHT ACCOUNT; for freight, primage, and pierage	24	4	11
4	To CUSTOMS INWARD; duty and entry	107	5	0
4	CHARGES; dock dues, 52*s.* 10*d.*; warehouse rent, 35*s.* 2*d.*; landwaiters, 16*s.*; sampling, 3*s.* 6*d.*; and fire insurance, 6*s.*	5	13	6
4	To THOMAS KEMBLE & Co.; brokerage, 1 ℔ cent.	2	6	9
3	To PROFIT AND LOSS; for commissions £5 10 10			
	Interest on freight and duty 1 12 3			
		7	3	1
4	To MORRIS PITTMAN; proceeds due 2d of May, 1831	81	11	3
		234	0	0

JOURNAL ENTRIES — *continued.*

Folio of Ledger.	June 1851. — *continued.*	£	s.	d.
4	COFFEE ℔ VITTORIA Dr. to SUNDRIES.			
3	To INSURANCE; for premium and policy	19	6	9
3	To FREIGHT ACCOUNT; freight, primage, and pierage	44	2	6
3	To CHARGES; dock dues, landwaiters, insurance from fire, and public sale charges	13	18	7
4	To THOMAS KEMBLE & Co.; brokerage	6	16	7
3	To PROFIT AND LOSS; for commissions	20	8	1
4	To JAMES FORBES; nett proceeds due 3d of June, 1830	571	13	1
		£676	5	7

We have thus given an example of the transactions which form a great part of the business of our merchants; the export of manufactured goods, and the import and sale of produce received in return. Our next illustration shall be of a merchant's Cash-book: the following is an example of the entries for a month: —

Dr. CASH.					PAID. Cr.				
1830.		£	s.	d.	1830.		£	s.	d.
Mar.1	To balance at the banker's	2,550	0	0	Mar.2	By bills payable, paid No. 261. to James Harding	145	10	0
3	To ship *Amelia*, received of James Jacobs, for freight	175	3	0	4	By George and William Fox, paid their balance of account	320	15	0
6	To bills receivable, received payment of No. 251. on J. Henderson	200	0	0	6	By John Smith & Sons, paid J. Jackson for their account	98	0	0
9	To James Bailey & Co., received payment of their draft at sight on J. Bainbridge	152	10	0	7	By bills payable, paid No. 269. to J. Stewart	300	0	0
15	To William Spence & Co., received balance of their account	970	0	10	18	By interest paid, discount on Harrison & Co., 2 months	6	1	10
—	To debenture account, received drawback on tobacco shipped by the *Plover*	15	8	0		By J. Johnson, paid his bill of parcels	278	15	11
18	To bills receivable, discounted at the bankers, Harrison & Co., due 15—18 March	730	10	0		By John Wilson do.	42	0	0
—	To profit and loss, received 5 ℔ cent. discount, on paying with ready money, the accounts per contra, not due till six months hence, from					By Simon Frazer do.	236	5	0
	James Johnson £13 19 0					By John Mackenzie do.	367	10	0
	John Wilson 2 2 0					By James Borradaile & Co. do.	32	2	0
	Simon Frazer 11 16 0					By Molling & Co. do.	328	5	4
	John Mackenzie 18 7 6				31	By charges paid, postage, and petty disbursements this month, per petty cash book	15	2	6
	James Borradaile & Co. 0 16 0				—	By balance, carried to next month	2,686	13	0
	Molling & Co. 16 8 3								
		63	8	9					
		£4,857	0	7			£4,857	0	7

These transactions, when put into the Journal form, stand thus: —

Folio of Ledger.	MARCH, 1830. CASH Dr. to SUNDRIES. Received this month.		£	s.	d.
6	To SHIP AMELIA.				
	3d. Freight from James Jacobs		175	3	0
6	To BILLS RECEIVABLE.				
	6th. Received payment of J. Anderson, due this day	£200 0 0			
	18th. Discounted Harrison and Co., due 9th May	730 10 0			
			930	10	0
7	To JAMES BAILEY & Co.				
	9th. Received their draft on Bainbridge, due		152	10	0
7	To WILLIAM SPENCE & Co.				
	15th. Received balance of their account		970	0	10
8	To DEBENTURE ACCOUNT.				
	15th. Drawback on tobacco by the *Plover*		15	8	0
3	To PROFIT AND LOSS.				
	18th. Received discou on sundry accounts, per cash book		63	8	9
			£2,307	0	7

Folio of Ledger.	SUNDRIES Drs. to CASH. Paid this month as follows:	£	s.	d.
6	BILLS PAYABLE.			
	2d. Paid No. 261. - - - £145	10	0	
	7th. Do. 269. - - - 192	15	0	
		338	5	0
4	CUSTOMS INWARD.			
	23d. Paid duty on sugar, ℔ *Ceres*, 79 cwt. 25 lbs. at 27*s.*			
	℔ cwt. - - - - 106	19	0	
	Entry - - - - - 0	6	0	
		107	5	0
8	SIMON FRAZER.			
	18th. Paid his bill of parcels - - - 236	5	0	
1	26th. Paid J. Jackson for his account - - 98	0	0	
		334	5	0
8	INTEREST ACCOUNT.			
	18th. Paid discount on Harrison & Co. - - -	6	1	10
1	JAMES JOHNSON.			
	18th. Paid his bill of parcels - - - -	278	15	11
1	JOHN WILSON.			
	18th. Paid his bill of parcels - - - - -	42	0	0
1	JOHN MACKENZIE.			
	18th. Paid his bill of parcels - - - -	367	10	0
2	JAMES BORRADAILE & Co.			
	18th. Paid their bill of parcels - - - -	32	2	0
2	MOLLING & Co.			
	18th. Paid their balance of account - - -	328	5	4
8	GEORGE AND WILLIAM FOX.			
	24th. Paid their balance of account - - - -	320	15	0
3	CHARGES.			
	31st. Paid postage, and petty disbursements this month - -	15	2	6
		£2,170	7	7

The above shows, that for all sums received, the account of cash is made debtor, and the parties paying the same are made creditors; while for all sums paid, the cash is credited, and the parties receiving them are made debtors.

We are next to state the mode of entering bill transactions.

BILLS RECEIVABLE. — We have seen by the Balance sheet that several correspondents are indebted to the house. The debts of correspondents abroad may be reduced by remitting either bills, specie, or merchandise for sale: from correspondents in England, bills are almost the only mode of remitting. When bills come to hand, the rule is to enter each in the bill book, with a minute statement of the date, term, sum, and other particulars thus: —

No.	*Received*	*From whom.*	*Drawn by*	*Date.*	*Term.*	*Drawn on*	*To order of*	*Due.*	*Sum*	*How disp. of.*
									L.	
630	8 Mar.	Bailey & Co.	W. Adams	Belfast, 1 Mar.	2 mths.	T. Jones, Dublin	A. Williams	1–4 May	350	Rainier & Co.
631	10 do.	Watson & Co.	J. Jacobs	Cork, 3 do.	1 do.	J. Adams, London	G. Wilson	3–6 April	135	Smith & Co.
632	12 do.	Spence & Co.	T. Johnson	Falmo. 5 do.	2 do.	T. Allan, Liverpool	D. Jones	5–8 May	260	Overend & Co.

The JOURNAL ENTRIES for these bills are as follows: —

Folio of Ledger.	BILLS RECEIVABLE Dr. to SUNDRIES. For the following remitted this month:	£	s.	d.
7	To JAMES BAILEY & Co.			
	No. 630. on T. Jones, Dublin, due 4th of May - - -	350	0	0
7	To T. WATSON & Co.			
	No. 631. on J. Adams, London, due 6th of April - -	135	0	0
7	To WILLIAM SPENCE & Co.			
	No. 632. on T. Allan, Liverpool, due 8th of May - - -	260	0	0
		£745	0	0

BILLS PAYABLE. — The entries under this head are, of course, wholly different from the preceding, being for acceptances of the house given on account of sums owing by it to correspondents. Each acceptance is entered in the book of bills payable, thus: —

No.	*Drawn by*	*Place and Date.*	*To Order of*	*On Account of*	*Term.*	*When accepted.*	*Due.*	*Sum.*
151	J. Allan & Co.	Jamaica, 15 Jan.	J. Jones	J. Allan & Co.	90 days' sight	12 March	10–13 June	*L.*175 10 0
152	G. & W. Fox	Falmouth, 7 Mar.	J. Thomson	G. & W. Fox	15 days' date	14 do.	22–25 Mar.	73 15 0
153	J. Clark	Hull, 5 Mar.	G. Barclay	J. Smith & Sons	1 month's date	16 do.	5–8 ditto	132 10 0

The Journal entries for these bills are as follows: —

Folio of Ledger.			£ s. d.
	SUNDRIES Drs. to BILLS PAYABLE.		
	For the following bills accepted.		
2	James Allan & Co. No. 151. their draft, due 13th of June	-	175 10 0
8	G. & W. Fox. No. 152. their draft, due 25th of March	- -	73 15 0
1	Simon Frazer. J. Clark's draft on his account, due 8th of March	-	132 10 0
			£381 15 0
	May, 1830.		
	CASH Dr. to THOMAS KEMBLE & CO.		
1	27th. Received from them proceeds of sugar ℔ *Ceres*	- 234 0 0	
	Less their brokerage - -	- 2 6 9	
			231 13 3
4	30th. Received coffee ℔ *Vittoria* - -	- 676 5 6	
	Less brokerage - -	- 6 16 7	
			669 8 11
			£901 2 2

The preceding entries, few as they are compared to the monthly transactions of a house of business, are sufficient to show the nature of a Journal as well as of the subsidiary books, (for cash, bills, invoices, and account sales,) from which it is composed. The Journal, being a complete record of the business of the house, is very varied and comprehensive in its nature, and may be termed an index to every book of consequence in the counting-house. But while in the cash book every payment or receipt is entered on the day it takes place, and in the bill books every bill is registered on the day it comes to hand, or is accepted, the Journal entries, being completed only at the end of the month, admit of being combined to a considerable extent, so as to exhibit a number of transactions in collective sums. Thus all the acceptances of the house paid in the course of the month appear in the Journal entry of Bills Payable Dr. to Cash: they are arranged in this entry as they fall due, after which the whole are added into one sum, which sum alone needs be carried to the Ledger. In like manner, all bills receivable, whether discounted, or kept by the house till they fall due, are collected under the head of Bills Receivable Dr. to Cash, summed up together, and carried to the Ledger in one line; a point of great importance, as we shall see presently, in facilitating the balance of the Ledger.

We proceed to give a specimen of the Ledger: the whole of the Journal entries in the preceding pages, when posted into the Ledger, will stand thus: —

Dr. STOCK. Cr.

1831.	Fo.		£ s. d.	1831.	Fo.		£ s. d.
Jan. 1	1	To sundries -	8,753 15 0	Jan. 1	1	By sundries -	32,391 17 10

Dr. CASH. Cr.

Jan. 1	1	To stock - -	2,550 0 0	Mar. 31		By sundries -	2,170 7 7
Mar. 1	4	To sundries -	2,307 0 7				
May 30	15	To T. Kemble & Co.	901 2 2				

Dr. EXCHEQUER BILLS. Cr.

Jan. 1	1	To stock - -	5,310 0 0				

Dr. THREE AND A HALF ℔ CENT. STOCK. Cr.

Jan. 1	1	To stock - -	5,400 0 0				

Dr. JAMES JOHNSON, London. Cr.

Mar. 1	4	To cash - -	278 15 11	Mar. 6	9	By J. Allan & Co.	278 15 11

Dr. JOHN WILSON, London. Cr.

Mar. 1	4	To cash - -	42 0 0	Mar. 6	9	By J. Allan & Co.	42 0 0

Dr. SIMON FRAZER, London. Cr.

Mar. 26	4	To cash - -	334 5 0	Jan. 1	2	By stock - -	960 15 0
31	5	To bills payable -	132 10 0	Jan. 6	9	By J. Allan & Co.	236 5 0

Dr. JOHN MACKENZIE, London. Cr.

Mar. 8.	4	To cash - -	367 10 0	Mar. 6	9	By J. Allan & Co.	367 10 0

Drs. JAMES BORRADAILE & Co., London. Crs.

Mar. 1	4	To cash - -	32 2 0	Mar. 6	9	By J. Allan & Co.	32 2 0

Drs. MOLLING & Co., London. Crs.

Mar. 1	4	To cash - -	328 5 4	Mar. 6	9	By J. Allan & Co.	328 5 4

Drs. J. ALLAN & Co., Kingston, Jamaica. Crs.

Mar. 6	9	To sundries -	1,443 10 0	Jan. 1	2	By stock - -	1,150 10 0
31	11	To bills payable -	175 10 0				

Dr. SUGAR BY THE CERES. Cr.

April 2	11	To sundries -	234 0 0	April 2	11	By T. Kemble & Co.	234 0 0

Dr. FREIGHT ACCOUNT. Cr.

				Mar. 6	9	By J. Allan & Co.	38 10 6
				April 2	11	By sugar ℔ *Ceres*	24 11 11
				May 3	13	By coffee ℔ *Vittoria*	44 2 6

Dr. INSURANCE ACCOUNT. Cr.

				Jan. 1	2	By stock - -	1,880 15 0
				Mar. 6	9	By J. Allan & Co.	33 18 9
				April 2	11	By sugar ℔ *Ceres*	5 16 6
				May 3	13	By coffee ℔ *Vittoria*	19 6 9

Dr. CHARGES. Cr.

Mar. 3	4	To cash - -	15 2 6	Mar. 6	9	By J. Allan & Co.	11 17 6
				April 2	11	By sugar ℔ *Ceres*	5 13 6
				May 3	13	By coffee ℔ *Vittoria*	13 18 7

Dr. PROFIT AND LOSS. Cr.

				Mar. 6	9	By J. Allan & Co.	74 5 0
				Mar. 8	4	By cash - -	63 8 9
				April 2	11	By sugar ℔ *Ceres*	7 3 1
				May 3	13	By coffee ℔ *Vittoria*	20 8 1

Drs. CUSTOMS INWARD. Cr.

April 2	4	To cash -	107 5 0	April 2	11	By sugar ℔ *Ceres*	107 5 0

Dr. COFFEE PER VITTORIA. Cr.

April 3	13	To sundries -	676 5 6	April 3	11	By T. Kemble & Co.	676 5 6

Dr. MORRIS PITTMAN, Trinidad. Cr.

				Jan. 1	2	By stock - -	1,370 5 0
				April 2	11	By sugar ℔ *Ceres*	81 11 3

Dr. JAMES FORBES, Demerara. Cr.

				Jan. 1	2	By stock - -	720 5 0
				May 3	13	By coffee ℣ *Vittoria*	571 13 1

Drs. THOMAS KEMBLE & Co., London. Crs.

April 3	11	To sundries -	910 5 6	April 7	11	By sugar ℣ *Ceres*	2 6 9
				30	13	By coffee ℣ *Vittoria*	6 16 7
				May 30	15	By cash - -	901 2 2
							910 5 6

Dr. BILLS RECEIVABLE. Cr.

Jan. 1	1	To stock - -	7,300 15 0	Mar. 1	4	By cash - -	930 10 0
Mar. 3	5	To sundries -	745 0 0				

Dr. BILLS PAYABLE. Cr.

Mar. 7	4	To cash - -	338 5 0	Jan. 1	2	By stock - -	2,359 10 0
				Mar. 3	5	By sundries -	381 15 0

Dr. SHIP AMELIA. Cr.

Jan. 1	1	To stock - -	3,000 0 0	Mar. 1	4	By cash - -	175 3 0

Dr. ADVENTURE IN IRISH LINEN. Cr.

Jan. 1	1	To stock - -	2,467 0 0				

Drs. JAMES BAILEY & Co., Liverpool. Crs.

Jan. 1	1	To stock - -	1,350 10 0	Mar. 3	4	By cash - -	152 10 0
				Mar. 9	5	By bills receivable	350 0 0

Drs. THOMAS WATSON & Co., Dublin. Crs.

Jan. 1	1	To stock - -	3,530 12 0	Mar. 3	5	By bills receivable	135 0 0

Drs. WILLIAM SPENCE & Co., Plymouth. Crs.

Jan. 1	1	To stock - -	970 0 10	Mar. 3	4	By cash - -	970 0 10
				Mar. 5	5	By bills receivable	260 0 0

Drs. GEORGE AND WILLIAM FOX, Falmouth. Crs.

Mar. 4	4	To cash - -	320 15 0	Jan. 1	2	By stock - -	320 15 0
Mar. 6		To bills payable -	73 15 0				

Dr. DEBENTURE ACCOUNT. Cr.

Jan. 1	1	To stock - -	513 0 0	Mar. 5	4	By cash - -	15 8 0

Dr. INTEREST ACCOUNT. Cr.

Mar. 8	4	To cash - -	6 1 10				

The Ledger is thus a register of all the entries in the Journal; and a register so arranged as to exhibit on one side all the sums at Debtor; on the other all those at Creditor. It is kept in the most concise form, the insertions in it hardly ever exceeding a line each, or containing more than the title of the entry in the Journal. On opening a page in the Ledger, a person unacquainted with book-keeping is apt to consider this brevity unsatisfactory; and it was formerly the practice to add in each line a few

explanatory words. Thus the entries in the account of Simon Frazer, which in our preceding page are briefly

		£	s.	d.
March 26.	To cash - - - -	334	5	0
31.	To bills payable - - -	132	10	0

would, at an earlier date in the practice of book-keeping, have been expanded to

		£	s.	d.
March 18.	To cash paid for goods per Rawlins - -	236	5	0
26.	To ditto paid J. Jackson for his account - -	98	0	0
31.	To bills payable, paid J. Clark's draft for his account	132	10	0

This method is still followed in some counting-houses, and such explanatory additions are certainly conducive to clearness; but they are practicable only in a house of limited business: wherever the transactions are numerous and varied, they should be left out of the Ledger, for two reasons; they increase greatly the labour of the book-keeper, and they never can be so full or circumstantial as to supersede the account current book.

The same Ledger may continue in use from one to five years, according to the size of the book, or the extent of the transactions of the house. On opening a new Ledger, it is proper to place in succession accounts of the same class or character: thus — Stock account ought to be followed by that of the Three per cent. consols, Exchequer bills, or other property belonging to the house; and if the business be with the West Indies, it is fit that accounts with Jamaica should be placed near those with Demerara, Trinidad, and other sugar colonies.

Balancing the Ledger. — This important operation is performed by adding up the Debtor and Creditor side of every account in the Ledger, ascertaining the difference or balance in each, and carrying such balance, as the case may be, to the Debtor or Creditor column in the balance sheet. On closing, for example, a few of the preceding Ledger accounts, we find them to stand thus: —

Debtors.	£	s.	d.	Creditors.	£	s.	d.
Cash - -	3,587	15	2	Simon Frazer - - -	730	5	0
James Allan & Co. - -	468	10	0	Freight account - - -	107	4	11

And so on with every account except Stock, which, having no entries in the current year, is put in the balance sheet exactly as it was in the beginning of the year. Including Stock, the total at the Debtor side of the balance sheet ought to agree exactly with the total at the Creditor side; and if it do not, it is a rule in all well-regulated counting-houses to follow up the examination perseveringly, until they are made to agree. The apparent difference may not exceed a few shillings or a few pence; still the search is continued, because the smallest discrepancy shows the existence of error, and to an extent perhaps greatly beyond the fraction in question. It often happens, indeed, that, as the examination proceeds, the difference undergoes a change from a smaller to a larger amount, and without increasing the difficulty of discovering the error, which is as likely to have occurred in the case of a large as of a small sum. Differences, when in round sums, such as 10*l.*, 100*l.*, or 1,000*l.*, generally lie in the addition; fractional sums frequently in the posting. All this, however, is uncertain; for the error or errors may be in any month in the year, and in any one of the thousand entries and upwards which have been made in the course of it. Hence the necessity of examining the whole; and young book-keepers are often obliged to pass week after week in the tedious labour of revising, adding, and subtracting. On the other hand, there are sometimes examples of the balance being found on the first trial; but such cases are rare, and occur only to careful and experienced book-keepers. The only effectual means of lessening the labour and perplexity of balancing the Ledger, is to exercise great care in every stage of the book-keeping process; as well in making the additions in the Journal, as in posting from the Journal into the Ledger, and casting up the Ledger accounts; and, lastly, in adding up the balance sheet, which is generally of formidable length.

Accuracy in addition is one of the main requisites in a clerk, and particularly in a book-keeper. Of the extent to which it may be attained by continued practice, those only can judge who have experienced it themselves, or have marked the ease and correctness with which clerks in banking-houses perform such operations. They are in the habit of striking a daily balance which comes within small compass; but a merchant's balance, comprising the transactions of a year, extends commonly over a number of folio pages. It is advisable, therefore, to divide each page into portions of ten lines each, adding such portions separately. This lessens the risk of error, as it is evidently easier to add five or six such portions in succession, than to do at once a whole folio containing fifty or sixty sums.

Another important point towards agreeing a balance, is to limit carefully the number of Ledger entries; in other words, to comprise as much as possible in those aggregate

sums in the Journal which are posted in the Ledger. Thus, in the case of the monthly entries for bills, whether receivable or payable, while the inner column of the Journal contains the amount of each specific bill — the final column, that which is carried to the Ledger — should, and generally does, comprise a number of bills in one sum. Entries in the cash book, which generally form so large a proportion of the transactions of the month, are carried by some book-keepers directly from the cash book into the Ledger, without an intermediate arrangement in the Journal form. In some lines of business this plan may answer; but as a general rule it is better to take the trouble of journalising the cash, thereby comprising in 30 or 40 Ledger entries the transactions of the month, which, when posted separately, would exceed 100. The time required for re-writing or rather re-casting them, will, in most cases, be amply made good, by exhibiting the cash in a proper form, and by facilitating the balance of the Ledger at the close of the year.

We have said the close of the year, because, in nine mercantile houses out of ten, that is the period for striking a balance. In some branches of trade, however, the case is otherwise. Thus, among West India merchants, the 30th of April is the time of balancing, because at that season the sales of the preceding crop are, in general, completed, and those of the current year not yet begun.

Arrears in book-keeping ought to be most carefully avoided — calculated as they are to engender mistakes, and to produce loss from delay in adjusting accounts. The practice of balancing the Ledger every six months, and of transmitting as often accounts current to the correspondents and connections of merchants, will, it is to be hoped, become general. It is, however, hardly practicable in cases where, as too often happens in the lesser mercantile establishments, the book-keeper is charged with a share of the active management. Exemption from interruption, and removal from the bustle of current business, are main requisites to accuracy and despatch in accounts. In examining, or, as it is called, collating the books, the book-keeper requires not only a retired apartment, but the assistance of a clerk for the purpose of calling them over. A similar arrangement for another purpose — we mean for composing the Journal, the book-keeper dictating from the subsidiary books to a clerk whose writing forms the draught or rough copy of the Journal, has as yet been seldom adopted; although, when properly applied, it is highly conducive both to accuracy and expedition.

A Ledger must, of course, have an index; but it is very brief, containing merely the titles of the accounts and a reference to the page, as follows: —

	Folio		Folio
Allan & Co., James - -	- 2	Bailey & Co., James - -	- 7
Amelia, ship - - -	- 6	Bills payable - - -	- 6

The Subsidiary Books. — In former times, when business in this country was conducted by most persons on a very limited scale, the accounts of a number of merchants, or rather of those dealers whom we should now think it a compliment to call merchants, were often kept on a plan somewhat like that at present followed by our shopkeepers. The merchant or his chief clerk kept a daily record of transactions, whether sales, purchases, receipts, or payments, in a diary, which was called a Waste-book, from the rude manner in which the entries or rather notices in it were written, being inserted, one by one, soon after the transactions in question took place. From this diary the Journal and Ledger were posted; and book-keeping by double entry being in those days understood by few, one person frequently kept the books of several merchants, passing one or two days in the week at the house of each, and reducing these rough materials into the form of regular entries. In process of time, as transactions multiplied and mercantile business took a wider range, separate books were more generally required for particular departments, such as a bill book for all bills of exchange, and a cash book for all ready money transactions. This had long been the case in the large mercantile towns of Italy and Holland; and above a century ago it became a general practice in London and Bristol, which were then the only places of extensive business in England. But in English, as in foreign counting-houses, the bill book and even the cash book were long considered as little more than memoranda of details; not as books of authority, or as fit documents for Journal entries: for that purpose the diary only was used. In time, however, the mode of keeping these subsidiary books improved, and merchants became aware that, when cash or bill transactions were properly entered in them, the Journal might be posted from them as well as from the diary.

Similar observations are applicable to the other subsidiary books, viz. an invoice book for goods shipped, and an account of sales book for goods received and sold. When from the gradual improvement in the management of counting-houses these books were kept in a manner to supply all that was wanted for Journal entries, the use of the diary was dispensed with for such entries also. And at last it was found, that in all well-regulated counting-houses the books kept for separate departments of the business were sufficient for the composition of the Journal, with the exception of a few transactions out

of the regular course, which might be easily noticed in a supplementary book called a Petty Journal, or a book for occasional entries. The consequence was, that the diary or waste book, formerly the groundwork of the Journal and Ledger, became excluded from every well-regulated counting-house. This has long been the case, and the name of waste book would have been forgotten, were it not found in the printed treatises on book-keeping which have appeared from time to time, and have been generally composed by teachers in schools or academies, who, unacquainted with the actual practice of merchants, were content to copy and reprint what they found laid down in old systems of book-keeping.

The subsidiary books required in a counting-house are, the Cash book;

Book of Acceptances of the house, or Bills Payable;

Book of Bills Receivable, or bills on other merchants which are or have been in possession of the house;

Bought book, or book for bills of parcels;

Invoice book, or register of goods sold or exported;

Account of Sales book;

Insurance Policy book, containing copies of all policies of insurance;

Petty Journal, or book for such occasional entries as do not belong to any of the preceding.

Such are the authorities from which it is now customary, in every well-regulated house, to compose the Journal. Their number indicates a repartition or subdivision, to a considerable extent, of counting-house work, and nowhere is such repartition productive of greater advantage. How much better is it to enter all bills receivable in one book, all bills payable in another, and all cash transactions in a third, than in any way to blend these very distinct entries! The effect of this subdivision is to simplify the Journal entries in a manner highly conducive to accuracy and despatch; and to present such means of checking or examining them, that many transactions may be stated, and an account extended over a number of folios, without a single error.

The use of most of the subsidiary books is sufficiently pointed out by their names; but it may be well to add a few remarks on the "Bought book," or receptacle for the accounts of goods purchased. A bill of parcels is the name given to the account of goods supplied by a manufacturer, tradesman, or dealer, to a merchant. Such accounts soon become numerous, and it is evidently of consequence to adopt the best method of keeping them. In former times it was the practice to fold them up in a uniform size, and after writing on the back the names of the respective furnishers, to put them away in bundles. But wherever the purchases of a merchant are extensive, and the bills of parcels numerous, the better mode, after arranging them alphabetically, is to paste them in a large book, generally a folio, made of blue or sugar-loaf paper: this book to have its pages numbered, and to have an alphabetical index. Any single bill of parcels may thus be referred to with the same ease as we turn to an account in a ledger; and one of these folios may be made to hold a very great quantity of bills of parcels; as many as would form a number of large bundles when tied up on the plan of former times.

Book of Bills Payable. — The notice, or, as it is termed, advice of bills payable after sight, generally comes to hand before the bills themselves. As the time of the arrival of the latter is uncertain, the better plan is not to enter them from the advice among the other bills payable, but to appropriate a space of ten or twelve pages at the beginning or end of the book of bills payable, and to insert there the substance of the advice received.

There are a few books in every counting-house which do not form part of the vouchers or materials for the Journal; viz., the Account Current book, containing duplicates of the accounts furnished by the house to their different correspondents and connections;

The Letter-book, containing copies of all letters written to the correspondents or connections of the house;

The Petty Cash book, or account of petty disbursements, the sum of which is entered once a month in the cash book;

The Order book, containing copies of all orders received;

The Debenture book, or register of drawbacks payable by the Custom-house.

It was formerly a practice in some houses for the book-keeper to go over the letter book at the end of each month, that he might take note of any entries not supplied by the subsidiary books. This, however, is now unnecessary; these books, when carefully kept, containing, in one shape or other, every transaction of the house.

The Principle of Double Entry. — From these explanations of the practice of book-keeping, we must call the attention of our readers to a topic of more intricacy — the origin of the present system, and the manner in which it was adopted. To record the transactions of a merchant in a Journal or day book was an obvious arrangement, and to keep a Ledger or systematic register of the contents of the Journal was a natural

result of his business, particularly when conducted on credit. Such, in a rude form, are the books of our shopkeepers, who enter their sales and purchases in a day book, and in their Ledger carry the former to the Dr. of their customers, the latter to the Cr. of the wholesale dealers who supply them with goods. By making at the end of the year a list of the sums due to him by his customers, and of those due by him to wholesale dealers, a shopkeeper may, after adding to the former the value of his stock on hand, make out an approximative statement of his debts and assets. Now, that which in this manner is done indirectly and imperfectly, it is the object of double entry to do with method and certainty. The shopkeeper makes out a list of debtors on one side and of creditors on the other, but he cannot make them balance, because his entries have been single; that is, they have had no counterpart. On making a purchase of cottons from Messrs. Peel of Manchester, or of woollens from Messrs. Gott of Leeds, he merely enters the amount to their credit, but he makes no one Dr. to them, because the goods are not sold; and to introduce an imaginary account would be too great a refinement for a plain, practical man. But a person accustomed to double entry would, without any effort of thought, make "Printed Calicoes" Dr. to Messrs. Peel, and "Kerseymeres" Dr. to Messrs. Gott, for the respective amounts; after which, as the sales proceeded, he would make the buyers Drs. to these accounts for the amount of their purchases.

We thus perceive that the intricacy in the application of double entry was not with the personal so much as with the nominal accounts. Let us refer to the country where book-keeping was first studied, and take as an example the case of Doria, a merchant in Genoa, shipping, in a former age, silk, of the value of 200*l.*, bought from Flori, in Piedmont, to Henderson & Co., silk manufacturers, in England, on the terms of charging, not an additional price, but a commission of 5 per cent. with interest until reimbursed his advance. In entering the transaction, Doria's book-keeper would, as a matter of course, make Hendersons debtors to Flori 200*l.* for the cost of the silk; but he might not so readily find a creditor for the 10*l.* commission, or the 7*l.* interest eventually due on the advance. The custom in this primitive era of book-keeping probably was, to introduce the firm of the house into their books, making Hendersons debtors to Doria for the 10*l.* and 7*l.*; but as the practice of book-keeping improved, it was found preferable to avoid inserting, on any occasion, the firm of the house, and to substitute nominal accounts, such as, commission, interest, bills payable, bills receivable. These, attention and practice rendered in time familiar to the book-keeper, who learned to open his Journal at the beginning of a year by making the parties who owed balances to the house debtors, not to the firm by name, but to Stock; and those to whom the house was indebted, creditors by Stock. As the transactions of the year proceeded, he made those to whom money was paid debtors, not to the firm of the house, but to Cash; and those for whose account bills were accepted debtors to Bills payable; so that book-keeping by double entry assumed its present form gradually and almost imperceptibly.

What are the advantages of this method compared to that of single entry? First, it supplies a test of accuracy, inasmuch as, the entries on the debtor side of the Ledger being equal to those on the creditor side, their respective totals ought, as a matter of course, to balance. After going through this proof, personal accounts of whatever length may be settled with confidence; while in a general account, such as kerseymeres or printed calicoes, the value sold and the value remaining on hand may be ascertained by merely balancing the account in the Ledger, without the repeated references to the sales book that would otherwise be required. Without double entry, a dealer could hardly estimate his property unless he took stock; but with it an extraction of the Ledger balances fulfils that object, and stock-taking, however proper as a test of the honesty of servants, becomes quite unnecessary as a means of calculation. In short, in regard to any person in trade, whether merchant, dealer, or manufacturer, double entry forms the connecting link of his accounts, and affords a ready solution of any inquiry as to the appropriation, increase, or diminution of his capital.

This advantage may fortunately be obtained without any great sacrifice of time or labour. Of the books of dealers, manufacturers, and retailers, nine parts in ten may continue to be kept by single entry; for the addition of a few pages of double entry in the form of a summary, at the end of the month or quarter, will be sufficient to exhibit the result of a great extent of transactions.

Nominal Accounts. — Of these our limits permit us to notice only two; Profit and Loss, and Merchandise. The former contains on the creditor side all the entries of commissions earned, and gains obtained on particular adventures; while the debtor side exhibits the losses incurred, whether by bad debts or by unsuccessful purchases. Every house keeping regular books must have a profit and loss account, but a merchandise account is altogether optional. Those who have such a head in their Ledger are accustomed to make it Dr. to the dealers or furnishers from whom they make purchases,

and to credit it in return by the correspondents or connections to whom they make sales. In many houses, however, there is no such intermediate account; the parties to whom the goods are sent being made Drs. at once to the furnishers of the goods, as in the case of the shipment to Jamaica stated in our preceding pages.

A merchant, before estimating his profits, ought to charge interest on each head of investment. His clear profit cannot be ascertained without it; and the practice of charging it is a lesson to him to hold no property that does not afford, at least, interest on his advances.

Mercantile books and accounts must be kept in the money of the country in which the partners reside. A house in Rotterdam composed of English partners necessarily keep their accounts in Dutch money, although their transactions may be chiefly with England. Further, books, it is obvious, can be kept in only one kind of money; and when a merchan in England receives from a distant country, accounts which cannot at the time be entered in sterling for want of a fixed exchange, these accounts should be noted in a separate book, until the exchange being ascertained, they can be entered in the Journal in sterling.

A book-keeper will do well to avoid all such puzzling distinctions, as "J. Johnson, my account with him;" and "J. Johnson, his account proper;" on the plain ground that every account in the Ledger ought to be the general account of the person whose name it bears.

Errors excepted. — This expression is merely a proviso, that if any mistakes be discovered in the account in question, they shall be open to correction.

Accounts Current. — An account current generally contains all the transactions of the house with one of its correspondents during a given time, generally six or twelve months. The following is an example: —

Messrs. James Allan & Co., Jamaica, in Account Current with Henry Barclay & Co., London.

1831.	Drs.	£	s.	d.	Days to 31 Dec.	Interest.	1831.	Crs.	£	s.	d.	Days to 31 Dec.	Interest.
June 30	To balance of last account - -	867	10	0	184	1,595	Aug. 10	By proceeds of 20 tierces coffee ℔ *Louisa*, due Sept. 10. -	410	0	0	112	459
July 2	To your draft to J. Smith, due Aug. 13.	128	0	0	140	179		By your remittance on J. Austin, due Oct. 10. -	350	0	0	82	287
July 9	To invoice of goods ℔ Amelia, due Oct. 9. - -	752	0	0	83	624	Sept. 15	By proceeds of 17 hhds. sugar, ℔ *Hercules*, due Oct. 15. -	238	0	0	77	173
Oct. 10	To cash paid J. Harvey on your account	75	10	0	82	62	Sept. 20	By cash received from J. Johnson on your account -	260	0	0	102	265
	To insurance on produce shipped by you in the *Ann*, Nokes, £1,400, at 2 guineas per cent. £29 8 0 Policy 3 10 0	32	18	0			Dec. 31	Balance of interest carried to Dr. - -	-	-		-	1,276
Dec. 31	Postage and petty charges during this half year - -	1	15	0				Balance of account carried to your Dr. in new account -	621	8	7		
	To commission, ½ ℔ cent. on £203 paid, Do. on £260 received on your account -	4	6	0									
	To balance of interest this half year, 1,276 divided by 73, is -	17	9	7									
	£	1,879	8	7		2,460		£	1,879	8	7		2,460

Errors excepted.

London, 31st of December, 1831. Henry Barclay & Co.

We have here on the Dr. side all the payments made or responsibilities incurred for the correspondents in question, and on the Cr. side the different receipts on their account. The interest for the half year, the commission on receipts and payments, the postage and petty charges, being then added, the account may be closed and the balance carried to next year. Copies of accounts current ought to be sent off as soon as possible after the day to which they are brought down; and with that view they ought to be written out from the Ledger before the close of the year or half year, particularly as the entries for interest and commission can be made only after they are written out. The whole ought then to be copied into the account current book.

But in some counting-houses the account current book, instead of being copied from the Ledger and Journal, is posted, like the latter, from the bill book, the cash book, the invoice book, and the account of sales book. It is then considered a check on the Journal and Ledger; and from the comparative ease with which it is posted, may be

completed and made use of before the latter are fully brought up. This is certainly an advantage in houses where, from pressure on the book-keeper, the Journal and Ledger are in arrear, but such ought never to be the case for any length of time; while as to the former point — that of forming a check on the Journal and Ledger — the fact is, that these books, from the mode in which they are kept, are much more likely to be correct than the account current book.

Printed Works on Book-keeping. — To the publications of old date by teachers have succeeded, in the present age, several treatises on book-keeping by accountants. Some of these are of very limited use, being directed more to recommend a favourite practice of the author in some particular branch of book-keeping, than to convey a comprehensive view of the system. The only works on the subject entitled to that character are two: one by the late Benjamin Booth, published above thirty years ago; the other by Mr. Jones, an accountant in London, printed so lately as the year 1831. Booth was a man of ability, who had experience both as a merchant and a book-keeper, having passed one part of his life in London, the other in New York. The reader of his work finds a great deal of information in short compass, without being perplexed either by superfluous detail or by fanciful theory.*

The form of Mr. Booth's Journal and Ledger is similar to what we have given in the preceding pages, and to the practice of our merchants for more than a century: it was by much the best work on book-keeping, until Mr. Jones devised several improvements calculated to lessen the risk of error in both Journal and Ledger. One of these improvements is the use of two columns for figures in each page of the Journal, one for the Drs., the other for the Crs.: by inserting each sum twice, the book-keeper obtains the means of proving the Journal additions page by page. The posting from the Journal to the Ledger is also simplified and rendered less subject to error by the use of these columns. In regard to the great task of balancing the Ledger, Mr. Jones's plan is to do it quarter by quarter, making use of a separate book, called a balance book, in which are inserted the totals on each side of the Ledger accounts at the end of three months. By these means, the agreement of the general balance is made a matter of certainty after completing the additions. Other parts of Mr. Jones's book, viz. his *formulæ* for books on the single entry plan, and for the accounts of bankers, contain suggestions of evident utility. His volume consists of two parts: the printed part (120 pp.) containing the treatise, with directions; and the lithographed part (140 pp.) giving copious examples in two sets of books, one kept by single, the other by double entry. If, on a reimpression, the author were to divide the work, and to sell the single entry part separately from the double entry, the price of each might be moderate, and a great service would be rendered to the mercantile public.

BOOTS AND SHOES, the external covering for the legs and feet, too well known to require any description. — (For an account of the value of the boots and shoes annually produced in Great Britain, see LEATHER.)

BORAX, OR TINCAL (Arab. *Buruk*; Pers. *Tunkar*), one of the salts of soda. This salt is obtained in a crystallised state from the bottom of certain lakes in Thibet. It is found dissolved in many springs in Persia, and may be procured of a superior quality in China. It is also said to be found in Saxony and South America; but it is more abundant in Thibet than any where else. When dug up it is in an impure state, being enveloped in a kind of fatty matter. It is then denominated tincal; and it is not till it has been purified in Europe that it takes the name of borax. The process followed in its purification was for a long time known only to the Venetians and Hollanders. Borax is white, transparent, rather greasy in its fracture, its taste is styptic, and it converts syrup of violets to a green. It readily dissolves in hot water, and swells and bubbles in the fire. It is of great use as a flux for metals. — (*Thomson's Chemistry, Ure's Dictionary, &c.*)

The borax entered for home consumption amounted, at an average of the 3 years ending with 1831, to 151,569 lbs. a year; the total imports during the 3 years ending with 1832 having been 170,392 lbs. a year. Previously to 1832, it was subject, refined, to a duty of 56*s.*, and unrefined, to a duty of 28*s.* a cwt. In 1832, however, these duties were reduced, the former to 10*s.*, and the latter to 4*s.* a cwt. Their produce in that year amounted to 882*l.* 15*s.* 1*d.* Borax is worth, in bond, unrefined, 3*l.* 15*s.* to 4*l.*; refined, 4*l.* 10*s.* to 5*l.* a cwt.

BORDEAUX, a large and opulent commercial city of France, situated on the Garonne, about 75 miles from its mouth, in lat. 44° 50$\frac{1}{3}$′ N., long. 0° 34′ W. Population 110,000. The commerce of Bordeaux is very extensive. The Garonne is a noble river, with depth of water sufficient to enable large ships to come up to the city, laying open, in conjunction with the Dordogne and their tributary streams, a large extent of country. The commerce of Bordeaux is greatly promoted by the famous canal

* The title of the book is "A Complete System of Book-keeping, by Benjamin Booth." London, 1799, thin 4to. Printed for Grosvenor and Chater, and for the late J. Johnson, St. Paul's Churchyard.
Mr. Jones's book is entitled "The Science of Book-keeping exemplified." 4to. London, 1831. 4*l.* 4*s.*

of Languedoc, which communicates with the Mediterranean. By its means Bordeaux is enabled to furnish the south of France with colonial products at nearly as cheap a rate as Marseilles. Wines, brandies, and fruits are the staple articles of export; but the merchants apply themselves more particularly to the wine trade. Most part of their other business is confined to dealing upon commission; but this they conduct almost invariably on their own account. The reason they assign for this is, that the difficulties attending the purchase, racking, fining, and proper care of wines, so as to render them fit for exportation, are so very great, as to make it almost impossible to conduct the business on any thing like the ordinary terms so as to satisfy their employers. Colonial products, cotton, &c. form the principal articles of importation.

Money is the same at Bordeaux as in other parts of France. All accounts are kept in francs, the par of exchange being 25 fr. 20 cent. the pound sterling. — (See EXCHANGE.)

Weights and Measures. — With the exception of wines and brandies, the new or decimal system is of general application in Bordeaux, both in wholesale and retail operations. — (See WEIGHTS AND MEASURES.)

Wine is still sold by the tun of 4 hogsheads. The hogshead contains 30 veltes.

Brandy by the 50 veltes.

Spirits of wine by the velte.

The *velte* is an old measure of which 50 are equal to 3·8 hectolitres.

Oil is sold by weight (per 50 kilog.) 50 — 81¾ imperial gallons.

Entrance to the River.—This lies between Point de la Coubre on the north, and Point de Grave on the south, bearing from each other nearly S.E. and N.W., distant about 4 leagues. There are lights on both these points, but neither of them is elevated to any great height above the level of the sea. The middle part of the entrance to the river is encumbered with extensive sand banks and rocks. On one of the latter, in lat. 45° 35½′ N., long. 1° 10′ W., stands the Tour de Cordouan, one of the most celebrated light-houses in Europe. It was erected in 1610; but has been materially improved since. It is 206 feet high. The light, which is revolving, exhibits in succession a brilliant light, a feeble light, and an eclipse, the changes following each other every half minute. It may be distinguished at the distance of 8 or 9 leagues. The Point de la Coubre is 2⅔ leagues N. ¼ W., and the Point de Grave 1⅓ league S.E. by E. ½ E., from the Tour de Cordouan. There are two main channels for entering the river,—the Passe du Nord, and the Passe de Grave. The former lies between the north side of the river and the banks in the middle, about 1¼ mile south from the Point de la Coubre; the water, where shallowest, being about 4⅓ fathoms. The course hence is nearly S.E. ½ E. The other principal passage lies between the Tour de Cordouan and the Point de Grave, nearly in a N.N.E. and S.S.W. direction. In some places it has not more than 13 feet water; and is in all respects very inferior to the other passage, which is always to be preferred, especially with a large ship. The tides, both ebb and flood, set through the channels with great rapidity, so that a good deal of caution is required on making the river; but having once entered, there is no further danger. Spring tides rise from 14 to 15 feet, and neaps from 7 to 8; but they depend a good deal on the direction of the wind. All vessels, except French coasters under 80 tons burden, and small craft from the north of Spain, entering the Garonne, are obliged to take a pilot on board as soon as one offers himself. In summer, pilots are not unfrequently met with 30 or 40 miles west of the Tour de Cordouan; but in winter they seldom venture far beyond the banks, and sometimes cannot proceed even thus far.— (See *Laurie's Plan of the Bay of Biscay*, with the *Sailing Directions*, &c.)

Shipping. — In 1831, the arrivals at Bordeaux were —

	Ships.	Tons.
French from French colonies - -	103	24,722
— foreign countries - -	146	27,226
— fishery - - -	234	9,165
— coasting trade - -	2,341	108,370
Foreign ships from foreign countries -	114	16,453
Total -	2,938	185,936

— (*Administration des Douanes*, p. 342.) It is stated in the *Resumé Annuel*, published at Bordeaux, that of the 114 foreign ships entering the port in 1831, 50 were English. In 1832, there were 95 arrivals from England; and there was also a considerable increase in the arrivals from the north. The entire produce of the customs duties at Bordeaux in 1831, was 10,415,682 francs.

Port Charges. — Account of Port Charges, Brokerage, and other public Disbursements, payable in Bordeaux on account of a French or English Vessel of 300 Tons Burden, from a Port of England to Bordeaux, or from Bordeaux to a Port of England, or from or to any other British Possession in Europe.

Nature of Charges.	On a Fr. or Brit. Vessel.		On a Foreign Vessel.	
	In French Money.	In Sterling Money.	In French Money.	In Sterling Money.
	Fr. c.	*L. s. d.*	*Fr. c.*	*L. s. d.*
Report and pilotage from sea to Bordeaux, for a vessel drawing 14 French feet water (15 ft. 3·9 in. British) - - -	218 93	8 15 2	247 50	9 18 0
Lazaretto dues - - - - - - -	61 0	2 18 10	61 0	2 18 10
Moving vessel up and mooring her - - - -	10 0	0 8 0	10 0	0 8 0
Entering vessel at Custom-house, and brokerage inwards - -	100 0	4 0 0	100 0	4 0 0
Advertisements for freight and passengers, 6 fr. (4*s.* 10*d.*) to each newspaper.				
Tonnage money and navigation dues on 300 tons - - -	495 0	19 16 0	1,239 0	49 11 2
Visiting officers, clearances, harbour-master, &c. - - -	14 75	0 11 10	14 75	0 11 10
Manifest and freight list - - - - -	15 0	0 12 0	15 0	0 12 0
Ballast taken in or out, 1 fr. 25 c. per ton (1*s.*).				
Consul's bill. Usual fees (English vessels), 17 fr. 25 c. (15*s.*).				
Pilotage from Bordeaux to sea - - - -	220 0	8 16 0	245 34	9 16 3
Broker's commission outwards, care and attendance for expediting the vessel				
In ballast, 50 c. per ton (5*d.*), say 120 fr. at most (4*l.* 16*s.*) -				
Loaded per charter or on owner's account, 1 fr. (10*d.*) per ton - } average	300 0	12 0 0	300 0	12 0 0
Loaded in freight, 1 fr. 50 c. (1*s.* 3*d.*) per ton - -				
	1,434 66	57 7 10	2,232 59	89 6 1

N. B. — No regard paid to the nature of the cargo, as all goods are importable either for consumption or exportation, which does not expose vessels to pay more or less charges.

British vessels are on a perfect equality with French vessels when they come from British ports in Europe, otherwise they pay pilotage and tonnage dues like all other foreign vessels, as stated in the foreign column.

Imports. — The following is a note of the leading articles imported, by the ships not of Europe, in 1827 and 1828, since which they have not materially varied. They are taken from the ship brokers' reports, no official account being published by the Customs.

	1827.	1828.	
Sugar	16,094	22,748	hogsheads
	5,073	4,783	boxes
	312	346	tierces
	1,540	1,608	casks
	5,717	39,317	sacks
Coffee	2,273	1,949	hogsheads
	4,800	3,490	casks
	736	663	tierces
	38,661	27,540	sacks or bales
Cocoa	130	51	hogsheads
	1,202	525	casks
	34,424	12,229	sacks
Pimento	1,996	342	bales
Pepper	25,498	21,698	do., sacks, and packages
Cinnamon	149	0	cases and serons
	2,635	2,374	bundles 3 to 5 lbs.
Cloves	543	323	casks
	2,997	227	bales
Do. bruised	614	434	do.
Vanilla	52	45	chests
Indigo	4,144	5,693	do.
	1,143	1,568	serons
Lac dye	0	210	chests
Campeachy and other dye woods	118	152	parcels, quantities unknown
Cochineal	1,243	2,926	serons
Annotto	680	666	casks
Gums (different kinds)	9,423	15,151	do., bales, and sacks
Quercitron	340	116	casks
Quino	4,793	250	serons
Bablap	512	208	bales
Jalap	252	717	serons
Sarsaparilla	290	230	do. and bales
Saltpetre	9,467	8,713	sacks
Saffron	0	110	bales
Tea	670	99	chests
Rice	2,520	4,306	casks
White and yellow wax	460	680	do., sacks, &c.
Curcuma	1,130	2,034	sacks
Ivory	28	70	teeth, &c.
Mother of pearl	602	0	canisters
Cotton	9,429	7,068	bales and serons
Raw silk	46	0	cases and bales
Wool, Cashmere	6	0	bales
Do. Peru	3	616	do.
Tufia (new rum)	1,031	460	puncheons
Guinea blue cloth	122	490	bales
American hides	47,116	15,738	single
	109	0	bales
Ox horns	10,000	21,700	
Chinchilla	216	0	dozens
Raw skins	55	80	bales
Tobacco	4,594	4,616	hogsheads and bales
Cigars	170,000	80,000	
	466	685	boxes
Rattans	1,604	10,370	packets
Quicksilver	2,739	1,990	bottles
Tin, Peru and Banca	9,759	804	bars
Lead	0	11,583	saloners
Copper	4,400	3,240	do. or bars
Platina	5	10	packages
Gold	735	29	ingots
	8,250	2,517	doubloons
Silver	105	51	chests
	25	40	ingots
	23	11	boxes or sacks
	1,559,569	3,784,231	dollars

In addition to the articles above specified, there were also received for re-exportation considerable quantities of bar iron, utensils, and tools from England, Spain, and Sweden; zinc from Germany; and linens from England, Holland, and Germany: for consumption, lead, tin plates, coal (as ballast), arsenic, litharge, minium, &c. from England; lead, steel, olive oil, liquorice, paste, saffron, and saffrarum from Spain; steel from Germany; olive oil from Italy; fish, glue, and tallow from Russia; timber from Baltic ports; cheese, stock-fish, &c. from Holland.

Exports. — It is impossible to procure even approximate information regarding the *quantities* of the several articles of exportation. No reports are published by the Customs, nor do they allow extracts of the entries outwards to be taken.

The following is a list of the species of articles exported from Bordeaux to the different parts of the world: —

To Martinique and Guadaloupe. — Provisions, flour, wine, brandy, and a small quantity of manufactured goods.

To Bourbon. — Wines, provisions, cattle, furniture, coarse and fine hardwares, perfumery, silk, cotton and linen stuffs, stationery, fashionable articles, &c.

To the United States. — Wines, brandy, almonds, prunes, verdigris, and a trifling quantity of manufactured goods.

To Spanish America, Cuba, &c. — Wines, brandy, silks, cloths, stationery, fashions, jewellery, perfumery, saddlery, &c.

To the South Seas. — Wines, brandy, liqueurs, and all sorts of manufactured articles.

To the East Indies and China. — Wines, brandy, furniture, silver, &c.

To England. — Wines, brandy, liqueurs, fruits, tartar, cream of tartar, plums, chesnuts, walnuts, loaf-sugar to Guernsey and Jersey, clover seed, annotto, corn, flour, skins raw and dressed, cork wood and corks, vinegar, turpentine, resins, &c.

To the North of Europe. — Wines, brandy, spirits of wine, tartar, cream of tartar, colonial produce, loaf-sugar, molasses, &c.

Wine — This forms the great article of export from Bordeaux. The estimated produce of the department of the Gironde in wines of all kinds, and one year with another, is from 220,000 to 250,000 tuns; the disposal of which is, approximately, as follows: —

Consumed in the department	about	50,000 tuns.
Expedited to the different parts of France		125,000 —
Converted into brandy		25,000 —
Exported to foreign countries		50,000 —
		250,000 tuns.

The exports to foreign countries are as follow: —

To England	1,500 to 2,000 tuns.
Holland	12,000 - 15,000 —
The north of Europe	27,000 - 34,000 —
America and India	1,000 - 1,200 —
	41,500 to 52,200 tuns.

The red wines are divided into three great classes, each of which is subdivided into several sorts.

Class 1. embraces the Medoc wines,
2. — Grave, and St. Emilion,
3. — common, or cargo wines.

The *first class* is composed of the "grands crus," the "crus bourgeois," and the "crus ordinaires."

The "grands crus" are further distinguished as *firsts*, *seconds*, and *thirds*.

The *firsts* are the wines of Château Margaux, Lafitte, Latour, and Haut-Brion. The latter is properly a *Grave* wine, but it is always classed amongst the first Medocs.

The *seconds* are the wines of Rauzan, Leoville, Larose, Mouton, Gerse, &c.

The *thirds*, wines which are produced by the vineyards touching those above named, and which differ little in quality from them

The quantity of "grands crus" wine of the above description does not exceed 3,000 tuns, and sells at from 1,600 fr. to 3,500 fr. per tun *on the lees*.

The "crus bourgeois" consists of the superior Margaux, St. Julien, Pauillac, St. Estephe, &c.: quantity estimated about 2,000 tuns, and prices on the lees 800 fr. to 1,800 fr. per tun.

The "crus ordinaires," sell at 300 fr. to 700 fr. according to the year and the quality. Quantity, 25,000 to 35,000 tuns.

The whole produce of *Medoc* is therefore about 40,000 tuns.

The "grands crus" and "crus bourgeois" require 4 years' care and preparation, before delivery for use or for exportation; and this augments their price from 30 to 35 per cent.

The *second class* is composed of the red wines of *Grave* and *St. Emilion*, which are in greater quantity, and amongst them some of a very superior quality, that are generally bought for mixing with Medoc. The first quality of these wines sells from 800 fr. to 1,800 fr. per tun. The second qualities — Queyries, Montferrand, Bassans, &c. — 300 fr. to 600 fr.

The *third class* consists of the common or cargo wines, the greater part of which is consumed in the country, or converted into brandy. The portion exported is sent off the year of its growth. Prices from 160 fr to 250 fr. per tun.

The white wines of the first "crus," such as Haut-Barsac, Preignac, Beaumes, Sauterne, &c., are only fit for use at the end of 4 or 6 years, and for exportation at the end of 1 or 2 years more. Prices on the lees vary from 800 fr. to 1,500 fr. per tun.

The "grand crus," of white *Grave*, St. Briés, Carbonieux, Dulamon, &c., sell, in good years, from 500 fr. to 800 fr.

Inferior white wines 130 fr. to 400 fr. per tun.

The expenses of all kinds to the wine-grower of Medoc, for the cultivation, gathering, and making his wine, and the cask, are estimated to amount, in the most favourable years, to 50 fr. per hogshead, or 200 fr. per tun.

The merchants in general purchase up the finest *crus* as soon as sufficiently advanced to judge of their character; or more frequently they are bought up for a series of years, whether good or bad. They are transported to their cellars or "chays," in Bordeaux, so situated and protected by surrounding houses, as to preserve a tolerably equable temperature throughout the year; and in these they ripen, and undergo all the different processes of fining, racking, mixing, &c. considered necessary to adapt them to the different tastes of the foreign consumers.

It is pretty generally the practice to adapt the wines for the English market by a plentiful dose of the strong, full-bodied, and high-flavoured wines of the Rhone; such as Hermitage, Côte Rotie, and Croze — especially the first, by which means they are hardly cognisable by the Medoc flavour. Perhaps the principal reason for keeping these wines so long before they are used, is to give them time to acquire a homogeneous flavour, destroyed by the mixture of several different qualities. The wines shipped under the titles of Château Margaux, Lafitte, and Latour, are also mixed with the wines of the surrounding vineyards, which, from the nature of the soil, and proximity, cannot be greatly different. Other good wines are also said to enter largely into the composition of these celebrated *crus*; and those of a superior year are employed to bring up the quality of one or two bad years, so that it is easy to conceive, that the famous wines of 1811 and of the years 1815, 1819, and 1825, are not speedily exhausted. Some houses pretend to keep their wines pure; but the practice of mixing is, at any rate, very general.

The purchase of the wines, whether from the grower or merchant, is always effected through a broker. There are a few of them who have acquired a reputation for accuracy in dissecting the different flavours, and in tracing the results of the wines by certain measures of training, or treatment.

England takes off nearly half the highest priced wines, and very little of any other quality. Except in Bordeaux itself, there is but a very moderate portion of the superior Medoc consumed in France. The capital even demands only second, third, and fourth rate wines.

The Dutch, who are large consumers of Bordeaux wine, go more economically to work. They send vessels to the river in the wine season, with skilful supercargoes, who go amongst the growers, and purchase the wines themselves, cheaper even than a broker would do. They live on board the ship, take their own time to select, and wait often for months before their cargo is completed; but they attain their object, getting a supply of good sound wine, and at as low a rate, with all charges of shipping included, as the wine merchants can deliver it into their stores in Bordeaux. They never purchase old wine; they take only that newly made, which, being without the support of stronger bodied wines, must be consumed in the course of 2 or 3 years. They follow the same system at Bayonne, where 2 or 3 ships go annually for the white wines of Jurançon, &c.

The cargo wines are so manufactured that it is hardly possible to know of what they are composed. They are put free on board for 2*l*. per hogshead and upwards, according as they are demanded. They are such as will not bear exposure in a glass when shipping: the tasters have a small flat silver cup expressly for them. These wines are principally shipped to America and India, and some at a higher price to the north of Europe.

The principal wine merchants have agents in London, whose business is more particularly to introduce their wines to family use; and it is to that end they pay them from 300*l*. to 800*l*. for travelling expenses and entertainments, besides allowing 3 per cent. or more, on the amount of sales. They generally look out for individuals for their agents of good address, and some connection amongst the upper classes.

Brandies, and Spirits of Wine.—The quantity distilled in the neighbourhood of Bordeaux is estimated at about 18,000 pieces, of 50 veltes each.

Ditto, in the Armagnac	-	20,000	ditto
Ditto, in the Marmauduis	-	8,000	ditto
		46,000	pieces, ordinary proof.

Of this quantity, France takes off about 23,000 pieces for consumption; England, 2,500; United States, 10,000; India, 2,500; north of Europe, 5,000; in all, 43,000 pieces.

Languedoc produces annually about 40,000 pieces, of 80 veltes each, the greater part of which comes to Bordeaux to be forwarded to the different ports of the north of France, or to foreign countries.

France consumes about two thirds of the above quantity; the remaining one third goes to the north of Europe.

The prices of brandy are from 130 fr. to 150 fr. per 50 veltes, ordinary proof; spirits of wine, from 4 fr. to 5 fr. per velte.

It is at the port of Formay, on the Charente, that the greatest shipments of brandy take place to England. Cognac, from which the brandy takes its name, and where there are large distilleries, is a few leagues up the river. The quantity exported is far greater than what is made at Cognac — the two leading distillers there (Martel, and Henessey) buying great quantities from the small cultivators. The greater part of the wines made about Angoulême, and thence down toward the sea, are of inferior quality,

and fit only for making brandy; and so little do the prices vary, that the proprietors look upon it nearly in the same light as gold. When they augment their capital by savings or profits, it is employed in keeping a larger stock of brandy, which has the further advantage of paying the interest of their capital by its improved value from age. England is said to receive upwards of 6,000 pieces annually from Charente.

At Bordeaux, as at Paris and Marseilles, there is a constant gambling business in time bargains of spirits of wine. It is in the form of spirits of wine that nearly all the brandy consumed in France is expedited; as in this form there is a great saving in carriage. — (For an official account of the exports of wine and brandy from France, see WINE.)

The fruits exported consist almost entirely of prunes and almonds. The latter come principally from Languedoc.

The policy of the Spanish government toward her American colonies during the last 10 years has been the cause of a great many very wealthy Spaniards settling in Bordeaux; and their number has been still further increased by the Spaniards expelled from Mexico, who do not choose to employ their fortunes in their native country, or find greater facilities for employing them in Bordeaux. These are in possession of the greater part of the Spanish American trade of this port, and are viewed with a very jealous eye by the old merchants. They have also contributed greatly to beautify the city, by employing their wealth in building, which they have done to a considerable extent. They have also reduced the rate of interest, and contributed to the facilities of discounting bills: the Spanish houses generally discount long bills at 1½ or 2 per cent. lower than the Bank.

Bordeaux possesses some iron founderies, cotton factories, sugar refineries, glass works, &c., but labour and living are too high to admit of its becoming a considerable manufacturing city.

Banking Establishments. — There is only one banking company in Bordeaux — the "Bordeaux Bank." It has a capital of 3,000,000 fr., in shares of 1,000 fr. each. It issues notes for 1,000 and 500 fr. (40*l.* and 20*l.*) payable in specie on demand. Its affairs are managed by a Board of directors, named by the 50 principal shareholders. This Board fixes the rate of discount, and the number of names that ought to guarantee each bill; it being left to the discount committee to judge of the responsibility of the signatures on the bills presented. At present the bank discounts bills on Bordeaux, having 3 months to run, and guaranteed by 3 signatures, at 5 per cent., and those on Paris at 4½ per cent.

When bills are presented, not having the required number of names, or these deemed suspicious, they take, in guarantee, public stock bonds or other effects — advancing to the extent of 9-10ths of their current value.

The bank advances ¾ths of the value of gold and silver in ingots, or in foreign money, deposited with them, at the rate of 5 per cent. per annum. It also accepts in deposit, diamonds, plate, and every kind of valuable property, engaging to redeliver the same in the state received, for ¼ per cent. per quarter, or 1 per cent. per annum.

Those who have accounts current with the bank may have all their payments made, and money received, by the bank, without fee. It allows no interest on balances, and never makes advances either on *personal security* or on mortgage.

On the 31st of December, 1832, the bank notes in circulation amounted to 12,650,000 fr. (506,000*l.*)

The affairs of the bank are subject to the inspection of the Prefect, to whom half yearly reports of its situation are made. These are printed entire, and distributed to the 50 principal shareholders; an abstract being, at the same time, published in the Bordeaux journals.

After the revolution of July, 1830, there was a severe run on the bank; and owing to the difficulty of procuring gold from Paris, the directors were obliged to limit their deliveries in specie to 500 fr. (20*l.*) in a single payment; but notwithstanding this circumstance, no notes were protested; and the moment supplies of gold could be obtained from Paris, the operations of the bank resumed their usual course; and her affairs have been, during the last 3 years, uncommonly prosperous. Exclusive of the dividend of 5 per cent., the bank accumulated, in 1831, a surplus profit of 72,000 fr.; and, in 1832, her surplus profits were 250,000 fr., or 10,000*l.*

Brokers. — No one is allowed to act as a mercantile broker in France, who is not 25 years of age, and who has not served 4 years in a commercial house, or with a broker, or a notary public. They are nominated by the king, after their qualifications have been ascertained by the Chamber of Commerce. All brokers must deposit the sum of 8,000 fr. in the treasury, as a guarantee for their conduct, for which they are allowed interest at the rate of 4 per cent. At present there are in Bordeaux 21 ship brokers, 24 merchandise do., 20 wine and spirit do., 7 insurance do., and 20 money and exchange do.: the latter form a separate class.

All foreigners are obliged to employ ship brokers to transact their business at the Custom-house; and although masters and owners of French vessels might sometimes dispense with their services, they never do so, finding it to be, in all cases, most advantageous to use their intervention. All duties outward on vessels and cargoes are paid by the ship brokers, who invariably clear out all vessels, French as well as foreign.

Rates of Commission. — 1. Ship brokers: — Vessel in ballast, 50 cents (5*d.*) per ton; vessel loaded per charter or on owners' account, 1 fr. (10*d.*) per ton. 2. Merchandise brokers: — ½ per cent. on colonial produce, and other goods. 3. Wine and spirit brokers: — 2 per cent. on wine, &c. 4. Insurance brokers: — ⅛ per cent. 5. Money brokers: — ⅛ per cent. on Paris and foreign paper; ¼ per cent. on Bordeaux do. 6. Merchants: — 2 per cent. on all sorts of operations between natives; 2½ per cent. on all sorts of operations between strangers; 5 per cent. on litigious affairs; 1 per cent. on goods *in transitu*, when the constituent is present; ½ per cent. on banking affairs.

Insurance of ships, houses, and lives is effected at Bordeaux. The first is carried on partly by individuals, and partly by companies; the last two by companies only. The partners in these associations are generally liable only to the amount of the shares they respectively hold.

For statements as to the *Warehousing System*, *Smuggling*, &c., the reader is referred to the article HAVRE.

Quarantine is performed at Trompeloup, where a spacious lazaretto has been constructed. Bordeaux is a favourable place for repairing and careening ships, and for obtaining supplies of all sorts of stores.

The *exchange* or *money brokers* of Bordeaux follow a kind of business pretty similar to the London private bankers. They receive, negotiate, and pay bills and orders, of such houses as have accounts open with them, charging and allowing an interest on balances, which varies from 3½ to 4½ per cent. according to circumstances. They charge ¼ per cent. for negotiating bills, and ⅛ per cent. on all the payments they make.

There are, besides, numerous capitalists who employ their spare funds in discounting bills. They prefer bills at long dates, and take from 3 to 6 per cent. discount, according to the confidence they have in the paper presented.

There are not wanting individuals who guarantee, with their names, every sort of paper presented taking from 5 to 60 per cent. for the risk.

Customary Mode of Payment, and Length of Credit. — Colonial produce, spices, dye stuffs, and metals are usually sold for cash, with 3 per cent. discount. Corn, flour, brandy, and several other articles, are sold for nett cash, without discount.

Wines are generally bought of the cultivators at 12 and 15 months' credit, or 6 per cent. discount. When they change hands amongst the merchants, the practice is to sell for cash, allowing 3 or 5 per cent. discount.

The usage is generally established in Bordeaux, to consider all paper having less than 30 days to run *as cash*; and with such all payments are made, where there is not an express stipulation to be paid in coin.

Tares. — The tares allowed in Bordeaux are as follows: —

At Custom-house.	*In Commerce.*	*At Custom house.*	*In Commerce.*
Cotton in bales, 6 per cent.	Large square bales, 6 per cent. Smaller do., 8 per cent. Round do., 4 per cent.	Indigo, in chests, real tare.	In chests, real tare. In serons weighing from 45 to 55 kil. (101 to 123 lbs.), 7 kil. Do. 55½ to 65 kil. (102 to 146 lbs.), 8 kil. Do. 65½ to 75 kil. (103 to 168 lbs.), 9 kil. Do. 75½ to 95 kil. (169 to 213 lbs.), 10 kil. Do. 95½ to 107 kil. (214 to 240 lbs.), 11 kil.
Sugar in hhds., 15 per cent. Do. in cases, Havannah, &c., 13 per cent. Do. in bales from Bourbon, Mauritius, Manilla, &c., nett.	In hhds., 17 per cent. Tret per hhd., 1 kil. (2·24 lbs.) In cases, Havannah, &c., 14 per cent. Tret per case, 1 kil. (2·24 lbs.) In bales from Bourbon, &c., real. Mauritius, Manilla, &c., 8 per cent.	Ashes, pot and pearl, 12 per cent.	Pot and pearl, 12 per cent.
Do. clayed, in hhds., white and brown, 12 per cent.	Clayed, in hhds. white, 12 per cent. Tret per hhd., 1 kil. Clayed do., brown, 13 per cent. Tret per hhd., 1 kil.	Quercitron bark, real tare.	In casks of 200 kil. and above (448 lbs.), 12 per cent. Do. from 150½ to 200 kil. (337 to 448 lbs.), 15 per cent. Do. from 120 to 130 kil. (269 to 336 lbs.), 20 per cent.
Rice, from all countries, nett.	Tare nett, or 12 per cent.		
Coffee in bags, tare nett, or 2 per cent.	In bags weighing 60 kil. (134 lbs.), 1 kil. Do. from 60½ to 75 kil. (135 to 168 lbs.), 1½ kil. Do. above 75 kil. (168 lbs.), 2 kil.	Peruvian bark, real tare.	In chests, tare nett. In serons weighing from 45 to 57½ kil. (101 to 129 lbs.), 8 kil. Do. 60 to 75 kil. (134 to 168 lbs.), 10 kil.
Cocoa in bags, tare nett, or 2 per cent.	In bags weighing 60 kil. (134 lbs.), 1 kil. Do. 60½ kil. to 75 kil. (135 to 168 lbs.), 1½ kil. Do. above 75 kil. (168 lbs.), 2 kil.	Cinnamon in chests, 12 per cent. Do. in bales, 2 per cent. Cloves, real tare.	Ceylon, in serons, or single bales, 3 kil. Do. in double bales, 6 kil. China, in chests, real tare. In casks, real tare. In bales weighing from 30½ to 50 kil. (68 to 112 lbs.), real tare, or 2 kil.
Pepper in bags, 2 per cent.	In bags weighing 60 kil. (134 lbs.), 1 kil. Do. from 60½ to 75 kil. (135 to 168 lbs.,) 1½ kil. In bales, 130 to 150 kil. (291 to 336 lbs.), 2 kil. In serons, 50 to 60 kil. (112 to 134 lbs.), 2 kil.	Cochineal, real tare. Gum in casks, do. Mace and nutmegs, do. Annotto, none. Sarsaparilla, real tare, or 2 per cent.	In bags, single, 1 kil. Real tare. Real tare. Real tare. In casks, 4 per cent. for leaves, and 6 per cent. tare. In bales, 5 kil.

*** The instructive details with respect to the trade of Bordeaux given above, so very superior to what are to be found in any other publication, have been principally derived from a communication of Mr. Buchanan, of the house of James Morrison and Co., who acquired his information on the spot; but some particulars have been learned from the carefully drawn-up answers made by the Consul to the *Circular Queries.*

Operation of the French commercial System on the Trade of Bordeaux, &c. — The trade of this great city has suffered severely from the short-sighted, anti-social policy of the French government. This policy was first broadly laid down, and systematically acted upon, by Napoleon; and we believe it would not be difficult to show that the privations it entailed on the people of the Continent powerfully contributed to accelerate his downfall. But those by whom he has been succeeded, have not hitherto seen the expediency of returning to a sounder system; on the contrary, they have carried, in some respects at least, the "continental system" to an extent not contemplated by Napoleon. Notwithstanding the vast importance to a country like France, of supplies of iron and hardware at a cheap rate, that which is produced by foreigners is excluded, though it might be obtained for half the price of that which is manufactured at home. A similar line of policy has been followed as to cotton yarn, earthenware, &c. And in order to force the manufacture of sugar from the beet-root, oppressive duties have been laid, not only on foreign sugar, but even on that imported from the French colonies. The operation of this system on the commerce and industry of the country has been most mischievous. By forcing France to raise, at home, articles for the production of which she has no natural or acquired capabilities, the exportation, and consequently the growth, of those articles in the production of which she is superior to every other country, has been very greatly narrowed. All commerce being bottomed on a fair principle of reciprocity, a country that refuses to import must cease to export. By excluding foreign produce — by refusing to admit the sugar of Brazil, the cottons and hardware of England, the iron of Sweden, the linens of Germany, and the cattle of Switzerland and Wirtemberg — France has done all that was in her power to drive the merchants of those countries from her markets. They are not less anxious than formerly to obtain her wines, brandies, and silks; inasmuch, however, as commerce is merely an exchange of products, and as France will accept very few of the products belonging to others, they cannot, how anxious soever, maintain that extensive and mutually beneficial intercourse with her they would otherwise carry on: they sell little to her, and their purchases are, of course, proportionally diminished.

This, indeed, is in all cases the necessary and inevitable effect of the prohibitive system. It never fails to lessen exportation to the same extent that it lessens importation; so that, when least injurious, it merely substitutes one sort of industry for another — the production of the article that had been obtained from the foreigner, in the place of the production of that which had been sent to him as an equivalent. — (See COMMERCE.)

France is not only extremely well situated for carrying on an extensive intercourse with foreign countries, but she is largely supplied with several productions, which, were she to adopt a liberal commercial system, would meet with a ready and advantageous sale abroad, and enable her to furnish equivalents for the largest amount of imports. The superiority enjoyed by Amboyna in the production of cloves is not more decided than that enjoyed by France in the production of wine. Her claret, burgundy, champagne, and brandy, are unrivalled; and furnish, of themselves, the materials of a vast commerce. Indeed, the production of wine is, next to the ordinary business of agri-

culture, by far the most extensive and valuable branch of industry in France. It is estimated by the landholders and merchants of the department of the Gironde, in the admirable *Pétition et Mémoire à l'Appui*, presented by them to the Chamber of Deputies in 1828, that the quantity of wine annually produced in France amounts, at an average, to about 40,000,000 hectolitres, or 1,060,000,000 gallons; that its value is not less than from 800,000,000 to 1,000,000,000 francs, or from 32,000,000*l.* to 40,000,000*l.* sterling; and that upwards of *three millions* of individuals are employed in its production. In some of the southern departments, it is of paramount importance. The population of the Gironde, exclusive of Bordeaux, amounts to 432,839 individuals, of whom no fewer than 226,000 are supposed to be directly engaged in the cultivation of the vine.

Here, then, is a branch of industry in which France has no competitor, which even now affords employment for about a tenth part of her population, and which is susceptible of indefinite extension. The value of the wines, brandies, vinegars, &c. exported from France, at an average of the 3 years ending with 1790, amounted to about 51,000,000 francs, or upwards of *two* millions sterling. The annual exports of wine from Bordeaux only, exceeded 100,000 tuns; and as the supply of wine might be increased to almost any amount, France has, in this single article, the means of carrying on the most extensive and lucrative commerce. "Le gouvernement Français," says M. Chaptal, in his work *Sur l'Industrie Française*, "doit les plus grands encouragements à la culture des vignes, soit qu'il considére ses produits relativement à la consommation intérieure, soit qu'il les envisage sous le rapport de notre commerce avec l'étranger, *dont il est en effet la base essentielle.*"

But instead of labouring to extend this great branch of industry, government has consented to sacrifice it to the interests of the iron-founders, and the planters of Martinique and Guadaloupe! We do not, indeed, imagine that they were at all aware that such would be the effect of their policy. Theirs is only one instance, among myriads that may be specified, to prove that ignorance in a ministry is quite as pernicious as bad intentions. The consideration, apparently not a very recondite one, that, notwithstanding the bounty of nature, wine was not gratuitously produced in France, and could not, therefore, be exported except for an equivalent, would seem never to have occurred to the ministers of Louis and Charles X. But those whose interests were at stake, did not fail to apprise them of the hollowness of their system of policy. In 1822, when the project for raising the duties on sugar, iron, linens, &c. was under discussion, the merchants of Bordeaux, Nantes, Marseilles, and other great commercial cities, and the wine-growers of the Gironde, and some other departments, presented petitions to the Chambers, in which they truly stated, that it was a contradiction and an absurdity to attempt selling to the foreigner, without, at the same time, buying from him; and expressed their conviction, that the imposition of the duties in question would be fatal to the commerce of France, and would consequently inflict a very serious injury on the wine-growers and silk manufacturers. These representations did not, however, meet with a very courteous reception. They were stigmatised as the work of ignorant and interested persons. The Chambers approved the policy of ministers; and in their ardour to extend and perfect it, did not hesitate deeply to injure branches of industry on which several millions of persons are dependent, in order that a few comparatively insignificant businesses, nowise suited to France, and supporting 100,000 persons, might be bolstered up and protected!

The event has shown that the anticipations of the merchants were but too well founded. There is a discrepancy in the accounts laid before the late *Commission d'Enquéte* by government, and those given in the above-mentioned *Pétition et Mémoire à l'Appui* from the Gironde. According to the tables printed by the Commission, the export of wine from France is, at this moment, almost exactly the same as in 1789. It is, however, plain that, had there not been some powerful counteracting cause in operation, the export of wine ought to have been very greatly augmented. The United States, Russia, England, Prussia, and all those countries that have at all times been the great importers of French wines, have made prodigious advances in wealth and population since 1789; and, had the commerce with them not been subjected to injurious restrictions, there is every reason to think that their imports of French wine would have been much greater now than at any former period.

But the truth is, that the accounts laid before the Commission are entitled to extremely little credit. In so far as respects the export of wine from Bordeaux, which has always been the great market for this species of produce, the statements in the *Mémoire à l'Appui* are taken from the Custom-house returns. Their accuracy may, therefore, be depended upon, and they show an extraordinary falling off. Previously to the Revolution, the exports amounted to 100,000 tuns a year—(*Peuchet, Statistique Elémentaire*, p. 138.); but since 1820, they have only been as follows:—

	Tuns.		Tuns.		Tuns.		Tuns.
1820,	61,110.	1822,	39,955.	1824,	39,625.	1826,	48,464.
1821,	63,244.	1823,	51,529.	1825,	46,314.	1827,	54,492.

It is also stated (*Mémoire*, p. 33.), that a large proportion of these exports has been made on speculation; and that the markets of Russia, the Netherlands, Hamburgh, &c. are glutted with French wines, for which there is no demand. "Dans ce moment," (25th April, 1828,) it is said in the *Mémoire*, "il existe en consignation, à Hambourg, 12,000 à 15,000 barriques de vin pour compte des propriétaires du département de la Gironde, qui seront trop heureux s'ils ne perdent que leur capital."

This extraordinary decline in the foreign demand has been accompanied by a corresponding glut of the home market, a heavy fall of prices, and the ruin of a great number of merchants and agriculturists. It is estimated, that there were, in April, 1828, no fewer than 600,000 tons of wine in the Gironde, for which no outlet could be found; and the glut, in the other departments, is said to have been proportionally great. The fall in the price of wine has reacted on the vineyards, most of which have become quite unsaleable; and a total stop has been put to every sort of improvement. Nor have matters been in the least amended during the current year: on the contrary, they seem to be gradually getting worse. Such is the poverty of the proprietors, that wine is now frequently seized, and sold by the revenue officers in payment of arrears of taxes; and it appears, from some late statements in the *Mémorial Bordelais* (a newspaper published at Bordeaux), that the wine so sold has not recently fetched more, at an average, than about two thirds of the cost of its production!

The following *official* account of the exports of wine from the Gironde, during the 3 years ending with 1831, sets the extraordinary decline of this important trade in the most striking point of view: —

Year.	Litres.	Imp. Gal.	Year.	Litres.	Imp. Gal.	Year.	Litres.	Imp. Gal.
1829	43,852,064	= 9,643,053	1830	28,551,863	= 6,281,412	1831	24,409,604	= 5,370,110

The exports of brandy have declined in about the same degree; and the foreign shipping frequenting the port has been diminished nearly a half.

Such are the effects that the restrictive system of policy has had on the wine trade of France, — on a branch of industry which, as we have already seen, employs *three millions* of people. It is satisfactory, however, to observe, that the landowners and merchants are fully aware of the source of the misery in which they have been involved. They know that they are not suffering from hostile or vindictive measures on the part of foreigners, but from the blind and senseless policy of their own government; that they are victims of an attempt to counteract the most obvious principles — to make France produce articles directly at home, which she might obtain from the foreigner in exchange for wine, brandy, &c. at a third or a fourth part of the expense they now cost. *They cannot export, because they are not allowed to import.* Hence they do not ask for bounties and prohibitions; on the contrary, they disclaim all such quack nostrums; and demand what can alone be useful to them, and beneficial to the country, — a free commercial system.

"Considéré en lui-même," say the landowners and merchants of the Gironde, "le système prohibitif est *la plus deplorable des erreurs.* La nature, dans sa variété infinie, a départi à chaque contrée ses attributs particuliers; elle a imprimé sur chaque sol sa véritable destination, et c'est par la diversité des produits et des besoins, qu'elle a voulu unir les hommes par un lien universel, et opérer entre eux ces rapprochements, qui ont produit le commerce et la civilisation.

"Quelle est la base du système prohibitif? Une véritable chimère, qui consiste à essayer de vendre à l'étranger sans acheter de lui.

"Quelle est donc la conséquence la plus immédiate du système prohibitif, ou, en d'autres termes, du monopole? C'est que le pays qui est placé sous son empire ne peut vendre ses produits à l'étranger. Le voilà donc refoulé dans lui-même; et à l'impossibilité de vendre ce qu'il a de trop, vient se joindre la nécessité de payer plus cher ce qui lui manque.

"Notre industrie ne demandoit, pour fructifier, ni la faveur d'un monopole, ni cette foule d'artifices et des secours dont bien d'autres ont imposé le fardeau au pays. Une sage liberté commerciale, une économie politique fondée sur la nature, en rapport avec la civilisation, en harmonie avec tous les intérêts véritables; telle étoit son seul besoin. Livrée à son essor naturel, elle se seroit étendue d'elle-même sur la France de 1814, comme sur celle de 1789; elle auroit formé la plus riche branche de son agriculture; elle auroit fait circuler, et dans son sol natal, et dans tout le sol du royaume, une sève de vie et de richesse; elle auroit encore attiré sur nos plages le commerce du monde; et la France, au lieu de s'ériger avec effort en pays manufacturier, auroit reconquis, par la force des choses, une supériorité incontestable comme pays agricole.

"Le système contraire a prevalu.

"La ruine d'un des plus importants départements de la France; la détresse des départements circonvoisins; le dépérissement général du Midi; une immense population attaquée dans ses moyens d'existence; un capital enorme compromis; la perspective de ne pouvoir prélever l'impôt sur notre sol appauvri et depouillé; un préjudice immense pour tous les départements dont nous somme tributaires; un décroissement rapide dans celles de nos consommations qui profitent au Nord; la stagnation générale du commerce, avec tous les désastres qu'elle entraine, toutes les pertes qu'elle produit, et tous les dommages ou matériels, ou politiques ou moraux, qui en sont l'inévitable suite; enfin, l'anéantissement de plus en plus irréparable de tous nos anciens rapports commerciaux; les autres peuples s'enrichissant de nos pertes et développant leur système commercial sur les débris du nôtre;

"Tels sont les fruits amers du système dont nous avons été les principales victimes."

Such is the well authenticated account, laid before the Chamber of Deputies by 12,563 landowners and merchants of the Gironde, of the *practical* operation and real effect of that very system of policy, which, extraordinary as it may seem, has been held up for imitation to the parliament of England!

The effect of this system upon the silk trade of France, the most important branch

of her *manufacturing* industry, and one in which she had long the superiority, is similar, and hardly less destructive. Her prohibitions have forced others to manufacture for themselves, so that the foreign demand for silks is rapidly diminishing. It is stated, in *Observations addressées à la Commission d'Enquête*, by the delegate of the Chamber of Commerce of Lyons, that the silk manufacture is in the worst possible state. "Ce qui doit surtout exciter," he observes, "la sollicitude du gouvernement, et le décider à entrer dans nos vues, c'est *l'état déplorable, alarmant, de la fabrique de Lyon :* les quatre années de 1824 à 1827 offrent sur les quatre années précédentes un déficit qui excéde 150 mille kilog. pour les seules expéditions d'Allemagne; l'année 1828, et l'année courante, 1829, nous donnent une progression décroissante plus effrayante encore."—(p. 11.) It is further stated, in a Report by the manufacturers of Lyons, that there were 26,000 looms employed in that city in 1824, while at present there are not more than 15,000. The competition of Switzerland and England has been chiefly instrumental in producing these effects. At Zurich, where there were only 3,000 looms employed in 1815, there were, in 1830, more than 5,000; and at Eberfeld, where there were none in 1815, there were then above 1,000. Switzerland is said to have, in all, 11,000 looms employed at this moment (1833) in the manufacture of plain broad silks.

Besides the injury done to the wine trade of France by her anti-commercial system, it has been much injured by the *octrois*, and other duties laid on wine when used for home consumption. These, however, have been modified since the accession of Louis-Philippe; and it is reasonable to suppose, that the experience that has been afforded of the ruinous effects of the prohibitive system, and the more general diffusion of correct ideas with respect to the real sources of wealth, will at no distant period cause the adoption of such changes in the commercial legislation of France, as may render it more conducive to her interest, and more in accordance with the spirit of the age. If we were hostile to France, we should wish her to continue the present system; but we disclaim being actuated by any such feelings. We are truly anxious for her prosperity, for her sake and our own; for, unless she be surrounded by Bishop Berkeley's wall of brass, whatever contributes to her prosperity must, in some degree, redound to the advantage of her neighbours.

"Were such narrow and malignant politics to meet with success," said Mr. Hume, writing in the middle of the last century, and when the prosperity of others was generally regarded with an evil eye, "we should reduce all our neighbouring nations to the same state of sloth and ignorance that prevails in Morocco and the coast of Barbary. But what would be the consequence? They could send us no commodities; they could take none from us: our domestic commerce itself would languish for want of emulation, example, and instruction; and we ourselves should soon fall into the same abject condition to which we had reduced them. I shall, therefore, venture to acknowledge, that not only as a man, but as a British subject, I pray for the flourishing commerce of Germany, Spain, Italy, and even France itself. I am, at least, certain that Great Britain, and all those nations, would flourish more, did their sovereigns and ministers adopt such enlarged and benevolent sentiments towards each other."—(*Essay on the Jealousy of Trade.*)

For a more ample exposition of the nature and effects of the French commercial system, the reader is referred to an article in the 99th Number of the *Edinburgh Review*, contributed by the author of this work. Most of the foregoing statements are taken from that article.

BOSTON, a commercial city of the United States, the capital of Massachusetts, and the largest town of New England, in lat. 42° 23′ N., long. 71° 4′ W. Population, in 1830, 62,000. The city is situated on a peninsula near the bottom of a large and deep bay, being surrounded on all sides by water, except on the south, where it is joined to the main land by the narrow isthmus called Boston Neck. But it communicates, by means of extensive wooden bridges, with Charleston on the north side of the bay, and with Dorchester on the south. Boston Bay is of great extent, and is studded with many islands. The plan, on the opposite side, will give a better idea of it than could be derived from any description.

References to Plan. — A, outer light-house, 65 feet high, having a revolving light, alternately brilliant 40 and obscured 20 seconds. B, buoy on the outward edge of the shoal, off Alderton Point. C, D, E, Great, Middle, and Outward Brewster's Islands. F, George's Island. The passage for ships, lying between this island and the rocks on the opposite side of Lovell's Island (G), being very narrow, it is, in effect, the key of the harbour; and large sums have recently been expended on its fortification. To the south of George's Island, and Hospital Island (H), is Nantasket road, where there is good anchorage. The outer harbour lies to the west of Lovell's (G) and George's (F) Islands, being separated from the inner harbour by Castle Island (M), and Governor's Island (N). On the north end of Long Island (I) is a harbour fixed light, 27 feet high. K, Deer Island, L, Spectacle Island. O, Middle Ground, dry at ¾ ebb. P, Upper and Middle Ground having, at ebb, only 5 feet water. Q, Thomson's Island. R, Dorchester peninsula. S, Noodle Island. T, Charleston. Governor's Island (N), Castle Island (M), and Noodle's Island (S), are all fortified. The course that a ship ought to steer is marked by the dotted line, leading between the light-house and Alderton Point, and between George's Island (F) and Lovell's Island (G). The soundings are laid down in fathoms at low water.

BOSTON
T
R
S
P
M
N
Q
O
L
K
H
F
G
C
D
A
B
E
Shirley Pt.
0
1
2
Nautic Miles

Shipping. — According to the official accounts laid before Congress, 15th of February, 1833, the registered, enrolled, and licensed tonnage belonging to Boston in 1831 amounted to 138,174 tons, of which 21,084 tons were employed in the coasting trade, and 17,784 in the fisheries.*

In 1831, there arrived from foreign parts 766 ships, of the burden of 126,980 tons. Of these were, American, 671 ships, tonnage 115,780; and British, 86 ships, tonnage 9,350. With the exception of Sweden, which sent 3, there was not more than 1 ship from any other country! In 1832, the foreign arrivals were 1,064 ships, tonnage not stated: of these, 842 were American, and 211 British.

The arrivals coastwise in 1832 were 3,536; of these were 62 ships, 514 brigs, 2,332 schooners, and 628 sloops.

Shipping Charges. — For an account of these, see NEW YORK.

How to enter the Port. — In coming from the Atlantic, a ship should bring the light-house to bear W. by N. to W.N.W., and run direct for it. The largest ships may pass it at within less than a cable's length. If there be no pilot on board, or the master be unacquainted with the harbour, or the wind be north-westerly, which is the most unfavourable for entering, she had better steer W. by S. for Nantasket roads, where she may anchor, and get a pilot.

Mooring, &c. — Generally speaking, there is sufficient depth of water to enable the largest ships to come up to town at all times of the tide. They usually moor alongside quays or wharfs, where they lie in perfect safety. There are in all about 60 wharfs; which, for the most part, are built on piles, with a superstructure of stone and earth. The two principal are "Long Wharf," 550 yards in length; and "Central Wharf," 413 yards long by 50 in breadth, having a range of lofty brick stores and warehouses along its whole length.

Pilotage. — No particular place is specified at which vessels must heave to for a pilot. But all vessels, with the exception of coasters under 200 tons, and American vessels laden with plaster of Paris from British America, if hailed by a pilot within about 1½ mile of the outer light, must take him on board, under a penalty of 50 dollars. If they have got within this distance before being hailed, the obligation to take a pilot on board ceases. This regulation has obviously been dictated by a wish to have the pilots constantly on the alert; it being supposed that masters not well acquainted with the bay will heave to to take one on board, though they have got within the free limits.

Table of the Rates of Pilotage on Outward and Inward bound Vessels in the Port of Boston.

Outward.				Inward.			
From Nov. 1. to May 1.		From May 1. to Nov. 2.		From Nov. 1. to May 1.		From May 1. to Nov. 1.	
Ships drwg. Water.	Dol. per Foot.	Ships drwg. Water.	Dol. per Foot.	Ships drwg. Water.	Dol. per Foot.	Ships drwg. Water.	Dol. per Foot.
7 ft.	0·90	17 ft.	1·10	7 ft.	0·75	17 ft.	1·00	7 ft.	1·45	17 ft.	1·87	7 ft.	1·10	17 ft.	1·35
8	0·90	18	1·20	8	0·75	18	1·00	8	1·45	18	2·50	8	1·10	18	1·88
9	0·90	19	1·30	9	0·75	19	1·25	9	1·45	19	2·75	9	1·10	19	1·88
10	0·95	20	1·50	10	0·80	20	1·50	10	1·56	20	3·00	10	1·20	20	1·88
11	1·00	21	2·00	11	0·85	21	1·75	11	1·72	21	4·00	11	1·25	21	2·80
12	1·05	22	2·50	12	0·90	22	2·00	12	1·77	22	4·00	12	1·30	22	3·00
13	1·10	23	2·75	13	0·95	23	2·25	13	1·77	23	4·00	13	1·35	23	3·00
14	1·10	24	2·75	14	0·95	24	2·25	14	1·87	24	4·00	14	1·35	24	3·00
15	1·10	25	2·75	15	0·95	25	2.25	15	1·87	25	4·00.	15	1·35	25	3·00
16	1 10			16	0 95			16	1·87			16	1·35		

Careening, Stores, &c. — Boston is a very favourable place for careening and repairing ships. All kinds of supplies may be had of the best quality and at moderate prices.

Customs Revenue. — The amount collected at Boston in 1831 was 5,227,592 dollars = 1,176,208*l.* 4*s.* — (For an account of the American warehousing system, see NEW YORK.)

Immigration. — The number of immigrants arriving at Boston is not great, seldom exceeding 1,600 in a year. A city ordinance directs that the masters of vessels bringing immigrants shall enter into a bond with sureties to the amount of 200 dollars for each immigrant, that he shall not become a charge upon the state for 3 years, or pay a commutation of 5 dollars on account of each individual. But this regulation does not apply to immigrants having a reasonable amount of property; the declaration of the foreign consuls as to this point is commonly acted upon.

Trade of Boston, &c. — Boston has a very extensive trade with the southern states and with foreign countries, and is also one of the principal seats of the American fisheries. She is wholly indebted to her southern neighbours, and principally to New York, Maryland, and Pennsylvania, for supplies of flour and wheat, and for large quantities of barley, maize, oatmeal, oats, &c., as well as for cotton, tobacco, staves, rice, &c. Of these, the imports of flour may amount, at an average, to about 400,000 barrels a year; all sorts of grain to about 2,000,000 bushels; cotton, 160,000 bales; staves, 3,000,000, &c. Her returns are made, partly in native raw produce, as beef, pork, lard, &c.; partly and principally in the produce of her manufacturing industry, in which Massachusetts is decidedly superior to every other state in the Union; and partly in the produce of her fisheries and foreign trade. At an average, Boston annually sends to the southern ports of the Union about 45,000 barrels of beef and pork; 165,000 barrels of mackarel, herrings, alewives, &c.; 20,000 quintals of dried and smoked fish; 3,500,000 pairs of boots and shoes; 600,000 bundles of paper; besides a very large amount of cotton and woollen manufactured goods, nails, furniture, cordage, &c.; so as to leave a large balance in her favour. Her exports of native produce to foreign countries consist principally of the same articles she sends to the southern states; but she also exports a large amount of the foreign produce she had previously imported. The imports from abroad consist principally of cotton and woollen goods; linens, canvas, &c.; hardware, silks, sugar, tea, coffee, wines and brandy, spices, hides,

* By comparing this return with that for 1828, given in the former edition of this work, there would appear to have been a considerable falling off in the interim in the amount of shipping; this however, is not really the case. For an explanation of the discrepancy, see art. NEW YORK.

indigo, dye woods, &c. The total imports from foreign countries into the state of Massachusetts in the year ending 30th of September, 1832, amounted to 18,118,900 dollars; while the exports of native produce, during the same year, amounted to only 4,656,635 dollars, and of native and foreign produce together, to 11,993,763 dollars; the balance against Massachusetts being paid off by bills upon the southern states, to which she exports much more than she imports. New York alone is, in fact, supposed to be at all times indebted to Boston about 5,000,000 dollars. We subjoin a summary

Account of the Trade of Boston and Massachusetts with Foreign Countries in 1831.

Imports from	Dollars.	Exports to	Dollars.
Russia	1,606,300	Russia	176,400
Sweden and Denmark	322,800	Sweden and Denmark	285,600
Brazil	396,500	Brazil	428,500
England	6,030,000	England	200,000
British East Indies	685,000	British East Indies	426,000
Do. West Indies	92,000	Do. West Indies	80,500
Do. American provinces	92,100	Do. American provinces	531,000
Cuba and Spanish West Indies	1,991,300	Cuba and Spanish West Indies	1,077,000
China	762,000	China	325,000
	12,278,000		3,530,000
From other places to Boston	1,000,000	To other places from Boston	2,000,000
Total value of imports to Boston	13,278,000	Total value of exports from Boston	5,530,000
To other ports in Massachusetts from various places	991,056	To various places from other ports in Massachusetts	2,203,763
Total value of imports into Massachusetts	14,269,056	Total value of exports from Massachusetts	7,733,763
14,269,056 dollars = 3,210,527*l.* 12*s.* sterling.		7,733,763 dollars = 1,740,096*l.* 13*s.* 6*d.* sterling.	

Banks. — In January, 1833, there were 84 banks in the state of Massachusetts, of which 24 were in Boston. Of the latter, 4 or 5 were only recently established. We subjoin a detailed statement of the principal circumstances in the condition of the Boston banks in 1830; and for further particulars the reader is referred to the article BANKS (FOREIGN).

Banks.	Shares.	Each.	Capital.	Time and Rate of Dividend.	Amount of Dividend.
			Dollars.		*Dollars.*
U. S. Branch	15,000	100	1,500,000	Jan. 3½—July 3½	105,000
American	7,500	100	750,000	April 1 —Oct. 2	22,500
Massachusetts	3,200	250	800,000	April 2 —Oct. 2½	36,000
New England	10,000	100	1,000,000	April 3 —Oct. 3	60,000
State Bank	30,000	60	1,800,000	April 2½—Oct. 2½	90,000
Washington	5,000	100	500,000	April 1½—Oct. 2¼	18,750
Commonwealth	5,000	100	500,000	April 3 —Oct. 3	30,000
Eagle	5,000	100	500,000	April 3 —Oct. 3	30,000
Globe	10,000	100	1,000,000	April 2¾—Oct. 3	55,000
Union	8,000	100	800,000	April 2 —Oct. 2½	44,000
Boston	12,000	75	900,000	April 0 —Oct. 3	27,000
City	10,000	100	1,000,000	April 1½—Oct. 3	45,000
Columbian	5,000	100	500,000	April 2 —Oct. 2½	22,500
Franklin	1,000	100	100,000	April 3 —Oct. 3½	6,500
Tremont	5,000	100	500,000	April 0 —Oct. 2½	12,500
North Bank	5,000	100	500,000	April 3½—Oct. 3¾	33,750
Suffolk	7,500	100	750,000	April 3 —Oct. 3	45,000
Atlantic	5,000	100	500,000	April 2½—Oct. 1½	20,000
Totals	149,200		13,900,000		703,500

So that there were in 1830, in Boston, 18 banks with a capital of 13,900,000 dollars. The dividends on this sum for the same year amounted to 703,500 dollars, being at the rate of 5·06 per cent. The paper under discount is estimated to have exceeded 70,000,000 dollars. — (*Statement by J. H. Goddard, New York Advertiser*, 29th of January, 1831.)

Insurance Companies. — Insurance, both fire and marine, is carried on to a great extent by joint stock companies, and to some extent also by individuals. The stocks of the different insurance companies amounted in January, 1833, to 6,675,000 dollars. Only one company is established for insurance upon lives. The stocks of the different insurance companies produced, in 1830, an average dividend of 5·113 per cent.

Credit. — Foreign goods are frequently sold for ready money, but more usually at a credit of from 3 to 12 months: average length of credit, 6 months; but on iron and some other articles, 12 months' credit is given. Discount for ready money at the rate of 6 per cent. per annum.

Commission. — The rates of commission are arbitrary, varying from 2 to 5, and sometimes (*del credere* included) to 7½ per cent. On small accounts, and West India goods, 5 per cent. is usually charged. The ordinary rate may be taken at 2½ per cent.; but competition is so great, that commission merchants may be found who will transact business on almost any terms. Sometimes whole cargoes are sold by brokers on an agreement to receive a specific sum in lieu of commission and brokerage.

Bankruptcy. — The law as to bankruptcy in Massachusetts seems to be in a most disgraceful state. Preferences are very frequently given; and property is in many instances conveyed, for behoof of the bankrupt's family, to persons said to be creditors to a corresponding amount, without their having any real claim to such character. It is true that these conveyances may be cancelled; but the difficulties in the way are so great, that they are seldom set aside. The safest course that a foreigner, or one not thoroughly acquainted with the city, can pursue, is to deal only for ready money; and to employ none but the most respectable agents.

Money.—In Massachusetts, and throughout New England, the dollar passes at 6*s.*; so that the pound sterling = 1*l.* 6*s.* 8*d.* Boston currency.—(For further particulars as to *Money, Weights, Measures,* &c. see New York.)

We have derived these details partly from the authorities referred to, partly from private information, and partly from the elaborate *Answers of the Consul to the Circular Queries.*

BOTARGO, called in Provence *Bouargues*, a sausage made on the shores of the Mediterranean and the Black Sea, of the roe of the mullet. The best comes from Tunis and Alexandria.

BOTTLES (Fr. *Bouteilles;* Ger. *Bouteillen;* It. *Bottiglie; Fiaschi;* Rus. *Bulülki;* Sp. *Botellas*), glass vessels for holding liquids, too well known to require any description. They are exported in considerable quantities. The duty of 8*s.* a cwt. on bottle glass, like the duties on other descriptions of glass, is both oppressive in amount, and is imposed and collected in the most vexatious manner. The manufacture has declined considerably since 1826. — (For further details, see Glass.)

BOTTOMRY and RESPONDENTIA. — Bottomry, in commercial navigation, is a mortgage of the ship. The owner or captain of a ship is, under certain circumstances, authorised to borrow money, either to fit her out so as to enable her to proceed on her voyage, or to purchase a cargo for the voyage, pledging the keel, or bottom of the ship (a part for the whole), in security for payment. In bottomry contracts it is stipulated, that if the ship be lost in the course of the voyage, the lender shall lose his whole money; but if the ship arrive in safety at her destination, the lender is then entitled to get back his principal, and the interest agreed upon, however much that interest may exceed the legal rate. — (*Black. Com.* book ii. c. 30.) The extraordinary hazard run by the lenders of money on bottomry, who, in fact, become adventurers in the voyage, has been held, in all countries, as justifying them in stipulating for the highest rate of interest.

When the loan is not on the ship, but on the goods laden on board, which, from their nature, must be sold or exchanged in the course of the voyage, the borrower's personal responsibility is then the principal security for the performance of the contract, which is therefore called *respondentia.* In this consists the principal difference between bottomry and respondentia. The one is a loan upon the ship, the other upon the goods. The money is to be repaid to the lender, with the *marine interest,* upon the safe arrival of the ship, in the one case; and of the goods, in the other. In all other respects, these contracts are nearly the same, and are governed by the same principles. In the former, the ship and tackle, being hypothecated, are liable, as well as the person of the borrower; in the latter, the lender has, in general, only the personal security of the borrower.

This contract, which *must always be in writing,* is sometimes made in the form of a deed poll, called a bill of bottomry, executed by the borrower; sometimes in the form of a bond or obligation, with a penalty. But whatever may be its form, it must contain the names of the lender and the borrower, those of the ship and the master; the sum lent, with the stipulated marine interest; the voyage proposed, with the commencement and duration of the risk which the lender is to run. It must show whether the money is lent upon the ship, or upon goods on board, or on both; and every other stipulation and agreement which the parties may think proper to introduce into the contract. — (See the *Forms* at the end of this article.)

"It is obvious," says Lord Tenterden, "that a loan of money upon bottomry, while it relieves the owner from many of the perils of a maritime adventure, deprives him also of a great part of the profits of a successful voyage; and, therefore, *in the place of the owners' residence,* where they may exercise their own judgment upon the propriety of borrowing money in this manner, the master of the ship is, by the maritime law of all states, precluded from doing it, so as to bind the interest of his owners without their consent. With regard to a *foreign country,* the rule appears to be, that if the master of a vessel has occasion for money to repair or victual his ship, or for any other purpose necessary to enable him to complete the enterprise in which she is engaged; whether the occasion arises from any extraordinary peril or misfortune, or from the ordinary course of the adventure; he may, if he cannot otherwise obtain it, borrow money on bottomry at marine interest, and pledge the ship, and the freight to be earned in the voyage, for repayment at the termination of the voyage. When this is done, the owners are never personally responsible. The remedy of the lender is against the master of the ship." — (*Law of Shipping,* part ii. c. 3.)

In bottomry and respondentia bonds, the lender receives the whole of his principal and interest, or nothing; *he is not answerable for general or particular average*;* nor will any loss by capture, if subsequently recaptured, affect his claim. In this respect our

* Mr. Serjeant Marshall doubts this; but it was so decided by the Court of King's Bench in *Joyce* v. *Williamson,* B. R. Mich. 23 Geo. 3.

law differs from that of France (*Code de Commerce*, art. 330.) and most other countries: the lenders on bottomry bonds being there subject to average, as our underwriters upon policies of insurance. No loss can void a bottomry contract, unless a total loss, proceeding from a peril of the sea, during the voyage, and within the time specified by the contract. If the loss happen through any default or act of the owners or master, to which the lender was not privy, he may still recover.

There is no restriction by the law of England as to the persons to whom money may be lent on bottomry or at *respondentia*, except in the single case of loans on the ships of foreigners trading to the East Indies, which are forbidden by the 7 Geo. 1. stat. 1. c. 21. § 2.

It does not, however, appear to be necessary, in order to enable the master of a ship in a foreign port to obtain money for her repair, outfit, &c., that the contract pledging the vessel in security of the debt should be in the nature of a bottomry bond. Provided the person who advances the money do not choose to take upon himself the risk of the ship's return, and *do not stipulate for maritime interest*, "there seems," says Lord Tenterden, "to be no reason why the master should not pledge both the ship and the personal credit of the owner." And in the case of money advanced in this way to refit a ship in distress at Jamaica, which was captured on the voyage home, the lender recovered. — (*Law of Shipping*, part ii. c. 3.)

Bottomry contracts were well known to the ancients. At Athens, the rate of interest was not fixed by law; but the customary rate seems to have been about 12 per cent. But when money was lent for a voyage, upon the security of the ship and cargo, the interest, on account of the superior risk encountered by the lender, was in most cases much higher. In voyages to the Taurica Chersonesus and Sicily, it was sometimes as high as 30 per cent. — (*Anacharsis's Travels*, vol. iv. p. 369. Eng. trans.) By the Rhodian law, the exaction of such high interest as is usual in bottomry was declared to be illegal, unless the principal was really exposed to the dangers of the sea. — (*Boeckh's Public Economy of Athens*, vol. i. p. 177. Eng. trans.) This principle was adopted by the Romans, who gave to bottomry interest the name of *nauticum fœnus*; and has been transferred from the Roman law into all modern codes.

"Formerly," says Mr. Serjeant Marshall, "the practice of borrowing money on bottomry and respondentia was more general in this country than it is at present. The immense capitals now engaged in every branch of commerce render such loans unnecessary; and money is now seldom borrowed in this manner, but by the masters of foreign ships who put into our ports in need of pecuniary assistance to refit, to pay their men, to purchase provisions, &c. Sometimes officers and others belonging to ships engaged in long voyages, who have the liberty of trading to a certain extent, with the prospect of great profit, but without capitals of their own to employ in such trade, take up money on respondentia to make their investments; but even this, as I am informed, is now not very frequently done in this country."

The term bottomry has sometimes been incorrectly applied to designate a contract, by the terms of which the ship is not pledged as a security, but the repayment of money, with a high premium for the risk, is made to depend upon the success of the voyage. This, however, is plainly a loan upon a particular adventure, to be made by a particular ship, and not a loan upon the ship, and, of course, the lender has only the personal security of the borrower for the due performance of the contract. And it seems that loans have sometimes been made in this manner, and probably also with a pledge of the ship itself, to an amount exceeding the value of the borrower's interest in the ship; and such a contract is still legal in this country in all cases, except the case of ships belonging to British subjects bound to or from the East Indies; as to which it is enacted (19 Geo. 2. c. 37. § 5.),

"That all sums of money lent on bottomry or at respondentia upon any ship or ships belonging to his Majesty's subjects, bound to or from the East Indies, shall be lent only on the ship, or on the merchandise or effects laden, or to be laden, on board of such ship, and shall be so expressed in the condition of the bond, and the benefit of salvage shall be allowed to the lender, his agents or assigns, who alone shall have a right to make assurance on the money so lent; and no borrower of money on bottomry or at respondentia as aforesaid, shall recover more on any assurance than the value of his interest on the ship, or in the merchandises and effects laden on board of such ship, exclusive of the money so borrowed; and in case it shall appear that the value of his share in the ship, or in the merchandises and effects laden on board, doth not amount to the full sum or sums he hath borrowed as aforesaid, such borrower shall be responsible to the lender for so much of the money borrowed as he hath not laid out on the ship, or merchandises laden thereon, in the proportion the money not laid out shall bear to the whole money lent, notwithstanding the ship and merchandises be totally lost."

Lord Tenterden says that this statute was introduced for the protection of the trade of the East India Company; and its rules must be complied with in the case of bottomry by the *masters* of ships trading to the East Indies.

For a further discussion of this subject, see *Abbott on the Law of Shipping*, part ii. c. 3.; *Marshall on Insurance*, book ii.; and *Park on Insurance*, c. 21.

I. *Form of a Bottomry Bond.*

KNOW ALL MEN by these presents, That I, *A. B.* commander and two-thirds owner of the ship *Exeter*, for myself and *C. D.*, remaining third-owner of the said ship, am held and firmly bound unto *E F.* in the penal sum of *two thousand pounds* sterling, for the payment of which well and truly to be made unto the said *E. F.*, his heirs, executors, administrators, or assigns, I hereby bind myself, my heirs, executors, and administrators, firmly by these presents. *In witness* whereof I have hereunto set my hand and seal, this 14th day of *December*, in the year of our Lord 1796.

WHEREAS the above bound *A. B.* hath taken up and received of the said *E. F.* the full and just sum of *one thousand pounds* sterling, which sum is to run at respondentia on the block and freight of the ship *Exeter*, whereof the said *A. B.* is now master, from the port or road of *Bombay* on a voyage to the port of *London*, having permission to touch, stay at, and proceed to all ports and places within the limits of the voyage, at the rate or premium of *twenty-five per cent.* (25 per cent.) for the voyage. In consideration whereof usual risks of the seas, rivers, enemies, fires, pirates, &c. are to be on account of the said *E. F.* And for the further security of the said *E. F.* the said *A. B.* doth by these presents mortgage and assign over to the said *E. F.*, his heirs, executors, administrators, and assigns, the said ship *Exeter*, and her freight, together with all her tackle, apparel, &c. And it is hereby declared, that the said ship *Exeter* and her freight is thus assigned over for the security of the respondentia taken up by the said *A. B.*, and shall be delivered to no other use or purpose whatever, until payment of this bond is first made, with the premium that may become due thereon.

NOW THE CONDITION of this obligation is such, that if the above bound *A. B.*, his heirs, executors, or administrators, shall and do well and truly pay, or cause to be paid, unto the said *E. F.* or his attorneys in *London* legally authorised to receive the same, their executors, administrators, or assigns, the full and just sum of 1,000*l.* sterling, being the principal of this bond, together with the premium which shall become due thereupon, at or before the expiration of *ninety* days after the safe arrival of the said ship *Exeter* at her moorings in the river *Thames*, or in case of the loss of the said ship *Exeter*, such an average as by custom shall have become due on the salvage, then this obligation to be void and of no effect, otherwise to remain in full force and virtue. Having signed to three bonds of the same tenor and date, the one of which being accomplished, the other two to be void and of no effect.

A. B. for self and *C. D.** (L. S.)

Signed, sealed, and delivered, where no stamped paper is to be had, in the presence of *G. H.* *I. K.*

* In this bond the occasion of borrowing the money is not expressed, but the money was in reality borrowed to refit the ship which being on a voyage from *Bengal* to *London* was obliged to put back to *Bombay* to repair. See *The* EXETER, *Whitford*, 1 Rob. A. R. 176. The occasion therefore of borrowing the money gave the lender the security of the entire interest of the ship. But this bond, although expressed to be executed by the master for himself and the other part-owner, would not bind the other part-owner personally, *unless he had by a previous deed authorised the master to execute such a bond for him.* —(*Abbott on the Law of Shipping*, part iii. c. 1. § 2.)

II. *Form of a Bottomry Bill.*

TO ALL MEN TO WHOM THESE PRESENTS SHALL COME. I, *A. B.* of *Bengal*, mariner, part-owner and master of the ship called the *Exeter*, of the burthen of five hundred tons and upwards, now riding at anchor in *Table Bay*, at the *Cape of Good Hope*, send greeting :

WHEREAS I, the said *A. B.*, part-owner and master of the aforesaid ship, called the *Exeter*, now in prosecution of a voyage from *Bengal* to the port of *London*, having put into *Table Bay* for the purpose of procuring provision and other supplies necessary for the continuation and performance of the voyage aforesaid, am at this time necessitated to take up upon the adventure of the said ship, called the *Exeter*, the sum of *one thousand pounds* sterling monies of *Great Britain*, for setting the said ship to sea, and furnishing her with provisions and necessaries for the said voyage, which sum *C. D.* of the *Cape of Good Hope*, master attendant, hath at my request lent unto me, and supplied me with, at the rate of *twelve hundred and twenty pounds* sterling for the said *one thousand pounds*, being at the rate of *one hundred and twenty-two pounds* for every *hundred pounds* advanced as aforesaid, during the voyage of the said ship from *Table Bay* to *London*. NOW KNOW YE, that I, the said *A. B.*, by these presents, do, for me, my executors and administrators, covenant and grant to and with the said *C. D.* that the said ship shall, with the first convoy which shall offer for *England* after the date of these presents, sail and depart for the port of *London*, there to finish the voyage aforesaid. And I, the said *A. B.*, in consideration of the sum of *one thousand pounds* sterling to me in hand paid by the said *C. D.* at and before the sealing and delivery of these presents, do hereby bind myself, my heirs, executors, and administrators, my goods and chattels, and particularly the said ship, the tackle and apparel of the same, and also the freight of the said ship, which is or shall become due for the aforesaid voyage from *Bengal* to the port of *London*, to pay unto the said *C. D.*, his executors, administrators, or assigns, the sum of *twelve hundred and twenty pounds* of lawful British money, within thirty days next after the safe arrival of the said ship at the port of *London* from the same intended voyage.

AND I, the said *A. B.*, do, for me, my executors and administrators, covenant and grant to and with the said *C. D.*, his executors and administrators, by these presents, that I, the said *A. B.*, at the time of sealing and delivering of these presents, am a true and lawful part-owner and master of the said ship, and have power and authority to charge and engage the said ship with her freight as aforesaid, and that the said ship, with her freight, shall, at all times after the said voyage, be liable and chargeable for the payment of the said *twelve hundred and twenty pounds*, according to the true intent and meaning of these presents.

AND lastly, it is hereby declared and agreed by and between the said parties to these presents, that in case the said ship shall be lost, miscarry, or be cast away before her arrival at the said port of *London* from the said intended voyage, that then the payment of the said *twelve hundred and twenty pounds* shall not be demanded, or be recoverable by the said *C. D.*, his executors, administrators, or assigns, but shall cease and determine, and the loss thereby be wholly borne and sustained by the said *C. D.*, his executors and administrators, and that then and from thenceforth every act, matter, and thing herein mentioned on the part and behalf of the said *A. B.* shall be void; any thing herein contained to the contrary notwithstanding.

IN WITNESS whereof the parties have interchangeably set their hands and seals to four bonds of this tenor and date, one of which being paid, the others to be null and void.

At the *Cape of Good Hope*, this 15th day of *November*, in the year of our Lord one thousand eight hundred and thirty.

Witness, *E. F.* *G. H.* *I. K.* *A. B.* (L. S.)

BOUNTY, a term used in commerce and the arts, to signify a premium paid by government to the producers, exporters, or importers of certain articles, or to those who employ ships in certain trades.

1. *Bounties on Production* are most commonly given in the view of encouraging the establishment of some new branch of industry; or they are intended to foster and extend a branch that is believed to be of paramount importance. In neither case, however, is their utility very obvious. In all old settled and wealthy countries, numbers of individuals are always ready to embark in every new undertaking, if it promise to be really advantageous, without any stimulus from government: and if a branch of industry, already established, be really important and suitable for the country, it will assuredly be prosecuted to the necessary extent, without any encouragement other than the natural demand for its produce.

2. *Bounties on Exportation and Importation.* — It is enacted by the 3 & 4 Will. 4. c. 52., that a merchant or exporter claiming a bounty or drawback on goods exported, must make oath that they have been actually exported, and have not been relanded, and are not intended to be relanded, in any part of the United Kingdom, or in the Isle of Man (unless entered for the Isle of Man), or in the islands of Faro or Ferro: and it is further enacted, that if any goods cleared to be exported for a bounty or drawback, shall not be duly exported to parts beyond the seas, or shall be relanded in any part of the United Kingdom, or in the islands of Faro or Ferro, or shall be carried to the islands of Guernsey, Jersey, Alderney, Sark, or Man, (not having been duly entered, cleared, and shipped for exportation to such islands,) such goods shall be forfeited, together with the ship or ships employed in relanding or carrying them; and any person by whom or by whose orders or means such goods shall have been cleared, relanded, or carried, shall forfeit a sum equal to treble the value of such goods. — §§ 87—95.

3. *Policy of Bounties.* — It was formerly customary to grant bounties on the exportation of various articles; but the impolicy of such practice is now very generally admitted. It is universally allowed that bounties, if they be given at all, should be given only to the exporters of such commodities as could not be exported without them. But it is plain that, by granting a bounty in such cases, we really tax the public, in order to supply the foreigner with commodities at less than they cost. A. has a parcel of goods which he cannot dispose of abroad for less than 110*l.*; but they will fetch only 100*l.* in the foreign market; and he claims and gets a bounty of 10*l.* to enable him to export them. Such is the mode in which bounties on exportation uniformly operate; and to suppose that they can be a means of enriching the *public*, is equivalent to supposing that a shopkeeper may be enriched by selling his goods for less than they cost!

But however injurious to the state, it has been pretty generally supposed that bounties on exportation are advantageous to those who produce and export the articles on which they are paid. But the fact is not so. A trade that cannot be carried on without the aid of a bounty, must be a naturally disadvantageous one. Hence, by granting it, individuals are tempted to engage or continue in businesses which are necessarily very insecure, and are rarely capable of being rendered lucrative; at the same time that they are prevented, by trusting to the bounty, from making those exertions they naturally would have made, had they been obliged to depend entirely on superior skill and industry for the sale of their produce. The history of all businesses carried on in this country by the aid of bounties, proves that they are hardly less disadvantageous to those engaged in them than to the public.

The truth of these remarks has been acknowledged by government. The bounty on the exportation of corn was repealed in 1815; and the bounties on the exportation of linen and several other articles ceased in 1830.

4. *Bounties on Shipping* have principally been paid to the owners of vessels engaged in the fishery, and their influence will be treated of under the articles Herring Fishery and Whale Fishery.

For an account of the bounties that still exist, see the article Tariff.

BOX-WOOD (Ger. *Buchsbaum;* Du. *Palmhout;* Fr. *Buis;* It. *Busso, Bosso, Bossalo*), the wood of the box tree (*Buxus sempervirens*), growing wild in several places in Great Britain. This tree was greatly admired by the ancient Romans, and has been much cultivated in modern times, on account of the facility with which it is fashioned into different forms. Box is a very valuable wood. It is of a yellowish colour, close-grained, very hard, and heavy; it cuts better than any other wood, is susceptible of a very fine polish, and is very durable. In consequence, it is much used by turners, and mathematical and musical instrument makers. It is too heavy for furniture. It is the *only* wood used by the engravers of wood-cuts for books; and provided due care be exercised, the number of impressions that may be taken from a box-wood cut is very great. In France, box-wood is extensively used for combs, knife-handles, and button-moulds; and sometimes, it has been said, as a substitute for hops in the manufacture of beer. The value of the box-wood sent from Spain to Paris is reported to amount to about 10,000 fr. a year. In 1815, the box trees cut down on Box-hill, near Dorking, in Surrey, produced upwards of 10,000*l.* They are now, however, become very scarce in England. The duty on box-wood is quite oppressive, being 5*l.* a ton if brought from a foreign country, and 1*l.* a ton if from a British possession. At an average of the 3 years ending with 1831, the entries of box-wood for home consumption amounted to 382 tons a year. In 1832, the duty produced 1,867*l.* 17*s.* 4*d.* Turkey box-wood sells in the London market for from 7*l.* to 14*l.* a ton, duty included.

BRAN, the thin skins or husks of corn, particularly wheat, ground, and separated from the corn by a sieve or boulter.

BRANDY (Ger. *Brantewein;* Du. *Brandewyn;* Fr. *Eau de vie, Brandevin;* It. *Aquarzente;* Sp. *Aguardiente;* Port. *Aguardente;* Rus. *Wino;* Lat. *Vinum adustum*), a spirituous and inflammable liquor, obtained by distillation from wine and the husks of grapes. It is prepared in most of the wine countries of Europe; but the superiority of French brandy is universally admitted. The latter is principally distilled at Bordeaux, Rochelle, Cognac, the Isle de Rhé, Orleans, Nantes, and in Poitou, Touraine, and Anjou. That of Cognac is in the highest estimation.

Wines of all descriptions, but chiefly those that are strong and harsh (*poussés*), are used in the manufacture of brandy. The superior vintages, and those that have most flavour, are said to make the worst brandy. It is naturally clear and colourless. The different shades of colour which it has in commerce, arise partly from the casks in which it is kept, but chiefly from the burnt sugar, saunders wood, and other colouring matter intentionally added to it by the dealers. It is said that the burnt sugar gives mellowness to the flavour of the liquor, and renders it more palatable.

The art of distillation is believed to have been first discovered by the Arabians. From a passage in the *Testamentum Novissimum* of the famous Raymond Lully, who flourished in the thirteenth century, it would appear that the production of brandy and alcohol from wine was familiar to his contemporaries.—(p. 2. edit. *Argent.* 1571.) But the practice does not appear to have been introduced into France till 1313.—(*Le Grand d'Aussi Vie privé de François,* t. iii. p. 64.) When first introduced, brandy or burnt wine (*vinum adustum*) appears to have been used principally as an antiseptic and restorative medicine; and the most extravagant panegyrics were bestowed on its virtues. It was described as a sovereign remedy in almost all the disorders of the human frame; it was commended for its efficacy in comforting the memory, and strengthening the reasoning powers; it was extolled, in short, as the elixir of life, and an infallible preservative of youth and beauty!—(*Henderson's Hist. of Wine*, p. 24.) Dr. Henderson says that the experience of later times has shown how little this eulogy was merited; but in this he is contradicted by Burke, who maintains, with equal eloquence and ingenuity, that "the *alembic* has been a vast benefit and blessing."—(*Thoughts and Details on Scarcity*, p. 41.)

Brandy has always formed a very prominent article in the exports of France; few ships sailing from Bordeaux, Rochelle, or Nantes, without taking a certain quantity of it on board. The following is an account of the exportation of brandy from France during the 3 years ending with 1789, and the 14 years ending with 1828.—(*Enquête sur les Fers*, p. 39.)

Years.	Hectolitres.	Years.	Hectolitres.	Years.	Hectolitres.
1787	305,638	1817	61,697	1823	310,059
1788	221,499	1818	99,402	1824	317,347
1789	234,500	1819	231,652	1825	250,937
		1820	253,349	1826	194,110
1815	154,160	1821	153,408	1827	273,574
1816	137,398	1822	230,186	1828	403,207

Which, as the hectolitre is equal to 26·42 wine gallons, shows that the exportation in 1828 was equivalent to 10,252,728 gallons; but it has since declined considerably.

Duties on Brandy in Great Britain and Ireland. Quantities consumed. — In nothing, perhaps, has the injurious operation of oppressive duties been so strikingly exemplified as in the case of brandy. At the latter end of the seventeenth century, when the duty on brandy did not exceed 9*l.* a tun, the imports into England amounted to about 6,000 tuns, or 1,512,000 gallons—(*Historical and Political Remarks on the Tariff of the late Treaty*, 1786, p. 113.); whereas at present, notwithstanding our vast increase in wealth and population since the period referred to, we do not import more brandy than we did then! Nor is this extraordinary circumstance to be ascribed to any preference on the part of the public to other beverages, but is wholly owing to the exorbitant duties with which brandy is loaded. The price of brandy in bond varies, at this moment, according to quality, from 3*s.* to 5*s.* a gallon (Imperial measure), while the duty is no less than 22*s.* 6*d.* Had the imposition of such a duty taken away the taste for brandy, it would have been comparatively innocuous. But it has done no such thing. Its only effect has been to convert a trade, that might otherwise have been productive of the most advantageous results, into a most prolific source of crime and demoralisation. The temptation to smuggle, occasioned by the exorbitancy of the duty, is too overpowering to be counteracted by the utmost penalties of the law. All along the coasts of Kent and Sussex, and the districts most favourably situated for *running spirits*, almost the whole of the labouring population are every now and then withdrawn from their ordinary employments, to engage in smuggling adventures. The efforts of the revenue officers to seize foreign brandy and geneva have in innumerable instances been repelled by force. Bloody and desperate contests have, in consequence, taken place. Many individuals who, but for this fiscal scourge, would have been industrious and virtuous, have become idle,

predatory, and ferocious; they have learned to despise the law, to execute summary vengeance on its officers; and are influenced by a spirit that has been, and may be, turned to the most dangerous purposes.

Neither can it be truly said that this miserable system is upheld for the sake of revenue. On the contrary, it is easy to show that, besides the other mischievous effects it entails on the public, it occasions the loss of at least 1,000,000*l.* a year. In 1786, Mr. Pitt, by a wise and politic measure, took 50 per cent. from the duty on brandy and geneva; (the duty on the latter has been for a lengthened period the same as that on brandy;) and instead of being diminished, the revenue was increased. In 1790, when the duty on brandy and geneva was 5*s.* the wine gallon, the quantity retained for home consumption was 2,225,590 gallons. During the 3 years ending with 1803, when the duty was 9*s.* 2*d.*, the quantities of brandy and geneva retained for home consumption amounted, at an average, to about 2,700,000 gallons; but during the 3 years ending with 1818, when the duty had been increased to 18*s.* 10*d.* the wine gallon, the quantities retained did not exceed 850,000 gallons, while the quantities actually entered for home consumption were considerably less! Since then the consumption has increased with the increasing wealth of the country; but, at this moment, the quantity consumed in Great Britain is fully 635,000 gallons less than in 1790! Nothing, therefore, can be more palpably erroneous than to contend that the revenue is improved by the present system. Have we not seen the revenue derived from coffee trebled, by reducing the duty from 1*s.* 7*d.* to 6*d.*? Have we not seen the revenue derived from British spirits greatly increased, by reducing the duty from 5*s.* 6*d.* to 2*s.* the wine gallon? And where is the ground for supposing that the result would be different, were the duties on brandy equally reduced? But the experience afforded by Mr. Pitt's measure, in 1786, is decisive as to this point. He quadrupled the consumption and increased the revenue, by taking a half from the duty when it was a good deal less oppressive than now? Were a similar reduction made at present, does any one doubt that a similar result would follow? Smuggling and adulteration would immediately cease; our trade with France would be very greatly extended; and the revenue would gain, not merely by a direct increase of duty, but indirectly by a very great diminution of the expense of collection.

But the effect of the increase of the duties on brandy in Ireland has been still more extraordinary. At an average of the 3 years ending with 1802, when the duty was 7*s.* 3¾*d.* the wine gallon, the average annual consumption of brandy in Ireland amounted to 208,064 gallons, producing a nett revenue of 77,714*l.* Now, mark the consequence of *trebling* the duties. The consumption during the last 2 years, notwithstanding the population is more than doubled, only amounted, at an average, to 20,199 gallons, producing about 22,500*l.* a year revenue! Dr. Swift has shrewdly remarked, that in the arithmetic of the customs two and two do not always make four, but sometimes only one. But here we have threefold duties, with little more than a fourth part of the revenue, and less than a tenth part of the consumption!

It is surely impossible that such a system — a system evincing in every part a degree of ignorant rapacity, to be paralleled only by that of the savages, who to get at the fruit cut down the tree — should be permitted for a much longer period to disgrace our fiscal code. Those only who are anxious for the continuance of smuggling, with all its consequent crime and misery, can be hostile to a reduction of the duty on brandy. By fixing it at 10*s.* the gallon, neither the consumption of British spirits nor rum would be sensibly affected. The middle classes would, however, be able to use brandy, on occasions when, perhaps, at present, they use nothing; its clandestine importation would be prevented; those engaged in smuggling would be obliged to have recourse to industrious pursuits; and the manufacture of the abominable compounds, that are now so frequently substituted in its stead, would be put an end to. It is not easy, indeed, to suggest any measure that would be productive of so much advantage, and be attended with fewer inconveniences.

Regulations as to Importation, &c. — Brandy, geneva, and other foreign spirits, must be imported, if in casks, in casks containing not less than 40 gallons, under penalty of forfeiture. — (3 & 4 *Will.* 4. c. 52.) They must also be imported in ships of 70 tons burden or upwards, and are not to be exported from a bonded warehouse except in a vessel of like tonnage, under pain of forfeiture. — (*Ibid.*)

Brandy is not to be imported except in British ships, or in ships of the country or place of which it is the product, or from which it is imported, on pain of forfeiture thereof, and 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54.)

Brandy may be exported to Mexico, Chili, or Peru, in casks containing not less than 15 gallons each. — (*Treas. Ord.* 17th of December, 1827.)

Brandy and geneva may be bottled in bonded warehouses, for exportation to British possessions in the East Indies, under the same conditions as wine and rum. — (See SPIRITS.)

In most of the public accounts, the imports of brandy and geneva are blended together. It would appear, too, from the note to the following account, that there are no means of accurately distinguishing them, except since 1814. The reader will find, in the article SPIRITS, an account of the quantities of brandy and geneva entered for home consumption, and the rates of duty upon them, in each year since 1789. The following account shows the consumption of brandy, and rates of duty on it, since 1814: —

An Account of the Number of Gallons (Imperial Measure) of Foreign Brandy entered for Home Consumption in Great Britain and Ireland, the Rates of Duty affecting the same, and the entire nett Produce of the Duty, each Year since 1814.—(Obtained from the Custom-house.)

Years.	Quantities entered for Home Consumption.			Nett Produce of Duty (Customs and Excise).									Rates of Duty per Imperial Gallon (Customs and Excise).					
	Gt. Britain.	Ireland.	United Kingdom.	Great Britain.			Ireland.			United Kingdom.			Gt. Brit.			Ireland.		
	Imp. gal.	*Imp. gal.*	*Imp. gal.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d*
1814	500,592	7,169	507,761	581,056	1	1	6,618	12	4	587,674	13	5	1	2	6⅗	0	17	3¾
1815	656,555	5,160	661,715	740,747	12	1	4,702	6	1	745,449	18	2	—			—		
1816	657,062	5,275	662,337	742,304	8	0	4,124	19	5	746,429	7	5	—			—		
1817	634,017	3,875	637,892	716,734	0	6	3,248	4	4	719,982	4	10	—			—		
1818	531,583	6,232	537,815	599,586	0	4	5,287	10	1	604,873	10	5	—			—		
1819	787,422	7,080	794,502	890,068	19	8	6,090	17	10	896,159	17	6	1	2	7½	—		
1820	842,864	6,025	848,889	956,275	16	9	5,219	8	6	961,495	5	3	—			—		
1821	914,630	6,001	920,631	1,034,327	17	0	5,173	19	2	1,039,501	16	2	—			—		
1822	1,001,607	7,308	1,008,915	1,132,416	3	5	6,414	1	10	1,138,830	5	3	—			—		
1823	1,083,104	17,118	1,100,222	1,225,481	19	7	14,330	1	8	1,239,812	1	3	—			1	2	8
1824	1,226,715	984	1,227,699	1,387,204	2	8	1,207	9	8	1,388,411	12	4	—			—		
1825	1,321,327	3,550	1,324,877	1,489,768	11	4	4,177	3	9	1,493,945	15	1	—			—		
1826	1,473,243	7,371	1,480,614	1,636,499	6	7	8,397	15	3	1,464,897	1	10	1	2	6	1	2	6
1827	1,313,217	7,271	1,320,488	1,471,501	12	4	8,232	5	0	1,479,733	17	4	—			—		
1828	1,327,929	7,556	1,335,485	1,490,793	4	2	8,629	19	10	1,499,423	4	0	—			—		
1829	1,301,450	8,529	1,309,979	1,460,764	17	6	9,686	17	8	1,470,451	15	2	—			—		
1830	(See Note	below.)	1,285,967	-	-	-	-	-	-	1,443,018	5	8	—			—		
1831	1,226,280	8,821	1,235,101	1,378,244	0	0	9,923	0	0	1,388,167	0	0	—			—		
1832	1,570,075	31,577	1,601,652	1,765,889	0	0	35,511	0	0	1,801,400	0	0	—			—		

Note.—In consequence of the destruction of the official records by fire, no separate account can be rendered of the consumption of brandy and geneva, or the revenue derived therefrom, for the years prior to 1814.

The trade accounts of Great Britain and Ireland having been incorporated during 1830, the particulars for that year are stated for the United Kingdom only.

BRASS (Ger. *Messing;* Du. *Messing, Missing, Geelkoper;* Fr. *Cuivre jaune, Laiton;* It. *Ottone;* Sp. *Laton, Azofar;* Rus. *Selenoi mjed;* Lat. *Orichalcum, Aurichalcum*) is a factitious metal, made of copper and zinc in certain proportions. It is of a beautiful yellow colour, more fusible than copper, and not so apt to tarnish. It is malleable, so ductile that it may be drawn out into wire, and is much tougher than copper. Its density is greater than the mean density of the two metals. By calculation it ought to be 7·63 nearly, whereas it is actually 8·39; so that its density is increased by about one tenth. The ancients do not seem to have known accurately the difference between copper, brass, and bronze. They considered brass as only a more valuable kind of copper, and therefore used the word *æs* to denote either. They called copper *æs cyprium*, afterwards *cyprium;* and this in process of time was converted into *cuprum*. Dr. Watson has proved that it was to brass they gave the name of *orichalcum*. Brass is malleable when cold, unless the proportion of zinc be excessive; but when heated it becomes brittle. It may be readily turned upon the lathe; and, indeed, works more kindly than any other metal.

There is a vast variety in the proportions of the different species of brass used in commerce; nor is it easy to determine whether the perfection of this alloy depends on any certain proportions of the two metals. In general, the extremes of the highest and lowest proportions of zinc are from 12 to 25 parts in the 100. In some of the British manufactories, the brass made contains one third its weight of zinc. In Germany and Sweden the proportion of zinc varies from one fifth to one fourth of the copper. The ductility of brass is not injured when the proportion of zinc is highest. This metal is much used in the escapement wheels, and other nicer parts of watch-making: and bars of brass, very carefully made, fetch for this purpose a high price.

The use of brass is of very considerable antiquity. Most of the ancient genuine relics are composed of various mixtures of brass with tin and other metals, and are rather to be denominated bronzes. The best proportion for brass guns is said to be 1,000 lbs. of copper, 990 lbs. of tin, and 600 lbs. of brass, in 11 or 12 cwt. of metal. The best brass guns are made of malleable metal, not of pure copper and zinc alone; but worse metals are used to make it run closer and sounder, as lead and pot-metal.—(*Thomson's Chemistry, Encyc. Britannica, &c.*)

BRAZILETTO, an inferior species of Brazil wood brought from Jamaica. It is one of the cheapest and least esteemed of the red dye woods.

BRAZIL NUTS, or *Chesnuts of Brazil*, the fruit of the Juvia (*Bertholletia excelsa*), a majestic tree growing to the height of 100 or 120 feet, abounding on the banks of the Orinoco, and in the northern parts of Brazil. The nuts are triangular, having a cuneiform appearance, with sutures at each of the angles; the shell is rough and hard, and of a brownish ash colour. The kernel resembles that of an almond, but is larger, and tastes more like a common hazel nut; it contains a great deal of oil, that may be obtained by

expression or otherwise. These nuts do not grow separately, or in clusters, but are contained, to the number of from 15 to 50 or more *, in great ligneous pericarps or outer shells, generally of the size of a child's head. This outer shell is very hard and strong, so that it is rather difficult to get at the nuts, which are closely packed in cells inside. The natives are particularly fond of this fruit, and celebrate the harvest of the juvia with rejoicings; it is also very much esteemed in Europe. The nuts brought to this country and the Continent are chiefly exported from Para, and form an article of considerable commercial importance. — (*Humboldt's Pers. Nar.* vol. v. p. 538. Eng. trans.)

BRAZIL WOOD (Fr. *Bois de Brésil;* Ger. *Brasilienholz;* Du. *Brasilienhout;* It. *Legno del Brasile, Verzino;* Sp. *Madera del Bresil;* Port. *Pao Brasil*). It has been commonly supposed that this wood derived its name from the country in which it is principally produced. But Dr. Bancroft has conclusively shown that woods yielding a *red dye* were called Brazil woods long previously to the discovery of America; and that the early voyagers gave the name of Brazil to that part of that continent to which it is still applied, from their having ascertained that it abounded in such woods. — (See the learned and excellent work, *Philosophy of Colours*, vol. ii. pp. 316—321.)

It is found in the greatest abundance, and is of the best quality, in the province of Pernambuco, where it is called *Pao da rainha*, or Queen's wood; but it is also found in many other parts of the Western Hemisphere. The tree is large, crooked, and knotty; the leaves are of a beautiful red, and exhale an agreeable odour. Its botanical name is *Cæsalpinia Brasiletto;* but it is called by the natives *ibiripitanga.* Notwithstanding its apparent bulk, the bark is so thick, that a tree as large as a man's body with the bark, will not be so thick as the leg when peeled. When cut into chips, it loses the pale colour it before had, and becomes red; and when chewed, has a sweet taste. It is used for various purposes by cabinet-makers, and admits of a beautiful varnish: but its principal use is in dyeing red; and though the colour is liable to decay, yet, by mixing with it alum and tartar, it is easily made permanent; there is also made of it, by means of acids, a sort of liquid lake or carmine, for painting in miniature.

Brazil wood has been for many years past a royal monopoly; its exportation, except on account of government, being prohibited under the severest penalties. Owing to the improvident manner in which it has been cut down by the government agents, it is now rarely found within several leagues of the coast. Indeed, we are assured that many of the planters have privately cut down the trees on their estates, and used the timber as fire-wood, that they might not expose themselves to annoyance from the arbitrary and vexatious proceedings of these functionaries. The quantity of Brazil wood imported into this country is but inconsiderable. Its price in the London market, exclusive of the duty (2*l.* per ton), varies from 6*0l.* to 80*l.* per ton. — (*Dr. Bancroft in loc. cit. Encyc. Metrop. Modern Traveller*, vol. xxix. p. 87.; *Malte Brun*, vol. v. p. 525. Eng. ed. &c.).

BREAD, the principal article in the food of most civilised nations, consists of a paste or dough formed of the flour or meal of different sorts of grain mixed with water, and baked. When stale dough or yeast is added to the fresh dough, to make it swell, it is said to be *leavened;* when nothing of this sort is added, it is said to be *unleavened.*

1. *Historical Sketch of Bread.* — The President de Goguet has endeavoured, with his usual sagacity and learning, to trace the successive steps by which it is probable men were led to discover the art of making bread — (*Origin of Laws, &c.* vol. i. pp. 95—105. Eng. trans.); but nothing positive is known on the subject. It is certain, however, from the statements in the sacred writings, that the use of unleavened bread was common in the days of Abraham — (*Gen.* xviii. 8.); and that leavened bread was used in the time of Moses, for he prohibits eating the Paschal lamb with such bread. — (*Exod.* xii. 15.) The Greeks affirmed that Pan had instructed them in the art of making bread; but they, no doubt, were indebted for this art, as well as for their knowledge of agriculture, to the Egyptians and Phœnicians, who had early settled in their country. The method of grinding corn by hand mills was practised in Egypt and Greece from a very remote epoch; but for a lengthened period the Romans had no other method of making flour, than by beating roasted corn in mortars. The Macedonian war helped to make the Romans acquainted with the arts and refinements of Greece; and Pliny mentions, that public bakers were then, for the first time, established in Rome — (*Hist. Nat.* lib. xviii. c. 11.). The conquests of the Romans diffused, amongst many other useful discoveries, a knowledge of the art of preparing bread, as practised in Rome, through the whole south of Europe.

The use of yeast in the raising of bread seems, however, from a passage of Pliny (lib. xviii. c. 7.), to have been practised by the Germans and Gauls before it was practised by the Romans; the latter, like the Greeks, having leavened their bread by intermixing the fresh dough with that which had become stale. The Roman practice seems to have superseded that which was previously in use in France and Spain; for the art of raising bread by an admixture of yeast was not practised in France in modern times, till towards the end of the seventeenth century. It deserves to be mentioned, that though the bread made in this way was decidedly superior to that previously in use, it was declared, by the faculty of medicine in Paris, to be prejudicial to health; and the use of yeast was prohibited under the severest penalties! Luckily, however, the taste of the public concurring with the interest of the bakers, proved too powerful for these absurd regulations,

* Humboldt says he had most frequently found from 15 to 22 nuts in each pericarp; but De Laet, who gave the first and most accurate description of this fruit, says that the pericarp is divided into six compartments, each of which incloses from 8 to 12 nuts. — (See *Humboldt in loc. cit.*)

which fell gradually into disuse; and yeast has long been, almost every where, used in preference to any thing else in the manufacture of bread, to the wholesomeness and excellence of which it has not a little contributed.

The species of bread in common use in a country depends partly on the taste of the inhabitants, but more on the sort of grain suitable for its soil. But the superiority of wheat to all other farinaceous plants in the manufacture of bread is so very great, that wherever it is easily and successfully cultivated, wheaten bread is used, to the nearly total exclusion of most others. Where, however, the soil or climate is less favourable to its growth, rye, oats, &c. are used in its stead. A very great change for the better has, in this respect, taken place in Great Britain within the last century. It is mentioned by Harrison, in his description of England (p. 168.), that in the reign of Henry VIII. the gentry had wheat sufficient for their own tables, but that their *household* and poor neighbours were usually obliged to content themselves with rye, barley, and oats. It appears from the household book of Sir Edward Coke, that, in 1596, rye bread and oatmeal formed a considerable part of the diet of servants, even in great families, in the southern counties. Barley bread is stated in the grant of a monopoly by Charles I., in 1626, to be the usual food of the ordinary sort of people. — (*Sir F. M. Eden on the Poor*, vol. i. p. 561.) At the Revolution, the wheat produced in England and Wales was estimated by Mr. King and Dr. Davenant to amount to 1,750,000 quarters. — (*Davenant's Works*, vol. ii. p. 217.) Mr. Charles Smith, the very well informed author of the Tracts on the Corn Trade, originally published in 1758, states, that in his time wheat had become much more generally the food of the common people than it had been in 1689; but he adds (2d ed. p. 182. Lond. 1766.), that notwithstanding this increase, some very intelligent inquirers were of opinion that even then not more than *half* the people of England fed on wheat. Mr. Smith's own estimate, which is very carefully drawn up, is a little higher; for taking the population of England and Wales, in 1760, at 6,000,000, he supposed that 3,750,000 were consumers of wheat; 739,000, of barley; 888,000, of rye; and 623,000, of oats. Mr. Smith further supposed that they individually consumed, the first class, 1 quarter of wheat; the second, 1 quarter and 3 bushels of barley; the third, 1 quarter and 1 bushel of rye; and the fourth, 2 quarters and 7 bushels of oats.

About the middle of last century, hardly any wheat was used in the northern counties of England. In Cumberland, the principal families used only a small quantity about Christmas. The crust of the goose pie, with which almost every table in the county is then supplied, was, at the period referred to, almost uniformly made of barley meal. — (*Eden on the Poor*, vol. i. p. 564.)

Every one knows how inapplicable these statements are to the condition of the people of England at the present time. Wheaten bread is now universally made use of in towns and villages, and almost every where in the country. Barley is no longer used, except in the distilleries and in brewing; oats are employed only in the feeding of horses; and the consumption of rye bread is comparatively inconsiderable. The produce of the wheat crops has been, at the very least, *trebled* since 1760. And if to this immense increase in the supply of wheat, we add the still more extraordinary increase in the supply of butchers' meat—(see art. Cattle), the fact of a very signal improvement having taken place in the condition of the population, in respect of food, will be obvious.

But great as has been the improvement in the condition of the people of England since 1760, it is but trifling compared to the improvement that has taken place, since the same period, in the condition of the people of Scotland. At the middle of last century, Scotch agriculture was in the most depressed state; the tenants were destitute alike of capital and skill; green crops were almost wholly unknown; and the quantity of wheat that was raised was quite inconsiderable. A field of 8 acres sown with this grain, in the vicinity of Edinburgh, in 1727, was reckoned so great a curiosity that it excited the attention of the whole neighbourhood! — (*Robertson's Rural Recollections*, p. 267.) But even so late as the American war, the wheat raised in the Lothians and Berwickshire did not exceed a third part of what is now grown in them; and taking the whole country at an average, it will be a moderate estimate, to say that the cultivation of wheat has increased in a *tenfold* proportion since 1780. At that period no wheaten bread was to be met with in the country places and villages of Scotland; *oat cakes* and *barley bannocks* being universally made use of. But at present the case is widely different. The upper and also the middle and lower classes in towns and villages use only wheaten bread, and even in farmhouses it is very extensively consumed. There is, at this moment, hardly a village to be met with, however limited its extent, that has not a public baker.

In many parts of England it is the custom for private families to bake their own bread. This is particularly the case in Kent, and in some parts of Lancashire. In 1804, there was not a single public baker in Manchester; and their number is still very limited.

2. *Regulations as to the Manufacture of Bread.* — Owing to the vast importance of

bread, its manufacture has been subjected in most countries to various regulations, some of which have had a beneficial and others an injurious operation.

a. Assize of Bread. — From the year 1266, in the reign of Henry III., down to our own days, it has been customary to regulate the price at which bread should be sold according to the price of wheat or flour at the time. An interference of this sort was supposed to be necessary, to prevent that monopoly on the part of the bakers which it was feared might otherwise take place. But it is needless, perhaps, to say that this apprehension was of the most futile description. The trade of a baker is one that may be easily learned, and it requires no considerable capital to carry it on; so that were those engaged in the business in any particular town to attempt to force up prices to an artificial elevation, the combination would be immediately defeated by the competition of others; and even though this were not the case, the facility with which bread may be baked at home would of itself serve to nullify the efforts of any combination. But the assize regulations were not merely useless; they were in many respects exceedingly injurious: they rendered the price of flour a matter of comparative indifference to the baker; and they obliged the baker who used the finest flour, and made the best bread, to sell at the same rate as those who used inferior flour, and whose bread was decidedly of a worse quality. But these considerations, how obvious soever they may now appear, were for a long time entirely overlooked. According, however, as the use of wheaten bread was extended, it was found to be impracticable to set assizes in small towns and villages; and notwithstanding the fewness of the bakers in such places gave them greater facilities for combining together, the price of bread was almost uniformly lower in them than in places where assizes were set. In consequence, partly of this circumstance, but still more of the increase of intelligence as to such matters, the practice of setting an assize was gradually relinquished in most places; and in 1815 it was expressly abolished, by an act of the legislature (*55* Geo. 3. c. 99.), in London and its environs. In other places, though the power to set an assize still subsists, it is seldom acted upon, and has fallen into comparative disuse.

b. Regulations as to the Weight, and Ingredients to be used in making Bread. —According to the assize acts, a sack of flour weighing 280 lbs. is supposed capable of being baked into 80 quartern loaves; one fifth of the loaf being supposed to consist of water and salt, and four fifths of flour. But the number of loaves that may be made from a sack of flour depends entirely on its goodness. Good flour requires more water than bad flour, and old flour than new flour. Sometimes 82, 83, and even 86 loaves have been made from a sack of flour, and sometimes hardly 80.

Under the assize acts, bakers are restricted to bake only three kinds of bread, viz. wheaten, standard wheaten, and household; the first being made of the finest flour, the second of the whole flour mixed, and the third of the coarser flour. The loaves are divided into peck, half-peck, and quartern loaves; the legal weight of each, when baked, being, the peck loaf 17 lbs. 6 oz., the half-peck 8 lbs. 11 oz., and the quartern 4 lbs. 5½ oz. avoirdupois.

Now, however, it is enacted, that within the city of London, and in those places in the country where an assize is not set, it shall be lawful for the bakers to make and sell bread made of wheat, barley, rye, oats, buckwheat, Indian corn, peas, beans, rice, or potatoes, or any of them, along with common salt, pure water, eggs, milk, barm, leaven, potato or other yeast, and *mixed in such proportions as they shall think fit.* — (3 *Geo.* 4. c. 106. § 2., and 1 & 2 *Geo.* 4. c. 50. § 2.)

It is also enacted, by the same statutes, that bakers in London, and in the country, that is, in all places 10 miles from the Royal Exchange where an assize is not set, *may make and sell bread of such weight and size as they think fit*, any law or assize to the contrary notwithstanding. But it is at the same time enacted, that such bread shall always be sold by avoirdupois weight of 16 ounces to the pound, and in no other manner, under a penalty for every offence of not more than 40*s.*; except, however, French or fancy bread, or rolls, which may be sold without previously weighing the same.

Bakers or sellers of bread are bound to have fixed, in some conspicuous part of their shop, a beam and scales, with proper weights for weighing bread; and a person purchasing bread may require it to be weighed in his presence. Bakers and others sending out bread in carts, are to supply them with beams, scales, &c., and to weigh the bread if required, under a penalty of not more than 5*l.* — (3 *Geo.* 4. c. 106. § 8.)

Bakers, either journeymen or masters, using alum or any other unwholesome ingredient, and convicted on their own confession, or on the oath of one or more witnesses, to forfeit not exceeding 20*l.* and not less than 5*l.* if beyond the environs of London, and not exceeding 10*l.* nor less than 5*l.* if within London or its environs. Justices are allowed to publish the names of offenders. The adulteration of meal or flour is punishable by a like penalty. Loaves made of any other grain than wheat, without the city and its liberties, or beyond 10 miles of the Royal Exchange, to be marked with a large Roman M.; and every person exposing such loaves without such mark shall forfeit not more than 40*s.* nor less than 10*s.* for every loaf so exposed. — (1 & 2 *Geo.* 4. c. 50. § 6.)

Any ingredient or mixture found within the house, mill, stall, shop, &c. of any miller, mealman, or baker, which after due examination shall be adjudged to have been placed there for the purpose of adulteration, shall be forfeited; and the person within whose premises it is found punished, if within the city of London and its environs, by a penalty not exceeding 10*l.* nor less than 40*s.* for the first offence, 5*l.* for the second offence, and 10*l.* for every subsequent offence. — (3 *Geo.* 4. c. 106. § 14.) And if without London and its environs, the party in whose house or premises ingredients for adulteration shall be found, shall forfeit for every such offence not less than 5*l.* and not more than 20*l.* — (1 & 2 *Geo.* 4. c. 5. § 8.)

Bakers in London and its environs are not to sell, or expose to sale, any bread, rolls, or cakes, nor bake or deliver any meat, pudding, pie, tart, or victuals of any sort, on Sundays, except between the hours of *nine* in the morning and *one* in the afternoon, under penalty of 10*s.* for the first offence, 20*s.* for the second offence, and 40*s.* for every subsequent offence. — (3 *Geo.* 4. c. 106. § 16.)

Bakers in the country are prohibited from selling, &c. any bread, &c., or baking or delivering any meat, &c., on Sundays, any time after half past 1 o'clock of the afternoon of that day, or during the time of divine service, under penalty of 5*s.* for the first offence, 10*s.* for the second, and 20*s.* for the third and every subsequent offence. — (*59 Geo.* 3. c. *56.* § 12.)

There are several regulations in the acts now in force with respect to the sale, &c. of bread where an assize is set; but as the practice of setting an assize is nearly relinquished, it seems unnecessary to recapitulate them. The weight of the assize bread has already been mentioned, and the principle on which its price is fixed.

Notwithstanding the prohibition against the use of alum, it is believed to be very generally employed, particularly by the bakers of London. — "In the metropolis," says Dr. Thomson (*Suppl. to Encyc. Brit.* art. *Baking*), "where the goodness of bread is estimated entirely by its whiteness, it is usual with those bakers who employ flour of an inferior quality, to add as much alum as common salt to the dough; or, in other words, the quantity of salt added is diminished a half, and the deficiency supplied by an equal weight of alum. This improves the look of the bread, rendering it much whiter and firmer."

There are believed to be about 1,700 bakers in London, Westminster, &c. The trade which they carry on is in general but limited, and it is not reckoned a very advantageous line of business.

BREMEN, one of the free Hanseatic cities, situated on the river Weser, about 50 miles from its mouth, in lat. 53° 4¾′ N., long. 8° 48′ E. Population about 46,000. Its situation on the Weser renders Bremen the principal emporium of Hanover, Brunswick, Hesse, and other countries traversed by that river. The charges on the buying, selling, and shipping of goods are very moderate. The principal exports are linens, grain, oak bark, glass, smalts, hams, hides, rapeseed, beef and pork, rags, wool and woollen goods, wine, &c. The wheat and barley shipped here are mostly very inferior; but the oats are useful common feed; beans are good. The linens are mostly the same as those from Hamburgh. The imports consist of coffee, sugar, and other colonial products; wines, raw cotton, cotton stuffs and yarn, hardware, earthenware, brandy, tallow, tar, oil, tea, &c.

Entrance to Bremen. — The entrance to the Weser lies between the Mellum and other sands on the south-western, and the Teglers Plaat, &c. on the north-eastern side. Its course from Bremerlehe to its mouth is nearly S.E. and N.W. It is buoyed throughout. The buoys on the right or starboard side when entering being black and marked with letters, while those on the left or larboard are white and numbered. The first or outer black buoy has a gilt key upon it, and is, therefore, called the *schlussel* or key buoy; it lies in 10½ fathoms, bearing N.E. 5 miles from Wrangeroog light. This is an intermitting light, having replaced, in 1830, the old coal-fire beacon on the island of Wrangeroog, opposite to the northern extremity of East Friesland. It is, according to the most authentic statements, in lat. 53° 47½′ N., long. 7° 51′ 55″ E.; is elevated 63¼ feet above high water mark, being alternately visible and invisible for the space of a minute. A light vessel is moored in the fair-way of the Weser, between the black buoys E and F, and the white buoys 2 and 3. She has two masts: during day, a red flag, with a white cross upon it, is kept flying at the main-mast; and at night she exhibits 7 lantern lights, 28 feet above deck. This vessel is on no account to leave her station, unless compelled by the ice. Large vessels do not now generally ascend further than Bremerlehe, on the east side of the river, about 38 miles below Bremen, where a new and spacious harbour has been constructed. But vessels not drawing more than 7 feet water come up to town; and those drawing from 13 to 14 feet come up to Vegesack, about 13 miles from Bremen. — (See the valuable *Sailing Directions for the North Sea*, published by Mr. Norrie.)

Trade, &c. — Imports, Sales, and Stocks, of some of the principal Articles imported into Bremen, in the Years 1830, 1831, and 1832.

Years.		Imports.	Sales.	Stocks, 31st December.
Coffee	1830	13,000,000 lbs.	14,000,000 lbs.	3,500,000 lbs.
	1831	11,000,000 —	13,000,000 —	1,500,000 —
	1832	14,000,000 —	10,500,000 —	5,000,000 —
Sugar *, raw	1830	16,500,000 —	16,500,000 —	3,500,000 —
	1831	23,000,000 —	22,225,000 —	4,225,000 —
	1832	25,000,000 —	19,225,000 —	10,000,000 —
Tobacco and stems	1830	21,745 hhds.	20,624 hhds.	4,876 hhds.
	1831	21,620 —	21,407 —	5,089 —
	1832	31,005 —	26,750 —	9,344 —
Cotton	1830	3,950 bales	5,150 bales	1,300 bales
	1831	5,200 —	5,650 —	850 —
	1832	5,250 —	5,100 —	1,000 —
Rice	1830	9,070 tierces	9,570 tierces	2,500 tierces
	1831	7,280 —	9,780 —	
	1832	4,837 —	4,712 —	125 —
Fish oil	1830	32,620 barrels	31,820 barrels	2,500 barrels
	1831	24,460 —	24,860 —	2,100 —
	1832	48,600 —	45,700 —	5,000 —
Hides	1830	30,500 number	31,000 number	4,500 number
	1831	32,605 —	32,545 —	4,650 —
	1832	50,000 —	35,540 —	19,110 —

Among other imports in 1832, were, rum, 1,583 puncheons; logwood, 1,706,000 lbs.; fustic, 516,000 lbs.; indigo, 236 boxes and 22 serons; pepper, 2,500 bags; pimento, 1,650 bags; saltpetre, 4,873 bags; ashes, 354 barrels North American, and 1,951 casks Russian. The sugar and coffee are principally brought from Cuba. The imports of French wine in 1831 were 11,205 barrels and 4,300 pieces. Tea is also imported to a pretty considerable extent.

* Exclusive of the raw, about 3,000,000 lbs. of refined sugar were imported in 1832.

Exports.—Linens are one of the most important articles of export from Bremen. They are mostly sold by the piece; but there are great differences in the dimensions of pieces of different denominations. The following table is, therefore, of importance, as it exhibits the various descriptions of linens usually met with at Bremen, with the length and breadth of the different pieces. It also gives their price free on board in sterling money, at the exchange of 6 rix-dollars per 1*l.* sterling, on the 8th of January, 1833.

Description of Linen.	Length.	Width.	Price free on board.
Silesian Linens.	*Yards.*	*Inches.*	£ s. d. to £ s. d.
Platillas, white - - - per piece Rd.	37½	30	0 18 4 to 1 16 8
brown or cholets - - - - -	-	-	0 15 0 — 1 0 0
Bretagnes - - - - - - -	7½	-	0 4 2 — 0 9 2
Ditto - - - - - - -	-	35	0 10 0 — 0 18 4
Casarillos (in 3 rolls) - - - - -	37½	30	1 0 0 — 1 13 4
Estopillas unies, clarines, and à fleurs - - -	8	-	0 7 6 — 1 3 4
Rouans - - - - - - -	52½	40	1 16 8 — 3 13 4
Saxon.			
Arabias - - - - - - -	20½	24	0 15 0 — 1 5 2
Buchlinen, or checks and stripes - - - -	15	-	0 5 0 — 0 6 8
Coutils - - - - - - -	37½	29	1 1 8 — 2 0 0
Creas à la Morlaix - - - - -	67½	-	2 0 0 — 3 13 4
Dowlas - - - - - - -	66	29	1 16 8 — 3 0 0
Listados - - - - - - -	42½	33	1 3 4 — 2 13 4
Westphalian.			
Bielefield shirting - - - - -	37½	30	1 13 4 — 10 0 0
Osnaburghs, white, ord. to superfine - - -	125	27	3 10 0 — 3 16 8
Meyerlinen - - - - - -	-	-	2 6 8 — 2 13 4
Weserlinen, called Toile à la rose - - -	-	-	2 0 0 — 2 3 4
Bodenwerder, grey - - - - -	-	26	1 8 4 — 1 18 4
Tecklenburg, true born white - - - -	-	27	2 6 8 — 2 13 4
Iburgs, superfine - - - -	-	-	2 16 8 — 3 13 4
Hempen, best white - - -	-	-	2 10 0 — 3 0 0
brown and stout - -	-	-	1 16 8 — 2 1 8
Ravensduck - - - - -	37½	-	0 15 0 — 1 0 0
Sailcloth, imitation of Russia - - -	-	30	1 6 9 — 1 16 8
Dutch - -	-	-	2 10 0 — 3 0 0
White rolls (in 3 rolls) - - - - -	-	28	0 13 4 — 0 18 4
Bouten, No. 2. - - -	17½	29	0 5 7 — 0 7 9
Brown rolls, No. 0. 4. 3. 2. 1. - - -	37½	-	0 5 10 — 0 18 4
Fine twilled bagging - - - - -	-	45	0 16 4 — 1 0 0
Diaper bagging - - - - -	50	28	0 8 4 — 0 14 3
Halblaken or Burlaps, No. 0. 4. 3. 2. 1. per d. ell Gr.	1¼	31	0 0 4¼ — 0 0 6¾
Dielingen, coarse - - - per 200 ells Rd.	125	27	1 5 0 — 1 10 0
Cotton bagging, imitation of Dundee - - per piece	50	42	0 15 0 — 0 18 4
Hessian.			
Fine quality, black seals - - - - -	37½	40	0 13 4 — 0 18 4
Good quality, red seals - - - - -	-	-	0 10 0 — 0 13 4
Ordinary, ditto - - - - -	-	-	0 8 4 — 0 10 0

Arrivals.—During the year 1832, 1,116 ships entered the port of Bremen. Of these, 120 were from Great Britain; 121 from the United States; 68 from the West Indies; 108 from Russia; 84 from Denmark; 16 from South America; and the remainder from the Netherlands, France, Spain, Sweden, &c. The shipping charges at Bremen are particularly low.

Emigration.—From 9,000 to 10,000 emigrants left Bremen in 1832, for America; their conveyance has become an object of much importance, particularly to the American ship-owners.

Money.—Accounts are kept in thalers, or rix-dollars, of 72 groots or grotes; the grote being divided into 5 swares. The Bremen rix-dollar current is worth 3*s.* 2*d.* sterling; and the par of exchange is 1*l.* sterling = 6 rix-dollars 22 grotes 4 swares.

Weights and Measures.—The commercial pound = 2 marks = 16 ounces = 32 loths = 7,690 English grains. Hence, 100 lbs. of Bremen = 109·8 avoirdupois, or 49·825 kilog. A load or pfundschwer = 300 lbs., but carriers reckon it at 308 lbs. A centner = 116 lbs.; a shippound = 2½ centners, or 290 lbs.; a waage of iron = 120 lbs.; a stone of flax = 20 lbs.; a stone of wool = 10 lbs. A ton of butter great measure = 300 lbs.; and a ton of do. small measure = 220 lbs.

The dry measures are, 4 spints = 1 viertel; 4 viertels = 1 scheffel; 10 scheffels = 1 quart; 4 quarts = 1 last; the last = 80·70 bushels Winchester measure, or 10·087 quarters; that is, 10 quarters and 0·7 bushel. A barrel of salt = 3½ scheffels. A last of coals = 2 chaldrons Newcastle measure.

The liquid measures are, 8·8 quarts = 1 viertel; 5 viertels = 1 anker; 4 ankers = 1 tierce; 1⅓ tierce = 1 oxhoft; the oxhoft = 58 English wine gallons. Wine is sometimes sold by the ahm of 4 ankers = 37¾ Eng. wine gallons. A barrel of whale oil = 6 steckan, or 216 lbs. nett = 31⅛ Eng. wine gallons. A ship last of herrings, salt, and coals = 12 barrels.

The Bremen foot = 11·38 Eng. inches; hence, 100 Bremen feet = 94·8 Eng. ditto. The Bremen ell is 2 feet; and 100 ells of Bremen = 63·2 Eng. yards.

Tares.—The usual tares are, on sugar in casks and Brazil chests, 17 per cent.; on Havannah boxes 70 lbs.; Maryland tobacco, 90 lbs. per hogshead; ditto Virginia and Kentucky, 110 lbs. per hogshead; cotton, round bales, 4 per cent.; square ditto, 6 per cent.; tea (green) 20 lbs. per quarter chest; ditto (black), 22 lbs. per quarter chest. Most other articles, such as East India indigo, rice, coffee, spices, &c. real tare.—(Drawn up principally from the communications of Bremen merchants.)

BRIBE. Any person giving or offering a bribe, recompence, or reward, to any officer of the customs, to induce him to neglect his duty, to forfeit 200*l.*—(3 & 4 *Will.* 4. c. 53. § 38.)

BRICKS AND TILES, well known articles used in the building and covering of houses. They are made of baked clay and sand. Until last year (1833) an excise duty was charged both on bricks and tiles, their manufacture being, in consequence, placed under surveillance. It is ordered by 17 Geo. 8. c. 42., that all bricks made in England for sale shall be 8½ inches long, 2½ inches thick, and 4 wide; and all pantiles 13½ inches long, 9½ inches wide, and ½ an inch thick; on pain of forfeiting, for bricks or tiles made of less dimensions when burnt, as follows, viz. 20*s.* for every 1,000 of bricks, and 10*s.* for every 1,000 of pantiles, and proportionally for a greater or less number.

It is also provided, that the size of the sieves or screens for sifting or screening sea-coal ashes to be mixed with brick earth in making bricks, shall not exceed $\frac{1}{4}$ of an inch between the meshes. Makers of bricks and tiles must give notice, under a penalty of 100*l.*, to the excise, of their intention to begin the manufacture. Tiles used in draining land were exempted from the duties. But in so far as respects tiles, these regulations are no longer of importance, the duty on them having been abolished in 1833. The revenue derived from it was but trifling. It was, however, very prejudicial to the manufacture, particularly after the repeal of the duty on slates. It were to be wished that the state of the revenue was such as to admit of the repeal of the duty on bricks.

Account of the Rates of Duty on, and Quantities of, the different Species of Bricks produced in England and Wales in 1827, 1828, and 1829.

Species.	Rates of Duty.	Quantity.	Quantity.	Quantity.
		1827.	1828.	1829.
Common -	5*s.* 10*d.* per 1,000	1,092,447,058	1,068,400,330	1,099,744,701
Large - -	10*s.* per do.	2,683,046	2,645,425	2,540,360
Polished -	12*s.* 10*d.* per do.	8,150,750	7,769,075	7,295,366
Large polished -	2*s.* 5*d.* per 100	98,550	122,810	110,275
	Totals	1,103,379,404	1,078,937,640	1,109,690,702

Account of the Rates of Duty on, and Quantities of, the different Species of Bricks produced in Scotland in 1827, 1828, and 1829.

Species.	Rates of Duty.	Quantity.	Quantity.	Quantity.
		1827.	1828.	1829.
Common -	5*s.* 10*d.* per 1,000	20,071,337	24,281,032	24,741,582
Large - -	10*s.* per do.	255,850	406,439	396,187
Polished -	12*s.* 10*d.* per do.	3,375	1,850	6,522
	Totals	20,330,562	24,689,321	25,144,291

Nett Produce of the Duties on Bricks and Tiles in 1829.

		£	s.	d.			£	s.	d.
England - -	Bricks	319,051	14	5	Scotland - -	Bricks	6,714	0	0
	Tiles	34,830	7	5		Tiles	1,922	12	0

Total nett amount of revenue from bricks and tiles in Great Britain, 362,518*l.* 13*s.* 10*d.*

There were, in 1830, 5,369 brick and tile manufacturers in England and Wales, and 104 in Scotland.*

The entire duties on bricks and tiles are drawn back upon exportation. Sufficient security must be given before their shipment, that they shall be shipped and exported, and not relanded in Great Britain. (24 *Geo.* 3. sess. 2. c. 24. § 16.)

If bricks or tiles shipped for drawback be relanded, the bricks or tiles so relanded shall, over and above the penalty in the bond, be forfeited. — (§ 17.)

Return of the Number of Tiles made in the Year 1830, in Great Britain; stating the Number of each Kind, and the Rate of Duty charged per Thousand on each; also, the Gross Amount of Duty for the Year, and Amount paid for Drawback on Tiles exported; distinguishing each Country, and the Number of Tiles exported.

	Plain.	Rate of Duty.	Pan or Ridge.	Rate of Duty.	Small Paving.	Rate of Duty.	Large Paving.	Rate of Duty.	All other.	Rate of Duty.	Gross Amount of Duty.
		s. *d.*		*s.* *d.*		*s.* *d.*		*s.* *d.*		*s.* *d.*	£ *s.* *d.*
England -	41,707,915	5 8 ℔ 1000	20,603,450	12 10 ℔ 1000	3,972,507	2 5 ℔ 100	1,036,300	4 10 ℔ 100	399,675	4 10 ℔ 1000	32,438 19 5
Scotland -	3,250	—	2,638,942	—	57,330	—	19,370	—	1,750	—	1,810 15 0
Gt. Britain	41,711,165	—	23,242,392	—	4,029,837	—	1,055,670	—	401,425	—	34,249 14 5

Number of Tiles exported.

	Plain.	Pan or Ridge.	Small Paving.	Large Paving.	All other	Amount of Drawback.
						£ *s.* *d.*
England - -	17,000	734,742	126,909	143,073	1,424	975 9 5
Scotland - -	—	52,000	7,900	750	—	44 14 6
Great Britain -	17,000	786,742	134,809	143,823	1,424	1,020 3 11

Note. — Bricks and tiles made in Ireland are not subject to excise duty.

BRIMSTONE. See Sulphur.

BRISTLES (Fr. *Soies*; Ger. *Borsten*; Du. *Borstels*; It. *Setole*; Sp. *Cerdas, Setas*; Pol. *Szezeciny*; Rus. *Schtschetina*; Lat. *Setæ*), the strong glossy hairs growing on the back of the hog and the wild boar. These are very extensively used by brushmakers, shoemakers, saddlers, &c., and form a considerable article of import. Russia is the great mart for bristles; those of the Ukraine being held in the highest estimation. Of the total quantity imported in 1831, amounting to 2,070,306 lbs., Russia furnished 1,867,096

* (Compiled from the Parliamentary Papers, No. 194. Sess. 1830, and No. 354. Sess. 1831.)

lbs., and Prussia (Königsberg) 136,721 lbs. At an average of the 3 years ending with 1831, the entries for home consumption amounted to 1,789,801 lbs. a year. The duty, which varies from 2½*d.* to 3½*d.* a pound, produced, in 1832, 25,613*l.* 2*s.* 10*d.* nett.

BROCADE (Du. *Brokade;* Fr. *Brocade;* Ger. *Brokal;* It. *Broccalo;* Rus. *Partscha;* Sp. *Brocado*), a stuff made of silk variegated with gold and silver.

BROKERS, persons employed as middlemen to transact business or negotiate bargains between different merchants or individuals. They are sometimes licensed by public authority, and sometimes not.

Brokers are divided into different classes; as bill or exchange brokers, stockbrokers, ship and insurance brokers, pawnbrokers, and brokers simply so called, or those who sell or appraise household furniture distrained for rent. Exclusive, too, of the classes now mentioned, the brokers who negotiate sales of produce between different merchants usually confine themselves to some one department or line of business; and by attending to it exclusively, they acquire a more intimate knowledge of its various details, and of the credit of those engaged in it, than could be looked for on the part of a general merchant; and are consequently able, for the most part, to buy on cheaper and to sell on dearer terms than those less familiar with the business. It is to these circumstances — to a sense of the advantages to be derived from using their intervention in the transacting of business — that the extensive employment of brokers in London and all other large commercial cities is wholly to be ascribed.

The number of brokers in London is unlimited; but by the statute 8 & 9 Will. 3. c. 20. they are to be licensed by the lord mayor and aldermen, under such restrictions and limitations as they may think fit to enact. By the 57 Geo. 3. c. 60., brokers acting without being duly admitted are made liable in a penalty of 100*l.* The fee on admission is fixed by the same act at 5*l.*; and there is, besides, an annual payment also of 5*l.*

The following are some of the regulations established by the mayor and aldermen pursuant to the act of Will. 3.: — That every person shall, upon his admission, take an oath truly and faithfully to execute and perform the office of broker between party and party, in all things pertaining to the duty of the said office, without fraud or collusion, to the best and utmost of his skill and knowledge; — that he shall in all cases reveal the name of his principal; and neither deal in goods on his own account, nor barter and sell again, nor make any gain in goods beyond the usual brokerage; and that he shall regularly register all the contracts, &c. into which he enters.

Brokers grant a bond under a penalty of 500*l.* for the faithful performance of the duties sworn to in the oath of admission.

A medal is delivered to the broker, with his name engraved thereon, which he may produce, if required, as evidence of his qualification.

Twelve persons professing the Jewish religion are permitted to act as brokers within the city, under the same regulations, and receive the silver medal accordingly. This medal is transferable; sold generally at from 800*l.* to 1,500*l.*, exclusive of the expense of transfer, which is uncertain. Upon the decease of any of the holders of the medal without its having been transferred, the appointment falls to the lord mayor for the time being; and for it the sum of 1,500*l.* has not unfrequently been given. — (*Montefiore's Com. Dict.* art. *Brokers.*)

If goods in the city of London be sold by a broker, to be paid for by a bill of exchange, the vendor has a right, *within a reasonable time*, if he be not satisfied with the sufficiency of the purchaser, to annul the contract, provided he intimate his dissent as soon as he has an opportunity of inquiring into the solvency of the purchaser. In a case of this sort (*Hodgson* v. *Davies*, 2 Camp. N. P. C. 536.), Lord Ellenborough was, at first, rather inclined to think that the contract concluded by a broker must be absolute, unless his authority were limited by writing, of which the purchaser had notice. But the special jury said, that "unless the name of the purchaser has been previously communicated to the seller, if the payment is to be by bill, the seller is always understood to reserve to himself the power of disapproving of the sufficiency of the purchaser, and annulling the contract." Lord Ellenborough allowed that this usage was reasonable and valid. But he clearly thought that the rejection must be intimated as soon as the seller has had time to inquire into the solvency of the purchaser. The jury found, in the case in question, that *five* days was not too long a period for making the necessary inquiries.

Brokers, Bill, — propose and conclude bargains between merchants and others in matters of bills and exchange. They make it their business to know the state of the exchange, and the circumstances likely to elevate or depress it. They sell bills for those *drawing* on foreign countries, and buy bills for those *remitting* to them: and, from their knowledge of the mutual wants of the one class as compared with those of the other, a few of the principal brokers are able to fix the rate of exchange at a fair average, which it would not be possible to do if the merchants directly transacted with each other. Their charge as brokerage is 2*s.* per cent.

"Those," says Mr. Windham Beawes, "who exercise the function of bill brokers,

ought to be men of honour and capable of their business; and the more so, as both the credit and fortune of those who employ them may, in some measure, be said to be in their hands; and, therefore, they should avoid babbling, and be prudent in their office, which consists in one sole point, that is, *to hear all and say nothing*; so that they ought never to speak of the negotiations transacted by means of their intervention, or relate any ill report which they may have heard against a drawer, nor offer his bills to those who have spread it."

Brokers, Stock, — are employed to buy and sell stock in the public funds, or in the funds of joint stock companies. Their business is regulated by certain acts of parliament, by which, among other things, it is enacted, that contracts in the nature of wagers, or contracts apparently framed for the sale or purchase of stock, but really intended only to enable the parties to speculate on contingent fluctuations of the market, without any stock being actually sold, shall be void, and those engaging in them subjected to a penalty of 500*l.* — (7 *Geo.* 2. c. 8., made perpetual by 10 *Geo.* 2. c. 8.) And by the same act, any one contracting to sell stock of which he is not actually possessed, or to which he is not entitled, forfeits 500*l.* Brokers not keeping a book in which all contracts are regularly inserted, are liable in a penalty of 50*l.* for each omission; half to the king, and half to those who sue for it. The charge for brokerage on all public funds, except Exchequer bills and India bonds, is 2*s.* 6*d.* per cent.; on these it is 1*s.* per cent. No transaction with respect to the purchase and sale of stock in the public funds can be concluded except by the intervention of a licensed broker, unless by the parties themselves.

Brokers, Ship and Insurance. — The chief employment of this class of brokers is in the buying and selling of ships, in procuring cargoes on freight, and adjusting the terms of charterparties, settling with the master for his salary and disbursements, &c. Their charge as ship brokers is about 2 per cent. on the gross receipts. When they act as insurance brokers, they charge 5 per cent. on the premium, exclusive of a discount allowed them on settling with the underwriter. The merchant looks to the broker for the regularity of the contract, and a proper selection of underwriters. To him also the underwriters look for a fair and candid disclosure of all material circumstances affecting the risk, and for payment of their premiums. From the importance of their employment, ship and insurance brokers ought to be, and indeed generally are, persons of respectability and honour, in whom full confidence may be reposed. A ship broker is not within the various acts for the regulation and admission of brokers. — (*Gibbons* v. *Rule*, C. P. 27th of June, 1827.)

Brokers, Custom-house. — It is enacted by the 3 & 4 Will. 4. c. 52., that no person shall be authorised to act as an agent for transacting business at the Custom-house in the port of London, relative to the entry or clearance of any ship, &c., unless authorised by licence of the commissioners of customs, who are to require bond with one surety for 1,000*l.*, for the faithful conduct of such person and his clerks. This regulation does not, however, apply to the clerk or servant of any person or persons transacting business at the Custom-house on his or their account. The commissioners may extend this regulation to other ports. — §§ 144. & 148.

Brokers, Pawn. See PAWNBROKERS.

Brokers, simply so called, in their character of appraisers and sellers of goods distrained for rent, are regulated by 57 Geo. 3. c. 93., which enacts, that no *such person* making any distress for rent, where the sum due does not exceed 20*l.*, shall take more than the following sums; viz.

	£	s.	d.
For levying - - - - -	0	3	0
For men keeping possession, per day - - -	0	2	0
Advertisements, if any - - - - -	0	10	0
Catalogues, sale, commission, &c. in the pound on the nett produce	0	1	0
Stamp duty, lawful amount.			

Appraisements, whether by one broker or more, 6*d.* per pound on the value of the goods, under a penalty of treble the amount of the money unlawfully taken, with costs, to be recovered summarily before a justice of the peace.

In France, the brokers who deal in money, exchange, merchandise, insurance, and stock, are called *agents de change*, and their number, at Paris, is limited to *sixty*. The company of *agents de change* is directed by a chamber of syndics (*chambre syndicale*) chosen annually by the company. They are severally obliged to give bonds to the amount of 125,000 fr. for the prevention of abuses. They are also obliged to keep books; are restricted to a charge of from $\frac{1}{8}$ to $\frac{1}{4}$ per cent.; and are interdicted from carrying on, or having any interest in, any commercial or banking operations. — (See *Code de Commerce*, § 74. &c.; and art. BORDEAUX, in this Dictionary.)

In the United States, brokers are not licensed, nor do they give bonds.

BROKERAGE, the commission, or percentage, paid to brokers on the sale or purchase of bills, funds, goods, &c. — (See FACTORAGE.)

BRONZE (Ger. *Stückgut, Stükmetall;* Du. *Stückgoed;* It. *Bronzo;* Sp. *Metal de Canones;* Lat. *Metallum tormentorum*), "a mixed metal, consisting chiefly of copper, with a small proportion of tin, and sometimes other metals. It is used for casting statues, cannon, bells, and other articles, in all of which the proportions of the ingredients vary."—(*Ure.*)

BROOMS (Ger. *Besen;* Fr. *Balais;* It. *Scope, Granate;* Sp. *Escobas;* Rus. *Metlä*) are principally made of birch or heath. Vast quantities are manufactured in Southwark, for the supply of the London market.

BRUSHES (Ger. *Bürsten;* Fr. *Brosses;* It. *Setole, Spazzole;* Sp. *Brozas, Cepillos, Escobillas;* Rus. *Schtschetki*), well-known implements, made of bristles, and manufactured of various forms.

BUBBLES, a familiar name applied generally to fraudulent or unsubstantial commercial projects, which hold out hopes of rapid gain, for the purpose of enriching the projectors at the expense of sanguine and ignorant adventurers; and particularly used to designate those projects, the funds for which are raised by the sale of shares or subscription to a transferable stock. In consequence of the mischief produced by the gambling in transferable shares of bubble companies at the time of the South Sea project, 1719 and 1720, the stat. 6 Geo. 1. c. 18., reciting that several undertakings or projects had been contrived and practised, which "manifestly tended to the common grievance, prejudice, and inconvenience of great numbers of his Majesty's subjects in their trade and commerce," and describing, among other practices of the time, the ordinary mode of raising money by shares and subscriptions to a pretended transferable stock, enacted, that the undertakings and attempts so described, and public subscriptions, assignments, and transfers for furthering them, and particularly the raising or pretending to raise transferable stocks without authority of charter or act of parliament, should be deemed illegal and void, and prohibited them under severe penalties. Some decisions limited the operation of, and finally the stat. 6 Geo. 4. c. 91. altogether repealed, these enactments and prohibitions. The projectors of bubbles, therefore, are now punishable only when they can be deemed guilty of frauds or conspiracies at common law; and there is no other check on the adventurers than the loss and troublesome liabilities under the law of partnership, in which participation in these projects often involves them.

BUCKRAM (Fr. *Bougran;* Ger. *Schettre, Steife Leinwand;* It. *Tela collata o gommata;* Rus. *Kleanka;* Sp. *Bucaran*), a sort of coarse cloth made of hemp, gummed, calendered, and dyed several colours.

BUCKWHEAT (Fr. *Blé Sarrasin, Blé noir;* Ger. *Buchweizen, Heidekorn;* It. *Grano Saraceno, Faggina, Fraina;* Sp. *Trigo Saraceno, Trigo negro;* Pol. *Tatarca, Gryka, Pohanca;* Rus. *Gretscha;* Lat. *Fagopyrum*) is principally cultivated, in order that it may be cut when young and green, and employed as fodder for cattle; when allowed to ripen, the grain is usually employed to feed pigeons and poultry. When ripe it is of a deep yellow colour, the seeds bearing a great resemblance to beech-mast: it will grow on the poorest soils. Buckwheat has been cultivated in this country from the latter part of the sixteenth century. Its native country is unknown, but supposed to be Asia. Beckmann has a very learned dissertation on its introduction and early culture in Europe.—(See *Hist. of Invent.* vol. i. art. *Buckwheat.*) The average quantity of buckwheat imported, is about 10,000 quarters. The duty is the same as on barley. —(See Corn Laws.)

BUENOS AYRES, a city of South America, on the south side of the La Plata, about 200 miles from its junction with the sea, in lat. 34° 36½′ S., long. 58° 22′ W. Population very differently estimated; but said (*Bulletin des Sciences Géographiques*, vol. xx. p. 152.) to amount to 81,000. The La Plata is one of the largest rivers of the world, traversing a vast extent of country, of which it is the great outlet. Unluckily, however, it is of very difficult navigation, being shallow, infested with rocks and sand-banks, and exposed to sudden and violent gusts of wind. There is no harbour at Buenos Ayres, or none worthy of the name. Ships can only come within 2 or 3 leagues of the town: there they unload their goods into boats; from which they are received at the landing places into carts that convey them to the town, which is about ¼ of a league distant. Ships that want careening repair to the bay of Barragon, a kind of port about 10 leagues to the S. E. of the city; and there also the outward bound ships wait for their cargoes. All the timber used in the construction of houses, and in the building and repairing of vessels, comes down the river from Paraguay in rafts. The principal articles of export consist of hides and tallow, of which vast quantities are sent to England, the United States, Holland, Germany, &c.; besides these, there are exported bullion and viccunna wool from Peru, copper from Chili, salt beef, nutria skins, &c. The imports principally consist of cotton and woollen goods from England, hardware and earthenware from ditto, linens from Germany, flour from the United States, spices, wines, salt fish, machinery, furniture, &c.: the finest tobacco, sugars, wax, &c. are brought from the interior; as is Paraguay tea, an article in considerable

demand in South America. The inland trade carried on between Buenos Ayres, and Peru, and Chili, is very considerable; and its trade by sea with foreign countries is daily becoming of more importance.

During the year 1832, there were exported from Buenos Ayres, dry hides, 877,132; ditto salted, 48,378 horse hides, 40,076; jerked beef, 105,780 quintals; horns, 2,049,017; tips, 101,851; wool, 33,052 arrobas hair, 31,257 ditto; nutria skins, 14,562 dozen, &c. The trade from this country to Buenos Ayres is confounded in our Custom-house accounts with that to Monte Video, under the general name of the States of the Rio de la Plata; but by far the largest share belongs to Buenos Ayres. In 1831, we imported from these states, exclusive of bullion, of which no account is kept, 429,966 nutria skins—(see NUTRIA), 146,008 cwt. hides, 2,470 cwt. tallow, 12,244 lbs. sheep's wool, &c. The declared value of the articles of British produce and manufacture exported to these states during the same year, was 339,870*l.*; of which cottons, woollens, hardware, and linens made more than three fourths. In 1828, 64 British ships, of the burden of 12,746 tons, entered the port; the total number of foreign vessels that annually enter it being from 300 to 400. The commerce of Buenos Ayres will no doubt continue to increase according as the vast countries situated on the La Plata, now in a great degree unoccupied, are settled.

Monies, Weights, Measures, &c. same as those of Spain; for which, see CADIZ.

BUFF (Ger. *Büffel, Büffelhäute;* Fr. *Buffle, Peau de buffles, et Peaux passées en buffles;* It. *Bufalo, Cuojo di bufalo*), a sort of leather prepared from the skin of the buffalo, dressed with oil, after the manner of chamois. The skin of elks, oxen, and other like animals, when prepared after the same manner as that of the buffalo, is likewise called *buff*. It is used in making sword-belts and other articles, where great thickness and firmness are required.

BUGLES, small glass beads of different colours. They are in considerable demand in Africa, to which they are mostly exported.

BULLION, uncoined gold and silver in the mass. See GOLD and SILVER.

BUOYS, pieces of wood, cork, or some light substance, moored and floating on the water. Those of wood are sometimes solid, and sometimes hollow, like a cask, and strongly hooped; they are made of various shapes and sizes; and are either private or public.

Subjoined is an

Account specifying the Buoys and Beacons under the Control of the Trinity House, Deptford Strond, with the Rates of Charge on account of the same on British and Foreign Ships, and the Produce of the Rates in each of the Three Years ending with 1832.—(*Parl. Paper*, No. 315. Sess. 1833.)

	Rates of Charge.			Amounts collected.		
	Coasters.	British and Foreign privileged Vessels Oversea, per Ton.	Foreign Vessels not privileged Oversea, per Ton.	1830.	1831.	1832.
				£ s. d.	£ s. d.	£ s. d.
For the buoys and beacons in the channels leading to the river Thames and port of London, including loadsmanage and primage, also including the dues formerly returned under the head of Trinity House duties from strangers' ships.	In the port of London the following rates are payable for the inward passage only; viz.— The rates vary from ¼ penny to 1 farthing per ton, according to the description of the vessels' cargoes, and the places from whence they arrive.	1 penny -	2 pence -	8,623 7 5	9,313 16 5½	8,149 16 9¼
	These dues are also received at the ports of Gravesend, Sheerness, Rochester, Faversham, Leigh, Maldon, Colchester, Ipswich, Woodbridge, Harwich, and Aldborough, at which they are payable for the inward passage only. The rate on foreign vessels not privileged, is 2 pence per ton, but in other respects the rates are determined by the ancient usage of the respective places, and are generally one half the amount of those in the port of London.					
Buoys off Yarmouth	½ farthing per ton.	½ farthing	½ farthing	1,806 10 2¾	1,835 11 4¼	1,802 8 1½
Buoys and beacons in the river Tees	4 pence per vessel under 40 tons, 6 pence on all others.			462 7 8	452 17 2	465 7 6
Exeter buoys -	Stone boats, 5 shillings per annum.	1 penny -	2 pence -	305 14 0	296 5 10	350 19 7
Conway buoys -	3 farthings per ton, each and every time of passing.			48 18 2½	49 2 11½	45 8 4½
Carmarthen buoys	3 farth. per ton, each time of passing.			110 12 9¼	105 14 11¾	107 7 3
Aberdovey buoys -	1 halfpenny per ton.	1 penny -	1 penny -	- - -	31 14 10¼	40 9 2
			Total - £	11,357 10 3½	12,085 3 7½	11,261 16 9¼

Trinity House, London, 9th of March, 1833. (Errors excepted.) J. HERBERT, Secretary.

Private Buoys are so called from their belonging to private individuals. They are principally employed to mark the place of the ship's anchor, being fastened to it by a

rope or chain, so that the men who go in the boat to weigh it may readily find out where it is.

By the 1 & 2 Geo. 4. c. 75. § 11. it is enacted, that if any person or persons shall wilfully cut away, cast adrift, remove, alter, deface, sink, or destroy, or in any way injure or conceal, any buoy, buoy-rope, or mark belonging to any ship or vessel, or which may be attached to any anchor or cable belonging to any ship or vessel, whether in distress or otherwise, such person or persons so offending shall upon conviction be adjudged guilty of felony, and shall be liable to be transported for any term not exceeding 7 years, or to be imprisoned for any number of years, at the discretion of the court.

Public Buoys, being intended for the public service, cannot be placed, altered, or removed, except by competent authority. They are generally of a pretty large size; and are firmly moored by chains or cables to rocks, large stones, anchors, &c. By floating on the surface of the water, they serve at once to mark the channels through which it is safe to steer, and to point out dangers to be avoided, such as sunken rocks, shoals, wrecks of vessels, &c. The places in, and the purposes for, which buoys are exhibited, are always specified in good charts: and as the leading buoys are generally of a peculiar figure or colour, which is also indicated in the chart, the navigator, as soon as he recognises them, shapes his course accordingly. Hence the great importance of having buoys properly placed, and of their being carefully marked in charts.

The 6 Geo. 4. c. 125. § 91. enacts, that every person who shall ride by, make fast to, remove, or wilfully run down or run foul of any vessel placed to exhibit lights, or any buoy or beacon belonging to the corporation of the Trinity House of Deptford Strond, or to any other corporation having authority to place such vessel, buoy, or beacon, shall, besides making good all damage occasioned thereby, forfeit, for every such offence, any sum not exceeding 50*l.* nor less than 10*l.*

BURDEN of a ship. See TONNAGE.

BURGUNDY. See WINE.

BURGUNDY PITCH, a resin, the produce of the *Pinus Abies*, or spruce fir. It is obtained by making incisions in the bark down to the wood, whence it flows thickly and languidly, immediately concreting into flakes that adhere firmly to the tree. These being taken off are melted in boiling water, and strained through coarse cloths. It is of a close consistence, rather soft, has a reddish brown colour, and a not unpleasant smell; it is very adhesive. The greatest quantity is collected in the neighbourhood of Neufchâtel, whence it is brought to us packed in casks. A fictitious sort is made in England, and found in the shops under the title of *common* Burgundy pitch; it may be distinguished by its friability, want of viscidity and of the odour which characterises the genuine sort.

A species of Burgundy pitch exudes spontaneously from the Norway spruce fir. This, which undergoes no preparation, is the *resin* or *thus* of the old London Pharmacopœias. It is imported in the form of tears or small masses, packed in casks, each containing from 1 to 2 cwt. It fetches about half the price of that which is strained. — (*Gray's Supplement to the Pharmacopœias*, *Thomson's Dispensatory.*)

BUSHEL, a measure of capacity for dry goods, as grain, fruit, dry pulse, &c., containing 4 pecks, or 8 gallons, or $\frac{1}{8}$ of a quarter.

The Winchester bushel contains 2150·42 cubic inches, while the Imperial bushel contains 2218·192. Hence, to convert Winchester bushels into Imperial, multiply by the fraction $\frac{2150{\cdot}42}{2218{\cdot}192}$ or ·969447, or approximately deduct $\frac{1}{30}$th, and $\frac{1}{200}$th; and if great accuracy be required, $\frac{1}{2000}$, and $\frac{1}{20000}$ more. To convert prices per Winchester bushel into prices per Imperial bushel, multiply by the fraction $\frac{2218{\cdot}192}{2150{\cdot}42}$, or 1·0315157.

By the 5 Geo. 4. c. 74. § 7. the bushel shall be the standard measure of capacity for *coals*, *culm*, *lime*, *fish*, *potatoes*, or *fruit*, and all other goods and things commonly sold by heaped measure. The bushel shall contain 80 lbs. avoirdupois of distilled water, being made round, with a plain and even bottom, and being 19$\frac{1}{2}$ inches from outside to outside. Sections 7. and 8. direct the mode in which the bushel shall be used for heaped measure. — (See WEIGHTS AND MEASURES.)

The standard measure of capacity, by this act, as well for liquids as for dry goods not measured by heaped measure, shall be the *gallon*, containing 10 lbs. avoirdupois weight of distilled water weighed in air at the temperature of 62° of Fahrenheit's thermometer, the barometer being at 30 inches; and such measure shall be the Imperial standard gallon (containing 277·274 cubic inches); and all measures shall be taken in parts or multiples, or certain proportions, of the said Imperial standard gallon; and the quart shall be the fourth part, and the pint shall be an eighth of such standard gallon; and 2 such gallons shall be a peck, and 8 such gallons shall be a bushel, and 8 such bushels a quarter of corn or other dry goods not measured by heaped measure.

BUSHIRE, OR ABUSHIRE, a sea-port town of Persia, in the province of Fars, on the north-east coast of the Persian Gulf, in lat. 29° N., long. 50° 50′ E. Population uncertain, but estimated by Major Wilson at from 15,000 to 20,000. Bushire is situated at the northern extremity of a sandy peninsula, to the north and east of which is the bay. There is a convenient anchorage for large ships due west from the town, 3 or 4 miles distant, in from 25 to 28 feet water; but ships of 300 tons burden or thereby lie in the inner roads, to the north, about 6 miles from shore; the anchorage is pretty good; but during violent north-westerly gales, they are sometimes obliged to cut their cables

and bear up for Karak, a small island about 15 leagues W. N.W. of Bushire. The water immediately to the east of the town is deep, but the passage to it is obstructed by a bar, which cannot be passed by vessels drawing more than 8 or 9 feet water, except at spring tides, when there is a rise of from 8 to 10 feet. The variation in 1811 was 4° 43′ W. — (*Chart of the Persian Gulf*, by *Captain Ritchie*, &c.) The climate here, as in all the other ports of the Persian Gulf, is extremely hot, particularly in June, July, and August. The unhealthy season is in the fall of the year.

Trade, &c. — Bushire has a good deal of trade, particularly with Calcutta, Bombay, and Madras. Its merchants supply almost all Persia with Indian commodities; as, also, with a good many of those brought from Europe. Of the imports from India, indigo, sugar, sugar candy, and spices are the most important; the steel of India is preferred in Persia to every other, and is made into excellent sabres: tin is brought from Lanca; and coffee is principally supplied by Mocha and other ports on the Arabian Gulf. English cotton goods, notwithstanding the admitted inferiority of our red dyes, — a colour in great esteem in Persia, — have already gone far to supersede those that were formerly brought from Hindostan; and the demand for them is rapidly extending, and is susceptible of an almost indefinite increase. Besides those imported at Bushire, a good many are introduced through Bussorah, and some through Turkey and Russia; the latter by way of the Black Sea, the former of Smyrna and Constantinople. Hitherto, indeed, a considerable part of the cottons imported through the last mentioned channels have been supplied by Switzerland and Germany, — their fabrics having been, in some respects, better fitted than ours for the Turkish and Persian markets; but they seem to have lost this advantage, as our exports of cottons to Turkey are now rapidly increasing. Woollen goods, cutlery, watches, &c., sent to India from England, are thence exported to Bushire. Imitation shawls, of the proper size and pattern, are said to meet with a fair sale. The exports principally consist of raw silk, Kerman wool, Kerman and Cashmere shawls, carpets, horses, silk goods, dried fruits, wine, grain, copper, turquoises, asafœtida, gall-nuts, pearls, and other articles of minor importance. Turkey annually supplies Persia with a very considerable amount of bullion, most part of which is sent to India.

Of the Persian exports, raw silk is the most important. It is produced to some extent in every province; but Gheelan and Mazunderan are those which are most celebrated for its growth. In the former, about 900,000 lbs. are annually raised. Russia is a large customer for this article. Dried fruits and dates are sent in considerable quantities to India. Horses are largely exported to India both by sea and land; they serve for mounting our Indian cavalry, and for supplying the large private demand that always obtains in Hindostan for this noble animal. Though neither so swift nor so beautiful as those of Arabia, the Persian horses are large, more powerful, and, all things considered, better for cavalry. They are capable of supporting an extraordinary degree of fatigue. Wine of Shiraz enjoys a degree of celebrity, to which, judging from the few samples we have seen, it seems but ill entitled. Mr. Fraser says that it is made in so careless a manner, that, in choosing it, not more than 1 bottle in 4 or 5 can be made use of. Persian tobacco and yellow dye berries are highly esteemed: the former enters to a considerable extent into the trade to Turkey as well as to India; the berries bring a very high price in our markets, but the imports hitherto have been inconsiderable. Turquoises, asafœtida, and various sorts of drugs, rose water, with other minor articles, form part of the exports. Sheep's and goats' wool is also exported. The best is that of Kerman. The down furnished by the goats of this province is almost as fine as that of the Thibet or shawl goats. Cotton is extensively produced in Persia; the Russians carry away some, but the greater part is used in the country. Grain is sent to Muscat, but not in large quantities. The pearl trade is now principally centered at Muscat. The imports of copper into Calcutta from Bushire, Bussorah, and other ports of the Persian Gulf, during the 7 years ending with 1827–28, were valued at about 30,000*l.* a year. This copper is principally the produce of the Persian mines, mixed, however, with some Russian copper from Georgia. Of manufactured articles, the principal are carpets of the most beautiful fabric; shawls, partly native, and partly brought from Cashmere; velvets, silk goods, gold and silver brocades, and a few other articles. The trade between Persia and Russia by the Caspian Sea is very considerable. Most part of the paper used in the former is supplied by the latter. The furs of Russia find a ready market in Persia; but it is a fact worth mentioning, that Persian merchants have recently been seen at the Leipsic fairs, carrying gold thither for American furs! — (*Urquhart on the Resources of Turkey*, p. 155.) The Russian provinces on the Caspian derive their supplies of indigo from Persia by way of Bushire.

The official returns show that the total value of the entire trade, imports as well as exports, carried on between British India and the Persian Gulf, at an average of the 7 years ending with 1828, was (taking the rupee at 2*s.*) 1,337,163*l.* a year. Of this amount, Calcutta participated to the extent of 559,684*l.*, Madras of 54,981*l.*, and Bombay of 722,497*l.* This, however, includes the trade to Muscat and Bussorah, as well as to Bushire, and we have no means of discriminating the separate amount of each.

It appears, indeed, from an account in the same paper whence these statements are taken, that of 34 ships belonging to the Persian Gulf that arrived at Bombay during the 7 years referred to, 28 belonged to Muscat, and only 7 to Bushire. But it must not be supposed that the trade to these places is in this proportion, inasmuch as most of the Arabian ships trading to Bussorah belong to Muscat. It may, however, be fairly presumed, that the arrivals of Gulf ships at Calcutta and Madras would be in about the same proportion as those at Bombay; but the destination of the British ships trading to the Gulf not being given, and it being customary for most ships to visit both Bushire and Bussorah, it is impossible to say whether the value of the trade to the former, as compared with that to the latter and Muscat, corresponds with the number of ships they respectively send to India.

Water at Bushire is excessively bad and dear; but excellent water, and in great abundance, may be had at Karak. The anchorage at this island is safe at all times; and ships may lie close to the beach. Sir John Malcolm suggested, that the permanent possession of Karak would be an object of considerable importance; and we are rather inclined to agree with him. It is of no value to the Persians, and there seems little doubt that they would be glad to cede it for a trifling consideration. Its possession would not only enable us to command the navigation of the Persian Gulf: but it would form a depôt where goods destined for Bushire, Bussorah, &c. might be kept in perfect safety, and in a situation the most convenient, being readily accessible to all sorts of Arabian vessels. A taste for British cottons and woollens is now forming in all the vast countries watered by the Euphrates and the Tigris, or which derive their supplies from the emporia erected on their banks; and it is of the greatest consequence that nothing be omitted that may serve to facilitate the diffusion of this taste, and the means of gratifying it.

Money. — Accounts are kept in tomans of 50 abasses, or 100 mamoodis. The toman is a Persian gold coin, containing, according to the report of the Bombay mint, from 71·5 to 77 gr. pure metal, being consequently equal to from 12*s.* 7¾*d.* to 11*s.* 11*d.* sterling. The toman of Bussorah is worth about 36*s.*; and that of Gombroon about 24*s.* These, with Persian and foreign silver coins of all denominations, are found at Bushire; but the rates of the foreign coins are perpetually varying, and the weight of the native coins is also subject to frequent changes.

Weights and Measures. — Gold and silver are weighed by the miscal of 2 dwt. 23 7-12 gr., or 3 dwt. very nearly.

The commercial weights vary according to the commodities sold, and the places where they are used. The maund tabree weighs 6¾ lbs. avoirdupois at the Custom-house, but only 6¼ lbs. at the bazaar. This weight is used by dealers in sugar, coffee, copper, and all sorts of drugs. The maund copra is 7¾ lbs. at the Custom-house, and from 7¼ to 7½ lbs. at the bazaar. Dealers in rice and other articles of provision use this weight. The maund shaw is double the maund tabree, or 13½ lbs.

Pearls are weighed by the abbas = 2·25 gr. Troy.

There are various sorts of guz's or cubits. One called the royal guz = 37½ Eng. inches; the common guz is two thirds of the former, or 25 inches.

The Persian league or parasang is 1-20th of a degree of the equator, and should, therefore, be equal to 3 miles 3 furlongs and 25 poles English.

The artaba, or principal corn measure, is equivalent to about 2 Winch. quarters.

For further particulars, see *Niebuhr, Voyage en Arabie*, tome ii. p. 75.; *Kinneir's Memoir of the Persian Empire*, p. 70.; *Fraser's Travels on the Shores of the Caspian, Appen.* pp. 352—384.; *Parl. Paper*, No. 735. — II. Sess. 1832. pp. 632—638.; *Kelly's Oriental Metrology; Thornton's East Indian Calculator, &c.*

BUSS, a small sea-vessel, used by us and the Dutch in the herring fishery, commonly from 50 to 60 tons burden, and sometimes more. A buss has two small sheds or cabins; one at the prow, and the other at the stern: that at the prow serves for a kitchen. — (See FISHERY.)

BUSSORAH, OR BASRAH, a city of Arabia, on the western bank of the Shat-el-Arab (the name given to the river formed by the junction of the Tigris and the Euphrates), above 70 miles from its mouth, lat. 30° 30′ N., long. 47° 32′ E. Population about 60,000, consisting of Arabs, Turks, Persians, Armenians, Jews, &c. The houses and streets are mean and filthy. There is a vast area within the walls, occupied principally by gardens and plantations of date trees, and intersected by canals, on which are numerous small craft.

The bar at the mouth of the Shat-el-Arab has only about 12 feet water, but the channel within is deep, so that ships of 500 tons burden, provided they cross the bar at the springs, may without difficulty ascend the river as far as the city; and both its grand branches may be navigated to a great distance by smaller vessels. Bussorah is the principal inlet on the east, through which Indian and other Eastern products find their way into the Turkish empire. Its commerce is, therefore, even at present, pretty considerable; and were the rich and extensive countries traversed by the Tigris and the Euphrates occupied by a civilised and industrious people, it would be very great. Its imports from India and Europe are similar to those at BUSHIRE (which see); from Persia it imports shawls, pearls from Bahrein, &c., and coffee from Mocha. At an average, 6 or 8 British ships arrive in the course of the year from India; but the principal part of the trade is carried on in Arabian bottoms, the merchants of Muscat being the owners of some of the finest ships that are to be met with in the Indian seas. Its exports are principally bullion, pearls, dates, copper, raw silk, horses, gall nuts, and drugs. Captain Hamilton mentions, that in the early part of last century, the exports of dates from Bussorah exceeded 10,000 tons a year. — (*New Account of the East Indies*, vol. i. p. 78.) The commerce with the interior is conducted by means of caravans to Aleppo and Bagdad; but it might be carried on to much more advantage by means of steam-boats. It has been proposed to forward mails from India by steam by the Shat-el-Arab and the Euphrates to Bir, thence by land to Scanderoon, and again by steam to Gibraltar and England.

Money. — All sorts of coins circulate here, but their values are constantly fluctuating. Accounts are kept in *mamoodies* of 10 *danims*, or 100 *floose*; 100 *mamoodies* make a *toman*, which may be valued at about 15 sicca rupees, or 36*s.* sterling.

Weights and Measures. — Gold and silver are weighed by the *cheki* of 100 *miscals*, or 7,200 Eng. grains.

The commercial weights are the *maund atteree*, the *maund sofy* or *sesse*, and the *oke of Bagdad*. 1 *vakia* = 19 oz. avoirdupois; 2½ vakias = 1 oke of Bagdad = 47½ oz. avoir.; 1 maund atteree = 28 lbs. 8 oz. avoir.; 1 maund sofy = 90 lbs. 4 oz. avoir.; 1 *cutra* of indigo = 138 lbs. 15 oz. avoir.

These are the weights used by the Europeans settled at Bussorah; those used by the Arabians differ little from the above, and frequently also among themselves,—a circumstance to which the merchant must pay particular attention.

The long measures are the Aleppo yard for silks and woollens = 2 feet 2·4 inches; the Hadded do. for cottons and linens = 2 feet 10·2 inches; the Bagdad do. for all purposes = 2 feet 7·6 inches.

For further details as to the commerce of Bussorah, see *Kinneir's Memoir on the Persian Empire*, p. 283.; the art. BUSHIRE in this Dictionary; *Kelly's Oriental Metrology*; *Thornton's East Indian Calculator*, p. 424. Niebuhr has given a plan of Bussorah, *Voyage en Arabie*, tome ii. p. 170.

BUTLERAGE. See PRISAGE.

BUTT, a vessel or measure for wine, containing 2 hogsheads, or 126 wine gallons.

BUTTER (Da. *Smör*; Du. *Boter*; Fr. *Beurre*; Ger. *Butter*; It. *Burro*, *Butiro*; Lat. *Butyrum*; Pol. *Maslo*; Port. *Manteiga*; Rus. *Masslo Korowe*; Sp. *Manteca*; Sw. *Smör*), as every one knows, is a fat, unctuous, and, in temperate climates, a pretty firm substance, obtained from milk, or rather from cream, by the process of churning.

The various circumstances attending the introduction and use of butter in antiquity have been investigated by Beckmann with great learning and industry. The conclusion at which he arrives is, "that butter was not used either by the Greeks or Romans in cooking or the preparation of food, nor was it brought upon their tables by way of dessert, as is every where customary at present. We never find it mentioned by Galen and others as a food, though they have spoken of it as applicable to other purposes. No notice is taken of it by Apicius; nor is there any thing said of it in that respect by the authors who treat of agriculture, though they have given us very particular information with respect to milk, cheese, and oil. This, as has been remarked by others, may be easily accounted for, by the ancients having accustomed themselves to the use of good oil; and in the like manner butter is very little employed at present in Italy, Spain, Portugal, and the southern parts of France."—(*History of Inventions*, vol. ii. p. 413. Eng. ed.)

Butter is very extensively used in this and most other northern countries; that of England and Holland is reckoned the best. In London, the butter of Epping and Cambridge is in the highest repute; the cows which produce the former, feed during summer in the shrubby pastures of Epping Forest; and the leaves of the trees, and numerous wild plants which there abound, are supposed to improve the flavour of the butter. It is brought to market in rolls from one to two feet long, weighing a pound each. The Cambridgeshire butter is produced from cows that feed one part of the year on chalky uplands, and the other on rich meadows or fens: it is made up into long rolls like the Epping butter, and generally salted or cured before being brought to market; the London dealers, having washed it, and wrought the salt out of it, frequently sell it for Epping butter.

The butter of Suffolk and Yorkshire is often sold for that of Cambridgeshire, to which it is little inferior. The butter of Somersetshire is thought to equal that of Epping: it is brought to market in dishes containing half a pound each; out of which it is taken, washed, and put into different forms, by the dealers of Bath and Bristol. The butter of Gloucestershire and Oxfordshire is very good; it is made up in half-pound packs or prints, packed up in square baskets, and sent to the London market by wagon. The butter of the mountains of Wales and Scotland, and the moors, commons, and heaths of England, is of excellent quality when it is properly managed; and, though not equal in quantity, it often is confessedly superior, to that produced by the richest meadows.—(*Loudon's Ency. of Agriculture.*)

Considerable quantities of butter are made in Ireland, and it forms a prominent article in the exports of that country: generally, it is very inferior to that of Britain; but this is a consequence rather of the want of cleanliness and attention, than of any inferiority in the milk. Some of the best Irish butter brought to London, after being washed and repacked, is sold as Dorsetshire and Cambridge butter.

The salt butter of Holland is superior to that of every other country; large quantities of it are annually exported. It forms about three fourths of all the foreign butter we import.

The production and consumption of butter in Great Britain is very great. The consumption in the Metropolis may, it is believed, be averaged at about one half pound per week for each individual, being at the rate of 26 lbs. a year; and supposing the population to amount to 1,450,000, the total annual consumption would, on this hypothesis, be 37,700,000 lbs., or 16,830 tons: but to this may be added 4,000 tons, for the butter required for the victualling of ships and other purposes; making the total consumption, in round numbers, 21,000 tons, or 47,040,000 lbs., which at 10*d.* per lb. would be worth 1,960,000*l.*

The average produce per cow of the butter dairies is estimated by Mr. Marshall at 168 lbs. a year; so that, supposing we are nearly right in the above estimates, about 280,000 cows will be required to produce an adequate supply of butter for the London market.

The consumption of butter in London has sometimes been estimated at 50,000 tons; which, according to Mr. Marshall's statement, of the accuracy of which no doubt can be entertained, would require for its supply upwards of 666,000 cows! Further commentary on such a statement would be superfluous.

An Account of the Total Quantity (in Hundred Weights) of Butter imported into Great Britain from Foreign Countries and Ireland, in each Year, from 5th of January, 1801, to 5th of January, 1832; distinguishing the Quantity from Ireland, from the Isles of Jersey, Guernsey, and Man, from Holland and the Netherlands, and from all other Foreign Countries; and stating the Rate and Amount of Duty in each Year paid thereon.

Years.	Quantities of Butter imported into Great Britain from Ireland.	Quantities of Butter imported into Great Britain from all Parts (except Ireland). From the Isles of Jersey, Guernsey, Alderney, and Man.	From Holland and the Netherlands.	From Germany and other Foreign Countries.	Total from all Parts, except Ireland.	Amount of Duty received in Great Britain on Foreign Butter.	Rates of Duty on Foreign Butter.
	Cwts.	*Cwts.*	*Cwts.*	*Cwts.*	*Cwts.*	£ s. d.	s. d.
1801	186,821	339	71,206	43,583	115,130	86 4 7	2 9 ℔ cwt., and 3*l.* ℔ centum ad valorem.
1802	254,248	59	84,100	8,819	93,018	- - -	2 9 ℔ cwt. and 3*l.* 12*s.* ℔ centum ad valorem (from 12th of May)
1803	246,388	26	53,682	50,411	104,120	3 11 11	3 6¾ ℔ cwt. (from 5th of July)
1804	196,037	59	100,685	25,989	126,734	960 10 5	3 11½ ℔ cwt. (from 1st of June)
1805	242,441	56	64,616	32,169	96,843	4 10 2	4 0·45 ℔ cwt. (from 5th of April) *
1806	261,911	143	66,544	18,968	85,657	244 12 4	4 3·61 ℔ cwt. (from 10th of May)
1807	314,386	61	68,315	18,970	87,346	2 12 1	—
1808	312,408	46	73,727	5,816	79,590	0 0 6	—
1809	317,676	36	44,061	32,185	76,283	0 19 0	4 4 ℔ cwt. (from 5th of July)
1810	311,551	611	5,956	26,676	33,244	- - -	—
1811	353,791	359	- -	2,451	2,810	- - -	—
1812	311,475	27	22,415	3,451	25,894	196 4 4	—
1813	351,832	- -	the records were destroyed by fire.				5 1¾ ℔ cwt. (from 15th of April)
1814	315,421	1,864	96,560	17,373	115,798	7,397 13 8	—
1815	320,635	944	106,885	17,470	125,300	32,301 10 8	—
1816	280,586	327	61,753	2,062	64,143	48,737 11 5	£1 ℔ cwt. (from 5th of April) ‡
1817	305,662	258	20,279	152	20,690	20,540 10 4	—
1818	342,538	1,917	66,232	15,544	83,694	83,550 10 1	—
1819	429,614	1,256	62,498	2,295	66,050	65,836 16 4	—
1820	457,730	275	65,986	2,295	68,557	68,578 15 9	—
1821	413,088	190	99,345	16,291	115,827	115,980 12 4	—
1822	377,651	291	108,501	9,627	118,420	118,263 13 10	—
1823	466,834	387	101,549	20,394	122,331	122,164 14 10	—
1824	431,174	305	132,093	28,255	160,654	160,854 10 2	—
1825	425,670	394	160,048	118,975	279,418	263,861 19 6	—
1826	† - -	131	136,779	59,288	196,200	202,130 8 8	—
1827	- -	366	142,658	68,117	211,141	209,427 1 3	—
1828	- -	493	145,647	55,532	201,673	195,850 7 9	—
1829	- -	445	116,233	31,485	148,164	147,997 4 1	—
1830	- -	585	77,025	31,222	108,854	102,881 15 11	—
1831	- -	622	80,900	42,147	123,670	121,336 12 6	—
1832	- -	331	92,409	38,460	131,202	128,330 9 8	—

N. B.—We have omitted *qrs.* and *lbs.* from this account; but they are allowed for in the column of totals.

Custom House, London, 5th of October, 1833.

The average contract prices of the butter furnished to Greenwich Hospital from 1730 to 1832, have been as follows:—

Years.	Prices per lb.	Years.	Prices per lb.	Years.	Prices per lb.	Years.	Prices per lb.
	s. d.		*s. d.*		*s. d.*		*s. d.*
1730	0 5	1795	0 8¼	1813	1 3	1823	0 7¼
1740	0 5	1800	0 11½	1814	1 2	1824	0 8¼
1750	0 5½	1805	0 11⅝	1815	1 2	1825	0 10½
1755	0 5½	1806	0 11½	1816	0 9½	1826	0 9½
1760	0 5½	1807	1 0⅛	1817	0 8¾	1827	0 8¼
1765	0 5½	1808	1 0¼	1818	0 11	1828	0 8½
1770	0 6½	1809	1 1	1819	0 11	1829	0 8
1775	0 6¾	1810	1 1⅜	1820	0 9½	1830	0 6½
1780	0 6½	1811	1 2½	1821	0 8¾	1831	0 9¾
1785	0 6¾	1812	1 3½	1822	0 7½	1832	0 8¾
1790	0 6½						

(See art. PRICES.)

In order to obviate the practice of fraud in the weighing and packing of butter, different statutes have been passed, particularly the 36 Geo. 3. c. 86., and 38 Geo. 3. c. 73., the principal regulations of which are subjoined. It is very doubtful, however, whether they have been productive of any good effect. It might be proper, perhaps, to order the weight of the butter, exclusive of the vessel, and the dairyman's or seller's name, to be branded on the inside and outside of each vessel; but most of the other regula-

* Butter imported in British shipping, or in shipping of states in amity with his Majesty, was admitted free of duty under the authority of Orders in Council, by virtue of the act 39 Geo. 3. c. 87., from 12th of July, 1799, continued by subsequent acts until 6 months after the ratification of the definitive treaty of peace, and further continued, by Order in Council, until 25th of September, 1814.

† No account can be furnished of the quantities of butter imported from Ireland for the years subsequent to 1825, the records of the trade between Great Britain and Ireland having been discontinued, in consequence of the regulations adopted for the purpose of giving effect to the law which placed the intercourse between the two countries on the footing of a coasting traffic.

tions, especially those as to the thickness of the staves, and the weight of the vessels, seem to be at once vexatious and useless.

Every cooper or other person who shall make any vessel for the packing of butter, shall make the same of good well-seasoned timber, tight and not leaky, and shall groove in the heads and bottoms thereof; and every vessel made for the packing of butter shall be a tub, firkin, or half-firkin, and no other.

Every tub shall weigh of itself, including the top and bottom, not less than 11 lbs. nor more than 15 lbs. avoirdupois; and neither the top nor the bottom of any such tub shall exceed in any part five eighths of an inch in thickness.

Every firkin shall weigh at least 7 lbs. including the top and the bottom, which shall not exceed four eighths of an inch thick in any part.

Half-firkins to weigh not less than 4 lbs. nor more than 6 lbs. including the top and the bottom, which shall not exceed the thickness of three eighths of an inch in any part; upon pain that the cooper or every other person making any such vessel, in any respect contrary to the preceding directions, shall forfeit every such vessel and 10*s*.

Every cooper, &c. shall brand every cask or vessel before going out of his possession, on the outside, with his name, in legible and permanent letters, under penalty of 10*s*, together with the exact weight or tare thereof.

Every dairyman, farmer, or seller of butter, or other person packing the same for sale, shall pack it in vessels made and marked as aforesaid, and in no other, and shall properly soak and season every such vessel; and on the inside, and on the top on the outside, shall brand his name at length, in permanent and legible letters; and shall also, with an iron, brand on the top on the outside, and on the bouge or body of every such cask, the true weight or tare of every such vessel, when it shall have been soaked and seasoned; and also shall brand his name at length, on the bouge or body of every such vessel, across two different staves at least, and shall distinctly, and at length, imprint his Christian and surname upon the top of the butter in such vessel when filled, on pain of forfeiting 5*l*. for every default thereof.

Every tub of butter shall contain, exclusive of the tare, of good and merchantable butter, 84 lbs.; every firkin 56 lbs; every half-firkin 28 lbs.; and no old or corrupt butter shall be mixed, or packed in any vessel whatever, with any butter that is new and sound; nor shall any butter made of whey be packed or mixed with butter made of cream, but the respective sorts shall be packed separately, and the whole vessel shall, throughout, be of one sort and goodness; and no butter shall be salted with any great salt, but all butter shall be salted with small salt; nor shall more salt be intermixed with the butter than is needful for its preservation, under penalty of 5*l*. for offending against any of these regulations.

No change, alteration, fraud, or deceit, shall be practised by any dealers or packers of butter, either with respect to the vessel or the butter so packed, whether in respect to quantity or otherwise, under a penalty of 30*l*. to be imposed on every person engaged in the offence.

Every cheesemonger, dealer in butter, or other person, who shall sell any tubs, firkins, or half-firkins of butter, shall deliver, in every such cask or vessel respectively, the full quantity appointed by this act, or, in default thereof, shall be liable to make satisfaction to the person who shall buy the same for what shall be wanting, according to the price for which it was sold, and shall be liable to an action for recovery of the same, with full costs of suit.

No cheesemonger, dealer in butter, &c. shall repack for sale any butter, under penalty of 5*l*. for every tub, firkin, or half-firkin, so repacked.

Nothing in this act shall extend to make any cheesemonger, dealer in butter, or other person, liable to any penalties for using any of the tubs, firkins, or half-firkins, after the British butter used in such vessels shall have been taken thereout, for the repacking for sale of any foreign butter, who shall, before he so repack such foreign butter, entirely cut or efface the several names of the original dairyman, farmer, or seller of butter, from every such vessel, leaving the name and tare of the cooper, and the tare of the original dairyman, farmer, or seller, thereon; and, after the names are so effaced, shall, with an iron, brand his Christian and surname, and the words *foreign butter*, upon the bouge of every such vessel, across two staves at least, to denote that such butter is foreign butter.

Persons counterfeiting or forging any such names or marks, shall for every such offence forfeit 40*l*.

Penalties not exceeding 5*l*. to be determined by one justice, upon the evidence of one witness, and the whole shall go to the informer.

Penalties above 5*l*. to be recovered by action of debt, or information, in the courts at Westminster, and the whole to the informer.

Nothing to extend to the packing of butter in any pot or vessel which shall not be capable of containing more than 14 lbs.

Previously to 1826, no butter could be sold in any public market in Ireland, or exported from it, without being previously examined and branded by a public inspector; but compliance with this regulation is no longer compulsory, but is left to the discretion of the parties.

It is enacted by statute 4 Will. 3. c. 7., that every warehouse-keeper, weigher, searcher, or shipper of butter and cheese, shall receive all butter and cheese that shall be brought to him for the London cheesemongers, and ship the same without undue preference; and shall have for his pains 2*s*. 6*d*. for every load; and if he shall make default, he shall, on conviction before one justice, on oath of one witness, or confession, forfeit for every firkin of butter 10*s*., and for every weigh of cheese 5*s*., half for the use of the poor, and half to the informer.

And every such person shall keep a book of entry of receiving and shipping the goods, on pain of 2*s*. 6*d*. for every firkin of butter and weigh of cheese.

The master of a ship refusing to take in butter or cheese before he is full laden (except it be a cheesemonger's own ship sent for his own goods) shall forfeit for every firkin of butter refused 5*s*., and for every weigh of cheese 2*s*. 6*d*.

This act does not extend to any warehouse in Cheshire or Lancashire.

Butter made in hot countries is generally liquid. In India it is denominated *ghee*, and is mostly prepared from the milk of buffaloes; it is usually conveyed in duppers, or bottles made of hide, each of which contains from 10 to 40 gallons. Ghee is an article of considerable commercial importance in many parts of India.

The Arabs are the greatest consumers of butter in the world. Burckhardt tells us, that it is a common practice among all classes to drink every morning a coffee cup full of melted butter or ghee! and they use it in an infinite variety of other ways. The taste for it is universal; and the poorest individuals will expend half their daily income that they may have butter for dinner, and butter in the morning. Large quantities are annually shipped from Cosseir, Souakin, and Massouah, on the west coast of the Red Sea, for Djidda and other Arabian ports. — (*Burckhardt's Travels in Nubia*, p. 440.; *Travels in Arabia*, vol. i. p. 52.)

BUTTONS (Du. *Knoopen;* Fr. *Bouton;* Ger. *Knöpfe;* It. *Bottoni;* Rus. *Pogowizii;* Sp. *Botones*) are well known articles, serving to fasten clothes, &c. They are manufactured of an endless variety of materials and forms.

It might have been supposed, that the manufacture of such an article as this would have been left to be carried on according to the views and interests of those concerned, individuals being allowed to select any sort of button they pleased. Such, however, has not been the case; and various statutes have been passed, pointing out the kind of buttons to be worn, and the way in which they are to be made! Most of these regulations have luckily fallen into disuse, but they still occupy a place in the statute book, and may be enforced. The following are amongst the more prominent of these regulations: —

No person shall make, sell, or set upon any clothes, or wearing garments whatsoever, any buttons made of cloth, serge, drugget, frieze, camblet, or any other stuff of which clothes or wearing garments are made, or any buttons made of wood only, and turned in imitation of other buttons, on pain of forfeiting 40*s.* per dozen for all such buttons. — (4 *Geo.* 1. c. 7.)

No tailor shall set on any buttons, or button-holes, of serge, drugget, &c., under penalty of 40*s.* for every dozen of buttons or button-holes so made or set on.

No person shall use or wear, on any clothes, garments, or apparel whatsoever, except velvet, any buttons or button-holes made of or bound with cloth, serge, drugget, frieze, camblet, or other stuffs whereof clothes or woollen garments are usually made, on penalty of forfeiting 40*s.* per dozen, under a similar penalty. — (7 *Geo.* 1. c. 22.)

To prevent the frauds which it is alleged had taken place in the manufacture of gilt and plated buttons, an act, 36 Geo. 3. c. 6., was passed, which regulates what shall be deemed gilt and what plated buttons; and imposes penalties on those who order as well as on those who make any buttons with the words "gilt" or "plated" marked upon them, except they be gilt and plated as the act directs. Inasmuch as this statute goes to obviate a fraud, it is, perhaps, expedient; but no apology can be made for the regulations previously alluded to, which are at once vexatious and absurd.

The importation of buttons from abroad was prohibited in the reign of Charles II. But the 6 Geo. 4. c. 107. § 52. repealed this prohibition, and they may now be imported, for home consumption, on paying an *ad valorem* duty.

C.

CABBAGE, a biennial plant (*Brassica* Lin.), of which there are many varieties. It is too well known to require any particular description; it is extensively cultivated in the vicinity of London. Sour crout, or properly *sauer kraut*, is a very favourite dish in Germany; it consists of a fermented mass of salted cabbage.

CABLES are strong ropes or chains, principally used in the anchoring or mooring of ships.

1. *Rope Cables* are, in Europe, principally manufactured of hemp; but in the East they are very frequently made of *coir*, or the fibrous part of the coco nut, and in some places, particularly on the Red Sea, of the coating of the branches of the date-tree. Hemp cables are formed of three principal strands, every strand of three ropes, and every rope of three twists. The twists have more or fewer threads according to the greater or less thickness of the cable. All vessels have ready for service three cables, which are usually designated the *sheet* cable, the *best bower* cable, and the *small bower* cable; but besides these, most ships have some spare cables. The ordinary length of a cable is from 100 to 120 fathoms. The following are the existing regulations as to the manufacture of hemp cables and cordage: —

No person shall make or sell any cordage for shipping in which any hemp is used, called short chucking, half clean, whale line, or other toppings, codilla, or any damaged hemp, on pain of forfeiting the same, and also treble the value thereof.

Cables, hawsers, or ropes, made of materials not prohibited by this act, and whose quality shall be inferior to clean Petersburgh hemp, shall be deemed inferior cordage, and the same shall be distinguished by marking on the tally, *staple* or *inferior*. Manufacturers making default herein forfeit for every hundred weight of cordage, 10*s.*

Manufacturers are to affix their names and manufactory to new cordage before sold, under the like forfeiture; and putting a false name is a forfeiture of 20*l.*

Persons making cables of old and overworn stuff, containing above 7 inches in compass, shall forfeit four times the value.

Vessels belonging to British subjects, having on board foreign-made cordage, are to make entry thereof, on entering into any British port, on penalty of 20*s.* for every hundred weight. But this is not to extend to cordage brought from the East Indies, nor to materials at present used by any vessels built abroad before this act. — (25 *Geo.* 3. c. 56.)

2. *Iron Cables.* — The application of strong iron chains or cables to the purposes of navigation is a late and an important discovery, for which we are indebted to Captain Samuel Brown, R.N. It is singular, indeed, that this application should not have been made at a much earlier period. On rocky bottoms, or where coral is abundant, a hempen cable speedily chafes, and is often quite destroyed in a few months, or perhaps days. A striking instance of this occurred in the voyage of discovery under the orders of M. Bougainville, who lost *six* anchors in the space of nine days, and narrowly escaped shipwreck; a result, says that able seaman, which would not have happened, "*si nous eussions été munis des quelques chaînes de fer. C'est une précaution que ne doivent jamais oublier tous les navigateurs destinés à de pareils voyages.*" — (*Voyage autour du Monde*, p. 207. 4to ed.) The work from which this extract is taken was published in 1771; and yet it was not till nearly *forty* years after, that any attempt was made practically to profit by so judicious a suggestion. The difficulties in the way of importing hemp from 1808 to 1814, and its consequent high price, gave the first great stimulus to the manufacture of iron cables.

Iron cables are constructed in different ways — (see *Encyc. Metrop.*); but they are uniformly tried by a machine, which strains them by a force greater than the absolute

strength of the hempen cable they are intended to replace. By this means the risk of accident from defective links is effectually obviated; and there are exceedingly few instances in which an iron cable has broken at sea. Their great weight also contributes to their strength, inasmuch as the impulse of the ship is checked before the cable is brought nearly to a straight line, or that the strain approaches to a maximum. Bolts and shackles are provided at every fathom or two fathoms, by striking out which the ship may, if necessary, be detached from her anchors with less difficulty than a hempen cable can be cut.

Even in their most defective form, iron cables are a great deal stronger than those of hemp; and as to durability, no sort of comparison can be made. No wonder, therefore, that they should be rapidly superseding the latter; which are now almost wholly laid aside in the navy, and, to a great extent, also, in the merchant service.

CACAO, or, as it is commonly, but incorrectly, written in this country, *Cocoa* (Fr. and Sp. *Cacao;* Ger. *Kakao*), the seed, or nuts, of the cacao tree (*Theobroma cacao*), growing in the West Indies, and in many parts of South America. It is said, by Mr. Bryan Edwards, to bear some resemblance, both in size and shape, to a young *blackheart cherry*. The nuts are contained in pods, much like a cucumber, that proceed immediately from all parts of the body and larger branches; each pod contains from 20 to 30 nuts, of the size of large almonds, very compactly set. The shell of the nut is of a dark brown colour, brittle, and thin; the kernel is, both internally and externally, brownish, divided into several unequal portions, adhering together, but separating without much difficulty; it has a light agreeable smell, and an unctuous, bitterish, rather rough and peculiar, but not ungrateful taste. The nuts should be chosen full, plump, and shining, without any mustiness, and not worm-eaten. They yield, by expression, a great deal of oil; but they are cultivated only that they may be employed in the preparation of the excellent beverage cacao, and the manufacture of chocolate, of which they form the principal ingredient. The finest cacao is said to be that of Socomusco. The principal importations are, however, derived from the Caraccas and Guayaquil, particularly the former. The price of the cacao of the Caraccas is, also, at an average, from 30 to 40 per cent. higher than that of Guayaquil.

M. Humboldt estimated the consumption of cacao in Europe, in 1806, at 23,000,000 lbs., of which from 6,000,000 to 9,000,000 were supposed to be consumed in Spain. The production of cacao had been languishing in the Caraccas for several years previously to the commencement of the disturbances in South America; and latterly the cultivation of one or other of the great staples of cotton, sugar, and coffee, seems to have been every where gaining the ascendancy. — (*Humboldt, Pers. Narrative*, vol. iv. pp. 236—247. Eng. trans.)

Duties. — Very little cacao is consumed in England; a result which we are inclined to ascribe to the oppressiveness of the duties with which it has hitherto been loaded, and not to its being unsuitable to the public taste. It is now many years since Mr. Bryan Edwards declared that the ruin of the cacao plantations, with which Jamaica once abounded, was the effect of "*the heavy hand of ministerial exaction.*" — (*Hist. of West Indies*, vol. ii. p. 363.) And, unaccountable as it may seem, this pressure was not materially abated till 1832, when the duties on cacao from a British plantation were reduced from 56*s.* to 18*s.* 8*d.* a cwt. Foreign cacao is still subject to the oppressive duty of 56*s.* a cwt. The entries of cacao for home consumption, at an average of the 3 years ending with 1831, were 440,578 lbs. a year. In 1832, the entries were 502,817 lbs.; and there can be little doubt that the reduction in the rate of duty will occasion a considerable increase of consumption. Exclusive of the above, 470,000 lbs. of cacao were taken off in 1832 for the use of the navy; this, not being liable to the duty, was entirely foreign. The high discriminating duty on the latter is the greatest defect in the new arrangements. Had the duty on foreign cacao been fixed at 28*s.* per cwt., it is pretty certain that a good deal of it would have been taken for consumption. Even on this footing, there would have been a discriminating duty of no less than 50 per cent. in favour of British cacao; and, unless our object be to exclude the foreign article altogether, this is surely an ample preference. The duties on cacao produced, in 1832, 12,224*l.* 12*s.* British cacao is worth, at present (August, 1833), from 64*s.* to 76*s.* a cwt. in bond.

Cacao nut *husks and shells* are allowed to be imported under a duty of 9*s.* 4*d.* a cwt. None of them are imported into Great Britain; but, in 1832, 336,551 lbs. were imported into Ireland. They are brought not only from the West Indies, but from Gibraltar and other places, being the refuse of the chocolate manufactories carried on in them.

Cacao cannot be entered as being the produce of some British possession in America, or of the Mauritius, until the master of the ship by which it is imported delivers to the collector or comptroller a *certificate*, and makes oath that the goods are the produce of such places. — (3 & 4 *Will.* 4. c. 52. § 37.) Neither shall they be deemed to be the produce of such places, unless imported direct from thence. — (7 *Geo.* 4. c. 48.) Permits are no longer required for the removal of cacao. — (9 *Geo.* 4. c. 44. § 5.)

CADIZ, the principal commercial city and sea-port of Spain. It is situated on its south-western coast, on the rocky and elevated extremity of a narrow, low peninsula, or tongue of land, projecting from the Isla de Leon, N. N. W. about 4½ nautical miles. It is surrounded on all sides, except the south, where it joins the land, by the sea, and is very strongly fortified. Population from 60,000 to 70,000. It is well built, and has, at a distance, a very striking appearance. The tower or lighthouse of St. Sebastian stands on the western side of the city, being, according to Tofiño, in lat. 36° 31′ 7″ N. long. 6° 18′ 52″ W. It is a most conspicuous object to vessels approaching from the Atlantic. The light, which is 172 feet high, is of great brilliancy, revolves once a minute, and in fair weather may be seen more than 6 leagues off.

Bay of Cadiz. — The entrance to this noble basin lies between the city and the town and promontory of Rota, bearing N. W. by N., distant about $1\frac{3}{4}$ league. The bay is of very great extent, affording, in most places, good anchorage. The port is on the eastern side of the city, where a mole of considerable dimensions has been constructed; but the water is not sufficiently deep to allow large vessels to approach nearer than within about $\frac{3}{4}$ of a mile, where they anchor in from 5 to 7 fathoms. The rocks called the Cochincs, the Puercas, and the Diamante, lie to the north of the city in the entrance to the bay; the first two at about 3-5ths of a mile distant, and the Diamante at rather more than $1\frac{1}{8}$ mile from the city. Vessels may enter between the Puercas and the Diamante; but none, except those not drawing more than 15 feet water, and well acquainted with the channel, ought to attempt entering between the Cochinos and Puercas and the city. The town of St. Mary's, on the opposite side of the bay, is famous for being the depôt of the wines of Xeres. The outer bay, or that of Cadiz properly so called, is separated from the inner bay by the promontory having at its extremity the castle of Matagorda, which approaches within about $\frac{3}{4}$ of a mile of the Puntales castle on the Isla de Leon. Within the inner bay is the famous arsenal of the Caraccas, the town of San Carlos, the canal of Trocadero, &c. At spring tides the water in the bay rises 10 or 11 feet, but at neaps the rise does not exceed 6 feet. — (For further particulars see the excellent *Chart of the Bay of Cadiz, by Tofiño; Malham's Naval Gazetteer;* and *Purdy's Sailing Directions for the Bay of Biscay, &c.*)

History, Trade, &c. — Cadiz is a very ancient city, having been founded by the Phœnicians about 1,200 years before the Christian era. The temple, which they erected in it in honour of Hercules was one of the most celebrated in antiquity — (*Sainte Croix, Des Anciennes Colonies*, p. 14.; *Pomp. Mela*, lib. iii. cap. 6.) Its excellent port, and its situation, favourable alike for commerce and security, have made it, whether possessed by Carthaginians, Romans, Moors, or Christians, and under every vicissitude, a place of considerable commercial and political importance. It has long been one of the principal stations of the Spanish naval force. In 1720, the commerce with Spanish America, which had previously been exclusively carried on from Seville, was transferred to Cadiz. It enjoyed this valuable monopoly till 1765, when it was partially relaxed by the trade to Cuba, St. Domingo, Porto Rico, and the other islands being opened to all the greater ports of Spain. The benefits resulting from this relaxation were so very great, that in 1778 the trade to all parts of America was opened to ships from every considerable Spanish port, except those of Biscay, which, not being subjected to the general laws of the kingdom, were not allowed to participate in this privilege. In consequence, however, of her situation, the great capital of her merchants, and their established connections, Cadiz continued, notwithstanding the abolition of the monopoly, to preserve the largest share of the American trade. But since the colonies achieved their independence, her commerce has been contracted within comparatively narrow limits; nor is there much prospect of its being materially improved, without a total change of policy on the part of the Spanish government. — (*Robertson's America*, b. viii. passim; *Townsend's Travels in Spain*, vol. ii. pp. 395—401. 2d edit.)

The white wines of Xeres in its vicinity form by far the principal article of export from Cadiz. The quantity exported may amount to about 20,000 pipes a year. The prices vary from 12*l.* to 65*l.* per pipe; but, as the lower qualities predominate, the price may be taken, at a medium, at about 25*l.*, making the total value of the exports 500,000*l.* More than $\frac{3}{4}$ths of the whole comes to England. The other articles of export are brandy, oranges, and other fruits, olive oil, wool, quicksilver, &c. The imports consist principally of sugar and coffee from the Havannah and Porto Rico, cacao, hemp, flax, linens, dried fish, hides, cotton wool, and cotton manufactures, rice, spices, indigo, &c.

In 1826, the Spanish government published what they termed the *Balanza Mercantil*, or an account of the commodities imported into, and exported from, Spain during that year. It is a very defective document; but as it is the best that can be obtained, it is subjoined. The values of the articles only are given. We have converted the sums into English money.

Note of the most considerable Articles of Importation into Spain in 1826.

Articles.	From Europe, Asia, Africa, and United States of America.	From Spanish American Colonies, inclusive of the Philippines.	Articles.	From Europe, Asia, Africa, and United States of America.	From Spanish American Colonies, inclusive of the Philippines.
	£	£		£	£
Sugar	7,640	437,550	Hides	120,600	4,910
Cocoa	104,400	90,425	Cotton wool	166,970	7,820
Indigo	4,770	69,030	Ditto yarn	63,660	
Spices, Cinnamon £95,420			Ditto manufactures	430,080	
Cloves 40,100			Woollen ditto	91,030	
Pepper 67,500			Hemp and flax	165,760	
	203,020		Linen manufactures	222,870	
Wood of kinds	167,560	21,440	Ditto thread	12,970	
Rice 102,270			Silk manufactures	106,170	
Wheat 8,110			Iron and brass ditto	108,700	
	110,380		Gold and silver, in coin and		
Salt fish	200,560		bars	81,880	15,280
Coffee		75,830	Earthenware	19,700	
Olive oil	18,130		Copper	12,400	2,200
Butter 57,560			Tin	11,630	
Cheese 17,660			Crystal and glass ware	37,000	
	75,220				

Note of the most considerable Articles of Exportation from Spain in 1826.

Articles.	To Europe, Asia, Africa, and United States of America.	To Spanish American Colonies, inclusive of the Philippines.	Articles.	To Europe, Asia, Africa, and United States of America.	To Spanish American Colonies, inclusive of the Philippines.
	£	£		£	£
Wines - - -	137,550	51,790	Raw silk - -	28,890	
Fruits, Almonds £24,355			Indigo - - -	11,240	
Filberts - - 29,165	- -	3,030	Silk manufactures - -	218,930	74,590
Lemons & oranges 36,240			Wool - - -	161,650	
Raisins - - 59,905			Woollen manufactures -	12,020	
Grapes, olives, and figs - - 2,410			Cork-wood and corks -	34,640	
			Leeches - - -	19,080	
	152,075	2,645	Paper of all kinds - -	20,220	17,500
Brandy - - -	107,715	13,156	Gut, fishing - £18,480		
Olive oil - - -	7,170	6,030	for guitars - 2,500		
Saffron - - -	14,610	2,800		20,980	16,905
Lead - - -	215,360		Thread lace - -	10,285	
Ditto ore - - -	7,765		Cast iron - - -	16,626	
Quicksilver - - -	66,300		Garbanzos, beans, & wheat	3,980	3,600
Barilla - - -	79,290		Flour - - -	- -	49,290

Shipping. — In 1831 there arrived at Cadiz from foreign countries 475 ships, of the burden of 38,582 tons; and from the Spanish colonies, that is, from Cuba, Porto Rico, the Philippine Islands, &c., 103 ships, of the burden of 17,812 tons. The arrivals from England are not specified; but, in 1828, 184 British ships entered Cadiz. The coasting trade is very considerable.

Money. — The monies, weights, and measures, used at Cadiz, are those of Castile. Accounts are kept by the *real* (of old plate), of which there are $10\frac{4}{8}$ in the *peso duro*, or hard dollar: and as the dollar = 4*s.* $3\frac{3}{4}$*d.* the real = $4\frac{3}{4}$*d.* A real is divided into 16 *quintos*, or 34 *maravedis*. The *ducado de plata*, or ducat of plate, is worth 11 reals.

Weights and Measures. — The ordinary quintal is divided into 4 *arrobas*, or 100 lbs. of 2 marcs each: 100 lbs. Castile = $101\frac{1}{2}$ lbs. avoirdupois. The yard, or *vara* = ·927 English yard, or 100 varas = $92\frac{3}{4}$ English yards. The *cahiz*, or measure for corn, is divided into 12 *fanegas*, or 144 *celeminas*, or 576 *quartillas*; 100 cahiz's = 19·7 Winch. quarters, and 5 fanegas = 1 quarter. The *cantaro*, or *arroba*, the measure for liquids, is divided into 8 *azumbres*, and 32 *quartillos*. There are two sorts of arrobas, the greater and the lesser: they are to each other as 32 to 25; the former being equal to $4\frac{1}{4}$ English wine gallons, the latter to $3\frac{3}{4}$ do. A *moyo* of wine = 16 arrobas. The *botta* = 30 arrobas of wine, or $38\frac{1}{2}$ of oil. A *pipe* = 27 arrobas of wine, or $34\frac{1}{2}$ of oil. Hence the botta = $127\frac{1}{2}$ English wine gallons, and the pipe $114\frac{3}{4}$ do.

British Trade with Spain. — Notwithstanding the anti-commercial influence of prohibitions and oppressive duties, we carry on a very considerable trade with Spain. In 1831 we imported from her 61,921 cwt. barilla, 78,067 cwt. oak and cork bark, 146,234 quarters wheat — (see BILBAO), 769 cwt. figs, 972 tons lead, about 28,000 packages oranges and lemons, 1,243,686 gallons olive oil, 269,558 lbs. quicksilver, 105,066 cwt. raisins, 3,700 cwt. sumach, 14,184 lbs. silk, 69,319 gallons brandy, 3,474,823 lbs. wool, and 2,537,968 gallons wine. No account of the declared or *real* value of the imports is kept at the Custom-house; but the *official* value of the imports from Spain in 1831, exclusive of those from the Canaries, was above 1,000,000*l* sterling.

During the same year the *real* value of the various articles of British produce and manufacture cleared out from our ports for Spain was 597,848*l*. Of these articles linen was the principal, its value being estimated at 222,838*l*. Cottons amounted to above 148,000*l*. The other articles were hardware, iron and steel, tin, &c. — (*Parl. Paper*, No. 550. Sess. 1833.)

Smuggling, &c. — In 1829 Cadiz was made a free port, that is, a port where goods may be consumed and bonded without paying duty. This boon would have been of comparatively little consequence but for the opportunity of smuggling afforded by the oppressively high duties laid on most foreign articles imported into Spain. These, as such duties wherever imposed never fail to do, have given birth to a very extensive contraband trade; and under the free regime Cadiz became the grand focus of this traffic. The government having seen this effect of the franchise, it was withdrawn on the 22d of December, 1832. This, however, is but a very trifling inconvenience to the smuggler. Nothing, fortunately, but the repeal of prohibitions, and the reduction of oppressive duties to a reasonable amount, can ever materially diminish the field of his exertions. It would appear, however, that the experience of a couple of centuries has been as unable to impress the Spanish government with a conviction of this unquestionable truth, as it has been to open their eyes to the enormous abuses that infect every part of the public administration.

Mr. Townsend, the author of by far the best English work on Spain, which he visited in 1786 and 1787, has the following admirable remarks on this subject, in his chapter on Cadiz: —

"The Spanish government has never yet acquired any liberal ideas respecting trade; and even at the present moment, some of their best political writers resemble lag hounds hunting the stale scent, whilst the fleetest are already in possession of the game. Instead of throwing down every obstacle to commerce, they labour to contract its limits, under the vain hope of establishing a monopoly, without considering either their own want of capital, of industry, and of an enterprising spirit, or the utter impossibility of preventing smuggling, whilst other nations, with greater advantages for trade, can undersell them in the market. Until they shall be more enlightened, until they shall have banished their inquisitors, and until the happy period shall arrive when, under the protection of a free government, they shall have restored public credit, and placed it on a firm foundation; all their prohibitions, all their severities exercised on the property and persons of the illicit traders, all their commercial treaties, and all their commercial wars, into which ambition may betray them, will be frivolous and vain; because no efforts will ever prevail against the united interests of their own subjects, and of all surrounding nations.

"Even at home, the watchfulness and energy of government have never been able to enforce its prohibitions; for, notwithstanding these, when I was travelling through Spain, all the men appeared in Manchester cotton goods, and no woman was seen without her muslin veil. In Spain, as throughout Europe, it is found that when the price of insurance is less than the duties imposed on the commodity, no laws are sufficient to control the operations of illicit traders." — (Vol. ii. p. 394.)

But the Spanish government has been proof against such considerations. Instead of diminishing, they have materially increased, the number of prohibitions and the pressure of the duties; and the consequence is, that, in many extensive provinces, there is no regular trade, and that every thing is carried on by the agency of the smugglers, partly in defiance, but principally through the connivance, of the revenue officers. Notwithstanding their exclusion, English cotton goods may, at this moment, be bought in Madrid, and generally throughout Spain, at from 20 to 30 per cent. above their price in Gibraltar, where they are about as cheap as in Manchester! While Cadiz was a free port, about 6,000 persons are said to have been employed in it twisting cigars, which, as soon as finished, were forthwith smuggled into the interior. Three fourths of the foreign trade of Spain may, in fact, be said to be carried on in defiance of the law. And where such is the case, need we wonder at the low state of industry, or at the prevalence of those predatory and ferocious habits that uniformly mark the character of the smuggler?

In the valuable work of Mr. Ingliss, entitled "Spain in 1830," we find the following statement under the head Cadiz. Though written more than 40 years after the paragraph previously quoted from Mr. Townsend, it shows that not one of the flagrant abuses denounced by the latter has been eradicated; but that, on the contrary, they all continue to flourish in still ranker luxuriance.

"The whole commercial system of Spain is most erroneously conceived. The prohibitory system is carried to a length absolutely ruinous to the fair trader, and highly injurious to the revenue. The immense duties upon admissible articles, and the total prohibition of others, has occasioned a most extensive contraband trade, both externally with the various ports, along the coast of Spain, and internally, throughout the whole of the kingdom; and by this trade admissible articles are introduced into the interior, at from 100 to 300 per cent. below the duties imposed. Government could not fail to be benefited by permitting the importation of articles of general use, upon payment of such a duty as would allow the sale of the article at a lower price than is now paid by the consumer to the smuggler. As one example of the impolicy of the system, I may cite a fact respecting the trade in salted fish, the returns of which I have before me. The import of this article into Cadiz in one year, before that city was made a free port, amounted to 4 vessels, whose cargoes reached 4,092 cwt.; while at the free port of Gibraltar, in the same year, 41 vessels entered with 89,106 cwt., *the whole of which was intended for the illicit trade*, and passed into Spain through the hands of the smugglers. The duty upon this article is more than 100 per cent.; the smuggler considers himself remunerated by a gain of 25 per cent.; so that the article which finds its way into the market through the contraband trade is sold 75 per cent. cheaper than that which is admitted upon payment of the regular duties.

"The duties upon British manufactured goods amount almost to a prohibition; they often reach 100 per cent., and this trade is therefore also in the hands of the smugglers, who obtain the profit, which, under a more wholesome system, might go into the treasury of the kingdom. The fraudulent dealer is also greatly assisted by the custom of granting a royal licence to individuals to import a certain limited quantity of prohibited goods; an expedient resorted to in order to meet the exigencies of the state: and under the licence to enter 100 tons of merchandise, the merchant enters perhaps 1,000 tons; a deception easily practised in a country where, among the public officers, a scale of bribery is perfectly understood and acted upon."—(Vol. ii. pp. 132—136.)

But for the system of misrule to which Spain has been subjected, there can be no reasonable doubt that her commerce would have been about the most extensive of any European state. Her natural advantages, superior to most, and not inferior to those enjoyed by any other kingdom; her wines, brandies, fruits, &c.; her wheat, of which she might produce the largest supplies; her wool; her iron, which is of the best quality; her lead and quicksilver mines, respectively the most productive in the world; the number and excellence of her harbours; the enterprising and adventurous character of her inhabitants, and her favourable situation; would, were she permitted to avail herself of them, raise her to a very high rank among commercial nations. Let the government cease to counteract the intentions of nature; let moderate duties take the place of prohibitions, and freedom of regulation; and all sorts of industrious pursuits will speedily revive from the deadly lethargy in which they have been so long sunk.

CAGLIARI, the capital of Sardinia, situated on the north-east shore of a spacious day on the south coast of the island, lat. 39° 12′ 13″ N., long. 9° 6′ 44″ E. Population 26,000. The city stands on a rising ground, and has an imposing effect from the sea. The public buildings and churches are numerous, and some of them splendid; but the streets are, for the most part, narrow, steep, and filthy.

The Gulf of Cagliari extends from Pula on the west to Cape Carbonara on the east, a distance of about 24 miles across, and about 12 in depth, with good anchorage every where after getting into soundings. A mole projects from the Pratique office, and ships usually lie about 1 mile S.W. by S. from it, in 6 or 8 fathoms water, on an excellent bottom of mud. There is a very convenient pier harbour at the south angle of the tower wall, capable of containing 14 or 16 vessels of a tolerable size, besides small craft. Altogether, Cagliari is one of the best and safest ports in the Mediterranean.

Imports and Exports. — Almost all the trade of Sardinia is carried on by strangers; and even the fish on its coast and in its harbours is caught by Sicilians, Neapolitans, Tuscans, and Genoese. Corn is the principal article of export. In good years, the exports from the whole island may amount to 400,000 starelli, or about 500,000 bushels, of wheat, 200,000 starelli of barley, 6,000 ditto of maize, 100,000 ditto of beans, 200,000 of peas, and 1,000 ditto of lentils. The culture of vines is gradually becoming of more importance; and about 3,500 Catalan pipes are exported, principally from Alghero and Ogliastra. Cheese is an important object in the rural economy of Sardinia, and considerable quantities are exported. Salt is a royal monopoly, and affords a considerable revenue. Until recently, Sweden drew almost all her supplies of this important necessary from Sardinia, and it continues to be exported in considerable quantities. Flax, linseed, hides, oil, saffron, rags, alquifoux, &c. are among the articles of export. The tunny and coral fisheries employ a good many hands; but, as already observed, they are almost wholly managed by foreigners.

Almost every article of dress, whether for the gentry or the peasantry, is imported. Soap, stationery, glass, earthenware, and furniture, as well as sugar, coffee, drugs, spices, &c., are also supplied by foreigners; and notwithstanding the Sards possess many rich mines, several of which were successfully wrought in antiquity, they import all their iron and steel. The only manufactures carried on in the island are those of gunpowder, salt, tobacco, and woollen caps. In 1831, there entered the ports of Sardinia 166 foreign vessels, of the burden of 6,925 tons. Of these, the greater number were French; and next to them were Neapolitans, Austrians, Tuscans, &c.

Money, Weights, and Measures. — Accounts are kept in lire, reali, and soldi. 5 soldi = 1 reale = 4½*d.*; 4 reali = 1 lira = 1*s.* 6*d.*; 10 reali = 1 scudo = 3*s.* 9*d.* The paper money consists of notes for 5, 10, and 20 scudi.

Farm produce and the coarser metals are weighed by the *pesi di ferro*: 12 Sard. oz. = 1 lb. = 14 oz. 5 dr. avoirdupois; 26 lbs. = 1 rubbo; 4 rubbi = 1 cantaro = 93 lbs. 0 oz. 8 dr. avoirdupois.

The starello, or corn measure, is equivalent to 1 bush. 1¼ peck Eng. The palm = 10⅓ Eng. inches.

Causes of the depressed State of Sardinia. — The above statements sufficiently show that the commerce of Sardinia is very far from being what might naturally be expected from its extent, fertility, admirable situation, and the excellence of its many harbours. It contains an area of about 9,500 square miles, being, in point of size, but little inferior to Sicily; and in antiquity it was hardly less celebrated for its productiveness: —

"Non opimas
Sardiniæ segetes feracis." — *Hor.* lib. i. Od. 31.

But a long series of wars and revolutions, followed by the establishment of the feudal system in its worst form, and the subjection of the island, first to Spain, and more recently to the house of Savoy, have been attended by the most ruinous consequences. The Romans encouraged the exportation of corn and other produce from the provinces to Rome, where it always met with a ready and advantageous sale. But the modern rulers of Sardinia have followed quite an opposite policy; they have prevented the occupiers of the land from carrying their productions abroad; and as, owing to the want of a commercial and manufacturing population, there was little or no demand for it at home, no surplus was raised; so that the wish, as well as the means, of emerging from poverty and barbarism has been well-nigh eradicated. It is to this impolitic conduct on the part of government, and to the insecurity arising from the want of police and of occupation under the worst sort of feudal tenures, that we are inclined principally to attribute that habitual idleness, and indifference to the future, that distinguish the modern Sards.

We are glad, however, to have to state, that some improvements have been made within these few years. A good road has been formed from Cagliari to Sassari, and cross roads are being carried from it to some of the most considerable places in the island. The population, which, in 1816, amounted to only 352,000, is now estimated at 480,000 or 500,000*; and some meliorations have been introduced into various departments of industry. But without the establishment of an effective system for the administration of justice and the prevention and punishment of crime, the introduction of a better system of letting land, and the total abolition of the existing restraints on the exportation of corn and other produce from the island, it will be in vain to expect that its capacities should ever be fully developed. At present, it is usual to hire land, for the purposes of tillage, by the year; no corn can be exported if its price exceed 30 reals the starello; and a heavy duty is laid on all that is exported, as a substitute for a general land-tax. Nothing can be more preposterously absurd than such regulations. They have paralysed the exertions of the husbandman to such an extent, that this "*benignant nurse*" of ancient Rome† is sometimes, notwithstanding its scanty population, under the necessity of importing a portion of its supplies! Most other articles of export have been loaded with similar duties; so that the industry of the island has been, in effect, completely sacrificed to a short-sighted rapacity, of which, fortunately, there are not many examples. Let this disgraceful system, which, if possible, is even more injurious to the government than to the people, be put an end to, — let the freedom of exportation, with reasonable duties on imports, and the security of property, be established, — and we venture to predict that Sardinia will, at no very remote period, recover her ancient prosperity; that the revenues of the crown will be increased in a tenfold proportion; and that the population will cease to be conspicuous only for ferocity, idleness, and contempt of innovation.

In compiling this article, we have consulted Captain Smyth's valuable work on Sardinia, particularly pp. 106—128. But the most complete work on the island is that of Marmara, already referred to. It, however, touches very gently on the gross and scandalous abuses that infect every part of the administration. We have borrowed some details from the *Annales du Commerce Maritime* for 1833, p. 302, &c.

CAJEPUT OIL, the volatile oil obtained from the leaves of the cajeput tree (*Melaleuca Leucadendron* Lin.). The name is a corruption of the native term *cayu-puti*, that is, white-wood oil; because the bark of the tree which yields it has a whitish ap-

* See *Marmara, Voyage en Sardaigne*, p. 176., and the *Foreign Quarterly Review*, No. 23. p. 256. Captain Smyth reckons the population, at an average of the 10 years ending with 1825, at about 400,000. — (p. 128.)

† "Siciliam et Sardiniam, *benignissimas urbis nostræ nutrices.*" — Val. Maximus, lib. vii. c. 6.

pearance, like our birch. This tree is common in Amboyna and other Eastern islands. The oil is obtained by distillation from the dried leaves of the smaller of two varieties. It is prepared in great quantities in Banda, and sent to Holland in copper flasks. As it comes to us it is of a green colour, very limpid, lighter than water, of a strong smell resembling camphor, and a strong pungent taste. It burns entirely away without leaving any residuum. It is often adulterated with other essential oils, coloured with resin of milfoil. In the genuine oil, the green colour depends on the presence of copper; for, when rectified, it is colourless. — (*Thomson's Dispensatory.*)

Cajeput oil not being used except in the *materia medica*, only small quantities are imported. In July, 1831, it sold in bond at about 7*d*. an ounce; but an idea having then got abroad that it was one of the most efficient remedies in cases of cholera, its price rose in November, 1831, to no less than 11*s*. an ounce! But it soon after fell into discredit with the faculty, and additional supplies having been obtained from Holland, its price declined almost as fast as it had risen. It is not at present (September, 1833) worth more, in bond, than from 4*d*. to 9*d*. an ounce.

CALABAR SKIN (Fr. *Petit-gris;* Ger. *Grauwerk;* It. *Vaor, Vajo;* Rus. *Bjelka;* Sp. *Gris pequeno*), the Siberian squirrel skin, of various colours, used in making muffs, tippets, and trimmings for clothes.

CALABASH, a light kind of vessel formed of the shell of a gourd, emptied and dried. The Indians both of the North and South Sea put the pearls they have fished in calabashes, and the natives of Africa do the same by their gold dust. They also are used as a measure in Africa.

CALAMANCO (Du. *Kallemink, Kalmink;* Fr. *Calmande, Calmandre;* It. *Durante;* Rus. *Kolomenka;* Sp. *Calmaco;* Sw. *Kalmink*), a sort of woollen stuff, manufactured in England and the Netherlands; it has a fine gloss; and being chequered in the warp, the checks appear only on the right side.

CALAMANDER WOOD, a beautiful species of timber brought from Ceylon.

It is so hard that common edge-tools cannot work it, so that it must be rasped and almost ground into shape. It is singularly remarkable for the variety and admixture of colours. The most prevailing is a fine chocolate, now deepening almost into absolute black, now fading into a medium between fawn and cream colours. It arrests the eye from the rich beauty of the intermingled tints, not from any undue showiness. It takes a very high polish; and is wrought into chairs, and particularly into tables. Sir Robert Brownrigg, late governor of Ceylon, had the doors of the dining-room of his seat in Monmouthshire made of calamander. It is scarce in Ceylon, and is not regularly imported; all that is in Great Britain has been imported by private gentlemen, returning from the colony, for their own use. It is by far the most beautiful of all the fancy woods. The nearer it is taken from the root of the tree, the finer it is. — (*Milburn's Orient. Com.; Lib. of Entertaining Knowledge*, Vegetable Substances, p. 179.)

CALCUTTA, the principal city of the province of Bengal, the capital of the British dominions in India, and, with the exception perhaps of Canton, the greatest emporium to the eastward of the Cape of Good Hope. Its citadel is in lat. 22° 33′ 54′ N., long. 88° 20′ 17″ E. It is about 100 miles distant from the sea, being situated on the eastern bank of the western branch of the Ganges, denominated by Europeans the Hooghly River, which is the only arm of the Ganges navigable to any considerable distance by large ships. At high water the river opposite to the town is about a mile in breadth; but during the ebb the side opposite to Calcutta exposes a long range of dry sand banks. Owing to the length and intricacy of the navigation from the sea, it cannot be undertaken without a pilot; so that, even if it did not exceed our limits, it would be useless to attempt any description of it in this place. — (See the reduced *Plan of the Mouths of the Hooghly River*, in the *Mercator's Chart* in this work.)

In 1717, Calcutta was a petty native village of paltry huts, with a few hundred inhabitants. Little more than a century later, or in 1822, the following were the returns of the population; viz. Christians, 13,138; Mohammedans, 48,162; Hindoos, 118,203; Chinese, 414, making in all, 179,917.

A great part, however, of what may be fairly considered the population of Calcutta, consisting of labourers, mechanics, and persons engaged in trade, reside at night in the suburbs, or neighbouring villages; coming into town early in the morning to their respective employments. These have been estimated by the magistrates, on tolerably good data, at 100,000; and allowing for the increase of inhabitants which is admitted to have taken place within the last dozen years, the existing population may be estimated at about 300,000. The town, excluding suburbs, extends to about 4½ miles along the bank of the river, with an average breadth inland of about 1½ mile. Fort William, the citadel, lies on the same side of the river, a little lower down. It is a strong regular fortification; but so extensive that it would require a garrison of 10,000 men for its effectual defence. Calcutta possesses great natural advantages for inland navigation; all sorts of foreign produce being transported with great facility on the Ganges and its subsidiary streams to the north-western quarters of Hindostan, over a distance of at least 1,000 miles, while the productions of the interior are received by the same easy channels.

The principal merchants and traders of Calcutta consist of the following classes; viz. British and other Europeans, Portuguese born in India, Armenians, Greeks, Jews, Persians from the coast of the Persian Gulf commonly called Parsees, Moguls, Mohammedans of Hindostan, and Hindoos; the latter usually either of the Brahminical or mercantile castes, and natives of Bengal. In 1813, the total number of adult male British subjects, in the Bengal provinces (the great majority being in Calcutta), engaged in trade or agriculture, was 1,225; in 1830, it was 1,707. This is the statement given by the printed register; but it is probably much underrated, particularly for the last year. The native Portuguese and Armenian merchants have of late greatly declined in wealth and importance. On the other hand, the Persian merchants have increased in numbers and wealth, several of them being worth 250,000*l*. sterling. The large fortunes of the Hindoo merchants have been much broken down of late years by litigation in the courts, and naturally through the law of equal coparcenary among brothers. To counterbalance this, there has been, since the opening of the free trade in 1814, a vast augmentation of the number of inferior merchants, worth from 20,000*l*. to 50,000*l*. sterling. There are but few Hindoo merchants at present whose wealth exceeds 200,000*l*. sterling.

The principal foreign business is conducted by the English merchants; but the other parties also, either in partnership with the English, or on their own account, speculate largely to Europe, America, and

especially to China. The brokers known under the name of Sircars and Baboos are all Hindoos. The general rates of agency commission are as follow :—

1. On the sale or purchase of ships, vessels, houses and lands	2½ per cent.
2. On the sale, purchase, or shipment of bullion	½ do.
Do. of jewellery, diamonds, or other precious stones	2 do.
Do. of indigo, lac-dye, country piece goods, silk, opium, cochineal, coral, spices, coffee, copper, tin, and tutenague	2½ do.
Do. of all other kinds of goods	5 do.
3. On goods or treasure, &c. consigned, and afterwards withdrawn or sent to auction; and on goods consigned for conditional delivery to others	½ commission
4. On all advances of money for the purposes of trade, whether the goods are consigned to the agent or not, and where a commission of 5 per cent. is not charged	2½ per cent.
5. On ordering goods, or superintending the fulfilment of contracts, where no other commission is derived	2½ do.
6. On guaranteeing bills, bonds, or other engagements, and on becoming security for administrations of estates, or to government or individuals for contracts, agreements, &c.	2½ do.
7. On del credere, or guaranteeing the responsibility of persons to whom goods are sold	½ per cent. per mensem
8. On acting for the estates of persons deceased, as executors or administrators	5 per cent.
9. On the management of estates for others, on the amount received	2½ do.
10. On procuring freight, or advertising as the agent of owners or commanders: on the amount of freight, whether the same passes through the hands of the agent or not	5 do.
11. On chartering ships for other parties	2½ do.
12. On making insurance, or writing orders for insurance	½ do.
13. On settling insurance losses, total or partial, and on procuring returns of premium	1 do.
14. On effecting remittances, by bills of the agent or otherwise, or purchasing, selling, or negotiating bills of exchange	1 do.
15. On debts, when a process at law or arbitration is necessary	2½ do.
And if recovered by such means	5 do.
16. On bills of exchange returned, noted, or protested	1 do.
17. On the collecting of house-rent	2½ do.
18. On ships' disbursements	2½ do.
19. On negotiating loans on respondentia	2 do.
20. On letters of credit granted for mercantile purposes	2½ do.
21. On purchasing or selling government securities, and on each exchange of the same, in the transfer from one loan to another	½ do.
22. On delivering up government securities, or depositing the same in the treasury	½ do.
23. On all advances not punctually liquidated, the agent to have the option of charging a second commission, as upon a fresh advance, provided the charge does not occur twice in the same year.	
4. At the option of the agent, on the amount debited or credited within the year, including interest, and excepting only items on which a commission of 5 per cent. has been charged	1 do.

N. B. — This charge not to apply to paying over a balance due on an account made up to a particular period, unless where such balance is withdrawn without reasonable notice.

Money. — Accounts are kept here in imaginary money called rupees, either current or sicca, with their subdivisions, annas and pice: 12 pice make 1 anna; 16 annas 1 rupee; and 16 rupees 1 gold mohur. To this currency must all the real specie be converted, before any sum can be regularly entered in a merchant's books. The Company keep their accounts in sicca rupees, which bear a batta (premium) of 16 per cent. over the current. The coins current are gold mohurs, with their subdivisions — halves and quarters; sicca rupees, halves and quarters; annas, pice, and half pice. The two last are of copper. There are two mints under the Bengal presidency: that at Calcutta; and that of Ferruckabad, in the north-western provinces. The first is probably the most splendid establishment of the kind in the world; the original cost of the machinery, supplied by Messrs. Bolton and Watt of Birmingham, having exceeded 300,000*l*. Gold money is coined at Calcutta only; but silver, which is now, and has always been, the standard of India, equally at both mints. The following statement shows the present weight, fineness, and sterling value of the coins, reckoning the value of gold at 3*l*. 17*s*. 10½*d*. per standard ounce, and silver at 5*s*. 2*d*.:—

Coins.	Grains pure.	Grains Alloy.	Grains Gross Weight.	Value. L.	s.	d.
Gold mohur	187·651	17·059	204·710	1	13	2½ 2·25
Sicca rupee	175·923	15·993	191·916	0	2	0½ 6·25
Ferruckabad rupee	165·215	15·019	180·234	0	1	11½ 8·25

The charge for coining silver at the Calcutta mint is 2 per cent. if the bullion be the standard fineness; but where it differs, a proportional charge of from ¼ to ½ per cent. is made for refining.

The course of exchange by which the customs of Calcutta are at present regulated is as follows:—

		Sic. rup.	An.	Pice.
Great Britain	Pound sterling =	10	0	0
Cape of Good Hope	Rix-dollar (2*s*.) =	1	0	0
Madras	100 rupees =	93	1	8
Bombay	100 — =	94	13	0
Ceylon	Rix-dollar =	0	14	0
China	1 tale =	3	5	4
Burmah	125 tickals =	100	0	0
Manilla	Spanish dollar =	2	4	0
Portugal	1,000 reas =	2	12	0
France	24 francs =	10	0	0
Holland	2½ florins =	2	4	0
Hamburgh and Copenhagen	1½ marc banco =	1	0	0
Leghorn	100 pezzas =	202	8	0

Other sorts of rupees are met with in Bengal, differing in fineness and weight, though their denominations be the same. From this, and from the natives frequently punching holes in the rupees, and filling them up with base metal, and their fraudulently diminishing the weight of the coin after coming from the mint, the currencies of the different provinces are of different values. This defect has introduced the custom of employing *shroffs*, or money-changers, whose business is to set a value upon the different currencies, according to every circumstance, either in their favour or their prejudice. When a sum of rupees is brought to one of these shroffs, he examines them piece by piece, and arranges them according to their fineness; then, by their weight; he then allows for the different legal battas upon siccas and sounats; and this done, he values in gross, by the rupees current, what the whole are worth; so that the rupee current is the only thing fixed, by which coin is valued.

A current rupee is reckoned at 2*s*., and a sicca rupee of account commonly at 2*s*. 6*d*. A lac, means 100,000; and a crore 100 lacs, or 10,000,000. The following are the monies of account, premising that the lowest denomination is represented by a small smooth shell, a species of cypræa, chiefly imported as an article of trade from the Laccadive and Maldive islands, and current as long as they continue entire:—

4 Cowries	= 1 Gunda.
2,560 do.	= 1 Current rupee.
20 Gundas	= 1 Punn.
4 Punns, or 12 pice	= 1 Anna.
4 Annas	= 1 Cahaun.
4 Cahauns	= 1 Sicca rupee.
16 Sicca rupees	= 1 Gold mohur.

Weights. — The great weights are maunds, seers, chittacks, and siccas or rupee weights, thus divided:—

5 Siccas	= 1 Chittack.
16 Chittacks	= 1 Seer.
40 Seers	= 1 Maund.

There are two maunds in use, viz. the factory maund, which is 74 lbs. 10 oz. 10·666 drs. avoirdupois; and the bazaar maund, which is 10 per cent. better, viz. 82 lbs. 2 oz. 2·133 drs.

80 Sicca weight	= a Calcutta bazaar seer.
60 Ditto	= a Serampore seer.
82 Ditto	= a Hooghly seer.
84 Ditto	= a Benares Mirzapore seer.
96 Ditto	= an Allahabad and Lucknow seer.

A Calcutta factory seer is equal to 72 sicca weight, 11 annas, 2 puns, 10 gundas, 3·63 cowries.

Gold and Silver.

4 Punkhos	= 1 Dhan, or grain.
4 Dhans	= 1 Rutty.
6¼ Rutties	= 1 Anna.
8 Rutties	= 1 Massa.
10 Massas	= 1 Sicca weight = 179·7 grs. Troy, or 6·5705 drs. avoirdupois.
100 Rutties	= 1 Tolah.
12½ Massas	= 1 Tolah.
16 Annas	= 1 Tolah.
166¼ Rutties	= 1 Mohur.
13·28 Massas	= 1 Mohur.
17 Annas	= 1 Mohur.

The tolah is equal to 224·588 grs. Troy.

Liquid Measure.

5 Sicca weight	= 1 Chittack.
4 Chittacks	= 1 Pouah, or pice.
4 Pouahs	= 1 Seer.
40 Seers	= 1 Maund.
5 Seers	= 1 Pussaree, or measure.
8 Measures	= 1 Bazaar maund.

Grain Measure.

4 Khaonks	= 1 Raik.
4 Raiks	= 1 Pallie = 9·08 lbs. avoird.
20 Pallies	= 1 Soallie.
16 Soallies	= 1 Khahoon = 30 bz. mds.

Long Measure.

3 Barleycorns, or jows (barley)	= 1 Finger.
4 Fingers	= 1 Hand.
3 Hands	= 1 Span.
2 Spans	= 1 Cubit, or arm = 18 inches.
4 Cubits	= 1 Fathom.
1,000 Fathoms	= 1 Coss = 1 mile 1 furlong 3 poles 3½ yards.

Square Measure.

5 Cubits or hauts in length × 4 in breadth	= 1 Chittack, or 45 feet (Eng. square).
16 Chittacks	= 1 Cottah.
20 Cottahs	= 1 Biggah = 14,440 sq. ft.
3⅓ Biggahs	= 1 English statute acre.

Cloth Measure.

3 Jorbes	= 1 Angulla.
3 Angullas	= 1 Gheriah.
8 Gheriahs	= 1 Haut or cubit = 18 inches.
2 Hauts	= 1 guz = 1 yard.

For Goods reckoned by Tale.

5 Particulars	= 1 Gunda.
4 gundas, or 20 particulars	= 1 Koorje, or 1 corge.

Commercial Weights and Measures of India, with their equivalents in English Avoirdupois, Bengal Factory, Madras, and Bombay Weights.

Commercial Measures, &c.	Avoirdupois.			Bengal Factory.			Madras.			Bombay.		
	lbs.	*oz.*	*dr.*	*Mds.*	*S.*	*Ch.*	*Mds.*	*Vis.*	*Pol.*	*Mds.*	*S.*	*Pice.*
Acheen bahar of 200 catties	423	6	13	5	26	13	16	7	19	15	4	27
—— guncha of 10 nelly	220	0	0	2	37	13·7	8	6	16	7	34	8·6
Anjengo candy of 20 maunds	560	0	0	7	20	0	22	3	8	20	0	0
Batavia pecul of 100 catties	135	10	0	1	32	10	5	3	16	4	33	22·4
Bencoolen bahar	560	0	0	7	20	0	22	3	8	20	0	0
Bengal factory maund	74	10	10·7	1	0	0	2	7	35·7	2	26	20
—— bazaar maund	82	2	2·1	1	4	0	3	2	11·3	2	37	10
Bombay candy of 20 maunds	560	0	0	7	20	0	22	3	8	20	0	0
Bussorah maund of 76 vakias	90	4	0	1	8	5·6	3	4	35·2	3	8	27·9
—— of 24 ditto	28	8	0	0	15	4·3	1	1	4·8	1	0	21·4
Calicut maund of 100 pools	30	0	0	0	16	1·1	1	1	24	1	2	25·7
China pecul of 100 catties	133	5	5·3	1	31	6	5	2	26	4	30	14·3
Cochin candy of 20 maunds	543	8	0	7	11	2·6	21	5	36·8	19	16	12·9
Gombroon bazaar candy	7	8	0	0	4	0	0	2	16	0	10	21.4
Goa candy of 20 maunds	495	0	0	6	25	2·9	19	6	16	17	27	4·3
Jonkceylon bahar of 8 capins	485	5	5·3	6	20	0	19	3	12	17	13	10
Madras candy of 20 maunds	500	0	0	6	28	0	20	0	0	17	34	8·6
Malacca bahar of 3 peculs	405	0	0	5	16	15	16	1	24	14	18	17·1
Mocha bahar of 15 frazils	450	0	0	6	0	1	18	0	0	16	2	25·7
Muscat Custom-house maund	8	12	0	0	4	11	0	2	32	0	12	15
Mysore candy of 7 morahs	560	0	0	7	20	0	22	3	8	20	0	0
Pegu candy of 150 vis	500	0	0	6	28	0	20	0	0	17	34	8·6
Penang pecul of 100 catties	133	5	5·3	1	31	6	5	2	26	4	30	14·3
Surat maund of 40 seers	37	5	5·3	0	20	0	1	3	37·9	1	13	10
—— Pucca maund	74	10	10.7	1	0	0	2	7	35.7	2	26	20
Tellicherry candy of 20 maunds	600	0	0	8	0	2	24	0	0	21	17	4·3

Banks, Banking. — The paper currency of Calcutta is supplied by the following banks : —

Bank of Bengal. — This is the only bank in Calcutta that has a charter. Its capital is 50 lacs, divided into 500 shares of 10,000 sicca rupees each, of which the East India Company hold 100 shares. The shares are now at a premium of 5,000 to 6,000 rupees. It is managed by nine directors ; three appointed by government, and six elected by the proprietors : time of service, for the latter, three years. The secretary to government in the financial department, the accountant-general, and the sub-treasurer, are the *ex officio* government directors. The bank secretary and treasurer is also a civil servant. This bank possesses peculiar advantages, but has not been so useful to the public as it might have been. Its notes are received at all the public offices, in payment of revenue, by the collectors in all the districts below Benares ; and, consequently, its circulation, averaging 80 to 100 lacs, extends over a very large and the wealthiest portion of our Indian territory. The government being such considerable shareholders, too, it is generally supposed by the natives that the Bengal Bank is part and parcel thereof ; and it enjoys, therefore, the same credit. But other circumstances have operated against the usefulness which, with the advantages alluded to, it might have been supposed, would have certainly attended it.

1. The government required a deposit in their treasury of 20 lacs of rupees in Company's paper, as security for the notes received at the public offices and the district treasuries. To this extent, therefore, their means applicable to commercial purposes, or rather to the assistance of the commercial community, were crippled.

2. By their charter, they were required to issue their notes in the proportion of one third of specie, to two thirds of paper, — in other words, for every 90 rupees of notes issued, they kept 30 rupees of cash in their strong box.

3. Their rules for granting accommodation on personal credit were so severe, that the public rather avoided applications to them, if they could obtain discounts elsewhere ; and, consequently, the business of the Bengal Bank was almost entirely confined to the granting of loans on the security of the Company's paper. In 1826, 1827, and 1828, when the Burmese war, and the financial arrangements of the government, occasioned a great demand for money, the amount of discounts of mercantile paper in Calcutta did not exceed 10 or 12 lacs of rupees, whilst loans secured by Company's paper rose to 60 and 70 lacs.

The inconvenience of this system having been felt, the government of Calcutta has recommended an alteration : and we understand the capital is to be increased to 75 lacs ; the proportion of a third specie to be reduced to a fourth ; the deposit of 20 lacs of Company's paper at the treasury to be done away ; and greater facilities to be afforded to the mercantile community in obtaining accommodation.

As soon as this alteration is carried into effect, there will unquestionably be a great improvement in the money market in Calcutta.

The Union Bank. — This establishment was founded in 1829. It is the only private bank at present (1834) existing in Bengal ; for the Bank of Hindostan, the Commercial Bank, and the Calcutta Bank, noticed in the former edition of this work, have all, though solvent, been discontinued. The capital of the Union Bank is 50 lacs of rupees, consisting of 1,000 shares of 5,000 each, held by all classes of the community. Its notes circulate only in Calcutta and its immediate neighbourhood ; no private notes being received at the collectors' treasuries in the provinces. The main object of this establishment was to fill up the space in the money market, occasioned by the restrictions imposed on the Bank of Bengal by its charter ; but it has not yet been able to effect its intentions to their full extent, from its notes not being generally circulated ; and it is possible that the proposed alterations in the Bengal Bank may, in some measure, limit its operations. There is no doubt, however, but that it will be a favourite establishment ; and should it obtain a charter, it will probably get most of the banking business of Calcutta ; its rules being well adapted for facilitating commercial transactions, and sustaining commercial credit and confidence.

The rates of discount vary, from time to time, with the state of the money market. The last rates quoted were, at the Union Bank, 6 per cent. per annum on notes at 3 months, 5 ditto, at 2 ditto ; 4 ditto, at 1 ditto : the Bank of Bengal, discount on private bills at 3 months, 6 per cent. per annum ; ditto government bills*, ditto, 4 ditto ; interest on loans, on deposit, ditto, 5 ditto.

Indian Funds. — The public debt contracted by the Indian government, on the security of the territory, is under the management of the treasury department at Calcutta. This debt is of two descriptions ; that bearing no interest, and that which bears interest. The last is again divided into three parts ; viz. monies deposited by public bodies for specific purposes ; treasury notes, of the same character as our Exchequer bills ; and the actual funded or registered debt. The latter, on the 30th of April, 1830, was as follows ; for Bengal.

* This partiality to the government bills is objected to. The Union Bank makes no distinction.

Statement of the Amount standing on the general Registers of the Presidency of Bengal, in the Names of Europeans and Natives.

Debt.	Europeans.	Natives.	Total.
	Sicca rupees.	Sicca rupees.	Sicca rupees.
6 per cent. loan of 1822	703,43,500	43,68,700	747,12,200
5 — — 1823	709,87,800	206,39,700	916,27,500
5 — — 1825-26	532,74,800	408,79,500	941,54,300
5 — — 1829-30	19,51,700	7,01,300	26,53,000
4 — — 1824-25	3,13,000	5,86,200	8,99,200
4 — — 1828-29	6,63,600	5,84,100	12,47,700
Sicca rupees	1,975,34,400	677,59,500	2,652,93,900

The 6 per cent. loan of 1822 is irredeemable until the expiration of the Company's present charter, and then 15 months' notice to be given previously to discharge: the interest on this loan is payable either half-yearly in India, or, if the proprietor be resident in Europe, he has the option, as a matter of right, of demanding a bill upon the court of directors for the interest, payable at 12 months' date, at 2*s.* 1*d.* the sicca rupee. The 5 per cent. loan of 1823 was not payable, in any part, until after the 31st of March, 1825, and then only 1½ crore in any one year, after 60 days' notice; the interest is payable upon the same terms as that on the 6 per cent. loan, with this important difference, that the privilege which the residents in Europe possess of receiving interest in England belongs as of right to the holders of the 6 per cent. loan, and is only enjoyed by the holders of this loan *during the pleasure* of the home authorities. Of the 5 per cent. loan of 1825, no part was dischargeable till after the 30th of April, 1832, and then previous notice of 3 months to be given; the interest upon this loan is payable to all the holders, whether resident in Europe or not, either in cash in India, or by bills upon England, at 2*s.* the rupee. In this case, also, the option of remittance to England may be withdrawn by the home authorities at pleasure. Of the two 4 per cent. loans, no part of the first was dischargeable till after the 30th of April, 1830, nor of the second till the 30th of April, 1832; and, in both cases, previous notice of 3 months to be given. From the favourable conditions of the 6 per cent. loan, it has, of late years, borne a premium of from 30 to 40 per cent. The 5 per cent. loans have generally borne a premium of about 5 per cent.; and even the 4 per cent. securities have been at little more than a nominal discount. We have been thus particular in describing the nature of the Indian national funds, because, in a country where Europeans have been hitherto precluded from holding property in land beyond the narrow boundaries of the principal cities, and where the principal holders reside in Europe, they have been justly considered as a very desirable security.

Pilotage. — The navigation of the river Hooghly from the Sand Heads to Calcutta, a distance of about 130 miles, is naturally dangerous and intricate; but rendered comparatively safe by a skilful and excellent, though very costly, pilot establishment. This consists of twelve vessels, being brigs of between 150 and 200 tons burthen, capable of maintaining their stations in the most boisterous season, which extends from April to October inclusive; 12 branch pilots, 24 masters, 24 first mates, 24 second mates, and between 70 and 80 volunteers. Each branch pilot has a salary of 70*l.* a month; each master 27*l.*; first mates 15*l.*; and second mates and volunteers 6*l.* each. The following table exhibits the rates of pilotage: —

Table of Rates of full and broken Pilotage, chargeable to Ships and Vessels, inward and outward of the River Hooghly.

Draught of Water.	Full Pilotage inward.	Additional Pilotage outward.	Inward Proportion.	Outward Proportion.
Feet.	*L.*	*L.*	From Sea.	From Calcutta.
9 to 10	10		To Saugor - - 4 12ths	To Moyapore or Fulta - 2 12ths
10 11	12	1	To Kedgeree - - 6 12ths	To Fulta harbour - 3 12ths
11 12	14		To Culpee - - - 8 12ths	To Culpee - - - 4 12ths
12 13	16		To Culpee harbour - 9 12ths	To Kedgeree - - 6 12ths
13 14	18		To Fulta, or Moyapore - 10 12ths	To Saugor - - - 8 12ths
14 15	21	2	To Calcutta, full pilotage	To Sea, full pilotage.
15 16	25			
16 17	30			
17 18	35	4		
18 19	40			
19 20	45			
20 21	50	6		
21 22	55			
22 23	60			

Note. — All foreign vessels pay the same pilotage as those under British colours. By broken pilotage is meant the proportion of full pilotage between the different stages or places of anchorage. All ships, the property of foreigners, as well Asiatic as European, are subject to the charge termed "lead money;" it being indispensably necessary that the pilot should have with him a leadsman in whom he can confide.

Detention money, at the rate of 4*s.* per diem, from British and foreign vessels, is charged by persons of the pilot service kept on board ships at anchor by desire of the commander or owner.

In the river before Calcutta, and in other parts, there are chain moorings, of which the charges are as follow: —

Burthen of Ships.	April to October, 7 months.				November to March, 5 Months.			
		L.	*s.*	*d.*		*L.*	*s.*	*d.*
500 tons and upwards - -	Per diem -	0	16	0	Per diem - -	0	12	0
Under 500 tons - - -	Ditto - -	0	14	0	Ditto - -	0	10	0

Hire of the chain moorings at Diamond Harbour, 1*l.* per diem. The lowest charge to a ship requiring the accommodation of the chain moorings at either of the places above mentioned, is for 10 days; and using them longer, a further charge is made at the established rate per diem for every day exceeding 10. The charge for transporting a ship from her moorings into any of the docks at Kidderpore, Howrah, or Sulkea, or from any of the docks to her moorings, is fixed at 50 rupees; and no higher charge for such service is authorised. Besides pilotage, every ship is chargeable with the hire of a row-boat to accompany her; viz. for a boat of the first class, 24*s.*; of the second class, 18*s.*; and of the third class, 14*s.* Of late years a light-house has been erected at Kedgeree, for which the charge on British or American flags is at the rate of 3*d.* per ton per annum. Ships proceeding to Calcutta must land their gunpowder at the powder magazine at Moyapore; the charge is at the rate of 1½*d.* per ton for each voyage. The whole pilot establishment and the care of the navigation of the Hooghly is under the management of government, and is directed by a marine broad, with a master attendant and harbour master.

There are several dry docks at Calcutta, in which vessels of any size may be built or repaired. Ships built at Calcutta are of inferior durability to those constructed at Bombay, in consequence of the framework being always of the inferior woods of the country; and the planks, sheathing, upper works, and decks, alone, of teak; which last is furnished almost entirely from Pegu.

In 1824, the number of registered ships belonging to the port of Calcutta was 120, of the burthen of 44,366 tons; being at an average of about 370 tons for each. The largest class of vessels carry nearly 800 tons; but ships drawing so much water are unfit for the navigation of the Hooghly. Not being able to load at Calcutta, they are obliged to receive part of their cargo at Diamond Harbour, about 34 miles farther down the river. The most convenient-sized ship for trade between Calcutta, and Europe, and America, is from 300 to 400 tons.

Duties, &c. — At Calcutta there are two distinct Custom-houses; the one for the sea, and the other for the inland duties. Our business is with the first only. The export and import duties and drawbacks are regulated by an ordinance of the year 1825, and are the same for every port under the government of Bengal; or, as it is technically called, the Presidency of Fort William. The tariff is regulated by three schedules, stating respectively the rates of duty chargeable on goods imported by sea, the drawbacks allowed on re-exports, and the rates of duty chargeable and drawbacks allowed on

exported articles being the produce and manufacture of the country. The duty on goods and merchandise imported by sea is imposed *ad valorem*, or according to their market value at the time of importation, except when otherwise specially provided. The value of all such goods and merchandise must be stated on the face of the application to clear the same from the Custom-house presented by the importer, consignee, or proprietor of such goods, or his known agent or factor, who must subjoin to such application a declaration of the truth of the same, according to a prescribed form.

The following table contains the import duties on goods produced or manufactured in the United Kingdom, foreign Europe, or the United States No duty is charged on any article the produce or manufacture of the country, if exported in a British vessel, and very rarely when exported in a foreign vessel. The inland duties vary from 10 to 2½ per cent., a drawback of *two thirds* of which is usually allowed when the articles on which they are charged are exported in British vessels, and of *one third* when they are exported in foreign vessels. The drawbacks allowed on re-exports of foreign articles imported in British vessels vary from half to two thirds and three fourths of the import duty; on re-exports in a foreign vessel, they are commonly from half to two thirds and seven eighths.

Rates of Duty chargeable on Goods, the Produce or Manufacture of the United Kingdom, Foreign Europe, and the United States, imported by Sea into Calcutta, or any Port or Place belonging to the Presidency of Fort William.

Enumeration of Goods.	Imported on a British Bottom.	Imported on a Foreign Bottom.
1st. Goods, the Produce or Manufacture of the United Kingdom.		
1. Bullion and coin	Free	Free.
2. Horses	Free	Free.
3. Marine stores	Free	2½ per cent.
4. Metals, wrought and unwrought	Free	2½ ditto.
5. Opium	24 rs. a seer of 80 sa. wt.	48 rs. a seer of 80 sa. wt.
6. Precious stones and pearls	Free	Free.
7. Salt	3 rs. a md. of 82 sa. wt. per seer	6 rs. a maund of 82 sa. wt. per seer.
8. Spirituous liquors	10 per cent.	20 per cent.
9. Tobacco	4 annas a md. of 80 sa. wt. per seer	8 annas a md. of 80 sa. wt. per seer.
10. Wines	10 per cent.	20 per cent.
11. Woollens	Free	2½ ditto.
All articles not included in the above eleven items	2½ per cent.	5 ditto.
2d. Goods, the Produce of Foreign Europe, or of the United States of America.		
1. Arrack at a fixed valuation of 30*l.* per cask of 126 gallons	10 per cent.	20 per cent.
2. Bullion and coin	Free	Free.
3. Horses	Free	Free.
4. Opium	24 rs. a seer of 80 sa. wt.	48 rs. a seer of 80 sa. wt.
5. Precious stones and pearls	Free	Free.
6. Salt	3 rs. a md. of 82 sa. wt. per seer	6 rs. a maund of 82 sa. wt. per seer.
7. Spirits	10 per cent.	20 per cent.
8. Tobacco	4 annas a md. of 80 sa. wt. per seer	8 annas a md. of 80 sa. wt. per seer.
9. Wines	10 per cent.	20 per cent.
All articles not included in the above nine items	5 ditto	10 ditto.
3d. Goods, the Produce or Manufacture of Places other than the United Kingdom, Foreign Europe, or the United States of America.		
1. Allspice	10 per cent.	20 per cent.
2. Aloe wood	7½ ditto	15 ditto.
3. Altah	7½ ditto	15 ditto.
4. Alum	10 ditto	20 ditto.
5. Ambergris	7½ ditto	15 ditto.
6. Arrack, Batavia	55 sa. rs. per leager	110 sa. rs. per leager.
7. Arrack, from foreign territories in Asia	30 sa. rs. per leager	60 sa. rs. per leager.
8. Arsenic, white, red, or yellow	10 per cent.	20 per cent.
9. Asafœtida	10 ditto	20 ditto.
10. Awl root, or morinda	7½ ditto	15 ditto.
11. Beads, malas, or rosaries	7½ ditto	15 ditto.
12. Betel nut (customs)	7½ ditto	15 ditto.
Ditto (town duty)	5 ditto	10 ditto.
13. Benjamin, or loban	7½ ditto	15 ditto.
14. Brandy, from foreign territories in Asia	30 ditto	60 ditto.
15. Brass, wrought and unwrought	10 ditto	20 ditto.
16. Brimstone	10 ditto	20 ditto.
17. Brocades, and embroidered goods	7½ ditto	15 ditto.
18. Buhera, or myrobalan	10 ditto	20 ditto.
19. Buckum, or sapan wood	7½ ditto	15 ditto.
20. Bullion and coin	Free	Free.
21. Calizeerah, or Nigellah	7½ per cent.	15 per cent.
22. Camphire	10 ditto	20 ditto.
23. Canvas, — excepting canvas made of sunn or hemp, or other material, the growth or manufacture of places subject to the government of the East India Company, which is exempted from charge of duty on importation by sea	5 ditto	10 ditto.
24. Cardamums	7½ ditto	15 ditto.
25. Carriages and conveyances	7½ ditto	15 ditto.
26. Cassia	10 ditto	20 ditto.
27. Chanks	7½ ditto	15 ditto.
28. Cherayta	10 ditto	20 ditto.
29. China goods, or goods from China, not otherwise enumerated in this table	7½ ditto	15 ditto.
30. Cloves	10 ditto	20 ditto.
31. Cochineal, or crimdanah	7½ ditto	15 ditto.
32. Coffee	7½ ditto	15 ditto.
33. Coir, the produce of places not subject to the government of the East India Company in India	5 ditto	10 ditto.
34. Coin and bullion	Free	Free.
35. Columbo root	10 per cent.	20 per cent.
36. Coosoom fool, or saffower	7½ ditto	15 ditto.
37. Copal, or kahroba	10 ditto	20 ditto.
38. Copper, wrought and unwrought	10 ditto	20 ditto.
39. Coral	10 ditto	20 ditto.
40. Cordage, — excepting cordage made of sunn, hemp, or other material, the produce of places subject to the government of the East India Company, which shall be exempt from the charge of duty on importation by sea	5 ditto	10 ditto.
41. Crimdanah, or cochineal	7½ ditto	15 ditto.
42. Dhye flower	7½ ditto	15 ditto.
43. Elephants' teeth	7½ ditto	15 ditto.
44. Embroidered goods and brocades	7½ ditto	15 ditto.
45. Frankincense, or gundiberoza	7½ ditto	15 ditto.
46. Galbanum	10 per cent.	20 per cent.
47. Galingall	7½ ditto	15 ditto
48. Ghee (customs)	5 ditto	10 ditto.
Ditto (town duty)	10 ditto	20 ditto.
49. Gin, from foreign territories in Asia	30 ditto	60 ditto.
50. Goopee muttee, or yellow ochre	10 per cent.	20 per cent.
51. Goomootoo, sunn, and hemp	Free	Free.
52. Gum Arabic	10 per cent.	20 per cent.
53. Gundiberoza, or frankincense	7½ ditto	15 ditto.
54. Hemp, sunn, or goomootoo	Free	Free.
55. Hurrah, or myrobalan	10 per cent.	20 per cent.
56. Horses	Free	Free.
57. Hurshinghar flower	7½ per cent.	15 per cent.
58. Hurtaul, or orpiment, or yellow arsenic	10 ditto	20 ditto.
59. Iron, wrought or unwrought	10 ditto	20 ditto.
60. Ivory	7½ ditto	15 ditto.
61. Juttamunsee, or spikenard	10 ditto	20 ditto.
62. Kulliniun	7½ ditto	15 ditto.
63. Lead, pig, sheet, milled, and small shot	10 ditto	20 ditto.
64. Loadh	7½ ditto	15 ditto.
65. Loban, or benjamin	7½ ditto	15 ditto.
66. Mace	10 ditto	20 ditto.
67. Madder, or munjeet	7½ ditto	15 ditto.
68. Mahogany, and all other sorts of wood used in cabinet-work	7½ ditto	15 ditto.
69. Mastick	10 ditto	20 ditto.
70. Minium, or red lead	10 ditto	20 ditto.
71. Morinda, or awl root	7½ ditto	15 ditto.
72. Munjeet, or madder	7½ ditto	15 ditto.
73. Musk	7½ ditto	15 ditto.
74. Myrobalans, viz. buhera, hurrah, and ownla	10 ditto	20 ditto.
75. Myrrh	10 ditto	20 ditto.
76. Nutmegs	10 ditto	20 ditto.
77. Oils, vegetable or animal (customs)	7½ ditto	15 ditto.
Ditto, ditto (town duty)	5 ditto	10 ditto.

Rates of Duties — *continued.*

Enumeration of Goods.	Imported on a British Bottom.	Imported on a Foreign Bottom	Enumeration of Goods.	Imported on a British Bottom.	Imported on a Foreign Bottom
78. Oil seeds (customs)	7½ ditto	15 ditto.	104. Senna	10 ditto	20 ditto.
Ditto (town duty)	5 ditto	10 ditto.	105. Soonamookey leaf	10 ditto	20 ditto.
79. Oils, perfumed or essential, or otter and fooleyl teyl	7½ ditto	15 ditto.	106. Spikenard, or jutta-munsee	10 ditto	20 ditto.
80. Opium, foreign	24 rs. per seer of 80 Cal. sa. wt.	48 rs. per seer of 80 Cal. sa. wt.	107. Spirituous liquors, not otherwise described in this table	10 ditto	20 ditto.
81. Orpiment, or yellow arsenic, or hurtaul	10 per cent.	20 per cent.	108. Steel, wrought or unwrought	10 ditto	20 ditto.
82. Otter, or essential oils	7½ ditto	15 ditto.	109. Storax	10 ditto	20 ditto.
83. Ownla, or myrobalan	10 ditto	20 ditto.	110. Stones (precious) and pearls	Free	Free.
84. Pepper, black and white	10 ditto	20 ditto.	111. Sugar, wet or dry, including jaggery and molasses (customs)	5 per cent.	10 per cent.
85. Piece goods, — cotton, silk, and partly cotton and partly silk, the manufacture of the Honourable Company's territories in India	2½ ditto	5 ditto.	Ditto, ditto (town duty)	5 ditto	10 ditto.
86. Ditto, ditto, ditto, when not the manufacture of the Honourable Company's territories in India	7½ ditto	15 ditto.	112. Sulphur, or brimstone	10 ditto	20 ditto.
87. Pimento, or allspice	10 ditto	20 ditto.	113. Sunn, hemp, and goomootoo	Free.	Free.
88. Pipe staves	7½ ditto	15 ditto.	114. Tape	7½ per cent.	15 per cent.
89. Precious stones and pearls	Free	Free.	115. Taizepaut, or malabathrum leaf	10 ditto	20 ditto.
90. Prussian blue	10 per cent.	20 per cent.	116. Tea	10 ditto	20 ditto.
91. Putcha paut	7½ ditto	15 ditto.	117. Teak timber	Free	Free.
92. Quicksilver	10 ditto	20 ditto.	118. Thread	7½ per cent.	15 per cent.
93. Rattans	7½ ditto	15 ditto.	119. Tin and tin ware	10 ditto	20 ditto.
94. Red sandal wood	7½ ditto	15 ditto.	120. Tobacco (customs)	4 as. per md. of 80 sa. wt. per seer	8 as. per md. of 80 sa. wt. per seer.
95. Red lead, or minium	10 ditto	20 ditto.	Ditto (town duty)	10 per cent.	20 per cent.
96. Rose-water	7½ ditto	15 ditto.	121. Toond flower	7½ per cent.	15 per cent.
97. Rum, from foreign territories in Asia	30 ditto	60 ditto.	122. Tugger wood	7½ ditto	15 ditto.
98. Saffron	10 ditto	20 ditto.	123. Turmeric (customs)	5 ditto	10 ditto.
99. Safflower, or coosoom fool	7½ ditto	15 ditto.	Ditto (town duty)	5 ditto	10 ditto.
100. Sago	7½ ditto	15 ditto.	124. Tutenague	10 ditto	20 ditto.
101. Salt, foreign	3 rs. per md. of 82 sa. wt. per seer	6 rs. per md. of 82 sa. wt. per seer.	125. Ugger, or aloe wood	7½ ditto	15 ditto.
102. Sandal wood, red, white, or yellow	7½ per cent.	15 per cent.	126. Vermilion	10 ditto	20 ditto.
103. Sapan, or buckum wood	7½ ditto	15 ditto.	127. Verdigris	10 ditto	20 ditto.
			128. Wax and wax candles	10 ditto	20 ditto.
			129. Wines and spirits, not otherwise provided for	10 ditto	20 ditto.
			130. Wood of all sorts used in cabinet-work	7½ ditto	15 ditto.
			131. Yellow ochre, or goopee mutee	10 ditto	20 ditto.
			132. Articles not enumerated above	5 ditto	10 ditto.

Trade of Calcutta. — Exports. — During the last 20 years the trade of Calcutta has experienced some very striking vicissitudes. Previously to the opening of the trade in 1814-15, cotton piece goods formed the principal article of export from India; the value of those exported from Calcutta, at an average of the 5 years from 1814-15 to 1818-19, being (at 2*s.* per sicca rupee) 1,260,736*l.* a year. The extreme cheapness of labour in India, and the excellence to which the natives had long attained in several departments of the manufacture, would, it might have been supposed, have sufficed to place this important department beyond the reach of foreign competition. But the wonderful genius of our mechanists, the admirable skill of our workmen, and our immense capital, have far more than countervailed the apparently insuperable drawback of high wages, and the expense of bringing the raw material of the manufacture from America, and even India itself; and have enabled our manufacturers to bear down all opposition, and to triumph over the cheaper labour, contiguous material, and traditional art of the Hindoos. The imports of British cottons and twist into India have increased since 1814-15, with a rapidity unexampled in the annals of commerce; and the native manufacture has sustained a shock from which it is not very likely it will ever recover. — (See *post*, p. 539.) The influence of these circumstances on the trade in piece goods has been very striking. During the year 1833-34, the value of those exported from Bengal was no more than 77,175*l.*, being only about one sixteenth or one seventeenth part of what it amounted to 16 or 18 years previously!

An extraordinary change has also taken place in the trade in bullion at Calcutta. At no distant period it was one of the principal articles of export from Europe to India; and in 1818-19, there were imported into Calcutta from England only 1,216,115*l.* of gold and silver! But the current began soon after to change; and now sets so strongly in the opposite direction, that in 1832-33 the exports of the precious metals from Calcutta for England amounted to 516,419*l.*

The export of bullion from England to India at the former period, though influenced by other causes, was mainly occasioned by the difficulty under which we were then placed, of providing articles of merchandise suitable for the Indian markets, sufficient to balance our imports. The astonishing increase of our exports of cotton goods, besides completely obviating this difficulty, has actually, as we have just seen, produced an importation of large quantities of bullion from India. But it should be observed, that India derives most part of the bullion sent to Europe from China and Singapore, in payment of opium and other articles, so that the drain upon her is by no means so heavy as has been represented; and it may well be doubted, notwithstanding the numerous allegations to the contrary, whether it has had any injurious influence. Undoubtedly, however, it were much to be wished that the returns made by India to Europe in articles of native produce and manufacture, should be materially increased. The taste for British produce is already widely diffused over most parts of Hindostan; and it will, no doubt, continue to gain ground according as the natives become better acquainted with our language, arts, and habits. The difficulty of procuring return cargoes is now, in fact, almost the only obstacle to the rapid and indefinite extension of the trade with India. And it may be reasonably presumed, that this difficulty will progressively diminish, by the adoption of a course of policy and of measures calculated to develope the vast resources and dormant energies of the country. The repeal of the injudicious restrictions that formerly hindered Europeans from acquiring land, and from applying their capital and skill to most sorts of industry, carried on in the interior, with the exception of the culture of indigo, will doubtless be of considerable advantage. But the exorbitant amount of the land revenue, and the restrictions and duties imposed on the transit trade and internal commerce of the country, are unquestionably the principal causes of the depressed state of agriculture, as well as of the poverty of the inhabitants, and their inability to furnish equivalents for foreign products. The former should, if possible, be materially reduced; and it is not easy to see why the latter should not be wholly abolished. The soil and climate of Bengal are both admirably suited for the production of grain, indigo, sugar, opium, silk, cotton, saltpetre, and a vast variety of other desirable articles: the inhabitants are not deficient in industry, nor in a desire to improve

their condition; and there wants only the adoption of a sound and liberal system, to render the country prosperous and flourishing, and to lay the foundations of an immense commerce.

At present the principal articles of export from Calcutta are, opium, indigo, rice, and other species of grain, silk and silk goods, sugar, saltpetre, cotton and cotton piece goods, lac-dye and shell lac, gunnies and gunny bags, &c. We subjoin a statement of the

Quantity and Value (taking the Sicca Rupee at 2*s.*) of the principal Articles of native Produce, exported from Calcutta during the Years 1832-33, and 1833-34.

Articles.	1832-33.		1833-34.	
	Quantity.	Value.	Quantity.	Value.
Opium - - - chests	9,408	*L.* 1,177,559	12,006	*L.* 1,240,382
Indigo - - - - Fy. mds.	131,016	1,310,160	90,217½	902,175
Rice - - - - Bz. mds.	1,650,146	240,532	2,667,465	461,455
Raw silk - - - - —	12,410¾	343,121	13,550½	376,919
Silk piece goods - - - pieces	450,973	240,061	479,578	247,951
Sugar - - - - Bz. mds.	229,347	182,400	290,363¼	230,822
Saltpetre - - - - —	354,853⅓	190,813	490,554	254,801
Raw cotton - - - - —	126,943	127,038	143,555	143,250
Cotton piece goods - - - pieces	478,189	82,289	477,571	77,174
Lac dye - - - - Bz. mds.	5,082½	10,956	9,590	22,416
Shell lac - - - - —	19,063½	35,114	26,056½	60,412
Stick lac - - - - —	1,272	1,249	104	199
Gunnies and gunny bags - - No.	3,528,628	24,577	2,615,975	19,567
Skins and hides - - - —	1,013,348	57,238	1,251,577	66,004
Safflower - - - - Bz. mds.	6,973½	17,339	7,630¾	18,763
Ginger - - - - —	21,488	7,053	39,877½	13,524

It appears from the following table that the total value of the merchandise exported from Calcutta by private traders in 1833-34 was 4,045,720*l.* and of treasure, 242,573*l.* The value of the Company's exports of merchandise during the same year was 552,252*l.*; but their exports of treasure have not been stated. In these statements indigo and raw silk are valued at the Custom-house rates, which are considerably below their real value. Altogether, the exports from Calcutta in 1833-34 cannot have been much under 5,500,000*l.*

Destination of Exports.—From 40 to 50 per cent. of the exports from Calcutta are for the United Kingdom, from 20 to 25 for China, 6 or 7 for Singapore and Penang, 7 for France, 4½ for North and South America, the residue being for the coasts of Malabar and Coromandel, Pegu, the Arabian and Persian Gulfs, the Mauritius, &c. We subjoin a

Statement exhibiting the Value of the Merchandise, and the Value of the Treasure, exported from Calcutta on private Account, in 1832-33 and 1833-34, specifying the Shipments for each Country.

Countries.	1832–33.			1833–34.		
	Merchandis.	Treasure.	Total.	Merchandise.	Treasure.	Total.
	Sicca Rupees.	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*
Great Britain - - -	1,27,15,094	51,64,189	1,78,79,283	1,18,88,475	19,68,257	1,38,56,732
France - - - -	29,97,422	500	29,97,922	35,54,237	- -	35,54,237
Sweden - - - -	- -	- -	- -	90,064	- -	90,064
Portugal - - - -	1,60,814	- -	1,60,814	- -	- -	- -
North America - -	20,16,903	5,500	20,22,403	28,46,361	- -	28,46,361
Coast of Coromandel -	13,29,198	12,000	13,41,198	28,22,372	200	28,22,572
Ceylon - - - -	29,645	- -	29,645	38,588	30,000	68,588
Maldives and Laccadives -	50,610	- -	50,610	53,241	- -	53,241
Coast of Malabar - -	17,84,330	- -	17,84,330	22,92,998	- -	22,92,998
Arabian and Persian Gulfs	9,77,629	- -	9,77,629	9,68,577	- -	9,68,577
Singapore - - -	24,22,202	33,100	24,55,302	20,99,168	2,025	21,01,193
Penang and Malacca - -	5,13,151	- -	5,13,151	2,39,237	- -	3,36,237
China - - - -	97,63,511	32,000	97,95,511	1,09,08,120	37,427	1,09,45,547
New Holland - - -	10,684	- -	10,684	87,031	6,975	94,006
Sumatra and Java - -	29,460	- -	29,460	98,189	- -	98,189
Pegu - - - -	8,44,982	- -	8,44,982	9,67,574	4,655	9,72,229
Mauritius - - -	7,51,121	6,49,778¾	14,00,899¾	12,07,598	3,76,188	15,83,786
Bourbon - - - -	1,13,331	- -	1,13,331	2,17,371	- -	2,17,371
Cape and St. Helena - -	58,816	- -	58,816	78,003	- -	78,003
Total sicca rupees - -	3,65,68,903	58,97,067¾	4,24,65,970¾	4,04,57,204	24,25,797	4,28,82,931
or at 2*s.* per sicca rupee *L.*	3,656,890	589,707	4,246,597	4,045,720	242,573	4,288,293

	Sicca Rupees.
Total amount, merchandise and treasure, exported in 1833-34 -	4,28,82,931
Total amount, merchandise and treasure, exported in 1832-33 -	4,24,65,970¾
Difference in favour of 1833-34 - - -	4,16,960¼

The Company's exports, in 1832-33, were, merchandise and treasure together, 1,00,14,430 sicca rupees, or 1,001,443*l.*

Remarks on Exports.—The reader will elsewhere find (see *post*, p. 239., and the Article Opium) pretty ample information in relation to the trade in Opium. It is sufficient here to state, that it is rapidly growing in magnitude and importance. At an average of the 5 years ending with 1828-29, the exports from Calcutta were 6,369 chests, worth 944,071*l.* a year; but at an average of the 5 years ending with 1833-34, the exports had increased to 9,014⅓ chests, worth 1,163,809*l.* a year, being an annual increase of 2,645⅓ chests, and of 219,738*l.* of value. China is not the principal merely, but almost the only market for opium; so that the trade between Calcutta and her, is now second only to that between the former and England. Some opium is shipped for Singapore, but China is its ultimate destination.—(*Bell's Review* for 1833-34, p. 45.)

Previously to the close of the American war, the exports of indigo from Calcutta were comparatively trifling. But about that period Europeans began to engage in the business; and the culture of the plant has since been so much extended, and the preparation of the drug so much improved, that it has now become an article of primary commercial importance—(See Indigo.) Next to Great Britain, France is the principal market for indigo.

The crop of indigo in Bengal, which had, at an average of the 4 years ending with 1832-33, amounted to about 126,000 maunds a year, fell off in 1833-34 to 93,802 maunds. This great decline was occasioned partly by the unfavourableness of the season, but more by the diminished cultivation occasioned by the previous low prices, and the failure of some of the principal parties engaged in the trade.—(See *post.*)

But notwithstanding this decrease of the crop, and the great reduction in the imports into England in 1834 as compared with previous years, prices have not sustained any very material advance. The consumption of indigo in England has fallen off considerably since 1830, the effect, as is supposed, of the decreasing use of blue cloth. Subjoined is a statement of the

Exports of Indigo from Calcutta during the Five Years ending with 1833-34, specifying the Countries for which it has been exported, and the Quantities sent to each.

Years.	Great Britain.	France.	N. America.	Hamburgh, Sweden, and Portugal.	Arabian and Persian Gulfs.	Other Places.	Tota.
	Fac. Mds.	*Fac. Mds.*	*Fac Mds.*	*Fac. Mds.*	*Fac. Mds.*	*Fac. Mds.*	*Fac. Mds.*
1829—30	104,724	16,451	4,737	- -	6,024	319	132,255
1830—31	85,741	23,151	5,899	243	10,939	583	126,556
1831—32	85,330½	15,219	10,488	- -	7,110	905¾	119,051¼
1832—33	93,929	26,319	6,625¾	235½	2,991½	915¼	131,016
1833—34	51,906¾	30,212	5,481½	257½	12,114	1,145¾	90,217
Total	421,631¼	111,352	33,231¼	736	28,278½	3,866¾	599,095¾

	Fac. Mds.
Average total annual exports, 1829-30 to 1833-34 - -	119,819
Average total annual exports, 1824-25 to 1828-29 - -	115,846

Of the various articles exported from Bengal, sugar is that of which a large increase may, perhaps, be most reasonably anticipated. The processes followed in its culture and production have hitherto been of the rudest description; but, now that Europeans may engage in the business, it is probable they will be materially improved. The excess of 5*s.* a cwt. of duty laid on East India sugar, imported for home consumption, over that which is laid on West India sugar, ought to be repealed. There neither is nor can be any good reason why similar products, from different dependencies of the empire, should not be allowed to come into our markets on the same footing. Should any considerable decline take place in the production of sugar in our West India colonies, the expediency of equalising the duties on sugars of the East and West Indies, would be as obvious as its justice.

Cotton is another article of export which might, it is believed, be very greatly increased in quantity, and, probably also, improved in quality, by giving greater attention to its culture and preparation. Recently, however, the trade has been declining. The exports of cotton from Calcutta, at an average of the 3 years ending with 1833-34, did not exceed half the quantity exported during the 3 years ending with 1826-27. Bombay and Surat are, however, the great shipping ports for Indian cotton.

The exports of rice from Bengal fluctuate very greatly. This is not caused so much by variations in the crops of the country, as by variations in those of other countries; for, when a scarcity occurs in most parts of continental Asia, or in any of its islands, recourse is almost invariably had to Bengal to supply the deficiency; and the demands thence arising have been sometimes enormous. In 1831-32, for example, the exports of rice from Calcutta to the coast of Coromandel amounted to only 16,545 maunds, whereas in 1833-34, they amounted to 1,252,056 maunds.—(*Bell's Comparative View of* 1832-33, and 1833-34, p. 41.) It is worthy of remark, that while Bengal is shipping immense supplies of rice and other grain to distant parts, a large part of her own population is frequently in a state of great want and suffering. Ireland is not, therefore, the only country in which the most abject poverty and wretchedness on the part of the inhabitants, are found combined with great fertility of soil, and a large exportation of food.

The exports of saltpetre from Calcutta have increased materially during the last dozen years, and were greater in 1833-34 than they have been for a lengthened period. It is doubtful, however, owing to the competition of *nitrate of soda* from South America, whether this increase will be maintained. France is now principally supplied from America.—(See SALTPETRE.)

Besides the articles of native Indian produce exported from Calcutta, she re-exports pretty considerable quantities of various articles brought from other parts. The value of the British cotton goods re-exported, amounts to about 90,000*l.* a year. They are principally bartered with the Burmese for silver. The conveyance of the latter out of the Burmese dominions is strictly prohibited; but in Burma, as in England and elsewhere, the ingenuity of the smuggler is too much for the vigilance of the government, and the trade is carried on without much difficulty.

Imports.— The great articles of import into Calcutta are, British cotton manufactures and cotton twist; bullion: copper with spelter, tin, lead, iron, and other metals; woollens; wines and spirits; ale and beer; haberdashery, millinery, &c.; coffee; hardware and cutlery; pepper; coral, glass, and bottles; plate, jewellery, watches, &c.; books and stationery; tea, &c.

Statement exhibiting the Quantity and Value of the Principal Articles (classed in Alphabetical Order) imported into Calcutta during the Years 1832-33, and 1833-34.

Species of Merchandise.		1832-33.		1833-34.	
		Quantity.	Value.	Quantity.	Value.
Betel nut - - - -	Bz. mds.	29,931	*L.* 5,574	12,602	*L.* 5,504
Bottles, empty - - -	dozens	77,825	9,454	109,785	10,833
Books and pamphlets - -	—	- -	22,700	- -	16,725
Buffalo horns - - -	No.	990,001	6,766	1,166,905	7,090
Camphor - - - -	Bz. mds.	793¾	3,085	1,393¾	6,428
Coffee - - - - -	—	13,530½	22,047	17,954¼	26,020
Coals - - - - -	—	64,642	2,942	140,717	44,100
Coral, real - - -	Sa. wt.	115,630	8,197	288,804	14,117
Glass - - - -	Bz. mds.	- -	12,447	- -	13,577
Guns and pistols - - -	—	- -	6,132	- -	4,318
Haberdashery, millinery and apparel -		- -	31,569	- -	34,565
Hardware and cutlery - -	lbs.	- -	26,548	- -	16,882
Lametta - - - -	corge	44,669	13,881	56,976	15,556
Metals:					
Copper - - - -	Bz. mds.	84,640½	292,907	89,189	285,187
Spelter - - - -	—	30,710¼	13,095	24,941	9,651
Tin, block - - -	—	12,545¾	21,283	9,476	16,975
Tin plates - - -	boxes	890	1,355	2,017	3,825
Lead - - - -	Bz. mds.	28,121½	14,920	12,407	5,812
Lead shot - - -	bags	6,554	1,636	3,296	991
Iron - - - -	Bz. mds.	155,173	41,965	135,111	43,584
Steel - - - -	—	9,049	6,841	12,757½	6,987
Quicksilver - - -	—	1,321	11,275	1,234½	10,088
Brass, ingot - - -	—	419	1,075	1,182	2,512
Metal, sheathing - -	—	338	499	- -	
Ironmongery, machinery, and anchors		- -	15,893	- -	20,215
Oilman's stores and grocery -	Bz. mds.	- -	15,103	- -	19,071
Pepper, black - - -	—	69,273½	56,451	31,219	28,589

Statement — *continued*

Species of Merchandise.		1832-33. Quantity.	1832-33. Value.	1833-34. Quantity.	1833-34. Value.
Piece goods:					
White cotton	pieces	909,135	273,233	1,036,227	339,699
	yards	35,809		4,630	
	dozens	2,019		492	
Coloured cotton	pieces	346,297	153,237	174,320	89,150
	yards	8,742		8,831	
	dozens	163,325		36,953	
Silk and mixed goods	pieces	13,899	36,694	26,524	70,848
Plate, jewellery, and watches		- -	20,800	- -	12,948
Salt	Bz. mds.	8,438	2,468	12,496½	3,659
Spices, mace and nutmegs	—	855½	6,813	1,100	8,787
Segars and cheroots	—	- -	2,823	- -	5,329
Stationery and cards	—	-	12,283	- -	14,626
Spirits	—	- -	30,323	- -	30,536
Ale, beer, and porter	butts	252	42,483	322	26,972
	hogsheads	8,011		7,193	
	dozens	2,293		2,082	
Twist and yarn	lbs.	2,993,715	238,781	3,036,621	251,649
Tea	—	- -	19,831	- -	18,850
Vermilion	chests	552	4,430	1,941	16,555
Wines	Bz. mds.	- -	81,805	- -	61,391
Wood	—	- -	22,609	- -	14,475
Woollens	—	- -	80,370	- -	115,173

The total amount of all sorts of merchandise imported into Calcutta by private traders in 1833-34 was 1,956,027*l.*, exclusive of 586,394*l.* of treasure. The Company's imports, during the same year, amounted to 80,325*l.*

Sources of Imports. — These differ in different years, but, speaking generally, Great Britain furnishes about 60 per cent. of the whole; France, about 3 per cent.; North America, 2½; China, from 12 to 15; Singapore, from 6 to 8; coast of Coromandel, from 3 to 4; Malabar, from 3 to 4; Pegu, from 3 to 4, &c.

We subjoin a

Statement exhibiting the Value of the Merchandise, and the Value of the Treasure, imported into Calcutta on private Account, in 1832-33 and 1833-34, specifying the Imports from each Country.

Countries.	1832—33. Merchandise.	1832—33. Treasure.	1832—33. Total.	1833—34. Merchandise.	1833—34. Treasure.	1833—34. Total.
	Sicca Rupees.	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*
Great Britain	1,40,26,707	- -	1,40,26,707	1,39,91,801	2,900	1,39,94,701
France	7,96,283	- -	7,96,283	10,01,133	3,825	10,07,958
Sweden	- -	- -	- -	57,625	- -	57,625
South America	20,831	1,24,875	1,45,706	19,004	- -	19,004
North America	3,69,677	2,08,786¼	5,78,463¼	3,03,807	3,40,424	6,44,231
Coast of Coromandel	6,58,328	1,88,862¾	8,47,190¾	7,18,013	1,81,905½	8,99,918½
Ceylon	6,975	- -	6,975	25,991	- -	25,991
Maldives and Laccadives	98,659	- -	98,659	91,698	- -	91,698
Coast of Malabar	7,92,430	3,000	7,95,430	7,23,750	- -	7,23,750
Arabian and Persian Gulfs	3,38,050	16,400	3,44,450	4,39,462	23,900	4,63,362
Singapore	5,81,595	12,65,725¼	18,47,320¼	5,59,383	9,99,906	15,59,289
Penang and Malacca	2,65,906	1,62,175	4,28,081	2,28,337	1,51,173	3,79,510
China	9,34,228	22,12,431	31,46,659	10,18,170	37,58,524½	47,76,694½
New Holland	5,347	- -	5,347	20,892	- -	20,892
Sumatra and Java	34,441	- -	34,441	28,501	24,215	52,716
Pegu	2,56,471	4,89,444	7,45,915	2,06,389	2,86,298½	4,92,687½
Mauritius	34,522	24,864	59,386	30,967	90,870½	1,21,837½
Bourbon	73,775	- -	73,775	95,100	- -	95,100
Cape and St. Helena	6,974	- -	6,974	3,247	- -	3,247
Total sicca rupees	1,92,91,199	46,96,563¼	2,39,87,762¼	1,95,66,270	58,63,942	2,54,30,212
at 2s. per sicca rupee *L.*	1,929,120	469,656	2,398,776	1,956,627	586,394	2,543,021

	Sicca Rupees.
Total amount, merchandise and treasure, imported in 1833-34	2,54,30,212
Total amount, merchandise and treasure, imported in 1832-33	2,39,87,762¼
Difference in favour of 1833-34	14,42,449¾
The Company's imports in 1833-34 were	8,00,221

Account of the Value (in Sicca Rupees) of the private Trade between Great Britain and Bengal, from the 1st of May 1813 to 30th of April 1834. — (*Bell's Comparative View for* 1832-33 and 1833-34, p. 55.)

	Imports into Calcutta. Merchandise.	Treasure.	Total.	Exports from Calcutta. Merchandise.	Treasure.	Total.
	Sicca Rupees.	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*
1813—14	53,76,775	32,750	54,09,525	1,19,63,405	- -	1,19,63,405
1814—15	40,99,165	5,25,127	46,24,292	1,21,42,283	- -	1,21,42,283
1815—16	57,92,886	11,42,596	68,95,182	1,64,44,208	- -	1,64,44,208
1816—17	80,51,112	18,59,853	9 ,10,965	1,38,06,966	- -	1,38,06,966
1817—18	1,35,62,962	61,57,981	1,97,20,943	1,69,12,905	- -	1,69,12,905
1818—19	1,59,41,420	1,21,61,159	2,81,05,654	1,38,72,325	- -	1,38,72,325
1819—20	66,80,873	63,07,519	1,29,88,392	1,25,64,391	- -	1,25,64,391
1820—21	87,19,664	14,89,017	1,02,08,681	2,07,98,860	4,106	2,08,02,966
1821—22	1,25,68,218	1,64,758	1,42,15,676	94,10,405	13,500	94,23,905
1822—23	1,67,98,082	1,70,758	1,69,68,840	1,27,10,960	5,460	1,27,16,420
1823—24	1,37,67,035	5,24,032	1,42,91,067	1,35,64,851	2,23,767	1,37,88,618
1824—25	1,60,81,454	13,250	1,61,97,704	1,39,30,093	2,69,466	1,41,99,559
1825—26	1,24,63,958	1,26,978	1,26,50,936	1,71,31,915	48	1,71,31,963
1826—27	1,26,56,147	20,180	1,26,46,327	99,61,591	3,78,032	1,03,39,623
1827—28	1,86,43,444	73,620	1,87,17,064	1,28,83,130	7,06,979	1,35,90,109
1828—29	2,20,30,791	1,687	2,20,31,478	1,16,40,299	12,41,443	1,28,81,742
1829—30	1,61,33,841	- -	1,61,25,841	1,08,10,687	12,20,257	1,20,60,944
1830—31	2,00,73,534	1,000	2,00,74,534	1,18,40,971	30,16,384	1,48,57,355
1831—32	1,73,72,762	- -	1,73,72,762	1,18,10,761	37,06,397	1,55,17,158
1832—33	1,40,26,707	- -	1,40,26,707	1,27,15,094	51,64,189	1,78,79,283
1833—34	1,39,91,801	2,900	1,39,94,701	1,18,88,475	19,68,257	1,38,56,732

Account of Ships and Tonnage, arrived at and departed from Calcutta, during the Years 1832-33, and 1833-34. (Fractions omitted in this Table, but allowed for in the summing up.)

Arrivals.					Departures.				
British Imports.	1832-33.		1833-34.		British Exports.	1832-33.		1833-34.	
	Sh.	Tons.	Sh.	Tons.		Sh.	Tons.	Sh.	Tons.
Honourable Company's regular ships	7	9,383	8	10,587	Hon. Company's reg. ships	7	9,391	8	9,918
					Hon. Company's chart. ships	8	4,082	6	3,118
Honourable Company's chartered ships	7	3,543	9	5,106	Ships cleared for England, viâ Madras, &c.	68	29,716	87	37,268
Ships from the U. Kingdom	77	33,379	95	38,297	Ships cleared for Africa (Cape)	2	591	-	-
from Asiatic ports	137	39,264	158	46,050	for Asiatic ports	111	33,560	166	52,996
Dhonies	54	4,445	172	21,042	Dhonies	27	2,805	58	5,235
Vessels laden with coast salt	153	15,339	319	35,793	Ships laden with grain	169	22,386	357	46,072
in ballast	4	1,389	11	3,486	Arab and Turkish	8	3,250	10	4,444
Arab and Turkish	9	3,825	10	4,445	in ballast	48	4,569	102	9,672
Burmese	-	-	2	490	Burmese	-	-	1	400
Total	448	110,571	784	165,299	Total	448	110,550	795	168,525
Foreign Imports.					Foreign Exports.				
Ships from foreign Europe	15	4,942	23	7,708	Ships cleared for foreign Europe	15	5,399	17	5,852
from North America	15	4,484	22	7,353	Ships cleared for North America	17	5,103	18	5,952
from Asiatic ports	8	2,894	9	3,151	for Asiatic ports	12	3,905	16	4,983
in ballast	-	-	3	992					
Total	38	12,321	57	19,185	Total	44	14,407	51	16,767
Grand total	486	122,892	841	184,485	Grand total	492	124,957	846	185,290

Duties — Account of the Gross Amount of Duties collected on Merchandise imported at Calcutta by Sea.

	1832-33.	1833-34.
	L.	*L.*
Under British colours (including town duty)	57,150	54,267
Foreign colours (ditto)	14,786	13,037
Total	*L.* 71,936	67,304

Duties. — Account of the Gross Amount of Duties collected on Merchandise exported from Calcutta by Sea.

	1832-33.	1833-34.
	L.	*L.*
Under British colours	3,918	4,208
Foreign colours	1,308	2,176
Total	*L.* 5,226	6,384

Number and Tonnage of Vessels cleared out at Calcutta for Great Britain, Foreign Europe, and the United States, during the Ten Years ending with 1832-33.

Years.	Great Britain.		Foreign Europe.		United States.	
	Vessels.	*Tonnage.*	*Vessels.*	*Tonnage.*	*Vessels.*	*Tonnage.*
1822-23	59	34,832	21	9,277	11	3,378
1823-24	66	34,122	3	1,165	3	911
1824-25	49	26,843	10	3,897	10	3,449
1825-26	65	35,446	12	4,296	17	5,021
1826-27	86	41,124	13	4,941	6	1,823
1827-28	72	35,201	18	5,855	13	3,269
1828-29	80	37,802	29	8,906	13	4,297
1829-30	64	32,816	15	5,475	13	4,068
1830-31	79	36,351	17	5,220	15	4,716
1831-32	74	34,931	7	2,648	25	7,414
1832-33	79	35,240	15	5,399	17	5,013

Failures at Calcutta. — Within the 3 years ending with 1833, some of the principal mercantile establishments in this city failed for immense sums. To examine minutely into the origin of these disasters would lead us into inquiries foreign to the object of this work, and with respect to which it is difficult to acquire accurate information. We believe, however, that the main source of the evil was the combination, by most of the principal houses, of the business of merchants with that of bankers. Their credit being high, at the end of the war large sums were deposited in their hands, for which they engaged to pay a high rate of interest. But instead of employing these deposits, as bankers in England would have done, in the discount of bills at short dates, or in the purchase of government securities readily convertible into money, they employed them, probably because they could with difficulty dispose of them otherwise, in all manner of mercantile speculations, — advancing very large sums to the indigo planters, exporting goods to Europe, either directly on their own account, or indirectly by lending to those who did, — becoming owners of Indian shipping, &c. Most of those speculations turned out exceedingly ill. The production of indigo was so much increased, partly in consequence of the large capitals turned to the business, and partly of the high prices in England, that "fine blue violet," which had brought, in the London market, at an average of the 3 years ending with 1827, from 12*s.* 10*d.* to 13*s.* 4*d.* per lb., fell, at an average of the 3 years ending with 1832, to from 5*s.* 8*d.* to 6*s.* 4*d.* per lb., and other sorts in proportion. At these prices the production would not pay; and very heavy losses were sustained, and much capital sunk, by the planters and those who had supplied them with funds to extend their undertakings. The investments in Indian shipping turned out even worse than those in the indigo plantations, the shipping of England having nearly driven that of India out of the field. The embarrassment occasioned by this locking up of their capital, and by the ruinous nature of the adventures in which they were embarked, began to manifest itself simultaneously with the scarcity of money occasioned by the drains on account of the Burmese war. The great mercantile houses began then to find that they were entangled in difficulties from which they have been wholly unable to extricate themselves. After struggling on, some for a longer and some for a shorter period, most of them have since failed, the greater number for very large sums.

But, however distressing in the mean time, the embarrassment and want of confidence arising from the failures alluded to could not be of long continuance. In the end they will, no doubt, be productive of a better order of things. It is of the utmost consequence that the vicious combination of the business of a merchant with that of a banker should be put an end to. It is singular, indeed, that individuals should be found willing to intrust large sums in the hands of those who, they are aware, are employing them in the most hazardous adventures. The higher the interest promised by such persons, the greater ought to be the caution of the public in dealing with them.

Some, perhaps most, branches of the import trade of Calcutta seem also to have been completely overdone. That of cotton twist is an instance. In 1829-30, the imports were 1,625,333 lbs.; in 1830-31, they were 3,449,044 lbs.; and in 1831-32, 5,433,323 lbs. Such a supply was far beyond the wants of the country; and the returns were so very inadequate, that the imports were reduced in 1832-33 to 2,993,715 lbs. In 1833-34, the imports amounted to 3,036,621 lbs., and the trade is now comparatively steady. The imports of copper were also carried to an excess; but the greatest excess was in the article spelter, which has for some time past been almost unsaleable at Calcutta. — (See SPELTER.) (For further details as to the points now touched upon, the reader is referred to the clear and able evidence of G. G. de H. Larpent, Esq. before the Committee of the House of Commons on Manufactures, Commerce, &c.)

This article has been compiled from the following authorities: — *Milburn's Oriental Commerce; A Review of the external Commerce of Bengal, by Horace Hayman Wilson, Esq.* 1830; *Bell's Comparative View of the external Commerce of Bengal*, for the years 1832-33, and 1833-34; *The Bengal Directory; Thornton's East Indian Calculator; Parliamentary Papers relating to the Finances of India and the Trade of India and China* 1830—1833; and *private communications.*

CALICO (Ger. *Kattun;* Du. *Katoen;* Dan. *Kattun;* Sw. *Cattun;* Fr. *Coton, Toile de Coton;* It. *Tela Bambagina, Tela dipinta;* Sp. *Tela de Algodon;* Port. *Pano de Algodao;* Rus. *Wüboika;* Pol. *Bawelnika*), cloth made of cotton; so called from Calicut, on the Malabar coast, whence it was first imported. In England, all white or unprinted cotton cloths are denominated calicoes; but in the United States this term is applied to those only that are printed.

Historical Notice of the Art of Calico Printing. — This art, though apparently one of the most difficult, has been practised from a very remote era. Herodotus mentions (lib. 1. § 202.), that a nation on the shores of the Caspian were in the habit of painting the figures of animals on their clothes, with a colour formed from the leaves of trees bruised and soaked in water; and he adds, that this colour was not effaceable, and was as durable as the clothes themselves. It is difficult to imagine that the colours could have been so permanent, had not those using them been acquainted with the use of mordants. There is, however, a passage in Pliny (*Hist. Nat.* lib. xxxv. § 11.), which, though in some respects obscure, shows that the ancient Egyptians were fully acquainted with the principle of calico printing. "They paint," says he, "the clothes, not with colours, but with drugs (*sorbentibus medicamentis*) that have no colour. This being done, they immerse them in a vat full of boiling dye, and leave them there for a little: when they take them out, they are painted of various colours. It is extraordinary, seeing that there is only one colour in the vat (*unus in cortina color*), that a variety of colours should be produced by the operation of the drugs." Pliny further states, that the colours were so adhesive they could not be washed out; and that clothes were the stronger for being dyed. A similar process is known to have been followed in India from the earliest times. The chemical and mechanical inventions of modern ages have been the cause of vast improvements in this ingenious and beautiful art; but the passage now quoted shows distinctly that we have, in this instance, been only perfecting and improving processes practised in the remotest antiquity.

Calico Printing in this Country. Duties on Calicoes. — In Great Britain the printing of cottons has formed, for a considerable period, a very important and valuable business. It has been calculated that there are not less than 230,000 individuals employed in, and dependent upon, the print trade for subsistence, receiving the annual sum of 2,400,000*l.* in wages.

This important and valuable business may be truly said to have grown up amongst us in despite of repeated efforts for its suppression. To prevent the use of calicoes from interfering with the demand for linen and woollen stuffs, a statute was passed in 1721, imposing a penalty of 5*l.* upon the weaver, and of 20*l.* upon the seller, of a piece of calico! Fifteen years after, this extraordinary statute was so far modified, that calicoes manufactured in Great Britain were allowed to be worn, "provided the warp thereof was entirely of linen yarn." This was the law with respect to calicoes till after the invention of Sir Richard Arkwright introduced a new era into the history of the cotton manufacture, when its impolicy became obvious to every one. In 1774, a statute was passed, allowing printed goods, wholly made of cotton, to be used, after paying a duty of 3*d.* a yard (raised to 3½*d.* in 1806); and enacting some regulations as to the marks to be affixed to the ends of the pieces, the stripes, &c.

This act continued in force down to 1831; but, though an improvement upon the old law, it was much, and justly, complained of. Its injustice and injurious operation were very forcibly pointed out by Mr. Poulett Thompson, in his excellent speech on taxation. "It is a matter of surprise to me," said the Right Hon. gent., "that this most impolitic impost should have been allowed to continue, especially when it was declared by the committee of 1818 to be '*partial and oppressive*, and that its repeal was most desirable:' who, indeed, can examine it, and not feel the truth of this observation? Is it credible, that in order to raise a nett revenue of 599,669*l.*, a gross tax should be imposed of 2,019,757*l.*? and yet this was the return, according to the paper on your table, for 1828. And these figures are still far from showing the real cost of the collection of this tax; — that must be taken upon the gross produce; and supposing the rate of the collection for the excise to be 5 per cent., which is less than it really is, you have a cost of 20 per cent. on the nett produce of this tax, for charges. In addition to this, from all the inquiry I have been able to make, the increased cost to the manufacturer is fully 5 per cent. upon the whole quantity made; so that you have thus two sums, each of 100,000*l.*, levied on the public, for the sake of exacting a duty of 600,000*l.* But the revenue is again, in this case, far from being the measure of the injury you inflict. The inequality of the tax constitutes its chief objection. The duty is levied upon the square yard, at 3½*d.* per yard. Thus, the piece of calico which sells for 6*d.*, duty paid, contributes equally with that which is worth 5*s.* a yard. You levy an onerous and oppressive tax of 100 or 150 per cent. upon the poor, who are the purchasers of inferior cottons; whilst the rich, who buy only the finest kinds, pay but 10 or 15 per cent."

It is due to Mr. Thompson to state, that, not satisfied with giving this forcible exposition of the inequality and injurious operation of the duty on printed goods, one of his first measures, on coming into office, was to propose its repeal.

The following tables exhibit the quantity of printed cloths produced in Great Britain, the quantity exported, and the amount of revenue and drawback thereon, during the year ended 5th of January, 1830.

I. Return of the Number of Square Yards of Calicoes, Muslins, Linens, and Stuffs, made either of Cotton or Linen, printed, painted, stained, or dyed, in Great Britain (except such as shall have been dyed of one Colour throughout), with the Amount of Excise Duties collected thereon in England and Scotland, in the Year ended 5th of January, 1830; distinguishing the Number of Square Yards and Amount of Duty collected thereon. — (*Parl. Paper*, No. 335. Sess. 1830.)

	Number of Yards.			Amount of Duty.
	Foreign Calicoes.	Linens and Stuffs.	Calicoes and Muslins.	£ s. d.
England - -	22,338	1,704,761	102,234,454	1,516,431 14 10
Scotland - -	- -	8,755	26,105,550	380,833 12 3
Year ended 5th of January, 1830	22,338	1,713,516	128,340,004	1,897,265 7 1

II. Return of the Total Number of Square Yards of printed Calicoes, Muslins, Linens, and Stuffs, exported from England and Scotland, in the Year ended 5th of January, 1830; the Amount of Drawbacks paid or allowed thereon; distinguishing the Quantities and Amount of Drawbacks allowed to Foreign Parts from the Quantities and Drawbacks paid or allowed on the like Articles on the Removal coastwise to Ireland.

	Exported to Foreign Countries.			Exported to Ireland.	
	Number of Yards.		Amount of Drawback.	No. of Yards.	Amount of Drawback.
	Foreign Calicoes.	Linens, Stuffs, Calicoes, and Muslins.	£ s. d.	Linens, Stuffs, Calicoes, and Muslins.	£ s. d.
England - - - - -	3,672	81,445,424	1,187,852 17 4	5,169,683	75,391 4 2
Scotland - - - - -	- -	8,417,009	122,748 0 11	869,358	12,678 2 9
Year ended 5th of Jan. 1830 -	3,672	89,862,433	1,310,600 18 3	6,039,041	88,069 6 11

By the 34 Geo. 3. c. 23. it is enacted, that the inventor, designer, or printer of any new and original pattern for printing linens, cottons, calicoes, or muslins, shall have the sole right of printing and reprinting the same for 3 months, to commence from the day of first publishing.

CALOMEL. Chloride of mercury; frequently called mild muriate of mercury; and sometimes, but less properly, submuriate of mercury.

CAMBRIC, OR CAMBRICK (Ger. *Kammertuch*; Du. *Kameryksdoek*; Fr. *Cambray Batiste*; It. *Cambraja*; Sp. *Cambrai*; Port. *Cambraia*; Rus. *Kamertug*), a species of very fine white linen, first made at Cambray, in French Flanders, whence it derives its appellation. It is now produced, of an equally good quality, in Great Britain.

CAMEL (Fr. *Chameau*; It. and Sp. *Camelo*; Ger. *Kameel*; Arab. *Djimel*; Lat. *Camelus*; Greek, Καμηλος), is indigenous to Arabia, and we only mention it in this place on account of its extreme importance in the commerce of the East.

The camel is one of the most useful of the animals over which the inhabitants of Asia and Africa have acquired dominion. These continents are intersected by vast tracts of burning sand, the seats of desolation and drought, so as, apparently, to exclude the possibility of any intercourse taking place between the countries that they separate. "But as the ocean, which appears at first view to be placed as an insuperable barrier between different regions of the earth, has been rendered, by navigation, subservient to their mutual intercourse; so, by means of the camel, which the Arabians emphatically call *the Ship of the Desert*, the most dreary wastes are traversed, and the nations which they disjoin are enabled to trade with one another. Those painful journeys, impracticable by any other animal, the camel performs with astonishing despatch. Under heavy burdens of 600, 700, and 800 lbs. weight, they can continue their march during a long period of time, with little food or rest, and sometimes without tasting water for 8 or 9 days. By the wise economy of Providence, the camel seems formed of purpose to be the beast of burden in those regions where he is placed, and where his service is most wanted. In all the districts of Asia and Africa, where deserts are most frequent and extensive, the camel abounds. This is his proper station, and beyond this the sphere of his activity does not extend far. He dreads alike the excesses of heat and cold, and does not agree even with the mild climate of our temperate zone." — (*Robertson's Disquisition on Ancient India*, Note 53.)

The first trade in Indian commodities of which we have any account (Genesis xxxvii. 25.) was carried on by camels; and they still continue to be the instruments employed in the conveyance of merchants and merchandise throughout Turkey, Persia, Arabia, Egypt, Barbary, and many contiguous countries. The merchants assemble in considerable numbers, forming themselves into an association or *caravan* — (see CARAVAN), for their mutual protection against the attacks of robbers, and the dangers incident to a journey through such rude and inhospitable countries. These caravans are often very large and usually consist of more camels than men. The capacity of the camel to endure fatigue, and the small supply of provisions that he requires, is almost incredible.

"His ordinary burden," says Volney, "is 750 lbs.; his food, whatever is given him — straw, thistles, the stones of dates, beans, barley, &c. With a pound of food a day, and as much water, he will travel for weeks. In the journey from Cairo to Suez, which is 40 or 46 hours, they neither eat nor drink; but these long fasts, if often repeated, wear them out. Their usual rate of travelling is very slow, hardly above 2 miles an hour: it is in vain to push them; they will not quicken their pace; but, if allowed some short rest, they will travel 15 or 18 hours a day." — (*Voyage en Syrie* tom. ii. p. 383.)

The Arabians regard the camel as a sacred animal, the gift of Heaven, without whose aid they could neither subsist, nor trade, nor travel. Its milk is their ordinary food: they also eat its flesh, especially that of the young camel, which they reckon excellent; its hair, which is renewed every year, is partly manufactured into stuffs for their clothes and furniture, and partly sent abroad as a valuable article of merchandise; and even its fæces serve them for fuel. Blest with their camels, the Arabs want nothing, and fear nothing. In a single day they can traverse 40 or 50 miles of the desert, and interpose its trackless sands as an impenetrable rampart between them and their foes. — (See the admirable description of the camel, in Buffon.)

But, however useful to the inhabitants of parched, sandy deserts, it may be worth while, perhaps, to observe, that the camel is of very little service elsewhere. He cannot walk 100 yards on wet or slippery ground without stumbling. He is totally unknown in all hilly or woody countries; and, with few exceptions, may be said to be as great a stranger in the Eastern Islands, Japan, the southern parts of China, the whole country lying between China and India, and all the southern parts of the latter, including Bengal, as he is in Europe. In all those vast countries the ox is the most useful of the lower animals. It is used for draught (for which the camel is totally unfit,) in the cart and plough, in the carrying of burdens, in treading corn, in the oil press, &c., and finally as food.

CAMELS' HAIR (Ger. *Kameelhaar;* Fr. *Poil de chameau, Laine de chevron;* It. *Pelo di camello;* Sp. *Pelo ó lana de cámello*). The hair of the camel imported into this country is principally used in the manufacture of fine pencils for drawing and painting. In the East, however, it is an important article of commerce, and is extensively used in the arts. It serves for the fabrication of the tents and carpets of the Arabs, and for their wearing apparel. Cloth is also manufactured of it in Persia and other places. The most esteemed hair comes from Persia. It is divided into three qualities; black, red, and grey. The black is the dearest, and the grey is only worth half the red. Considerable quantities of camels' hair are exported from Smyrna, Constantinople, and Alexandria. It is used in the manufacture of hats, particularly by the French. — (*Rees's Cyclopædia*, art. *Camelus.*)

CAMLET, OR CAMBLET (Ger. and Du. *Kamelot;* Fr. *Camelot;* It. *Ciambellotto;* Sp. *Camelote;* Rus. *Kamlot*), a plain stuff, manufactured on a loom, with two treadles, as linens are. There are camlets of various colours and sorts: some wholly of goats' hair; others, in which the warp is of hair, and the woof half hair and half silk; others, again, in which both the warp and the woof are of wool; and, lastly, some, of which the warp is of wool and the woof of thread: some are striped, some watered, and some figured.

CAMOMILE (Fr. *Camomille;* It. *Camomilla;* Sp. *Manzanilla;* Lat. *Chamomilla*), a well-known plant, whose flowers are used for medical purposes. Most of what is brought to the London market is grown about Mitcham, in Surrey.

CAMPHOR, OR CAMPHIRE (Ger. *Kampfer;* Du. *Kamfer;* Fr. *Camphre;* It. *Canfora;* Sp. *Alcanfor;* Rus. *Kamfora;* Lat. *Camphora;* Arab. and Pers. *Kāfoor;* Mal. *Kaafur*). There are two descriptions of this valuable article, which must not be confounded.

1. *Camphor of Commerce*, or that met with in Europe, is obtained by boiling the timber of a species of laurel (*Laurus Camphora*), a tree found in the forests of Fokien, in China, near the city of Chinchew, where there is annually produced from 2,500 to 3,000, and sometimes as much as 4,000 piculs. Most of the camphor imported into Europe comes from China; but a small quantity, considered of superior quality, comes from Japan by way of Batavia. The exports from Canton in 1830 and 1831 were respectively 3,452 and 2,043 piculs, being, at an average, 366,266 lbs.; if to this we add the exports from Batavia of Japan camphor, amounting to 489 piculs, the total annual produce of China and Japan for exportation will be 432,770 lbs. It is brought to this country in chests, drums, and casks; and is in small, granular, friable masses, of a dirty white or greyish colour, very much resembling half-refined sugar. When pure, the camphor of commerce has a strong, peculiar, fragrant, penetrating odour, and a bitter, pungent, aromatic taste. It is in reality a concrete essential oil. Camphor, when refined, is in thin hollow cakes of a beautiful virgin whiteness, and, if exposed to the air, totally evaporates. Great care is therefore requisite in packing camphor, to prevent serious loss.

2. *Camphor, Malay*, commonly called, to distinguish it from the last, camphor of Barus, from the port of Sumatra, where it is mostly shipped. It is a product of the *Dryobalanops Camphora*, a forest tree confined to Sumatra, Borneo, and the Malay peninsula. It is found in concrete masses in the fissures of the wood: there are, however, but very few trees that afford it; and those that do, only in small quantities. This species of camphor is more fragrant and less biting and pungent than that yielded by the laurel, and is in high repute among the Chinese, by whom it is almost wholly consumed. There is an immense disparity in the prices of the two species in China. In a price current recently published at Canton, the finest Chinese camphor is quoted at 30 dollars per picul, while the Malay camphor is quoted at 30 dollars per catty, making the price of the latter 100 times greater than that of the former! Malay camphor is wholly unknown in Europe as an article of trade. — (*Private information.*)

CAMPHOR OIL (Malay, *Minyak*), a fragrant essential oil, obtained in large quantities by heating the wood of the *Dryobalanops Camphora*. It is nearly as cheap as spirits of turpentine, but is not held in any esteem by the Chinese. It might, perhaps, be profitably imported into England as a substitute for spirits of turpentine in the arts, and for medicinal purposes. We may add, that the timber of the *Dryobalanops Camphora* is not inferior to any produced in the countries where it grows, for the purposes of house and ship building.—(*Private information*, and *Crawfurd's Indian Archipelago*, vol. i. p. 516.)

CAMWOOD, a red dye wood, first brought to Europe from Africa by the Portuguese. It is principally obtained from the vicinity of Sierra Leone. The colouring matter which it affords differs but little from that of ordinary Nicaragua wood, either in quality or quantity; and it may be employed with similar mordants. — (*Bancroft on Colours.* See also *Dampier*, vol. ii. part ii. p. 58.) Camwood is at present worth, in the London market, from 16*l.* to 18*l.* a ton, duty (5*s.* a ton) included. In 1828, 475 tons of camwood were imported; but the imports in 1829 only amounted to 119 tons. — (*Parl. Paper*, No. 661. Sess. 1830.)

CANAL, CANALS. A canal is an artificial channel, filled with water kept at the desired level by means of locks or sluices, forming a communication between two or more places.

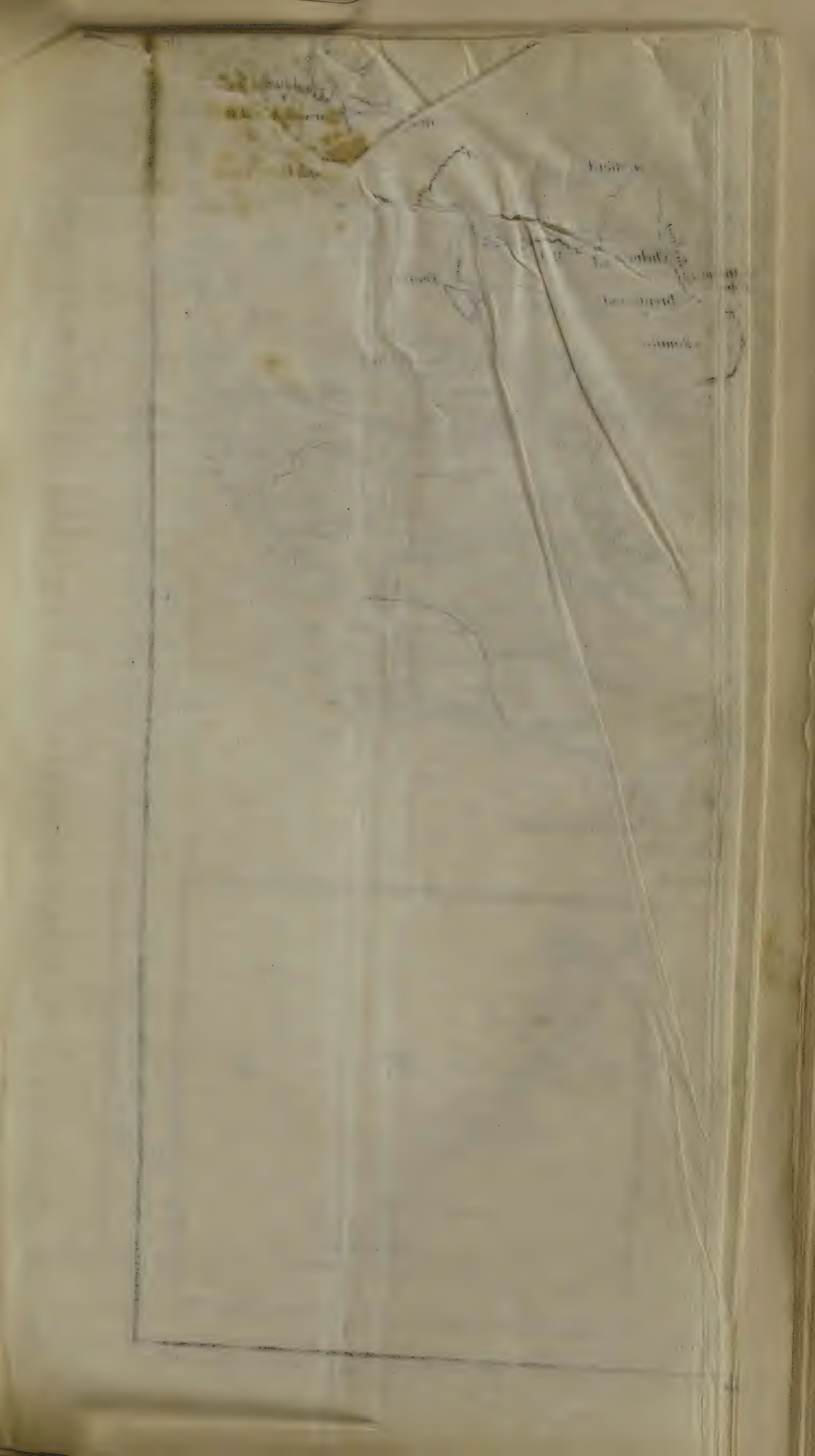
(1.) *Historical Sketch of Canals. Ancient Canals.* — The comparative cheapness and facility with which goods may be conveyed by sea, or by means of navigable rivers, seem to have suggested, at a very early period, the formation of canals. The best authenticated accounts of ancient Egypt represent that country as intersected by canals conveying the waters of the Nile to the more distant parts of the country, partly for the purpose of irrigation, and partly for that of internal navigation. The efforts made by the old Egyptian monarchs, and by the Ptolemies, to construct a canal between the Red Sea and the Nile are well known; and evince the high sense which they entertained of the importance of this species of communication. — (*Ameilhon, Commerce des Egyptiens*, p. 76.)

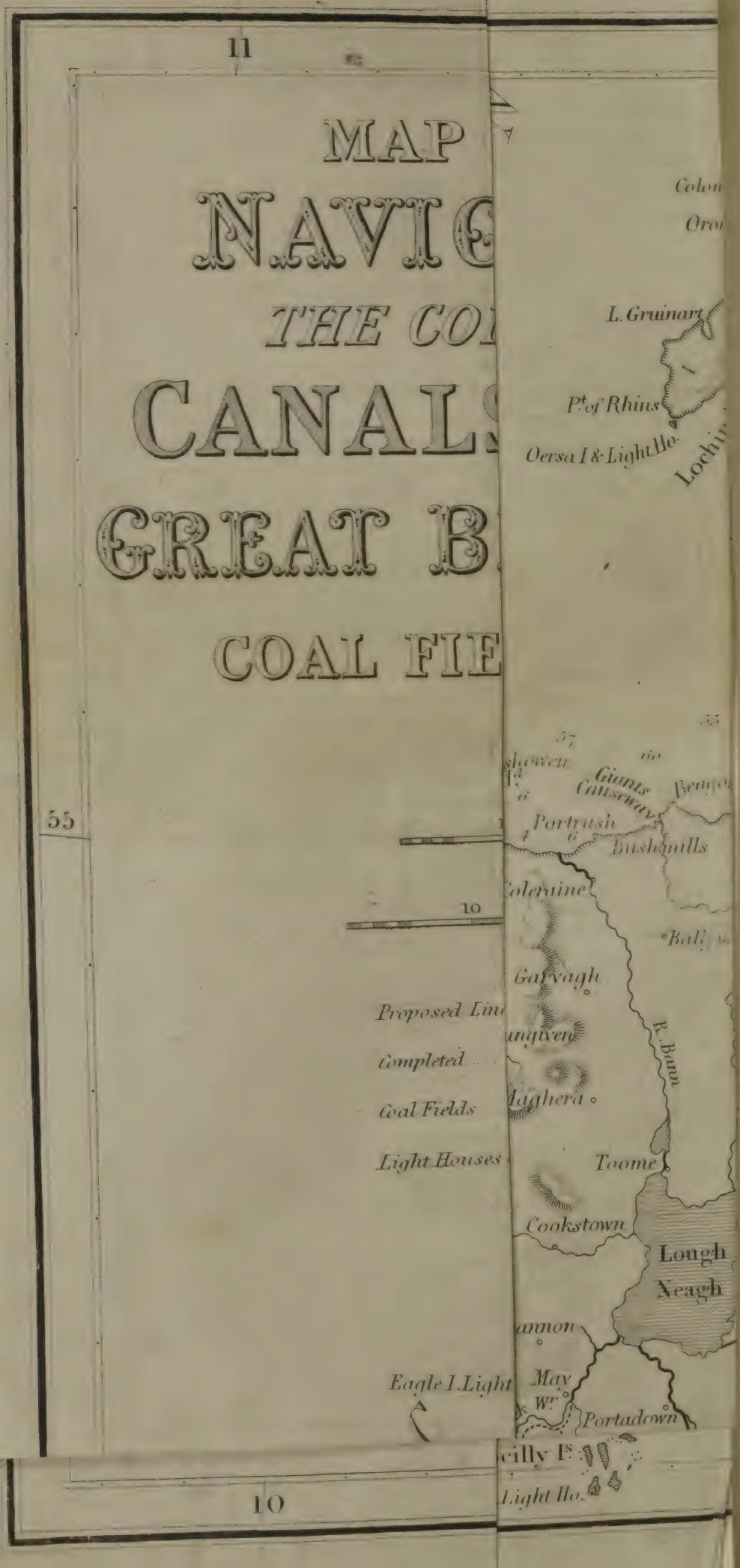
Greece was too small a territory, too much intersected by arms of the sea, and subdivided into too many independent states, to afford much scope for inland navigation. Attempts were, however, made to cut a canal across the Isthmus of Corinth; but they did not succeed.

The Romans did not distinguish themselves in canal navigation. Their aqueducts, the stupendous ruins of which attest the wealth and power of their founders, were intended to furnish supplies of water to some adjoining city, and not for the conveyance of vessels or produce.

(2.) *Chinese Canals.* — In China, canals, partly for irrigation, and partly for navigation, have existed from a very early period. The most celebrated amongst them is the Imperial or Grand Canal, forming a communication between Pekin and Canton, said to be about 1,660 miles long. But there can be no doubt that this is a very great exaggeration; and that it includes the various rivers which really form the greater part of the navigation, the excavated portion being of comparatively limited dimensions. The canal is said not to have, at any time, more than from 5 to 6 feet water; and in dry seasons, its depth is frequently reduced to 3 feet. (*De la Lande, Canaux de Navigation*, p. 529.) The locks are constructed with very little skill; and as the vessels are generally dragged by men, the navigation is extremely slow. The canals are mostly faced with stone; and the bridges across them are said to be very ingeniously contrived.

(3.) *Italian Canals.* — The Italians were the first people in modern Europe that attempted to plan and execute canals. They were principally, however, undertaken for the purpose of irrigation; and the works of this sort executed in the Milanese and other parts of Lombardy, in the eleventh, twelfth, and thirteenth centuries, are still regarded as models, and excite the warm admiration of every one capable of appreciating them. In 1271, the Navilio Grande, or canal leading from Milan to Abbiate Grasso and the Tesino, was rendered navigable. — (*Young's Travels in France, &c.* vol. ii. p. 170.)

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(4.) *Dutch Canals.* — No country in Europe contains, in proportion to its size, so many navigable canals as the kingdom of the Netherlands, and particularly the province of Holland. The construction of these canals commenced as early as the twelfth century, when, owing to its central and convenient situation, Flanders began to be the *entrepôt* of the commerce between the north and south of Europe. Their number has since been astonishingly increased. "Holland," says Mr. Phillips, in his *History of Inland Navigation*, "is intersected with innumerable canals. They may be compared in number and size to our public roads and highways: and as the latter with us are continually full of coaches, chaises, wagons, carts, and horsemen, going from and to the different cities, towns, and villages; so, on the former, the Hollanders, in their boats and pleasure barges, their treckschuyts and vessels of burden, are continually journeying and conveying commodities for consumption or exportation from the interior of the country to the great cities and rivers. An inhabitant of Rotterdam may, by means of these canals, breakfast at Delft or the Hague, dine at Leyden, and sup at Amsterdam, or return home again before night. By them, also, a most prodigious inland trade is carried on between Holland and every part of France, Flanders, and Germany. When the canals are frozen over, they travel on them with skaits, and perform long journeys in a very short time; while heavy burdens are conveyed in carts and sledges, which are then as much used on the canals as on our streets.

"The yearly profits produced by these canals are almost beyond belief; but it is certain, and has been proved, that they amount to more than 250,000*l.* for about 400 miles of inland navigation, which is 625*l.* per mile, the square surface of which mile does not exceed two acres of ground; a profit so amazing, that it is no wonder other nations should imitate what has been found so advantageous.

"The canals of Holland are generally 60 feet wide and 6 deep, and are carefully kept clean; the mud, as manure, is very profitable; the canals are generally levels; of course, locks are not wanted. From Rotterdam to Delft, the Hague, and Leyden, the canal is quite level, but is sometimes affected by strong winds. For the most part, the canals are elevated above the fields or the country, to enable them to carry off the water, which in winter inundates the land. To drain the water from Delftland, a province not more than 60 miles long, they employ 200 windmills in spring time to raise it into the canals. All the canals of Holland are bordered with dams or banks of immense thickness, and on these depends the security of the country from inundation; of course it is of great moment to keep them in the best repair; to effect which there is a kind of militia, and in every village is a magazine of proper stores and men, whose business it is to convey stones and rubbish in carts to any damaged place. When a certain bell rings, or the waters are at a fixed height, every man repairs to his post. To every house or family there is assigned a certain part of the bank, in the repair of which they are to assist. When a breach is apprehended, they cover the banks all over with cloth and stones."

(5.) *Canal from Amsterdam to Niewdiep, near the Helder.* — The object of this canal, which is the greatest work of its kind in Holland, and probably in the world, is to afford a safe and easy passage for large vessels from Amsterdam to the German Ocean. This city has 40 feet of water in the road in front of its port, but the pampus or bar at the junction of the Y with the Zuyder Zee, 7 miles below, has only a depth of 10 feet; and hence all ships of any considerable burden entering or leaving the port must unload and load part of their cargoes without the bar. As the Zuyder Zee is every where full of shallows, all ordinary means of improving the access to Amsterdam were necessarily ineffectual; and the resolution was, therefore, at length adopted, of cutting a canal from the city to the Helder, the most northern point of the province of Holland. The distance between these extreme points is 41 English miles, but the length of the canal is about 50½. The breadth at the surface of the water is 124½ English feet (120 Rhinland feet); the breadth at bottom 36; the depth 20 feet 9 inches. Like the Dutch canals generally, its level is that of the highest tides, and it receives its supply of water from the sea. The only locks it requires are, of course, two tide-locks at the extremities; but there are, besides, two sluices with floodgates in the intermediate space. It is crossed by about 18 drawbridges. The locks and sluices are double,—that is, there are two in the breadth of the canal; and their construction and workmanship are said to be excellent. They are built of brick, for economy; but bands of limestone are interposed at intervals, and these project about an inch beyond the brick, to protect it from abrasion by the sides of vessels. There is a broad towing path on each side, and the canal is wide enough to admit of two frigates passing. — (For the expense of towing, see AMSTERDAM.)

The line which the canal follows may be easily traced on a map of Holland. From the Y at Amsterdam it proceeds north to Purmerend; thence west to Alkmaar Lake; again north by Alkmaar to a point within 2 miles of the coast, near Petten; whence it runs nearly parallel to the coast till it joins the sea a little to the east of the Helder, at the

fine harbour of Niewdiep, formed within the last 30 years. At the latter place there is a powerful steam-engine for supplying the canal with water during neap tides, and other purposes. The time spent in towing vessels from Niewdiep to Amsterdam is 18 hours. The Helder is the only spot on the shores of Holland that has deep water; and it owes this advantage to its being opposite to the Texel, which, by contracting the communication between the German Ocean and the Zuyder Zee to a breadth of about a mile, produces a current which scours and deepens the channel. Immediately opposite the Helder there are 100 feet water at high tides, and at the shallowest part of the bar to the westward there are 27 feet. In the same way, the artificial mound which runs into the Y opposite Amsterdam, by contracting the water-way to about 1,000 feet, keeps a depth of 40 feet in the port (at high water), while above and below there is only 10 or 12.

The canal was begun in 1819, and finished in 1825. The cost was estimated at 10,000,000 or 12,000,000 florins, or about 1,000,000*l.* sterling. If we compute the magnitude of this canal by the cubic contents of its bed, it is the greatest, we believe, in the world, unless some of the Chinese canals be exceptions. The volume of water which it contains, or the *prisme de remplissage*, is twice as great as that of the New York Canal, or the Canal of Languedoc, and two and a half times as great as that of the artificial part of the Caledonian Canal. In consequence, however, of the facility with which the Dutch canal was dug, and of the evenness of the ground through which it passes, the difficulties with which the engineer had to contend in making it were trifling compared to those which had to be overcome in constructing the canals now mentioned. We have not learned what returns this canal yields; most probably it is not, at least in a direct point of view, a profitable concern. Even in Holland, notwithstanding the lowness of interest, it would require tolls to the amount of 40,000*l.* a year to cover interest and expenses; and so large a sum can hardly, we should think, be raised by the very moderate tolls laid on the ships passing through it.—(See Amsterdam.) This, however, is not the only consideration to be attended to in estimating the value of a work of this sort. Its influence in promoting the trade of Amsterdam, and, indeed, of Holland, may far more than compensate for its cost. It is evident, too, that the imposition of oppressive tolls would have effectually counteracted this advantage; that is, they would have defeated the very object for which the canal was constructed. — (We have derived these details, partly from an able article in the *Scotsman*, and partly from *private information.*)

(6.) *Danish Canals.* — The Holstein Canal, in Denmark, is of very considerable importance. It joins the river Eyder with Kiel Bay on the north-east coast of Holstein, forming a navigable communication between the North Sea, a little to the north of Heligoland, and the Baltic; enabling vessels to pass from the one to the other by a short cut of about 100 miles, instead of the lengthened and difficult voyage round Jutland, and through the Cattegat and the Sound. The Eyder is navigable for vessels not drawing more than 9 feet water, from Tonningen, near its mouth, to Rendsburg, where it is joined by the canal, which communicates with the Baltic at Holtenau, about 3 miles north of Kiel. The canal is about 26 English miles in length, including about 6 miles of what is principally river navigation. The excavated portion is 95 feet wide at top, 51 feet 6 inches at bottom, and 9 feet 6 inches deep (Eng. meas.). Its highest elevation above the level of the sea is 24 feet 4 inches; to which height vessels are raised and let down by 6 locks or sluices. It is navigable by vessels of 120 tons burthen, or more, provided they are constructed in that view. The total cost of the canal was about 500,000*l.* It was opened in 1785, and has so far realised the views of its projectors, as to enable coasting vessels from the Danish islands in the Baltic and the east coast of Holstein, Jutland, &c., to proceed to Hamburgh, Holland, England, &c. in less time and with much less risk, than, in the ordinary course of navigation, they could have cleared the point of the Skaw; and conversely with ships from the west. The smaller class of foreign vessels, particularly those under the Dutch and Hanseatic flags, navigating the Baltic and North Seas, have largely availed themselves of the facilities afforded by this canal. During the 5 years ending with 1831, no fewer than 2,786 vessels passed each year, at an average, through the canal. This is a sufficient evidence of its utility. It would, however, be much more frequented, were it not for the difficult navigation of the Eyder from the sea to Rendsburg. The dues are moderate. — (*Coxe's Travels in the North of Europe*, 5th ed. vol. v. p. 239., where there is a plan of the canal; *Catteau, Tableau des Etats Danois*, tom. ii. pp. 300—304.; and *private information.*)

(7.) *Swedish Canals.* —The formation of an internal navigation connecting the Cattegat and the Baltic has long engaged the attention, and occupied the efforts, of the people and government of Sweden. Various motives conspired to make them embark in this arduous undertaking. The Sound and other channels to the Baltic being commanded by the Danes, they were able, when at war with the Swedes, greatly to annoy the latter, by cutting off all communication by sea between the eastern and western provinces of the

kingdom. And hence, in the view, partly of obviating this annoyance and partly of facilitating the conveyance of iron, timber, and other bulky products, from the interior to the coast, it was determined to attempt forming an internal navigation, by means of the river Gotha, and the lakes Wener, Wetter, &c., from Gottenburgh to Soderkœping on the Baltic. The first and most difficult part of this enterprise was the perfecting of the communication from Gottenburgh to the lake Wener. The Gotha, which flows from the latter to the former, is navigable, through by far the greater part of its course, for vessels of considerable burden; but, besides others less difficult to overcome, the navigation at the point called Tröllhætta is interrupted by a series of cataracts about 112 feet in height. Owing to the rapidity of the river, and the stubborn red granite rocks over which it flows, and by perpendicular banks of which it is bounded, the attempt to cut a lateral canal, and still more to render it directly navigable, presented the most formidable obstacles. But, undismayed by these, on which it is, indeed, most probable he had not sufficiently reflected, Polhem, a native engineer, undertook, about the middle of last century, the Herculean task of constructing locks in the channel of the river, and rendering it navigable! Whether, however, it were owing to the all but insuperable obstacles opposed to such a plan, to the defective execution, or deficient strength of the works, they were wholly swept away, after being considerably advanced, and after vast sums had been expended upon them. From this period, down to 1793, the undertaking was abandoned; but in that year, the plan was proposed, which should have been adopted at first, of cutting a lateral canal through the solid rock, about $1\frac{1}{2}$ mile from the river. This new enterprise was begun under the auspices of a company incorporated for the purpose in 1794, and was successfully completed in 1800. The canal is about 3 miles in length, and has about $6\frac{1}{2}$ feet water.* It has 8 sluices, and admits vessels of above 100 tons. In one part it is cut through the solid rock to the depth of 72 feet. The expense was a good deal less than might have been expected, being only about 80,000*l.* The lake Wener, the navigation of which was thus opened with Gottenburgh, is very large, deep, and encircled by some of the richest of the Swedish provinces, which now possess the inestimable advantage of a convenient and ready outlet for their products.

As soon as the Tröllhætta canal had been completed, there could be no room for doubt as to the practicability of extending the navigation to Soderkœping. In furtherance of this object, the lake Wener has been joined to the lake Wetter by the Gotha Canal, which admits vessels of the same size as that of Tröllhætta; and the prolongation of the navigation to the Baltic from the Wetter, partly by 2 canals of equal magnitude with the above, and partly by lakes, is now, we believe, about completed. The entire undertaking is called the Gotha Navigation, and deservedly ranks among the very first of the kind in Europe.

Besides the above, the canal of Arboga unites the lake Hielmar to the lake Maelar; and since 1819, a canal has been constructed from the latter to the Baltic at Södertelge. The canal of Strœmsholm, so called from its passing near the castle of that name, has effected a navigable communication between the province of Dalecarlia and the lake Maelar, &c. — (For further details, see, besides the authorities already referred to, *Coxe's Travels in the North of Europe*, 5th ed. vol. iv. pp. 253—266., and vol. v. pp. 58—66.; *Thomson's Travels in Sweden*, p. 35, &c.)

(8.) *French Canals.* — The first canal executed in France was that of Briare, $34\frac{1}{2}$ English miles in length, intended to form a communication between the Seine and Loire. It was commenced in 1605, in the reign of Henry IV., and was completed in 1642, under his successor, Louis XIII. The canal of Orleans, which joins the above, was commenced in 1675. But the most stupendous undertaking of this sort that has been executed in France, or indeed on the Continent, is the canal of Languedoc. It was projected under Francis I.; but was begun and completed in the reign of Louis XIV. It reaches from Narbonne to Toulouse; and was intended to form a safe and speedy means of communication between the Atlantic Ocean and the Mediterranean. It is 64 French leagues long, and 6 feet deep; and has, in all, 114 locks and sluices. In its highest part it is 600 feet above the level of the sea. In some places it is conveyed, by bridges of great length and strength, over large rivers. It cost upwards of 1,300,000*l.*; and reflects infinite credit on the engineer, Riquet, by whom it was planned and executed.

Besides this great work, France possesses several magnificent canals, such as that of The Centre, connecting the Loire with the Saone; of St. Quentin, joining the Scheldt and the Somme; of Besançon, joining the Saone, and consequently the Rhone, to the Rhine; of Burgundy, joining the Rhone to the Seine, &c. Some of these are of very considerable magnitude. The canal of the Centre is about 72 English miles in length.

* This is the statement of Catteau, *Tableau de la Mer Baltique*, tome ii. p. 77.; Oddy, in his *European Commerce*, p. 306., and Balbi, *Abrégé de la Géographie*, p. 385., say that the depth of water is 10 feet.

It was completed in 1791, at an expense of about 11,000,000 francs. Its summit level is about 240 feet above the level of the Loire at Digoin; the breadth at the water's edge is about 48 feet, and at bottom 30 feet; depth of water $5\frac{1}{4}$ feet; number of locks 81. The canal of St. Quentin, 28 English miles in length, was completed in 1810. The canal joining the Rhone to the Rhine is the most extensive of any. It stretches from the Saone, a little above St. Jean de Losne, by Dole, Besançon, and Mulhouse, to Strasburg, where it joins the Rhine,—a distance of about 200 English miles. From Dole to Vogeaucourt, near Montbéliard, the canal is principally excavated in the bed of the Doubs. It is not quite finished. The canal of Burgundy will, when completed, be about 242 kilom., or 150 English miles, in length; but at present it is only navigable to the distance of about 95 kilom. In addition to these, a great many other canals have been finished, while several are in progress, and others projected. There is an excellent account of the French canals completed, in progress, and projected, in the work of M. Dutens, entitled *Histoire de la Navigation Intérieure de la France*, 2 vols. 4to, and to it we beg to refer the reader for further details. He will find, at the end of the second volume, a very beautiful map of the rivers and canals of France.

It is probable, however, that the railroad projects now set on foot in France may tend, for a while at least, to check the progress of canalisation. We may observe, too, that the state of the law in France is very unfavourable to the undertaking and success of all great public works; and we are inclined to attribute the comparative fewness of canals in France, and the recent period at which most of them have been constructed, to its influence. In that country, canals, docks, and such like works, are mostly carried on at the expense and for behoof of government, under the control of its agents. No scope has been given to the enterprise of individuals or associations. Before either a road or a canal can be constructed, plans and estimates must be made out and laid before the minister of the interior, by whom they are referred to the prefect of the department, and then to the *Bureau des Ponts et des Chaussés;* and supposing the project to be approved by these, and the other functionaries consulted with respect to it, the work must after all be carried on under the superintendence of some public officer. In consequence of this preposterous system, very few works of this description have been undertaken as private speculations. And while not a few of those begun by government remain unfinished and comparatively useless, those that are completed have, as was to be expected, rarely proved profitable. There are some good remarks on this subject in the useful work of M. Dupin, on the *Forces Commerciales* of Great Britain.

(9.) *Prussian Canals.* — The Prussian states are traversed by the great navigable rivers the Elbe, the Oder, and the Vistula; the first having its embouchure in the North Sea, and the others in the Baltic. The formation of an internal navigation, that should join those great *water-ways*, excited the attention of government at a distant period; and this object has been successfully accomplished, partly by the aid of the secondary rivers falling into the above, and partly by canals. In 1662, the canal of Muhlrose was undertaken, uniting the Oder and the Spree; the latter being a navigable river falling into the Havel, also a navigable river joining the Elbe near Havelburg. But the navigation from the Oder to the Elbe by this channel was difficult and liable to frequent interruption and to obviate these defects, Frederick the Great constructed, towards the middle of last century, the Finnow Canal, stretching from the Oder at Oderberg, to the Havel, near Liebenwalde; the communication is thence continued by the latter and a chain of lakes to Plauen; from which point a canal has been opened, joining the Elbe near Magdeburg. The Elbe being in this way connected with the Oder by a comparatively easy navigation, the latter has been united to the Vistula, partly by the river Netze, and partly by a canal joining that river to the Brahe, which falls into the Vistula near Bromberg. A vast inland navigation has thus been completed; barks passing freely through the whole extent of country from Hamburgh to Dantzic; affording the means of shipping the products of the interior, and of importing those of foreign countries, either by the North Sea or the Baltic, as may be found most advantageous.—(*Catteau, Tableau de la Mer Baltique*, tome ii. p. 11—18.)

(10.) *Russian Canals.* — The inland navigation of Russia is of vast extent, and very considerable importance. The reader will find some details with respect to it under the article PETERSBURGH.

(11.) *Austrian Canals.* — The Austrian empire is traversed in its whole extent by the Danube; but the advantages that might result to the foreign trade of the empire from so great a command of river navigation, have been materially abridged by the jealousy of the Turks, who command the embouchure of the river, and by the difficulties that are in some places incident to its navigation. Two pretty extensive canals have been constructed in Hungary. That called the Bega Canal is 73 English miles in length: it stretches from Fascet through the Bannat by Temeswar to Becskerek, whence vessels pass by the Bega into the Theiss, a little above its junction with the Danube. The

other Hungarian canal is called after the Emperor Francis. It stretches from the Danube by Zambor to the Theiss, which it joins near Földvar, being 62 English miles in length: its elevation, where highest, does not exceed 27 feet. Besides the above, the canal of Vienna establishes a communication between that city and Neustadt. It is said to be the intention to continue this canal to Trieste; but, however desirable, we doubt much whether this be practicable. A railroad is at present being made from Munthausen on the Danube to Budweiss on the Moldau, a navigable river that falls into the Elbe. This promises to be a highly useful communication. — (*Bright's Travels in Hungary*, p. 246.; *Balbi, Abrégé de la Géographie*, p. 216.)

(12.) *Spanish Canals.* — No where are canals more necessary, both for the purposes of navigation and irrigation, than in Spain; but the nature of the soil, and the poverty and ignorance of the government as well as of the people, oppose formidable obstacles to their construction. During the reign of Charles II., a company of Dutch contractors offered to render the Mançanares navigable from Madrid to where it falls into the Tagus, and the latter from that point to Lisbon, provided they were allowed to levy a duty for a certain number of years on the goods conveyed by this channel. The Council of Castile took this proposal into their serious consideration, and after maturely weighing it, pronounced the singular decision—"That if it had pleased God that these two rivers should have been navigable, he would not have wanted human assistance to have made them such; but that, as he has not done it, it is plain he did not think it proper that it should be done. To attempt it, therefore, would be to violate the decrees of his providence, and to mend the imperfections which he designedly left in his works!" — (*Clarke's Letters on the Spanish Nation*, p. 284.) But such undertakings are no longer looked upon as sinful; and many have been projected since the accession of the Bourbon dynasty, though few have been perfected. The canal of the Ebro, begun under the Emperor Charles V., is the most important of the Spanish canals; but it is only partially completed, and during dry seasons it suffers from want of water. It runs parallel to the right bank of the Ebro, from Tudela in Navarre to below Saragossa; the intention being to carry it to Sastago, where it is to unite with the Ebro. The canal of Castile is intended to lay open the country between the Douro and Reynosa, and to facilitate the conveyance of grain from the interior to Santander and Bilbao. It passes by Valladolid, Palencia, and Aguilar del Campos; a small part has been executed, and is now in operation. A company has recently undertaken, what the Dutch contractors formerly offered, to render the Tagus navigable from Aranjuez to Lisbon; the free navigation of the river having been stipulated at the Congress of Vienna. A project for deepening the Guadalquivir, and some others, are also on foot. — (*Foreign Quarterly Review*, No. 9. p. 85.; *Balbi, Abrégé de la Géographie*, p. 349.)

(13.) *British Canals.* — Owing partly to the late rise of extensive manufactures and commerce in Great Britain, but more, perhaps, to the insular situation of the country, no part of which is very distant from the sea, or from a navigable river, no attempt was made, in England, to construct canals till a comparatively recent period. The efforts of those who first began to improve the means of internal navigation, were limited to attempts to deepen the beds of rivers, and to render them better fitted for the conveyance of vessels. So early as 1635, a Mr. Sandys, of Flatbury, Worcestershire, formed a project for rendering the Avon navigable from the Severn, near Tewkesbury, through the counties of Warwick, Worcester, and Gloucester, "that the towns and country might be better supplied with wood, iron, pit-coal, and other commodities." This scheme was approved by the principal nobility and landowners in the adjoining counties; but the civil war having broken out soon after, the project was abandoned, and does not seem to have been revived. After the Restoration, and during the earlier part of last century, various acts were at different times obtained for cheapening and improving river navigation. For the most part, however, these attempts were not very successful. The current of the rivers gradually changed the form of their channels; the dykes and other artificial constructions were apt to be destroyed by inundations; alluvial sand banks were formed below the weirs; in summer, the channels were frequently too dry to admit of being navigated, while at other periods the current was so strong as to render it quite impossible to ascend the river, which at all times, indeed, was a laborious and expensive undertaking. These difficulties in the way of river navigation seem to have suggested the expediency of abandoning the channels of most rivers, and of digging parallel to them artificial channels, in which the water might be kept at the proper level by means of locks. The act passed by the legislature in 1755, for improving the navigation of Sankey Brook on the Mersey, gave rise to a lateral canal of this description, about 11¼ miles in length, which deserves to be mentioned as the earliest effort of the sort in England.

But before this canal had been completed, the celebrated Duke of Bridgewater*, and

* This truly noble person expended a princely fortune in the prosecution of his great designs; and, to increase his resources, is said to have restricted his own personal expenses to 400*l.* a year! But his pro-

his equally celebrated engineer, the self-instructed James Brindley, had conceived a plan of canalisation independent altogether of natural channels, and intended to afford the greatest facilities to commerce, by carrying canals across rivers and through mountains, wherever it was practicable to construct them.*

The Duke was proprietor of a large estate at Worsley, 7 miles from Manchester, in which were some very rich coal-mines, that had hitherto been in a great measure useless, owing to the cost of carrying coal to market. Being desirous of turning his mines to some account, it occurred to his Grace that his purpose would be best accomplished by cutting a canal from Worsley to Manchester. Mr. Brindley, having been consulted, declared that the scheme was practicable; and an act having been obtained, the work was immediately commenced. "The principle," says Mr. Phillips, "laid down at the commencement of this business, reflects as much honour on the noble undertaker as it does upon his engineer. It was resolved that the canal should be perfect in its kind; and that, in order to preserve the level of the water, it should be free from the usual construction of locks. But in accomplishing this end many difficulties were deemed insurmountable. It was necessary that the canal should be carried over rivers, and many large and deep valleys, where it was evident that such stupendous mounds of earth must be raised, as would scarcely, it was thought by numbers, be completed by the labour of ages; and, above all, it was not known from what source so large a supply of water could be drawn, even on this improved plan, as would supply the navigation. But Mr. Brindley, with a strength of mind peculiar to himself, and being possessed of the confidence of his great patron, contrived such admirable machines, and took such methods to facilitate the progress of the work, that the world soon began to wonder how it could be thought so difficult.

"When the canal was completed as far as Barton, where the Irwell is navigable for large vessels, Mr. Brindley proposed to carry it over that river by an aqueduct 39 feet above the surface of the water in the river. This, however, being considered as a wild and extravagant project, he desired, in order to justify his conduct towards his noble employer, that the opinion of another engineer might be taken, believing that he could easily convince an intelligent person of the practicability of the design. A gentleman of eminence was accordingly called, who, being conducted to the place where it was intended that the aqueduct should be made, ridiculed the attempt; and, when the height and dimensions were communicated to him, he exclaimed — 'I have often heard of castles in the air, but never was shown before where any of them were to be erected.' This unfavourable verdict did not deter the Duke from following the opinion of his own engineer. The aqueduct was immediately begun; and it was carried on with such rapidity and success as astonished those who, but a little before, thought it impossible."

Before the canal from Worsley to Manchester had been completed, it occurred to the Duke and his engineer that it might be practicable to extend it by a branch, which, running through Chester parallel to the river Mersey, should at length terminate in that river, below the limits of its artificial navigation; and thus afford a new, safer, and cheaper means of communication between Manchester and its vicinity and Liverpool. The execution of this plan was authorised by an act passed in 1761. This canal, which is above 29 miles in length, was finished in about 5 years. It was constructed in the best manner, and has proved equally advantageous to its noble proprietor and the public.

"When the Duke of Bridgewater," says Dr. Aikin, "undertook this great design, the price of carriage on the river navigation was 12*s.* the ton from Manchester to Liverpool, while that of land carriage was 40*s.* the ton. The Duke's charge on his canal was limited, by statute, to *six* shillings; and together with this vast superiority in cheapness, it had all the speed and regularity of land carriage. The articles conveyed by it were, likewise, much more numerous than those by the river navigation; besides manufactured goods and their raw materials, coals from the Duke's own pits were deposited in yards at various parts of the canal, for the supply of Cheshire; lime, manure, and building materials were carried from place to place; and the markets of Manchester obtained a supply of provisions from districts too remote for the ordinary land conveyances. A branch of useful and profitable carriage, hitherto scarcely known in England, was also undertaken, which was that of passengers. Boats, on the model of the Dutch trekschuyts, but more agreeable and capacious, were set up, which, at very reasonable rates, and with great convenience, carried numbers of persons daily to and from Manchester along the line of the canal."— (*Aikin's Description of the Country round Manchester*, p. 116.)

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jects were productive of great wealth to himself and his successors; and have promoted, in no ordinary degree, the wealth and prosperity of his country. He died in 1823.

* There is a good account of Brindley in *Aikin's Biographical Dictionary*. His intense application, and the anxiety of mind inseparable from the great enterprises in which he was engaged, terminated his valuable life at the early age of 56.

The success that attended the Duke of Bridgewater's canals stimulated public-spirited individuals in other districts to undertake similar works. Mr. Brindley had early formed the magnificent scheme of joining the great ports of London, Liverpool, Bristol, and Hull, by a system of internal navigation: and, though he died in 1772, at the early age of 56, he had the satisfaction to see his grand project in a fair way of being realised. The Trent and Mersey, or, as it has been more commonly termed, the Grand Trunk Canal, 96 miles in length, was begun in 1766 and completed in 1777. It stretches from near Runcorn on the Mersey, where it communicates with the Duke of Bridgewater's Canal, to Newcastle-under-Line; thence southwards to near Titchfield; and then north-westerly, till it joins the Trent at Wilden Ferry, at the north-western extremity of Leicestershire. A water communication between Hull and Liverpool was thus completed; and by means of the Staffordshire and Worcestershire Canal, which joins the Grand Trunk near Haywood in the former, and the Severn near Stourport in the latter, the same means of communication was extended to Bristol. During the time that the Grand Trunk Canal was being made, a canal was undertaken from Liverpool to Leeds, 130 miles in length; another from Birmingham to the Staffordshire and Worcestershire Canal, joining it near Wolverhampton; and one from Birmingham to Fazeley and thence to Coventry. By canals subsequently undertaken, a communication was formed between the Grand Trunk Canal and Oxford, and consequently with London, completing Brindley's magnificent scheme. In 1792, the Grand Junction Canal was begun, which runs in a pretty straight line from Brentford, on the Thames, a little above the metropolis, to Braunston in Northamptonshire, where it unites with the Oxford and other central canals. It is about 90 miles in length. There is also a direct water communication, by means of the river Lea navigation, the Cambridge Junction Canal, &c., between London and the Wash. In addition to these, an immense number of other canals, some of them of very great magnitude and importance, have been constructed in different parts of the country; so that a command of internal navigation has been obtained, unparalleled in any European country, with the exception of Holland.

In Scotland, the great canal to join the Forth and Clyde was begun in 1768, but it was suspended in 1777, and was not resumed till after the close of the American war. It was finally completed in 1790. Its total length, including the collateral cuts to Glasgow and the Monkland Canal, is 38¾ miles. Where highest it is 150 feet above the level of the sea. It is on a larger scale than any of the English canals. Its medium width at the surface is 56, and at the bottom 27 feet. Originally it was about 8 feet 6 inches deep; but recently its banks have been raised so that the depth of water is now about 10 feet. It has, in all, 39 locks. In completing this canal, many serious difficulties had to be encountered. These, however, were all successfully overcome; and though unprofitable for a while, it has, for many years past, yielded a handsome return to its proprietors. Swift boats, on the plan of those subsequently described, were established on this canal in 1832. — (See *Cleland's Statistics of Glasgow*, p. 170. &c.)

The Union Canal joins the Forth and Clyde Canal near Falkirk, and stretches thence to Edinburgh, being 31½ miles in length. It is 40 feet wide at the top, 20 at bottom, and 5 deep. It was completed in 1822; but has been, in all respects, a most unprofitable undertaking. Hitherto the proprietors have not received any dividend; and their prospects, we understand, are little, if any thing, improved.

A canal intended to form a communication between Glasgow, Paisley, and Ardrossan, was commenced in 1807; but only that portion connecting Glasgow with Paisley and the village of Johnstoun, has hitherto been finished. This part is about 12 miles long; the canal being 30 feet broad at top, 18 at bottom, and 4½ deep. It was here that the important experiments were originally made on quick travelling by canals, which demonstrated that it was quite practicable to impel a properly constructed boat, carrying passengers and goods, along a canal at the rate of 9 or 10 miles an hour, without injury to the banks! — (See *post.*)

The Crinan Canal, across the peninsula of Kintyre, is 9 miles long, and 12 feet deep, admitting vessels of 160 tons burden.

The Caledonian Canal is the greatest undertaking of the sort attempted in the empire. It stretches S.W. and N.E. across the island from a point near Inverness to another near Fort William. It is chiefly formed by Loch Ness, Loch Oich, and Loch Lochy. The total length of the canal, including the lakes, is 58¾ miles; but the excavated part is only 21½ miles. At the summit it is 96½ feet above the level of the Western Ocean. It has been constructed upon a very grand scale, being 20 feet deep, 50 feet wide at bottom, and 122 at top; the locks are 20 feet deep, 172 long, and 40 broad. Frigates of 32 guns and merchant ships of 1,000 tons burden may pass through it. This canal was opened in 1822. It was executed entirely at the expense of government, from the designs and under the superintendence of Thomas Telford, Esq., on whose skill and talents as an engineer it reflects the highest credit. The entire cost has been 986,924*l.* It would, however, appear to have been projected without due consideration, and promise

to be a very unprofitable speculation. During the year 1829, the total revenue of the canal, arising from tonnage dues and all other sources, amounted to only 2,575*l.* 6*s.* 4*d.*, while the ordinary expenditure, during the same year, amounted to 4,573*l.* 0*s.* 1½*d.*! It is, therefore, very doubtful whether the revenue derived from it will ever be able to defray the expense of keeping it in repair, without allowing any thing for interest of capital.

The following is a detailed account of the various items of expenditure on account of the Caledonian Canal, from 20th of October, 1803, to 1st of May, 1830: —

	£	s.	d.
Management and travelling expenses	36,691	12	10¼
Timber, and carriage thereof	72,317	1	10¼
Machinery, cast-iron works, tools, and materials	128,886	4	7¾
Quarries and masonry	200,014	4	10¾
Shipping	11,719	1	6
Houses and other buildings	5,539	10	6
Labour and workmanship (day-work)	54,209	1	1¾
Labour and workmanship (measure-work)	418,551	16	8½
Purchase of land, and payments on account of damages	47,956	12	9¾
Purchase and hire of horses and provender	3,638	12	2¾
Incidental expenses	2,820	18	10
Roadmaking	4,579	3	6¾
Total cost	£ 986,924	1	6½

Some other canals have been projected and completed in different parts of Scotland. Of these the Monkland Canal, for the supply of Glasgow with coal, has been the most successful.

The following extract from the share list of Mr. Edmunds, Broker, (9. Change Alley, Cornhill, 12th of October, 1833,) gives an account of the number of shares in the principal British canals, the cost or sum actually expended upon each share, the dividend payable upon it, its selling price at the abovementioned date, and the periods when the dividends are payable: —

Number of Shares.	Names of Canals.	Amount of Share.	Average Cost per Share.	Price per Share.	Div. per Annum.	Dividend payable.
		£ s.	£ s. d.	£ s.	£ s. d.	
1,482	Ashby-de-la-Zouch	100 0	113 0 0	74 0	4 0 0	Ap. Oct.
1,766	Ashton and Oldham	- -	113 0 0	136 0	5 0 0	Ap. Oct.
720	Barnsley	160 0	217 0 0	290 0	14 0 0	Feb. Aug.
1,260	Basingstoke	100 0	- -	5 5		
——	Ditto bonds	100 0	- -	- -	- -	April.
4,000	Birmingham (⅛th sh.)	17 10	- -	233 10	12 10 0	Ap. Oct.
4,000	Birmingham & Liverpool Junction	100 0	100 0 0 pd.	36 0		
477	Bolton and Bury	250 0	- -	105 0	6 0 0	January.
1,005	Brecknock and Abergavenny	150 0	- -	85 0	4 0 0	Jan. July.
600	Bridgewater and Taunton	100 0	100 0 0 pd.	70 0		
——	Calder and Hebble	- -	- -	490 0		
1,600	Carlisle	50 0	21 10 0 pd.			
400	Chelmer and Blackwater	100 0	- -	103 0	5 0 0	January.
1,500	Chesterfield	100 0	- -	176 0	8 0 0	
500	Coventry	100 0	- -	600 0	32 0 0	May, Nov.
1,851	Crinan	50 0	- -	2 0		
460	Cromford	100 0	- -	300 0	18 0 0	Jan. July.
4,546	Croydon	100 0	31 2 10	1 0		
11,810*l.*	Ditto bonds	100 0	- -	50 6	5 0 0	
600*l.*	Derby	100 0	110 0 0	117 0	6 0 0	Jan. July.
2,060	Dudley	100 0	- -	50 0	2 10 0	Mar. Sept.
——	Edinburgh and Glasgow	100 0				
3,575	Ellesmere and Chester	133 0	133 0 0	80 0	3 15 0	September
231	Erewash	100 0	750 0 0	705 0	47 0 0	May, Nov.
1,297	Forth and Clyde	100 0	400 10 0	545 0	25 0 0	June, Dec.
600	Glamorganshire	100 0	172 13 4	290 0	13 12 8	Ma. Jun. / Sep. Dec.
1,187	Gloucester and Berkeley	100 0	- -	13 10		
899	Ditto (New) of 10 per cent.	- -	- -	45 0		
11,600	Grand Junction	100 0	224 10 0	245 0	12 0 0	Jan. July.
1,521	Grand Surrey	100 0	- -	22 0	- -	Apr. Oct.
120,000*l.*	Ditto loan	- -	- -	80 0	4 0 0	Jan. July.
2,849½	Grand Union	100 0	- -	24 0	1 0 0	1st Oct.
3,096	Grand Western	100 0	100 0 0 pd.	21 0		
749	Grantham	150 0	150 0 0	200 0	10 0 0	May.
	Hereford and Gloucester	100 0				
6,238	Huddersfield	100 0	57 6 6	34 0	1 10 0	September.
148	Ivel and Ouse Beds	100 0	100 0 0 pd.	115 10	5 0 0	Jan. July.
25,328	Kennet and Avon	100 0	39 18 10	27 0	1 5 0	September.
150	Kensington	100 0	100 0 0 pd.	10 0		
11,699½	Lancaster	100 0	47 6 8	26 0	1 0 0	April.
2,879¾	Leeds and Liverpool	100 0	- -	470 0	20 0 0	May, Nov.
18¾	Ditto (New)	- -	- -	- -	16 0 0	May, Nov.
540	Leicester	- -	140 0 0	175 0	10 0 0	Jan. July.
5	Ditto	- -	90 0 0	80 0	13 10 0	Jan. July.
1,897	Leicester and Northampton	100 0	83 10 0	80 0	4 0 0	Jan. July.
70	Loughborough	- -	142 17 0	1,820 0	124 0 0	Jan. July.
3,000	Macclesfield	100 0	100 0 0 pd.	50 0		
250	Melton Mowbray	100 0	- -	190 0	9 0 0	July.
500	Mersey and Irwell	100 0	- -	750 0	40 0 0	June.
101	Monkland	100 0	- -	90 0		
2,409	Monmouthshire	100 0	100 0 0	198 0	10 0 0	Jan. July.

Number of Shares.	Names of Canals.	Amount of Share.	Average Cost per Share.	Price per Share.	Div. per Annum.	Dividend payable.
		£ s.	£ s. d.	£ s.	£ s. d.	
700	Montgomeryshire	100 0	- -	85 0	4 0 0	Mar. Aug.
600	North Walsham and Dilham	50 0	50 0 0 pd.	10 0	- -	January.
247	Neath	- -	107 10 0	290 0	15 0 0	Aug. Feb.
500	Nottingham	150 0	- -	265 0	12 0 0	Apr. Oct.
130	Nutbrook	109 0	- -	- -	6 2 0	
522	Oakham	130 0	- -	44 0	2 0 0	May.
1,786	Oxford	100 0	- -	595 0	32 0 0	Mar. Sept.
2,400	Peak Forest	100 0	48 0 0	77 0	3 10 0	June, Dec.
2,520	Portsmouth and Arundel	50 0	50 0 0	10 0		
21,418	Regent's	100 0	33 16 8	16 15	0 13 6	July.
5,669	Rochdale	100 0	85 0 0	111 0	4 6 0	May.
500	Shrewsbury	125 0	- -	255 0	11 0 0	May, Nov.
500	Shropshire	125 0	- -	138 0	7 10 0	June, Dec.
800	Somerset Coal	50 0	- -	170 0	10 10 0	Jan. July.
45,000	Ditto Lock Fund	12 10	- -	12 10	5 10 p. ct.	June, Dec.
700	Stafford and Worcester	140 0	140 0 0	610 0	34 0 0	Feb. Aug.
300	Stourbridge	145 0	- -	200 0	9 0 0	Jan. July.
3,647	Stratford-on-Avon	- -	79 9 8	36 0	1 5 0	August.
200	Stroudwater	150 0	- -	500 0	23 0 0	May, Nov.
533	Swansea	100 0	180 0 0	220 0	12 0 0	November.
350	Tavistock	100 0	- -	105 0	2 0 0	
4,805	Thames and Medway	100 0	30 4 3	1 0		
3,344	Ditto New	3 10	2 15 0 pd.			
——	Ditto 1st loan	- -	56 0 0	- -	2 10 0	
——	Ditto 2d loan	- -	40 0 0	- -	2 0 0	
——	Ditto 3d loan	- -	100 0 0	- -	5 0 0	
——	Ditto 4th loan	- -	100 0 0	- -	5 0 0	June.
1,150	Thames and Severn, New	- -	- -	33 0	1 10 0	June.
1,300	Ditto Original	- -	- -	27 7	1 10 0	June.
2,600	Trent and Mersey (½)	50 0	- -	640 0	37 10 0	May, Nov.
1,000 1,000½	Warwick and Birmingham	100 0 50 0	- -	278 0	16 0 0	May, Nov.
980	Warwick and Napton	100 0	- -	210 0	12 0 0	May, Nov.
905	Wey and Arun	110 0	110 0 0	32 0	- -	May.
20,000	Wilts and Berks	- -	- -	5 10	0 5 0	June.
126	Wisbeach	105 0	105 0 0	40 0	- -	February.
6,000	Worcester and Birmingham	- -	- -	88 10	4 0 0	Feb. Aug.
800	Wyrley and Essington	125 0	- -	75 0	- -	February.

(14.) *Irish Canals.* — Various canals have been undertaken in Ireland, of which the Grand Canal and the Royal Canal are the principal. The Grand Canal was begun in 1756, by a body of subscribers; but they could not have completed the work without very large advances from government. The canal commences at Dublin, and stretches in a westerly direction, inclining a little to the south, to the Shannon, with which it unites near Banagher, a distance of 87 statute miles. But, exclusive of the main trunk, there is a branch to Athy, where it joins the Barrow, a distance of about 26 miles; and there are branches to Portarlington, Mount Mellick, and some other places. There is also a westerly branch, recently constructed, from the Shannon to Ballinasloe, about 14 miles in length. The total length of the canal, with its various branches, is about 156 Eng. miles. Its summit elevation is 278 feet above the level of the sea at Dublin. It is 40 feet wide at the surface, from 24 to 20 feet at bottom, and has 6 feet water. It cost, in all, above 2,000,000*l.* In 1829, 191,774 tons of commodities were conveyed along the canal to and from Dublin, and about 67,000 passengers. The tonnage dues on the former amounted to 31,435*l.*, and the fares of the latter to 10,575*l.* In 1831, the produce conveyed by the canal had increased to 237,889 tons, and the tonnage dues to 36,736*l.* We have not learned the number of passengers for this year.

Two capital errors seem to have been committed in the formation of this canal, — it was framed on too large a scale, and was carried too far north. Had it been 4 or 4½ instead of 6 feet deep, its utility would have been but little impaired, while its expense would have been very materially diminished. But the great error was in its direction. Instead of joining the Shannon about 15 miles above Lough Derg, it should have joined it below Limerick. By this means, barges and other vessels passing from Dublin to Limerick, and conversely, would have avoided the difficult and dangerous navigation of the upper Shannon; the canal would have passed through a comparatively fertile country; and it would not have been necessary to carry it across the bog of Allen, in which, says Mr. Wakefield, "the company have buried more money than would have cut a spacious canal from Dublin to Limerick." — (*Account of Ireland*, vol. i. p. 642.)

The Royal Canal was undertaken in 1789. It stretches westward from Dublin to the Shannon, which it joins at Tormanbury. Its entire length is about 83 miles; its highest elevation is 322 feet above the level of the sea. At bottom it is 24 feet wide, having 6 feet depth of water. It has cost, exclusive of interest on stock, loans, &c. advanced by government, 1,421,954*l.* The tolls produced, in 1831, 12,729*l.* 6*s.* 1*d.* — a sum hardly adequate to defray the ordinary wear and tear of the

canal, and the wages of the persons employed upon it, without leaving any thing for interest of capital!

This canal seems to have been planned in the most injudicious manner. It has the same defect as the Grand Canal, of being extravagantly large; and throughout its whole course it is nearly parallel to, and not very distant from, the latter. There are consequently two immense canals, where there ought, perhaps, to be none. At all events, it is abundantly certain that one canal of comparatively moderate dimensions would have been quite enough for all the business of the district, though it were much greater than it is at this moment, or than it is ever likely to become.

Besides the above, there are some other canals, as well as various river excavations, in Ireland; but hardly one of them yields a reasonable return for the capital expended upon it. They have almost all been liberally assisted by grants of public money; and their history, and that of the two great canals now adverted to, strikingly corroborates the caustic remark of Arthur Young, that "*a history of public works in Ireland would be a history of jobs.*" — (*Tour in Ireland*, part ii. p. 66. 4to ed.) Those who wish to make themselves fully acquainted with the history and state of the canals of Ireland, may consult the valuable *Report by Messrs. Henry, Mullins, and M'Mahon*, in the *Appendix to the Report of the Select Committee of* 1830 *on the State of Ireland.* The previous statements have been derived principally from it, and from the evidence of Nicholas Fleming, Esq. before the same committee.

(15.) *American Canals.* — The United States are pre-eminently distinguished by the spirit with which they have undertaken, and the perseverance they have displayed in executing the most magnificent plans for improving and extending internal navigation. Besides many others of great, though inferior, magnitude, a canal has been formed connecting the Hudson with Lake Erie. This immense work is 363 miles long, 40 feet wide at the surface, 28 feet wide at the bottom, and 4 feet deep. The locks, 81 in number, exclusive of guard locks, are 90 feet long and 14 feet wide, the average lift of each being $8\frac{1}{4}$ feet; they are constructed of stone, and finished, like the rest of the canal, in a substantial and handsome manner. The rise and fall along the entire line is 661 feet. This great work was opened on the 8th of October, 1823, but was not finally completed till 1825. It cost nearly 1,800,000*l.* sterling, and was executed at the expense of the state of New York. It has completely answered the views of the projectors; and will remain an example to the other states; fully justifying the encomiums that have been bestowed upon it.

Besides Erie Canal, the state of New York has completed Champlain Canal, stretching from the Hudson, near Albany, to the lake of that name, and two smaller ones. The length, cost, and revenue of these canals are as follow: —

Canals.	Length.	Cost.	Tolls, 1829.	Tolls, 1830.	Tolls, 1831.
	Miles.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Erie - - -	363	9,027,456·05	707,883·49	954,328·05	1,091,714·26
Champlain - - -	63	1,179,871·95	87,171·03	78,148·63	102,896·23
Oswego - - -	38	525,115·37	9,439·44	12,335·18	16,271·10
Cayuga and Seneca - -	20	214,000·31	8,643·49	11,987·81	12,920·39
	484				
Navigable feeders - -	8				
	492	10,946,443·68	813,137·45	1,056,799·67	1,222,801·90

The *Chesapeake and Ohio* Canal is the largest by far of those now in progress. This truly gigantic work was commenced in 1828. It begins at the tide water of the Potomac River above Georgetown, in the district of Columbia, and is to terminate at Pittsburgh, in Pennsylvania, a distance of $341\frac{1}{4}$ miles. Its dimensions considerably exceed those of the Erie Canal; its breadth at the surface of the water being from 60 to 80 feet, do. at bottom 50 feet, with a depth of water varying from 6 to 7 feet. The locks are of stone, 100 feet by 15; — amount of lockage required in the whole line, 3,215 feet. At the summit level on the Alleghany mountains, there is a tunnel 4 miles and 80 yards in length. The estimated cost of this vast work was 22,375,000 dollars; but it is believed that it will be finished for less. — (*American Almanack for* 1833.)

A great number of other canals have been completed in different parts of the Union, and many new ones are now in progress.

(16.) *Canada Canals.*—The British government has expended a very large sum upon the Rideau River and Canal, stretching from Kingston, on Lake Ontario, to the Ottawa, or Grand River; but this work was undertaken as much in the view of improving the military defences of Canada, as of promoting its commerce. The expense has been enormous, while the benefits are contingent and doubtful.

(17.) *Utility of Canals.*—The utility of canals, when judiciously contrived, and opening an easy communication between places capable of maintaining an extensive intercourse with each other, has never been better set forth than in a work published in 1765, entitled "A View of the Advantages of Inland Navigation," &c. But the following ex-

tract from *Macpherson's Annals of Commerce* (anno 1760) contains a brief, and at the same time eloquent, summary of the principal advantages resulting from their construction. — "They give fresh life to established manufactures, and they encourage the establishment of new ones, by the ease of transporting the materials of manufacture and provisions; and thence we see new villages start up upon the borders of canals in places formerly condemned to sterility and solitude. They invigorate, and in many places create, internal trade, which, for its extent and value, is an object of still more importance than foreign commerce, and is exempted from the many hardships and dangers of a maritime life and changes of climate. And they greatly promote foreign trade; and consequently enrich the merchants of the ports where they, or the navigable rivers they are connected with, terminate, by facilitating the exportation of produce from, and the introduction of foreign merchandise into, the interior parts of the country, which are thus placed nearly on a level with the maritime parts; or, in other words, the interior parts become coasts, and enjoy the accommodations of shipping. The price of provisions is nearly equalised through the whole country; the blessings of Providence are more uniformly distributed; and the monopolist is disappointed in his schemes of iniquity and oppression, by the ease wherewith provisions are transported from a considerable distance. The advantages to agriculture, which provides a great part of the materials, and almost the whole of the subsistence, required in carrying on manufactures and commerce, are pre-eminently great. Manure, marl, lime, and all other bulky articles, which could not possibly bear the great expense of cartage, and also corn and other produce, can be carried at a very light expense on canals; whereby poor lands are enriched, and barren lands are brought into cultivation, to the great emolument of the farmer and landholder, and the general advantage of the community, in an augmented supply of the necessaries of life and materials of manufactures; coals (the importance of which to a manufacturing country, few people, not actually concerned in manufactures, are capable of duly appreciating), stone, lime, iron ore, and minerals in general, as well as many other articles of great bulk in proportion to their value, which had hitherto lain useless to their proprietors by reason of the expense, and, in many cases, impossibility, of carriage, are called into life, and rendered a fund of wealth, by the vicinity of a canal; which thus gives birth to a trade, whereby, in return, it is maintained. The cheap, certain, and pleasant conveyance of travellers by the treckschuyts in Holland, has been admired by all who have been in that country; and it must be owing to the universal desire in this country of flying over the ground with the greatest possible rapidity, that a mode of travelling so exceedingly easy to the purse and the person is so little used here. Neither ought we entirely to forget, among the advantages of canals, the pleasure afforded to the eye and the mind by a beautiful moving landscape of boats, men, horses, &c. busied in procuring subsistence to themselves, and in diffusing opulence and convenience through the country. And, in a word, we have now the experience of about 40 years to establish as a certain truth, what was long ago said by Dr. Adam Smith, that '*navigable canals are among the greatest of all improvements.*'"

(18.) *Increased Speed of Travelling by Canals.* — Great, however, as have been the advantages derived from the formation of canals, it is not improbable that their further progress may be in some degree checked by the formation of RAILROADS (which see). We believe, however, that the proprietors of most of the existing canals have very little to fear from this cause. The recent improvements in the art of constructing and propelling canal vessels promise to be of very great national importance, and will enable the canal owners still better to withstand the competition of the railroad companies. The new system was introduced on the Paisley and Glasgow Canal, by Mr. Houston, in June, 1831. The results are described in the following statements, to which it is unnecessary to call the reader's attention.

Mr. Thomas Grahame, civil engineer, in his "Letter to Canal Proprietors and Traders" says, "The experiments of great velocity have been tried and proved *on the narrowest, shallowest, and most curved canal in Scotland*, viz. the Ardrossan or Paisley Canal, connecting the city of Glasgow with the town of Paisley and village of Johnstoun, — a distance of 12 miles." The result has disproved every previous theory as to difficulty and expense of attaining great velocity on canals; and as to the danger or damage to their banks by great velocity in moving vessels along them.

"The *ordinary speed* for the conveyance of passengers on the Ardrossan Canal has, for nearly 2 years, been *from nine to ten miles an hour;* and, *although there are fourteen journeys along the canal per day, at this rapid speed, its banks have sustained no injury.* The boats are 70 feet in length, about 5 feet 6 inches broad, and, but for the extreme narrowness of the canal, might be made broader. They carry easily from 70 to 80 passengers; and when required, can and have carried upwards of 110 passengers. The entire cost of a boat and fittings up is about 125*l.* The hulls are formed of light iron plates and ribs, and the covering is of wood and light oiled cloth. They are more airy, light, and comfortable than any coach. They permit the passengers to move about from the outer to the inner cabin, and the fares per mile are *one penny* in the *first*, and *three farthings* in the *second cabin.* The passengers are all carried under cover, having the privilege also of an uncovered space. These boats are drawn by 2 horses (the prices of which may be from 50*l.* to 60*l.* per pair), in stages of 4 miles in length, which are done in from 22 to 25 minutes, including stoppages to let out and take in passengers, each set of horses doing 3 or 4 stages alternately each day. In fact, the boats are drawn through this narrow and shallow canal, at a velocity which many celebrated engineers *had demonstrated, and which the public believed, to be impossible.*

"The entire amount of the whole expenses of attendants and horses, and of running one of these boats

4 trips of 12 miles each (the length of the canal), or 48 miles daily, including interest on the capital, and 20 per cent. laid aside annually for replacement of the boats, or loss on the capital therein vested, and a considerable sum laid aside for accidents and replacement of the horses, is 700*l.* some odd shillings; or, taking the number of working days to be 312 annually, something under 2*l.* 2*s.* 4*d.* per day, or about 11*d.* per mile. The actual cost of carrying from 80 to 100 persons a distance of 30 miles (the length of the Liverpool railway), at a velocity of nearly 10 miles an hour, on the Paisley Canal, one of the most curved, narrow, and shallow in Britain, is therefore just 1*l.* 7*s.* 6*d.* sterling. Such are the facts, and, incredible as they may appear, they are facts which no one who inquires can possibly doubt."

The following statement by Mr. Macneill shows the gross expense of running old heavy boats on the Paisley Canal at the rate of 4 miles per hour, and new light boats, on the same canal, at the rate of 10 miles per hour, and the comparative expense per mile; also the number of passengers carried before and after the introduction of the new system.

	1830.*	1831.†	1832.†
Speed, 10 hours - - miles -	4	10	10
Number of passengers carried - -	32,831	79,455	148,561
Number of miles run each day - - -	48	varying	152
	£ s. d.	£ s. d.	£ s. d.
Gross expense in the year - - -	700 4 7	1,316 17 5	218 5 11
Cost per mile, year taken at 312 days - -	0 0 11	- -	0 0 10¾

The power of conveyance thus established on the Paisley Canal may be judged of from the fact, that on the 31st of December, 1832, and 31st of January, 1833, there were conveyed in these boats nearly 2,500 passengers. The increase still continues. The number carried in April, 1833, being 20,000, or at the rate of 240,000 a year.—(*Macneill on the Resistance of Water, &c.* p. 5.)

(19.) *Profits of Canals.* — It is a well-known fact, that canals, at an average, and allowing for the length of time that must elapse from the first outlay of capital before they yield any return, are not very productive. When, indeed, they connect places that have an extensive intercourse, and when no very extraordinary difficulties have to be surmounted in their construction, they most commonly yield very large profits; but, generally speaking, this does not appear to be the case; and, on the whole, they seem to have been more beneficial to the public than to their projectors.

It is customary to insert clauses in the acts authorising canals to be cut, limiting the charge which the proprietors shall be entitled to impose upon the goods conveyed by them. But we think that the dividend ought also to be limited; and that it should be stipulated that whatever a moderate toll yielded over and above defraying this dividend, and providing for the repair of the canal, should be accumulated as a fund in order to buy up the stock of the canal, so that the toll may ultimately be reduced to such a sum as may suffice merely to meet the necessary repairs. We are not aware that any good objection could be made to a plan of this sort; and had it been adopted in this country, there are several instances in which it would have been very advantageous for the public.

When the canal of Languedoc was completed, the most likely method, it was found, of keeping it in constant repair, was to make a present of the tolls to Riquet the engineer. "These tolls constitute," says Dr. Smith, "a very large estate to the different branches of the family of that gentleman; who have, therefore, a great interest to keep the work in constant repair. But had these tolls been put under the management of commissioners, who had no such interest, they might, perhaps, have been dissipated in ornamental and unnecessary expenses, while the most essential parts of the work were allowed to go to ruin." Dr. Smith ought, however, to have mentioned that Riquet advanced *a fourth* part of the entire sum laid out upon the canal (*Dutens, Navigation Intérieure de la France*, tom. i. p. 119. &c.); and that officers were appointed by the crown to see that the tolls were not rendered oppressive, and the canal kept in good order. At the Revolution, most part of the property of the canal was confiscated; but at the restoration of the Bourbons in 1814, such parts of the confiscated property as had not been sold were restored to the successors of M. Riquet, who have at this moment the principal management of the canal.

*** The accompanying map of the canals, railroads, &c. of Great Britain and Ireland, has been executed with great care and attention; and will, we hope, be found to be a valuable acquisition. Those who wish to see them laid down on a larger scale, are referred to the magnificent six sheet map, published by J. Walker, Esq. of Wakefield. This map, which is equally correct and beautiful, is a truly national work, and well deserves the public patronage. "An Historical Account of the Navigable Rivers and Canals, &c. of Great Britain," in 4to, attached to it by way of Index, is both an accurate and a useful publication.

CANARY SEED. See SEED.

CANDLE (Ger. *Lichter, Kerzen;* Du. *Kaarzen;* Fr. *Chandelle;* It. *Candelle;* Sp. and Port. *Velas;* Rus. *Swjetschi;* Lat. *Candela*), a taper of tallow, wax, or spermaceti, the wick of which is commonly of several threads of cotton spun and twisted together.

* These charges are the bare outlays.

† These charges include loss on purchase and sale of additional horses, and 10 per cent. on cost of horses and boats, deposited in a contingent fund.

Dr. Ure gives the following table, as containing the result of certain experiments he had made, in order to determine the relative intensity of the light, and the duration of different sorts of tallow candles: —

Number in a Pound.	Duration of a Candle.	Weight in Grains.	Consumption per Hour, in Grains.	Proportion of Light.	Economy of Light.	Candles equal one Argand.
10 mould,	5 h. 9 m.	682	132	12¼	68	5·7
10 dipped,	4 36	672	150	13	65⅓	5·25
8 mould,	6 31	856	132	10⅓	59⅓	6·6
6 do.	7 2⅓	1,160	163	14⅔	66	5·0
4 do.	9 36	1,787	186	20¼	80	3·5
Argand oil flame.			512	69·4	100	

"A Scotch mutchkin," says Dr. Ure, "or ⅛ of a gallon of good seal oil, weighs 6,010 gr., or 13$\frac{1}{19}$ oz. avoirdupois, and lasts in a bright Argand lamp 11 hours 44 minutes. The weight of oil it consumes per hour is equal to 4 times the weight of tallow in candles 8 to the pound, and 3¼ times the weight of tallow in candles 6 to the pound. But its light being equal to that of 5 of the latter candles, it appears from the above table, that 2 lbs. weight of oil, value 9*d.*, in an Argand, are equivalent in illuminating power to 3 lbs. of tallow candles, which cost about 2*s.* The larger the flame in the above candles, the greater the economy of light."

Until 1831, when it was repealed, candles were, for a lengthened period, subject to an excise duty; and their consumption was, in consequence, pretty exactly ascertained.

An Account of the Rates of Duty separately charged on Tallow, Wax, and Spermaceti Candles, the Number of Pounds' Weight of each Sort produced, and the Total annual Nett Revenue derived from Candles, in Great Britain, in each Year since 1820. — (*Parl. Paper*, No. 468. Sess. 1830.)

Years.	Pounds' Weight of Candles.						Nett Revenue.
	Tallow.	Rate of Duty per lb.	Wax.	Rate of Duty per lb.	Spermaceti.	Rate of Duty per lb.	
		d.		*d.*		*d.*	£ *s.* *d.*
1820	88,352,461	1	692,705	3½	193,463	3½	373,455 14 5
1821	93,816,346	—	697,196	—	165,647	—	395,911 8 7
1822	98,311,801	—	682,241	—	179,208	—	415,609 15 3
1823	102,461,879	—	694,194	—	180,401	—	433,537 15 8
1824	109,810,900	—	759,751	—	179,454	—	466,042 16 1
1825	114,187,550	—	851,370	—	208,377	—	485,014 8 9
1826	110,102,643	—	705,615	—	201,790	—	467,069 12 1
1827	114,939,578	—	713,655	—	226,277	—	487,318 3 4
1828	117,342,157	—	748,293	—	270,263	—	497,770 2 9
1829	115,156,808	—	746,052	—	303,683	—	489,059 1 9

CANDLE, *Sale or Auction by Inch of*, is when a small piece of candle being lighted, the bystanders are allowed to bid for the merchandise that is selling: but the moment the candle is out, the commodity is adjudged to the last bidder.

CANDLESTICKS (Ger. *Leuchter*; Du. *Kandelaars*; Fr. *Chandeliers*; It. *Candellieri*; Sp. *Candeleros*; Rus. *Podsweschnikii*) are of silver, brass, iron, bronze, tin japanned, or copper plated, made of different patterns and sorts. The best plated candlesticks are manufactured at Sheffield; the common sort of plated ones, as also brass, japanned, &c. are made at Birmingham.

CANELLA ALBA (Fr. *Canelle blanche*; Ger. *Weisser Zimmet*; It. *Canella bianca*; Sp. *Canella blanca*; Lat. *Canella alba*), the inner bark of the *Canella alba*, a tree growing in the West Indies. It is brought to this country packed in casks and cases, in long pieces, some rolled in quills and others flat; the quilled sort is considerably thicker than cinnamon, and the flat nearly ¼ of an inch in thickness. The quilled pieces are yellow on both sides; the flat pieces are yellow on the outside and pale brown within. The odour of both kinds, when fresh broken, is aromatic, something like a mixture of cloves and cinnamon; and the taste slightly bitter, and extremely warm and pungent.

CANES. See BAMBOO, RATTANS.

CANNON, CANNONS (Du. *Kanonen*; Fr. *Canons*; Ger. *Kanonen*; It. *Cannoni*; Pal. *Dziala*; Por. *Canhoes*; Rus. *Puschki*; Sp. *Canones*; Sw. *Kanon*), a kind of long hollow engines for throwing iron, lead, or stone balls by the force of gunpowder. They are commonly made of iron, but frequently also of a mixture of copper, tin, and brass. They are either cast hollow, or solid and then bored; those made in the latter way being very superior. Brass cannons, or cannons made of mixed metal, are said not to be so well calculated for hard service, or quick and continued firing, as those made of iron. The proportions of the ingredients used in making the former do not differ materially in different countries, though they rarely coincide. To 240 lbs. of metal fit for casting, we commonly put 68 lbs. of copper, 52 lbs. of brass, and 12 lbs. of tin. To 4,200 lbs. of metal fit for casting, the Germans put 3,687$\frac{3}{41}$ lbs. of copper, 204$\frac{11}{41}$ lbs. of

brass, and 307$\frac{36}{41}$ lbs. of tin. Others, again, use 100 lbs. of copper, 6 lbs. of brass, and 9 lbs. of tin; and others, 100 lbs. of copper, 10 lbs. of brass, and 15 lbs. of tin.

It seems to be the general opinion that cannon were first made use of in 1336 or 1338; but Don Antonio de Capmany has produced some statements, which render it almost certain that some sort of artillery was used by the Moors in Spain so early as 1312. — (*Questiones Criticas*, p. 181. &c.) Cannons were certainly used by the English in 1347 at the siege of Calais, and by the Venetians at Chioggia in 1366, and in their wars with the Genoese in 1379 and 1380. The Turks employed them at the sieges of Constantinople, in 1394 and 1453. When first introduced, they were for the most part very heavy and unwieldy, and threw balls of an enormous size: they were, however, owing to their frequently bursting, about as dangerous to those using them as to their opponents. There is a valuable article on the construction and history of cannons in *Rees's Cyclopædia*; but it was published previously to the appearance of Capmany's work referred to above.

CANTHARIDES, OR SPANISH FLY (Fr. *Cantharides, Mouches d'Espagne*; Ger. *Spanische Fliegen*; It. *Cantarelle*; Lat. *Cantharis*; Rus. *Hischpanskie muchi*; Sp. *Cantaridas*). This insect is found on a variety of shrubs in Spain, Italy, France, &c. Those used in this country are imported partly from Sicily, but principally from Astracan, packed in casks and small chests. The best are of a lively fresh colour, a small size, and not mouldy. They are frequently adulterated with the *Melolontha vitis*; but this is distinguishable by its form, which is squarer than the cantharis, and by its black feet. If they be properly dried and protected from the air, they may be kept for a very long period. — (*Thomson's Dispensatory.*)

CANTON, one of the greatest emporiums in the East, ranking, as a port of trade, either before, or immediately after, Calcutta, situated in the province of Quantong, in China; being the only place in that empire frequented by European traders: lat. 23° 7′ 10″ N., lon. 113° 14′ E.

Canton stands on the eastern bank of the Pekiang River, which flows from the interior in a navigable stream of 300 miles to this city, where it is rather broader than the Thames at London Bridge; falling, after an additional course of 80 miles, into the southern sea of China. Near its junction with the sea, it is called by foreigners Bocca Tigris. The town is surrounded by a thick wall, built partly of stone and partly of brick, and is divided into 2 parts by another wall running east and west. The northern division is called the Old, and the southern the New City. In the old city is the Mantchou or Tartar general, with a garrison of Mantchou troops under his command. The lieutenant-governor or Fooyuen's office is also in the old city, but the governor and Hoppo (principal customs officer) reside in the new city, not far from the river.

All foreign commerce is conducted in the south-west suburb, where the foreign factories are situated; and which, with the other suburbs, is probably not less populous than the city itself. The residence of Europeans is confined to a very small space, on the banks of the river; which might, however, be as pleasant as a crowded mercantile place can well be, were it not for the great number of small *dwelling boats*, which cover the face of the river. The people who occupy the larger portion of these boats are said to have come originally from the south; and being a foreign and despised race, were not, at first, allowed to dwell on shore; but most of the distinctions between them and the rest of the people have been abolished.

Although Canton is situated nearly in the same parallel of latitude as Calcutta, there is a considerable difference in their temperature; the former being much the coolest, and requiring fires during the winter months. The streets of Canton are very narrow, paved with little round stones, and flagged close to the sides of the houses. The front of every house is a shop, and those of particular streets are laid out for the supply of strangers; China-street is appropriated to Europeans; and here the productions of almost every part of the globe are to be found. One of the shopkeepers is always to be found sitting on the counter, writing with a camel's hair brush, or calculating with his swanpan, on which instrument a Chinese will perform operations in numbers with as much celerity as the most expert European arithmetician. This part of Canton being much frequented by the seamen, every artifice is used by the Chinese retailers to attract their attention; each of them having an English name for himself painted on the outside of his shop, besides a number of advertisements composed for them by the sailors in their own peculiar idiom. The latter, it may be supposed, are often duped by their Chinese friends, who have, in general, picked up a few sea phrases, by which the seamen are induced to enter their shops: but they suit each other extremely well; as the Chinese dealers possess an imperturbable command of temper, laugh heartily at their jokes without understanding them, and humour the seamen in all their sallies.

Ships only ascend the river as far as Whampoa, about 15 miles below Canton; loading and unloading by means of native boats.

The Chinese, considered as traders, are eminently active, persevering, and intelligent.

They are, in fact, a highly commercial people; and the notion that was once very generally entertained, of their being peculiarly characterised by a contempt of commerce and of strangers, is as utterly unfounded as any notion can possibly be. Business is transacted at Canton with great despatch; and it is affirmed, by Mr. Milburn, and by most of the witnesses examined before the late parliamentary committees, that there is no port in the world, where cargoes may be sold and bought, unloaded and loaded, with more business-like speed and activity.

The fears, whether real or pretended, of disturbances arising from a want of discipline in the crews of private ships, have been proved to be in a great degree futile; the Americans and other private traders having rarely experienced the slightest inconvenience from any tumults between their sailors and the natives.

Provisions and refreshments of all sorts are abundant at Canton, and, in general, of an excellent quality; nor is the price exorbitant. Every description of them, dead or alive, is sold by weight. It is a curious fact, that the Chinese make no use of milk, either in its liquid state, or in the shape of curds, butter, or cheese. Among the delicacies of a Chinese market are to be seen horse flesh, dogs, cats, hawks, and owls. The country is well supplied with fish from the numerous canals and rivers by which it is intersected.

Foreign Factories. — These extend for a considerable way along the banks of the river, at the distance of about 100 yards. They are named, by the Chinese, hongs, and resemble long courts, or closes, without a thoroughfare, which generally contain 4 or 5 separate houses. They are built on a broad quay, and have a parade in front. This promenade is railed in, and is generally called Respondentia Walk; and here the European merchants, commanders, and officers of the ships, meet after dinner and enjoy the cool of the evening. The English hong, or factory, far surpasses the others in elegance and extent. This, with the American and Dutch hongs, are the only ones that keep their national flags flying. The neighbourhood of the factories is occupied with warehouses for the reception of European goods, or of Chinese productions, until they are shipped. In 1822, during a dreadful conflagration that took place at Canton, the British factories and above 10,000 other houses were destroyed; on which occasion the East India Company's loss was estimated at 500,000*l.* sterling, three fifths in woollens.

For the space of 4 or 5 miles opposite to Canton, the river resembles an extensive floating city, consisting of boats and vessels ranged parallel to each other, leaving a narrow passage for others to pass and repass. In these the owners reside with their families; the latter rarely visiting the shore.

All the business at Canton with Europeans is transacted in a jargon of the English language. The sounds of such letters as B, D, R, and X, are utterly unknown in China. Instead of these they substitute some other letter, such as L for R, which occasions a Chinese dealer in rice to offer for sale in English a rather unmarketable commodity. The name mandarin is unknown among the Chinese; the word used by them to denote a person in authority being *quan*. Mandarin is a Portuguese word derived from the verb *mandar*, to command. — (*Hamilton's East India Gazetteer; Milburn's Orient. Commerce; Companion to Anglo-Chinese Calendar, Macao*, 1832, &c.)

Conduct of Chinese Government. — The only real difficulty in trading with China originates in the despotism, pride, and jealousy of the government, and in the general corruption of its officers. The former affects to treat all foreigners with contempt, and is always exposing them to insult; while the latter endeavour to multiply and enforce vexatious regulations and demands, that they may profit by the douceurs given for their evasion. Hitherto we have submitted with exemplary forbearance to every annoyance the Chinese authorities have chosen to inflict; but it is questioned by some whether this be the most politic course. The imbecility and powerlessness of the government is at least equal to its pride and presumption; and in the event of its attempting to stop the trade, or to subject those engaged in it to unmerited ill treatment, it is contended that we ought, in the event of redress being refused on the presentation of a remonstrance, to vindicate our rights by force. We are rather disposed to concur in this opinion. We believe that little more than a demonstration would be necessary; and that the appearance of a single ship of the line in the Chinese seas would have more influence over the court of Pekin than a dozen ambassadors. But it is essential, before employing this sort of negociators, that we be well assured that we have justice on our side, and that our own misconduct has not occasioned the interruptions and annoyances complained of. The superintendents about to be sent to Canton — (see *post*) — should be vested with full powers to prevent, if possible, and, at all events, suitably to punish, any British subject who may act so as to give just cause of offence to the Chinese. We have a right to claim fair treatment from them, as we have a right to claim it from the Americans, or any other people; but we have no right to expect that our claim should be regarded, unless we respect the prejudices of the people, and the equitable rules and regulations of the government.

Trade to the North of China. — At present, all foreign trade with China is confined to

the port of Canton; but this was not the case for a long time after China was visited by British ships, and it appears highly probable that it will be again extended towards the north. The interesting details given in the account of the voyage of the ship Amherst along the Chinese coasts show that the people are every where most anxious for an intercourse with foreigners, and that the law is the only obstacle to its being carried on to a very great extent. But, where the people are so well disposed to trade, the officers so corrupt, and the government so imbecile, it may, we think, be fairly anticipated that the unalterable laws of the "Celestial Empire" will not prove a very serious obstacle to such private individuals as may choose to engage in a clandestine trade with the northern provinces. The smuggler is even more omnipotent in China than in Spain. The extent and perfect regularity with which the trade in opium is carried on, in defiance of all the efforts of government for its suppression, shows how unable it is to contend against the inclinations of its subjects, which, fortunately, are all in favour of a free and liberal intercourse with foreigners.

Monies. — Accounts are kept at Canton in taels, mace, candarines, and cash; the tael being divided into 10 mace, 100 candarines, or 1,000 cash. There is but one kind of money made in China, called cash, which is not coined but cast, and which is only used for small payments: it is composed of 6 parts of copper and 4 of lead; it is round, marked on one side, and rather raised at the edges, with a square hole in the middle. These pieces are commonly carried, like beads, on a string of wire. A tael of fine silver should be worth 1,000 cash; but, on account of their convenience for common use, their price is sometimes so much raised that only 750 cash are given for the tael.

Foreign coins, however, circulate here, particularly Spanish dollars; and for small change they are cut into very exact proportions, but afterwards weighed; for which purpose merchants generally carry scales, called dotchin, made somewhat after the plan of the English steelyards.

The tael is reckoned at 6*s.* 8*d.* sterling in the books of the East India Company; but its value varies, and is generally computed according to the price paid per ounce for Spanish dollars in London. The tables given for this proportional value may be calculated in pence sterling, by the multiplier 1·208. Thus, if the price of the Spanish dollar be 60*d.* per ounce, the value of the tael will be 60 × 1·208 = 72·48*d.*; if at 66*d.*, the value of the tael will be 79·728*d.*; and for any other price in the same proportion.

Fineness of Gold and Silver. — The fineness of gold and silver is expressed by dividing the weight into 100 parts, called toques or touch; similar to the modern practice of France. Thus, if an ingot be 93 touch, it is understood to contain 7 parts of alloy and 93 of pure metal, making in the whole 100.

The fineness of the precious metals, expressed in these decimal proportions, may be converted into English proportions by the following analogies: — Suppose gold is 91·66 touch, say, as 100 : 91·66 : : 12 : 11, the standard, and *vice versâ*; and to convert standard silver into touch, say, as 240 : 222 :: 100 : 92·5, the touch of sterling silver. Pure gold or silver without alloy is called by the Chinese sycee; and sometimes, when of less purity, the metal is accepted as sycee.

Silver Ingots are used as money, and weigh from ½ a tael to 100 taels, their value being determined by their weight. These ingots are of the best sort of silver; that is, about 94 touch.

Gold Ingots. — Gold is not considered as money, but as merchandise: it is sold in regular ingots of a determined weight, which the English call shoes of gold: the largest of these weigh 10 taels each; and the gold is reckoned 94 touch, though it may be only 92 or 93.

Weights. — Gold and silver are weighed by the catty of 16 taels; the tael is divided into 10 mace, 100 candarines, or 1,000 cash. 100 taels are reckoned to weigh 120 oz. 16 dwts. Troy, which makes the tael equal to 579·8 English grains, or 37·566 grammes.

The principal weights for merchandise are the picul, the catty, and the tael; the picul being divided into 100 catties, or 1,600 taels.

	Lbs.	oz.	dwts.	
1 Tael weighs, avoirdupois - - -	0	1	5·333 =	1⅓ oz.
16 Taels, or 1 catty - - -	1	5	5·333 =	1⅓ lb.
100 Catties, or 1 picul - - -	133	5	5·333 =	133⅓ lbs.

Hence the picul weighs 60·472 kilogrammes, or 162 lbs. 0 oz. 8 dwts. 13 grs. Troy.

The above weights are sometimes otherwise denominated, especially by the natives: thus, the catty is called gin; the tael, lyang; the mace, tchen; the candarine, fivan; and the cash, lis.

There are no commercial measures in China, as all dry goods and liquids are sold by weight. In delivering a cargo, English weights are used, and afterwards turned into Chinese piculs and catties.

Long Measure. — That used in China is the covid or cobre; it is divided into 10 punts, and is equal to 0·3713 metres, or 14·625 English inches.

The Chinese have 4 different measures answering to the foot, viz.

	Metres.	Eng. inches.
The foot of the mathematical tribunal	= 0·333	= 13·125
The builders' foot, called congpu -	= 0·3228	= 12·7
The tailors' and tradesmen's foot -	= 0·3383	= 13·33
The foot used by engineers - -	= 0·3211	= 12·65

The li contains 180 fathoms, each 10 feet of the last-mentioned length; therefore the li = 1,897½ English feet; and 192⅛ lis measure a mean degree of the meridian nearly: but European missionaries in China have divided the degree into 200 lis, each li making 1,826 English feet; which gives the degree 69·166 English miles, or 11·131 French myriametres.

European Trade at Canton. — As soon as a vessel arrives among the islands which front the entrance to the Canton river, she is generally boarded by a pilot, who conducts her into Macao roads. The entrance is, however, so safe, that ships push on without waiting for the pilot, who, if the weather be bad, is sometimes long in coming on board. The pilots' names are registered at the Keun-min-foo's office, near Macao; and for a licence to act, the sum of 600 dollars is paid. The person who takes out the licence sometimes knows nothing about ships or the river; but employs fishermen to do the duty. On the vessel's arrival in Macao roads, the pilot goes on shore, to report her at the office of the keun-min-foo, who, when he has received answers to his inquiries, gives a permit for her to pass through the Bogue, and orders a river pilot on board. This pilot seldom repairs on board the vessel before 24 hours have elapsed. When arrived, the vessel proceeds through the Bogue, and up the Canton river, to Whampoa.

Every ship that enters the port is required to have a hong merchant as security for the duties, and a linguist, and comprador, before she can commence unloading. The master is required to give a written declaration, in duplicate, solemnly affirming that the ship has brought no opium. The East India Company's ships alone are excused giving this declaration.

The hong or security merchants (at present 10 in number) are the only individuals legally permitted to trade with foreigners. To obtain this privilege, they have to pay largely; and when once become merchants, they are rarely allowed to retire, and are at all times subject to severe exactions from the local

government. The linguists are government interpreters, who procure permits for delivering and taking in cargo, transact all the Custom-house business, and keep accounts of the duties. All the minor charges of the government, also, are paid by them; in consideration of which they receive a fee of about 173 dollars, previously to the vessel's departure.

When a vessel wishes to discharge or receive cargo, the linguist is informed, a day or two previously, what kind of goods are to be received or discharged, and in what quantities. He then applies for a permit, which being issued, the lighters or chop-boats proceed to Whampoa, where they usually arrive on the evening of the second or morning of the third day. For a single boat the linguist receives a fee of 23 dollars; but if a permit be obtained for from 2 to 6 boats at a time, the fee for each boat is only 11 taels 2 mace 6 cand., or about 15½ dollars.

When the goods are ready to be landed from or sent to the ship, the hoppō (principal Custom-house officer) sends a domestic, a writer, and a police runner; the hong merchant who has secured the ship sends a domestic, called a court going man (one who attends at the public offices, on ordinary occasions, in behalf of his master); and the linguist sends an accountant and interpreter, to attend at the examination of the goods. The hong merchants are always held responsible by the government for paying all duties, whether on imports or exports in foreign vessels; and, therefore, when goods are purchased, it is customary for the parties, before fixing the price, to arrange between themselves who is actually to pay the duties. The hong merchants are required to consider the duties payable to government as the most important part of their affairs. If a merchant fail to pay at the proper period, his hong, house, and all his property are seized, and sold to pay the amount; and if all that he possesses be inadequate, he is sent into banishment at Ele, in Western Tartary, which the Chinese call the "cold country;" and the body of hong merchants are commanded to pay in his stead.

Of an import cargo, each chop-boat, according to rule, which, however, is not rigidly enforced, should contain, — of woollens, camlets, and long-ells, 140 bales; tin, 500 bars; lead, 600 pigs; Bombay cotton, 55 bales; Bengal cotton, 80 bales; betel nut, pepper, &c., 300 piculs.

Of export goods, a chop-boat should take, — of tea, 600 chests; of other sorts of goods, 500 piculs. If more than this, the hong merchant gives to the chop-boat, for each additional picul, 6⅔ dollars.

In calculating the duties on export goods, 90 catties are considered 100. The woollens, long-ells, and camlets, are measured by the chang of 10 covids, without any deduction; and single articles are numbered.

Each ship may export, of silk, 88 piculs; the duty on each picul is 10⅓ dollars. Those ships that want more, avail themselves of the names of ships which have exported none; and the Custom-house connives at this, on receiving a fee of 14⅓ dollars per picul.

If, after entering the port, any persons tranship goods, it is considered that the one ship sold them to the other; and, in that case, the same duty has to be paid as if the goods were brought up to Canton. Provisions are not included in this regulation.

Ships' boats are not allowed to carry up or down any thing chargeable with duty.

Gold, silver, copper, and iron are prohibited to be exported; a few culinary utensils are the only exception. When it is desired to export treasure, the hong merchant must make an estimate of the value of the import and export cargoes; and whatever balance there may be in favour of the ship, may then be shipped off as treasure.

The whole amount of tutenague that is allowed to be exported by foreign ships, including the Portuguese at Macao, is 100,000 catties; but regulations of this sort may be easily evaded.

If more cargo be sent to a ship than she can take on board, and she wishes it to be shipped on board another, it must be done within 3 days after announcing the goods at the Custom-house, and a hong merchant must state it to government; if granted, a hong merchant and linguist are ordered to go to Whampoa and take an account of such goods; all which, with the expense of boats, runners, &c. at Whampoa, costs 40 or 50 dollars. — (*Companion to Anglo-Chinese Calendar for* 1832, pp. 99—101.)

Hong, or Security Merchants. — It may be supposed, perhaps, from the previous statements, that difficulties are occasionally experienced before a hong merchant can be prevailed upon to become security for a ship; but such is not the case. None of them has ever evinced any hesitation in this respect. The Americans, who have had as many as *forty* ships in one year at Canton, have never met with a refusal. The captain of a merchant ship may resort to any hong merchant he pleases, and, by way of making him some return for his becoming security, he generally buys from him 100*l.* or 200*l.* worth of goods. Individuals are, however, at perfect liberty to deal with any hong merchant, whether he has secured their ship or not, or with any *outside merchant;* that is, *with any Chinese merchant not belonging to the hong.* So that, though there are only 10 hong merchants at Canton, there is, notwithstanding, quite as extensive a choice of merchants with whom to deal in that city, as in either Liverpool or New York.

Duties. — It is very difficult, or rather, perhaps, impossible, to get any accurate account of the duties on goods exported and imported. They are almost always paid by the Chinese, though they must, of course, frequently be borne by the foreigner. Imported goods are weighed on board, and the duty paid by the purchaser; the duty on those exported is paid by the seller. The officers are notoriously corrupt; and it is a common practice to give them a douceur to under-rate the weight of the goods.

Foreign Merchants. — These consist of British, American, French, Dutch, Danish, Swedish, Spanish, and Portuguese, with Persee and Indian Mohammedan British subjects, and in 1832 amounted in number to above 110. The principal mercantile firms consisted of 8 British establishments, 7 American establishments, and 1 joint French and Dutch establishment. The Americans, French, and Dutch have each a consular agent; and though these functionaries be not publicly recognised by the Imperial government, all public business is conducted with them by the provincial government, through the agency of the hong merchants.

Newspapers and Public Accommodations. — At Canton, there are 2 English newspapers; viz. the "Canton Register," once a fortnight, with a Price Current; and the "Chinese Courier," once a week. There are 3 hotels, a billiard room, and 3 European shops or warehouses upon a large scale, with surgeons, apothecaries, watch-makers, and boat-builders.

General Rates of Agency Commission in China, agreed upon the 1st of November, 1831; in confirmation of those fixed by a meeting of merchants on the 1st of March, 1825.

1. On all sales or purchases of goods, except the following - - - 5 per cent.
2. On all sales or purchases of opium, cotton, cochineal, quicksilver, camphor-barroes, birds' nests, diamonds and other precious stones, or pearls, ships, and houses - 3 ditto.
3. On returns, if in goods - - 2½ ditto.
4. On ditto, if in treasure, bullion, or bills - 1 ditto.
5. On sale, purchase, or shipment of bullion 1 ditto.
6. On all goods, treasure, &c. consigned, and afterwards withdrawn or sent to auction, and on goods consigned for conditional delivery to others - ½ commission.
7. Ordering goods, or superintending the fulfilment of contracts, where no other commission is derived - - 2½ per cent.
8. On all advances of money for the purposes of trade, whether the goods are consigned to the agent or not, and where a commission of 5 per cent. is not charged 2½ ditto.
9. *Del credere*, or guaranteeing sales, when specially required - - - 2½ ditto.
10. Guaranteeing bills, bonds, or other engagements - - - - 2½ ditto.
11. Procuring freight, or advertising as agent of owners or commanders, on the amount of freight, whether the same passes through the hands of agents or not - - - - 5 ditto.
12. Receiving inward freight - - 1 ditto.
13. Ships' disbursements - - - 2½ ditto.
14. Chartering ships for other parties - 2½ ditto.
15. Effecting insurance or writing orders for insurance - - - - ½ ditto.
16. Settling insurance losses, total or partial, and on procuring return of premium - 1 ditto.
17. Effecting remittances by bills of the agent or otherwise, on purchasing or negociating bills of exchange - - 1 per cent.
18. Bills of exchange returned, noted, or protested - - - - 1 ditto.
19. Negociating loans on respondentia - 2 ditto.
20. Debts, where a process at law or arbitration is necessary, 2½ per cent.; and if recovered - - - - 5 ditto.
21. Collecting house-rent - - 2½ ditto.
22. Letters of credit granted for mercantile purposes - - - - 2½ ditto.
23. Acting for the estates of persons deceased, as executors, or administrators - 5 ditto.
24. The management of the estates of others, on the amount received - - 2½ ditto.
25. All cash receipts, not serving for the purchase of goods, and not otherwise specified above - - - 1 ditto.
26. Shroffing - - - - - ½ per mil.
27. Transhipping goods - - 1 per cent.
28. Upon all advances not punctually liquidated, the agent to have the option of charging a second commission as upon a fresh advance, provided the charge do not occur twice in the same year.
29. At the option of the agent, on the amount debited or credited within the year, including interest, and excepting only items on which a commission of 5 per cent. has been charged - - 1 ditto.

N. B. — This charge not to apply to paying over a balance due on an account made up to a particular period, unless where such balance is withdrawn without reasonable notice.

Port Charges. — All foreign vessels trading to Canton have to pay a measurement charge, varying according to the size of the vessel. For this purpose they are divided into 3 classes; viz.

		Taels.	
1st.	Vessels of 160 covids and upwards, pay - - -	7·874,755	per covid.
2d.	— above 120 and under 160 covids - - -	7·221,091	—
3d.	— of 120 covids and under - - - -	5·062,341	—

The dimensions are taken from the mizen to the foremast for the length, and between the gangways for the breadth; these two numbers multiplied together, and divided by 10, give the measurement in covids; and the quotient multiplied by the sum to be paid per covid, according to the vessel's size, gives the whole amount of measurement charge. Of this amount, only 10-11ths are, properly speaking, the measurement charge, the other 11th part being a fee of 10 per cent. on the Imperial dues.

Once a year the hoppo goes in person to superintend the measurement of vessels, on which occasion he goes on board a Company's ship. At other times an officer is sent to represent him.

The item next in importance to the measurement charge, is what is called the cumshaw or present, amounting, according to the reduced rate, to the sum of 1,600·683 taels, or 2,233 dollars, except on French, Austrian, and Prussian vessels, which are required to pay 80 taels more. This charge does not vary with the size of the ship; but is the same whether she carry 100 or 1,000 tons. The cumshaw is made up of the following sums: viz.

	Taels.
The entrepôt fees - - - - - - -	810·691
Port clearance fee - - - - - - -	480·420
Difference of scales, carriage to Pekin, &c., 6·75 per cent. on the above - -	87·150
Fee to the leang-taou, or superintendent of grain - - - -	116·424
For difference in the leang-taou's scales, 1·1 per cent. on the last named fee - -	1·281
For making it into sycee, 7 per cent. on the whole - - - -	104·717
Taels	1,600·683

Vessels loaded with rice are exempted from the entrepôt and leang-taou's fees, as also from the measurement charge; the latter by command of the reigning sovereign, in 1825; and the two former by previous orders of the local government. They are likewise exempted from certain small monthly and daily fees, so long as they are engaged in discharging the imported rice; but these charges commence as soon as the vessel begins to take in an export cargo; and the port clearance fee, with the double percentage of 6¾ and 7 per cent., is levied alike on all vessels. A vessel importing rice, in common with other vessels, is required either to receive an export cargo, or to pay about 300 dollars in default thereof.

Until the measurement charge, present, &c. have all been duly paid, no vessel can obtain her grand chop, or port clearance from the hoppo's office.

The other fixed charges besides the above are, 120 dollars for pilotage, in and out; fees paid to boats at second bar, and linguist's and comprador's fees. These last are intended to remunerate the expenses incurred on account of various daily and monthly charges, and other petty fees, besides several unauthorised sums exacted by the inferior local officers. Lists of these charges have been printed; but they vary so much in particular instances, that it is next to impossible to attain any certainty with respect to them.

The following is an example of a vessel of the 1st class subject to the highest rate of measurement charge, from which an idea of the amount of port charges on other vessels may be obtained: —

The Glenelg, 867 tons.

Length from mizen to foremast, covids - - - - -		83·1
Which multiplied by the breadth, from gangway to gangway - - -		26·0
And divided by 10, gives the dimensions - - - - -		216·06
Multiply that sum by - - - - -	Taels	7·874755

The measurement charge will be 1,701·418 taels, which, at 72 taels per 100 dollars, =

Spanish dollars - - - - - -	2,363
Cumshaw, or present, taels 1,600·683, at 72 per 100 = - - - -	2,223
Pilotage in and out - - - - - -	120
Bar boats and other small charges, about - - - -	30
Linguist's fees, about - - - - -	173
Comprador's fees, about - - - - -	50
Spanish dollars -	4,959

Vessels of the 2d class are charged in measurement from 1,200 to 1,600 dollars, and those of the 3d size from 600 to 800 dollars. The covid employed is equal to about 14⅓ inches.

The consequence of this mode of imposing the port duties is, that while they are very moderate on ships of 400 or 500 tons burden and upwards, they are very heavy on small ships: and hence small country ships frequently lie off Linting Flora, or Large Bay, till some of the large European ships come in sight, when they shift their cargoes on board the latter. They are commonly carried up to Canton for 1 per cent., by which means the duties and cumshaw are both saved. Chinese junks are exempted from the port dues.

Captain Coffin, the commander of an American ship of about 400 tons register trading to China, informed the late committee of the House of Commons, that the whole charges of every description falling upon his ship, in entering and clearing out from Canton, including measurement duty, cumshaw, pilotage, *victualling of the ship, and consul's fee*, amounted to between 7,000 and 8,000 dollars.—(*Companion to Anglo-Chinese Calendar*, pp. 101–103.; *First Report, Evidence*, p. 124.)

British Trade to Canton.—The trade between Great Britain and Canton has hitherto been entirely monopolised by the East India Company and its officers. Tea has always been by far the principal article of import; and it is mainly owing to the diffusion of the taste for this article, and its consumption by all ranks and orders of the community, that the trade has increased, notwithstanding the pernicious influence of the monopoly, to the extent that it has done. Besides tea, the Company formerly imported from China raw silk, silk piece goods, nankeens, mother-of-pearl shells, sandal wood, and a few other articles; but of late years the value of these articles has been quite inconsiderable.

The articles exported in the East India Company's ships from England to China consisted principally of woollens, copper, iron, and lead, glass, earthenware, and jewellery. Bullion used, formerly, to be largely exported; but recently the current has begun to set in the opposite direction, and bullion has been imported from China into England.

The invoice value of the Company's trade between China and England in the under-mentioned years has been—

Years.	Imports into China from England.			Exports from China to England.	Total Imports and Exports.
	Merchandise.	Treasure.	Total.	Merchandise.	
	£	£	£	£	£
1814–15	860,093	127,695	987,788	1,967,978	2,955,766
1815–16	926,920	1,127,518	2,054,433	2,231,366	4,285,799
1830–31	593,755	- -	593,755	1,861,980	2,455,735
1831–32	398,475*	- -	398,475	1,814,043	2,212,518

* *Mem.*—There is an apparent reduction in the value of exports of merchandise from England, arising from cargoes to the amount of 192,310*l.* of this season having been despatched after the 1st of May, 1832: allowing for the consignments so deferred, the imports into China from England would be augmented to 590,785*l.*, and the total of imports and exports to 2,404,828*l.*

East India House, 25th of April, 1833.

It appears from this account, that the merchandise exported from England to China during the years 1814–15 and 1815–16 amounted, at an average, to 893,506*l.* a year, exclusive of above 600,000*l.* a year in treasure; whereas, the exports of merchandise during the years 1830–31 and 1831–32 only amounted to 592,870*l.* a year, without any treasure! This extraordinary decline strikingly contrasts with the results of the free trade between Great Britain and India in the same years.

The following is a detailed Account of the Value of the Exports by the East India Company from Great Britain to China during the Five Years ending the 5th of January, 1828.

Species of Goods.	1824.	1825.	1826.	1827.	1828.
	£	£	£	£	£
Cotton manufactures - -	6,092	- -	167	11,995	20,752
Iron in bars (British) - -	13,482	15,502	17,214	36,067	24,350
Lead and shot - - -	8,793	22,430	39,221	41,918	32,154
Skins and furs - -	- -	33,516	31,151	—	—
Woollens - - -	674,585	532,221	652,047	756,968	413,422
All other articles - -	5,095	8,467	5,058	5,082	3,137
Total value of exports by the East India Company to China	708,047	612,139	744,856	852,030	493,815

Account of the registered Tonnage employed by the East India Company, clearing out annually from the Port of Canton for England, and of the Charges imposed by the Chinese on the Company's Ships in Canton during the undermentioned Years.

Years.	Cleared out for England.	Charges in Taels.	Rate per Tael.	Amount.
	Tonnage.		*s. d.*	£
1829	27,904	91,518	6 8	30,506
1830	29,037	92,967	—	38,989
1831	27,431	85,691	—	28,564
1832	27,852	95,184	—	31,728

The following is a detailed Account of the Quantities and Prices of the different Sorts of Teas exported from China in 1824-25 and 1828-29 by the East India Company, to Great Britain and British America.

Teas.	Exported to England.				Exported to the North American Colonies.			
	1824-1825.		1828-1829.		1824-1825.		1828-1829.	
	Quantity.	Average Prime Cost per lb.	Quantity.	Average Prime Cost per lb.	Quantity.	Average Prime Cost per lb.	Quantity.	Average Prime Cost per lb.
	Lbs.	*s. d.*	*Lbs.*	*s. d.*	*Lbs.*	*s. d.*	*Lbs.*	*s. d.*
Bohea	3,589,804	0 9·301	4,198,964	0 9·512	87,340	0 9·301	100,385	0 9·404
Congou	18,773,989	1 3·397	16,951,171	1 2·587	81,733	1 3·600	914,616	1 0·349
Campoi	214,153	1 6·427	507,881	1 7·461				
Souchong	269,456	1 10·501	183,498	1 10·870	51,312	1 3·067	19,768	1 9·599
Pekoe	33,973	1 11·569	-	-	3,539	2 0·594		
Twankay	3,791,405	1 4·460	5,471,633	1 3·810	579,120	1 3·831	146,753	1 6·796
Hyson skin	178,596	1 5·526	154,767	1 4·238	163,929	1 3·309	10,195	1 4·800
Young hyson	-	-	-	-	173,347	2 2·038		
Hyson	666,562	2 7·094	1,149,371	2 2·263	38,830	2 4·730	33,284	2 6·037
Gunpowder	-	-	-	-	-	-	4,953	2 6·511
	27,517,938		28,617,280		1,179,150		1,229,954	
					27,517,938		28,617,280	
Whole exports to Britain and America in the year 1824-25					28,697,088	In 1828-29	29,847,234	

In 1831-32 the total exports of tea by the East India Company were, to England, 30,203,098 lbs.; to North American colonies, 1,276,856 lbs.; being together 31,479,954 lbs. The aggregate prime cost (particulars not stated) was 1,907,648*l.* — (*N. B.* — For full details as to the tea trade, see art. TEA.)

The Company's business in China has been carried on by an establishment of public officers, consisting of 12 supercargoes and as many writers, promoted according to seniority; the former were paid by a commission chiefly derived from the monopoly sales of tea in England, and the latter by fixed salaries; both being supplied with lodging and a public table at the Company's expense. The 3 senior supercargoes, called the select committee, constituted the governing body, and had the whole control, not only of the Company's trade, but politically of all British interests in China. The entire charges of the Company's China establishment in 1828-29 were 138,526*l.*; being

	£
Twelve supercargoes	53,121
Twelve writers	10,226
Persons filling professional and other distinct offices	8,857
Rents and repairs of private apartments	16,782
Rent of factory, port charges, and other expenses	49,440

The Company's business was wholly conducted with the hong merchants, to the exclusion of the unlicensed or outside merchants, as they are called. The select committee divided amongst such of the solvent hong merchants as it pleased, the whole amount of the Company's export and import cargoes, and the business was done by a kind of barter; a system long banished among the free traders. The ships employed by the East India Company in the China trade were commonly from 1,000 to between 1,400 and 1,500 tons burden, the greater proportion being from 1,300 to 1,400 tons.

Trade between British India and China. — This trade is of decidedly more value and importance than that carried on between Great Britain and China; a result which seems mainly ascribable to the circumstance of its being principally in the hands of private individuals. The greatest article of export from India to Canton used to be cotton wool, principally from Bombay; but it is now far surpassed by opium, the imports of which into China have *sextupled* since 1816-17, and are worth, at present, about 13,500,000 dollars! This increase is the more extraordinary, seeing that opium is contraband in China; but the edicts of the emperors are as unable to prevent its introduction, as the proclamations of James and Charles were to hinder the use of tobacco in England. It is every where smuggled with ease and safety. The trade was at first principally conducted at Whampoa; but the exactions of the Chinese authorities drove it to Macao, where it increased, but whence it was subsequently driven by the exactions of the Portuguese. It is now principally carried on in the Bay of Lintin. Here the opium is kept on board receiving ships, of which there are frequently not less than 12 quietly lying at anchor, without danger or molestation of any sort.

The exports from China to India consist of sugar for Western India, tea, porcelain, nankeens, cassia, camphor, &c.; but the amount of these is not very considerable, and the returns are principally made in bills and bullion.

The following tables give very full details as to the trade between Great Britain and Canton, and the trade between the latter and British India, carried on under the British flag, during the years ended the 31st of March, 1831 and 1832.

Most part of the trade between India and Canton is conducted by the outside merchants. The hong merchants rarely adventure upon transactions in opium, of which this trade principally consists.

We have obtained from Canton, the following corrected account of the British trade at that city, in 1831-32. It corresponds pretty closely with the succeeding account, derived from the *Parl. Paper*, No. 229. Sess. 1833; but it is drawn up in a different form, and more in detail. Being anxious to afford all the information in our power with respect to this great emporium, we did not think we should be warranted in withholding it.

Corrected Statement of the British Trade at the Port of Canton for the Year ending the 31st of March, 1832.

IMPORTS.

					Taels.	Dollars.
On Account of the East India Company.						
Broad cloth	- bales	5,203	yards	543,132		693,793
Long-ells	—	7,000	pieces	140,000		756,000
Camlets	—	1,200	—	12,000		165,216
British cotton piece goods	—	1,200	—	30,000		89,131
British cotton twist	—	2,000	lbs.	480,000		105,759
British worsted yarn	—	50	—	6,250		4,171
British stuffs	- pieces	40	yards	1,200		389
Stamped long-ells	- bales	20	pieces	300		1,650
Union satinets	—	3	—	50		340
Dyed cotton piece goods	—	20	—	500		2,160
British iron	- tons	1,501	piculs	25,225		49,039
Lead	- pigs	24,643	—	28,561		91,393
Cotton, Bengal	- bales	18,320	—	41,220	Ts. 353,259	1,571,543
— Bombay	—	18,156	—	50,642	430,323	785,582
					2,656,125	5,687,674
On Private Account (per E. I. C. Ships).						
			T. m.		Taels.	
Cotton, Bengal	- piculs	63,024	at 8 6	per pic.	542,006	
— Madras	—	4,543	— 9 0	—	40,887	
— Bombay	—	283,639	— 7 7	—	2,184,020	2,766,913 5,812,935
			Dollars.		Dollars.	Dollars.
Opium, Patna and Benares	- chests	5,912	at 954	per chst.	5,640,048	
— Malwa	—	8,034	— 705	—	5,663,970	11,304,018
		13,946				
Sandal wood	- piculs	6,338	at 11¾	per picul		74,471
Pepper	—	15,771	— 7	—		110,397
Rattans	—	6,349	— 2¾	—		17,459
Betel nut	—	6,691	— 3	—		20,073
Putchuck	—	460	— 13	—		5,980
Olibanum	—	550	— 5	—		2,750
Broad cloth	- pieces	7,816	— 31	per piece		242,296
Camlets	—	2,621	— 27	—		70,767
Cotton piece goods	—	35,298	— 4½	—		159,016
Printed cotton piece goods	-	-	-	value		21,443
Cochineal	- piculs	46	at 314	per picul		14,444
Cotton yarn	—	1,252	— 42	—		52,584
Lead	—	1,393	— 5	—		6,965
Iron	—	13,482	— 3½	—		47,187
Tin	—	5,032	— 17	—		85,544
Tin plates	- boxes	2,525	— 9¾	per box		24,619
Steel	- piculs	2,101	— 7½	per picul		15,758
Quicksilver	—	178	— 70	—		12,460
Watches and clocks	-	-	-	value		11,785
Pearls, carnelians, diamonds	-	-	-	—		215,175
Ivory	- piculs	209	at 71	per picul		14,829
Elephants' teeth	—	159	— 76	—		12,084
Fish maws	—	1,075	— 60	—		64,500
Sharks' fins	—	3,010	— 24	—		72,240
Skins	- numb.	20,580	-	-		9,850
Saltpetre	- piculs	7,068	at 7	per picul		49,476
Rice	—	51,496	— 2½	—		128,740
Rose maloes and myrrh	-	-	-	value		7,212
Dollars	-	-	-	—		16,200
Sundries	-	-	-	—		120,996
						13,005,618

Importation of opium, 1831-32.	On English account.	Port. acct.	Total
Patna and Benares	5,912	700	6,612
Malwah, Bombay	4,000	577	4,577
Demaun	4,034	600	4,634
	13,946	1,877	15,823

Consump. of opium. 1831-32.	
Patna chts.	4,442
Benares	1,518
Malwah	8,265
	14,225

On hand.	
1st April, 1832.	
Patna chts.	2,186
Benares	409
Malwah	2,983
	5,578

20,530,227

EXPORTS.

					Taels.	Taels.	Dollars.
On Account of the East India Company.							
(a) Bohea	- piculs	54,367	-	-	861,347		
Congo	—	122,106	-	-	3,041,475		
Souchong	—	2,184	-	-	78,411		
Hyson	—	8,851	-	-	430,427		
Hyson skin	—	1,181	-	-	57,122		
Twankay	—	30,834	-	-	832,207	5,275,987	
N. American investment (supercargoes' commission included)					276,042		
Cape stores					20,290		
St. Helena stores					4,540		
Stores to Bengal, Madras, and Bombay					12,672	313,544	
						845,249	
(b) Bullion (charges of shipment included) 1,173,957 dollars					-	-	
Port charges on 24 ships (Bridgewater included)					89,131	199,471	
Unloading charges, Canton factory expenses, &c.					110,340		
						6,654,251	9,214,238
On Private Account.							
			T.				
(c) Congou	- piculs	6,069	at 21	per picul	127,449		
Souchong, pouchong	—	1,737	— 23	—	39,951		
Pekoe and orange pekoe	—	5,015	— 24	—	120,360	392,286	
Twankay	—	128	— 20	—	2,560		
Hyson and young hyson	—	2,139	— 44	—	94,116		
Gunpowder and Imperial	—	157	— 50	—	7,850		
(d) Black tea	—	1,641	-	-	42,446	153,201	
Green tea	—	7,085	-	-	110,755		
	—	23,971	-	-		545,487	757,625
			Dollars.		Dollars.	Dollars.	
Raw silk, Nankin	- piculs	6,283	at 368	per picul	2,312,144	2,654,688	
— Canton	—	2,168	— 158	—	342,544		
Nankeen cloth	- pcs.	315,570	— 51	per 100 pieces		160,941	
Silk piece goods	-	-	-	value		247,861	
Sugar candy	- piculs	32,279	at 7½	per picul		242,093	
Soft sugar	—	60,627	— 5¼	—		318,256	
Cassia lignea	—	7,096	— 7	—		49,672	
— buds	—	614	— 12	—		7,368	
Tortoiseshell and scraps	-	-	-	value		19,017	
Mother-o'-pearl shells	- piculs	2,235	at 17	per picul		37,995	
Vermilion	- boxes	825	— 37	per box		30,525	
Camphor	- piculs	279	— 24	per picul		6,696	
Rhubarb	—	763	— 54	—		41,202	
Alum	—	20,475	— 1¾	—		35,831	
Aniseed	—	477	— 10½	—		5,008	
China root, gallangal, and musk	-	-	-	value		10,799	
Floor mats	-	-	-	—		3,829	
Bamboos and whangees	-	-	-	—		7,476	
Pearls, false pearls, and glass beads	-	-	-	—		48,094	
China ware	-	-	-	—		23,179	
Paper, kethsols, lacquered ware, fire-works	-	-	-	—		83,840	
Cochineal	- piculs	144	at 209	per picul		30,096	
Cotton piece goods	-	-	-	value		14,250	
Cotton yarn	- piculs	1,532	at 48	per picul		73,536	
Saltpetre	—	1,868	— 7	—		13,076	
S. American copper	—	4,610	— 21	—		96,810	
Tobacco and segars	-	-	-	value		9,947	
Sundries	-	-	-	—		146,492	
Gold	-	-	-	—		51,190	
(e) Silver bullion (sycee, S. American silver, and dollars)						2,797,856	7,267,623
Disbursements on 20 regular ships, at 10,000 dollars; 4 chartered ships, at 4,000 dollars; 33 country ships, at 8,000 dollars; and 32 ships at Lintin, at 1,500 dollars each						-	528,000
Balance						-	2,768,741
							20,536,227

31st of March, 1832. E. E. T. J. Morris.

(a) Black tea 24,754,266 lbs.
Green tea - 5,448,800 —
To England per 23 ships. 30,203,066 —
( ) Dollars - 1,000,490 —
Sycee equal to dollars - 173,467 —
1,173,957 dollars.

(c) Black tea 1,709,466 lbs.
Green tea - 323,200 —
To England per 23 ships. 2,032,666 —

(d) Per country ships.

(e) To England, dollars - 1,154,623
Sycee, equal to dollars - 842,507
Calcutta, dollars - 171,542
Sycee, equal to dollars - 168,798
Bombay, dollars - 1,053,326
S. American silver and sycee equal to dollars - 524,217
Sundry places, dollars 1,577,543
77,000
Total export of bullion, sycee included. Dollars 3,971,813

N. B.—The sycee is calculated at 718, with 5 per cent. premium added.

I. Account of the Shipping engaged in the Trade carried on with China by the East India Company; and of the Quantity and Value of the various Articles imported by the Company and its Officers from England and India into China, and of those exported by them from China, in 1830-31 and 1831-32.

GOODS IMPORTED INTO CHINA.

Season.	No. of Ships cleared from China in the Season.	Tonnage.	Cotton.		Metals.		Quicksilver. Value.	Pepp. and Spices. Value.	Rattans. Value.	Betel Nut. Value.	Putchuck. Value.	Shark Fins, &c. Value.	Stock Fish. Value.	Drugs. Value.	Saltpetre. Value.	Sandal &othr. Wood. Value.	Woollens.		Cotton Goods.		Cotton Yarn. Value.	Diam. Pearls, Cornelians.	Watch and Clocks. Value.	Sundries.	Total Value of Goods.	Bullion.	Total Value of Imports.
			Piculs.	*Dollars.*	*Piculs.*	*Dollars.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Pieces.*	*Dollars.*	*Pieces.*	*Dollars.*	*Dollars.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dollars.*	*Dolls.*	*Dollars.*
1830-31	21	27,977	146,788	1,821,276	39,741	144,347	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	177,685	2,306,265	30,000	150,000	81,000	- -	- -	- -	4,502,888	- -	4,502,888
Privilege trade of the commanders and officers carried on in the Company's ships -			69,313	781,299	*Pcls.* 6,372 *Bxs.* 720	70,318	12,816	67,900	16,611	66,409	21,432	23,208	10,075	30,944	9,280	80,821	2,661	89,562	16,936	99,181	11,748	80,789	- -	42,680	1,515,073	55,000	1,570,073
																											6,072,961
1831-32	24	29,179	91,974	1,086,840	*Pcls.* 53,719	194,806	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	167,934	2,123,730	30,500	132,883	146,886	- -	- -	6,543	3,691,688	- -	3,691,688
Privilege trade of the commanders and officers carried on in the Company's ships -			69,723	781,863	— 19,893 *Bxs.* 2,525	148,318	12,460	74,284	11,690	18,849	2,808	- -	- -	14,444	5,257	27,941	5,766	174,546	- -	84,997	9,156	3,000	11,785	42,730	1,424,128	16,200	1,440,328
																											5,132,016

GOODS EXPORTED FROM CHINA.

Season.	Tea.		Raw Silk.		Nankeens.		Sugar and Sugar Candy.		Drugs. Value.	Silk Piece Goods.		Tin. Value.	Mother-o'-Pearl Shells.		Tortoise-shell, &c.	Mats. Value.	Bamboos and Whangees.		Sundries.	Total Value of Goods.	Bullion.	Total Value of Exports.
	Piculs.	*Dollars.*	*Piculs.*	*Dollars.*	*Pieces.*	*Dollars.*	*Piculs.*	*Dollars.*	*Dollars.*	*Pieces.*	*Dollars.*	*Dolls.*	*Piculs.*	*Dolls.*	*Dollars.*	*Dolls.*	*Number*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1830-31	228,574	7,964,485	- -	- -	- -	- -	96	1,233	- -	37	465	- -	- -	- -	- -	- -	- -	- -	563	7,966,746	1,962,136	9,928,882
Privilege trade of the commanders and officers carried on in the Company's ships -	15,052	523,104	23	7,820	2,500	1,450	- -	- -	- -	- -	38,322	12,096	1,134	22,680	4,125	14,558	584,400	10,124	312	634,591	692,964	1,327,555
																						11,256,437
1831-32	237,516	7,997,501	- -	- -	1,000	844	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1,706	8,000,051	1,179,119	9,179,170
Privilege trade of the commanders and officers carried on in the Company's ships -	15,245	544,842	1,221	449,328	- -	- -	- -	- -	4,254	- -	26,400	- -	737	12,529	5,767	3,829	- -	5,846	6,338	1,059,133	842,949	1,902,082
																						11,081,252

II. Account of the Shipping under the British Flag, engaged in the Private Trade between India and China, and of the Quantity and Value of the various Articles imported in these Ships into China, and exported in them from China, in 1830-31 and 1831-32.

GOODS IMPORTED INTO CHINA.

Season.	No. of Ships.	Tonnage.	Opium.		Cotton.		Metals.		Pepp. and Spices. Value.	Rattans. Value.	Betel Nut. Value.	Putchuck. Value.	Sharks' Fins, &c. Value.	Drugs. Value.	Sandal Wood, &c. Value.	Woollens. Value.	Cotton Goods. Value.	Cotton Yarn. Value.	Diam. Pearls, Cornelians.	Saltpetre. Value.	Ivory, &c. Value.	Rice.		Sundries.	Total Val. of Opium and Cotton.	Value of other Articles.	Total Value of Imports.
			Piculs.	*Dollars.*	*Piculs.*	*Dollars.*	*Piculs.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dolls.*	*Dollars.*	*Dolls.*	*Dolls.*	*Dollars.*	*Dolls.*	*Doll.*	*Dollars.*	*Dolls.*	*Dolls.*	*Piculs.*	*Dolls.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1830-31	58	29,127	243 *Chests.* 17,458	12,222,525	282,096	3,014,989	3,822 *Boxes* 160 *Piculs.*	46,230	63,667	10,161	17,516	960	118,887	10,918	63,479	81,010	- -	- -	30,680	53,034	6,020	24,322	60,805	76,688	15,237,514	640,055	15,877,569
1831-32	59	28,485	*Chests.* 13,946	11,304,018	281,483	3,061,072	2,115	31,755	36,113	5,769	1,224	3,172	136,740	9,962	46,530	138,517	89,462	43,428	212,475	44,219	26,913	51,496	128,740	88,116	14,365,090	1,043,135	15,408,225

GOODS EXPORTED FROM CHINA.

	Tutenague.		Raw Silk.		Nankeens.		Sugar and Sugar Candy.		Tea.		Cassia and Cassia Buds.	Cloves Value.	Drugs. Value.	Silk Piece Goods. Value.	Tortoise Shell. Value.	Moth-o'-Prl. Shell. Value.	False Pearls &c. Value.	China War. Value.	Writing Paper, &c. Value.	Copper.		Cotton Goods. Value.	Cotton Yarn. Value.	Sundries.	Total Value of Goods.	Bullion.	Total Value of Exports.
	Pcls.	*Dolls.*	*Pcls.*	*Dollars.*	*Pieces.*	*Dollars.*	*Piculs.*	*Dollars.*	*Pcls.*	*Dollars.*	*Dollars.*	*Dolls.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dolls.*	*Dollars.*	*Dolls.*	*Dollars.*	*Piculs.*	*Dolls.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1830-31	2,400	19,200	6,545	1,560,100	922,700	535,166	143,464	922,520	5,562	150,776	111,803	15,880	386,989	426,873	9,900	- -	55,643	34,076	150,620	3,007	78,052	8,500	- -	155,956	4,651,854	3,997,432	8,649,286
1831-32	- -	- -	7,230	2,205,360	315,570	160,941	92,906	560,349	8,726	212,785	57,040	- -	155,903	221,161	15,250	23,466	48,094	23,179	83,840	4,610	96,810	14,250	73,536	164,807	4,117,069	2,006,097	6,123,166

This statement includes the trade carried on between China and the Philippine Islands and New South Wales, both by private India ships under the British flag, and by other vessels under that flag.

TOTAL BRITISH TRADE WITH CHINA.

Trade by the Company and their Officers.				Trade by Individuals.			Total Value of the British Trade with China.
Season.	Imports.	Exports.	Total.	Imports.	Exports.	Total.	
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1830-31	6,072,961	11,256,437	17,329,398	15,877,569	8,649,286	24,526,855	41,856,253
1831-32	6,132,016	11,081,252	16,213,268	15,408,225	6,123,166	21,531,391	37,744,659

East India House, 25th of April, 1833.

Opium is sold by the resident European or American agents; and, on an order from these for its delivery, it is handed over to the smugglers, who come alongside the ships at night to receive it; putting the naval force, Custom-house establishment, and police of the empire at defiance. We subjoin an

Account of the Imports of the different Sorts of Opium into China from 1816-17 to 1830-31, both inclusive.

Seasons.	Patna and Benares.			Malwa.			Total.		Turkey.		
	No. of Chests.	Aver. Price.	Total Value.	No. of Chests.	Aver. Price.	Total Value.	No. of Chests.	Value.	No. of Chests.	Aver. Price.	Total Value.
		Dollars.	*Dollars.*		*Dollars.*	*Dollars.*		*Dollars.*		*Dollars.*	*Dollars.*
1816-1817	2,610	1,200	3,132,000	600	875	525,000	3,210	3,657,000	750	300	375,000
1817-1818	2,530	1,265	3,200,450	1,150	612	703,800	3,680	3,904,250	1,000	610	610,000
1818-1819	3,050	1,000	3,050,000	1,530	725	1,109,250	4,580	4,159,250	700	625	437,500
1819-1820	2,970	1,235	3,667,950	1,620	1,175	1,915,250	4,600	5,583,200	200	975	195,000
1820-1821	3,050	1,900	5,795,000	1,720	1,515	2,605,800	4,770	8,400,800	30	1,525	45,750
1821-1822	2,910	2,075	6,038,250	1,718	1,325	2,276,350	4,628	8,314,600	500	1,025	512,500
1822-1823	1,822	1,552	2,828,930	4,000	1,290	5,160,000	5,822	7,988,930	226	1,270	287,080
1823-1824	2,910	1,600	4,656,000	4,172	925	3,859,100	7,082	8,515,100			
1824-1825	2,655	1,175	3,119,625	6,000	750	4,500,000	8,655	7,619,625			
1825-1826	3,442	913	3,141,755	6,179	723	4,466,450	9,621	7,608,205	No account has been kept of Turkey opium during these years.		
1826-1827	3,661	1,002	3,668,565	6,308	942	5,941,520	9,969	9,610,085			
1827-1828	5,114	998	5,105,073	4,361	1,204	5,251,760	9,475	10,356,833			
1828-1829	5,961	940	5,604,235	7,171	966	6,928,880	13,132	12,533,115			
1829-1830	7,143	858	5,149,577	6,837	861	5,907,580	14,000	12,057,157			
1830-1831	6,660	869	5,789,794	12,100	587	7,110,227	18,760	12,900,031			
Total -	56,488	- -	64,997,204	65,496	- -	58,260,977	121,984	123,208,181	3,406	- -	2,462,770

In 1831-32, the total import of opium into China was 21,062 chests, of the value of 13,917,426 dollars. The stock on hand, 1st of January, 1833, was 5,110 chests. Nine tenths of the opium trade is in the hands of the British Indians.

The following tables exhibit the general results of our trade with China from 1814-15 downwards: —

Account of the Annual Value of the Trade between the Subjects of Great Britain and China, from 1814-15 to 1830-31, both inclusive, distinguishing the Trade of the East India Company from that of Individuals.

Years.	Value of Exports and Imports between India and China.		Total.	Value of Imports and Exports between England and China on Account of the Company.	Total Value of the British Trade with China.	Value of Trade of Individuals with China.	Value of Trade of the Company with China.
	On Account of Individuals.	On Account of the Company.					
	£	£	£	£	£	£	£
1814-15	2,573,940	221,589	2,795,529	2,955,776	5,751,295	2,573,940	3,177,355
1815-16	2,379,026	356,470	2,735,496	4,285,799	7,021,295	2,379,026	4,642,269
1816-17	3,034,031	230,083	3,264,114	2,962,062	6,226,176	3,034,031	3,192,145
1817-18	3,327,770	710,100	4,037,870	2,183,022	6,220,892	3,327,770	2,893,122
1818-19	3,516,332	364,543	3,880,875	2,065,389	5,946,264	3,516,332	2,429,932
1819-20	2,190,137	334,807	2,524,944	3,092,456	5,617,400	2,190,137	3,427,263
1820-21	3,328,039	602,994	3,931,033	2,935,904	6,866,937	3,328,039	3,538,898
1821-22	3,011,010	469,657	3,480,667	2,700,425	6,181,092	3,011,010	3,170,082
1822-23	3,047,792	189,304	3,237,096	2,642,845	5,879,941	3,047,792	2,832,149
1823-24	2,734,509	721,425	3,455,934	2,815,048	6,270,982	2,734,509	3,536,473
1824-25	2,832,191	326,591	3,158,782	2,600,060	5,758,842	2,832,191	2,926,651
1825-26	3,943,729	291,603	4,235,332	2,687,013	6,922,345	3,943,729	2,978,616
1826-27	3,764,404	362,405	4,126,809	3,176,901	7,303,710	3,764,404	3,539,306
1827-28	4,951,678	376,247	5,327,925	2,836,397	8,164,322	4,951,678	3,212,644
1828-29	3,795,966	433,388	4,229,354	2,517,726	6,747,080	3,795,966	2,951,114
1829-30	- -	308,767	- -	2,490,947	- -	- -	2,799,714
1830-31	- -	363,741	- -	2,983,487	- -	- -	3,347,228

The statements from India for 1829-1830 and 1830-1831 are not yet received.

Account of the Quantity of each Article of Chinese Produce imported into the United Kingdom, in each Year, from 1793 to 1831, both inclusive.

Years.	Tea.	Silk.	Nankeen Cloths.	Miscellaneous Articles of Chinese Produce.	Years.	Tea.	Silk.	Nankeen Cloths.	Miscellaneous Articles of Chinese Produce.
	Lbs.	*Lbs.*	*Pieces.*	*Value L.*		*Lbs.*	*Lbs.*	*Pieces.*	*Value L.*
1793	16,067,331	171,998	77,898	26,692	1813	The records of this year were destroyed by fire.			
1794	23,710,774	99,671	374,398	19,809	1814	26,110,550	150,629	783,253	29,054
1795	27,208,003	158,225	146,365	19,186	1815	25,602,214	216,129	896,797	19,474
1796	6,184,628	12,968	48,642	23,062	1816	36,234,380	88,987	396,453	29,050
1797	16,235,125	78,520	77,338	23,252	1817	31,467,073	103,367	564,226	35,703
1798	44,873,112	136,196	257,473	25,054	1818	20,065,728	146,878	409,349	19,510
1799	15,090,080	63,604	184,490	17,131	1819	23,750,413	141,325	523,852	55,595
1800	15,165,368	92,385	170,917	25,960	1820	30,147,994	271,115	969,746	70,827
1801	29,804,739	131,335	366,851	29,293	1821	30,731,105	275,110	569,062	39,654
1802	27,356,502	75,588	274,921	19,054	1822	27,362,766	222,673	287,431	23,419
1803	30,843,134	74,538	232,894	23,134	1823	29,046,885	392,717	412,076	73,935
1804	26,680,784	90,362	264,407	26,184	1824	31,681,977	293,014	1,010,494	69,618
1805	28,538,825	76,359	252,207	15,198	1825	29,345,699	142,676	392,998	75,963
1806	22,155,557	18,607	376,234	10,504	1826	29,840,401	405,185	431,520	124,569
1807	12,599,236	55,277	72,135	11,474	1827	39,746,147	208,287	99,698	97,752
1808	35,747,224	117,855	484,647	17,617	1828	32,678,546	288,916	529,602	95,412
1809	21,717,310	90,603	287,720	14,268	1829	30,544,382	606,444	919,255	103,077
1810	19,791,356	54,376	305,009	14,890	1830	31,897,546	456,991	593,339	94,131
1811	21,231,849	81,397	316,616	9,630	1831	31,648,922	476,692	857,171	89,796
1812	28,318,153	86,197	503,276	12,929					

Account of the Number of Ships, and of their Tonnage, that entered Inwards in the United Kingdom from China in each Year, from 1793-94 to 1831-32, both inclusive.

Years.	Ships.	Tons.	Years.	Ships.	Tons.	Years.	Ships.	Tons.
1793-4	18	17,436	1806-7	9	11,083	1819-20	24	28,451
1794-5	21	20,234	1807-8	24	31,797	1820-21	23	28,692
1795-6	5	4,856	1808-9	15	19,290	1821-22	19	24,975
1796-7	17	14,354	1809-10	13	17,272	1822-23	19	26,013
1797-8	32	37,682	1810-11	15	18,984	1823-24	21	28,237
1798-9	13	12,731	1811-12	19	25,324	1824-25	19	25,970
1799-1800	10	12,840	1812-13	21	27,227	1825-26	23	27,894
1800-1	22	27,407	1813-14	19	24,466	1826-27	29	35,969
1801-2	21	24,531	1814-15	21	24,890	1827-28	25	29,833
1802-3	24	25,994	1815-16	26	33,075	1828-29	20	27,904
1803-4	17	22,279	1816-17	27	28,032	1829-30	23	29,111
1804-5	18	24,191	1817-18	15	20,000	1830-31	21	27,879
1805-6	15	19,100	1818-19	16	21,210	1831-32	22	27,940

New Regulations as to the British Trade with Canton. — Notwithstanding the opposition made by the East India Company, the trade to China has, at length, been thrown open to all classes of his Majesty's subjects; and British merchants may now freely trade to all places, accessible to Europeans, to the east of the Straits of Malacca. We congratulate our readers on the opening of this new and almost boundless field for the display of commercial enterprise. It is not, indeed, a channel in which it would be prudent for any one not possessed of adequate capital and the necessary skill to embark. But the example of the Americans, and of the free traders from India to China, shows conclusively that there is nothing in the nature of the trade to prevent its being as successfully prosecuted by individuals as that to any other country. We are satisfied that the intercourse between the Eastern and Western worlds is as yet quite inconsiderable, compared with what it is destined to become, now that the incubus of monopoly is removed. The opening of the ports of Hindostan, in 1814, has more than trebled our trade with India; and a similar result may be fairly anticipated in the case of China. In making these remarks, we are very far from meaning to throw any reflections on the conduct of the East India Company. It is due to its directors to state that they have always evinced the greatest anxiety to extend the trade with India and China, and to carry it on in the most economical manner. But it was not in the nature of things that they could succeed. The affairs of all great associations must necessarily be managed according to a system of routine, by the intervention of salaried officers. And it were an insult to common sense to suppose that such persons should display the same enterprise, or that they should manage the affairs intrusted to their care with the same watchful attention to details, and the same regard to economy, as private individuals trading on their own account, and reaping all the advantage of successful, as they must abide all the loss resulting from unsuccessful, adventures. Speculations may be eminently profitable to the latter, that would have been highly injurious had they been attempted by the former. It is true that the too great ardour of competitors may occasionally render even the best business unprofitable to those engaged in it; but if this be an evil, it is one that is inseparable from all commercial undertakings; and there is no reason whatever for supposing that it will be oftener or more severely felt in the trade to Canton, than in that to Petersburgh or any other port.

In conducting an intercourse with the Chinese, — a people whose institutions and habits differ so very widely from those of Europeans, — it is essential that due circumspection should be used, and that nothing should be done by any one to give them reasonable grounds of offence. The experience of the Americans, and of the other foreigners, besides the English, resorting to Canton, shows, we think, pretty clearly, that the amount of danger from the circumstances just adverted to is not very considerable. It is right, however, as already stated, that effectual measures should be taken for preventing any interruption to the trade from the ignorance or misconduct of any individual. To accomplish this object, there are provisions in the act opening the trade, enabling his Majesty to appoint superintendents of the trade to China, who are to be authorised to issue regulations in regard to it, to which all individuals engaged therein are to be obliged to submit. These regulations will, no doubt, be framed so as to prevent any just offence being given to the natives, without unnecessarily interfering with the free action of the traders. There is one very questionable clause in the act — that which authorises the imposition of a tonnage duty on the shipping employed in the trade, for defraying the cost of the establishments in China. We subjoin a full abstract of this important statute.

ACT 3 & 4 WILL. 4. C. 93. FOR REGULATING THE TRADE TO CHINA AND INDIA.

Repeal of the Act 4 *Geo.* 4. *c.* 80. *&c.* — Having stated that it is expedient that the trade to China should be opened to all classes of his Majesty's subjects, it is enacted, that the act 4 Geo. 4. c. 80. should be repealed, except such parts thereof as relate to Asiatic sailors, Lascars, being natives of the territories under the government of the East India Company; and except also as to such voyages and adventures as shall have been actually commenced under the authority of the said act; and as to any suits and proceedings which may have been commenced, and shall be depending on the 22d day of April, 1834; and from and after the said 22d day of April, 1834, the enactments herein-after contained shall come into operation. — § 1.

Repeal of Prohibitions upon the Importation of Tea and Goods from China, imposed by 6 *Geo.* 4. *c.* 107. *and* 6 *Geo.* 4. *c.* 114. — So much of the act 6 Geo. 4. c. 107., intituled "An Act for the general Regulation of the Customs," as prohibits the importation of tea, unless from the place of its growth, and by the East India Company, and into the port of London; and also so much of the said act as prohibits the importation into the United Kingdom of goods from China, unless by the East India Company, and into the port of London; and also so much of the said act as requires that the manifests of ships departing from places in China shall be authenticated by the chief supercargo of the East India Company; and also that so much of the act 6 Geo. 4. c. 114., intituled "An Act to regulate the Trade of the British Possessions abroad," as prohibits the importation of tea into any of the British possessions in America, and into the island of Mauritius, except from the United Kingdom, or from some other British possessions in America, and unless by the East India Company, or with their licence; shall be, from and after the 22d day of April, 1834, repealed; and thenceforth (notwithstanding any provision, enactment, &c. to the contrary) it shall be lawful for any of his Majesty's subjects to carry on trade with any countries beyond the Cape of Good Hope to the Streights of Magellan. — § 2.

List of Persons on board any Ship arriving in India to be delivered to Officers of Customs. — The person in command of any ship or vessel arriving at any place in the possession of or under the government of the said Company shall make out, sign, and deliver to the principal officer of the customs, or other person lawfully authorised, a true and perfect list, specifying the names, capacities, and descriptions of all persons who shall have been on board such ship or vessel at the time of its arrival; and if any person having the command of such ship or vessel shall not make out, sign, and deliver such list, he shall forfeit 100*l.*, half to such person or persons as shall inform or sue for the same, and the other half to the Company; and if the Company shall inform or sue for the same, then the whole penalty shall belong to the Company. — § 3.

Penalties how recoverable. — The penalties and forfeitures aforesaid to be recoverable by action of debt, bill, &c. in any court of record in the United Kingdom, or in India, or elsewhere, to which jurisdiction shall be afterwards given. — § 4.

Three Superintendents of the China Trade to be appointed. — Whereas it is expedient for the objects of trade and amicable intercourse with the dominions of the emperor of China, that provision be made for the establishment of a British authority in them; be it enacted, that it shall be lawful for his Majesty, by any commission or warrant under his royal sign manual, to appoint 3 superintendents of the trade of his Majesty's subjects to and from the said dominions, for the purpose of protecting and promoting such trade, and to appoint such officers to assist them in the execution of their duties, and to grant such salaries to such superintendents and officers, as his Majesty shall from time to time deem expedient. — § 5.

His Majesty may issue Orders and Commissions to have force in China. — It shall be lawful for his Majesty, by any such order or commission as to his Majesty in council shall appear expedient and salutary, to give to the said superintendents, or any of them, powers and authorities over and in respect of the trade and commerce of his Majesty's subjects within any part of the said dominions; and to issue directions and regulations touching the said trade and commerce, and for the government of his Majesty's subjects within the said dominions; and to impose penalties, forfeitures, or imprisonments, for the breach of any such directions or regulations, to be enforced in such manner as in the said order shall be specified; and to create a court of justice with criminal and admiralty jurisdiction for the trial of offences committed by his Majesty's subjects within the said dominions, and the ports and havens thereof, and on the high seas within 100 miles of the coast of China; and to appoint one of the superintendents herein-before mentioned to be the officer to hold such court, and other officers for executing the process thereof; and to grant such salaries to such officers as may appear reasonable. — § 6.

Superintendents, &c. not to accept Gifts. — No superintendent or commissioner appointed under this act shall accept in regard to the discharge of his duties any gift, gratuity, or reward, other than the salary granted to him as aforesaid, or be engaged in any trade or traffic for his own benefit, or for the benefit of any other person or persons. — § 7.

A Tonnage Duty to be imposed, to defray the Expense of Establishments in China. — It shall be lawful for his Majesty in council, by any order or orders to be issued from time to time, to impose, and to empower such persons as his Majesty in council shall think fit to collect and levy from or on account of any ship or vessel belonging to any of the subjects of his Majesty entering any port or place where the said superintendents or any of them shall be stationed, such duty on tonnage and goods as shall from time to time be specified in such order or orders, not exceeding in respect of tonnage the sum of *5s.* for every ton, and not exceeding in respect of goods the sum of *10s.* for every *100l.* of the value of the same, the fund arising from the collection of which duties shall be appropriated, in such manner as his Majesty shall direct, towards defraying the expenses of the establishments by this act authorised within the said dominions: provided always, that every order in council issued by authority of this act shall be published in the London Gazette; and that every such order in council, and the amount of expense incurred, and of duties raised under this act, shall be annually laid before both houses of parliament. — § 8.

Limitation of Actions. — The next and last clause contains the usual provisions as to the limitation of actions, &c. — § 9.

American Trade with China. — The American intercourse with China commenced shortly after the termination of the revolutionary war, and speedily became one of the most valuable branches of the trade of the United States.

We have obtained from the United States the subjoined account of the American trade at Canton in 1831–32. This interesting document exhibits in detail the quantity and value of each article imported by the Americans into Canton, and of those exported; the latter are divided according to their destination.

Statement of the American Import and Export Trade at the Port of Canton, during the Season of 1831-32.

Imports.

		Dollars.
Bills of exchange		2,480,871 00
Spanish dollars		667,252·00
	Dol.	
10,295 piculs Quicksilver, at	70	720,650·00
24,892 - Lead	4½	112,014·00
4,481 - Iron	2¾	12,332·75
1,949 - Crude ginseng	54	105,246·00
799 - Clarified do.	72½	54,302·50
376 - Cochineal	200	75,200·00
4,652 - Copper	20½	95,366·00
1,100 - Sandal wood	5	7,000·00
10,761 - Rice & paddy	2	21,342·00
402 - Opium	550	221,100·00
	Taels.	
170 - Cotton	8	1,888·88
	Dol.	
2,510 - Spelter	4¾	11,922·50
2,286 - Cotton yarn	37	84,582·00
601 - Tobacco	10	6,010·00
770 - Pearl shells	5	3,850·00
1,072 - Tin	16	17,152·00
900 boxes Tin plates	7	6,300·00
3,418 pieces Broad cloths	30	102,540·00
820 - Camlets	23	18,860·00
2,880 - Long-ells	8	23,040·00
56,178 - Long cloths	4¼	238,756·50
19,802 - Chintz	4	79,208·00
6,492 - Cambrics	2	12,984·00
10,334 - Domestics	3	31,002·00
24,566 dozen Handkerchiefs	1½	36,849·00
11,722 Land otter skins	6½	76,193·00
1,591 Sea otter skins	42	66,822·00
9,369 Fox skins	1¼	11,240·00
1,868 Beaver skins	1½	12,339 00
71 Seal skins	2	142·00
180,000 Cigars	12	2,160·00
Wine, value		2,300·00
Watches		10,000·00
Glass		2,000·00
Morocco skins		500·00
		2,283,684·53
Sundry merchandise		100,000·00
Balance		467,924·41
Dollars		5,999,731·97

Exports.

To the United States.

Chests.	*Piculs.*	*Taels.*	*Taels.*	*Dollars.*
12,182 Bohea	7,309·20 at	11	80,401 2 0	
37,151 Souchong	24,147·85 -	18	434,661 5 0	
3,212 Twankay	1,991·40 -	24	47,794 5 5	
17,671 Hyson skin	8,835·50 -	24	212,052 0 0	
40,065 Young hyson	26,042·25 -	44	1,145,859 0 0	
9,346 Hyson	4,486·08 -	46	206,359 6 8	
4,514 Imperial	5,159·80 -	54	170,629 2 0	
4,603 Gunpowder	3,682·40 -	58	213,579 2 0	
2,245 Pouchong	1,122·50 -	20	22,450 0 0	
517 Pekoe	258·50 -	50	12,925 0 0	
200 Congou	120·00 -	16	1,920 0 0	
131,706	81,155·52		2,548,631 1 4	3,539,765·17

	Dol.	*Dollars.*
34,822 Embroided crape shawls, at	3½	121,877·00
68,063 Damask do. do.	1¾	119,110·00
8,507 pieces Crape	7	66,549·00
23,157 - Handkerchiefs	6	138,954·00
22,292 - Senshaws	9½	211,774·00
28,986 - Black sarsnets	8	231,968·00
8,459 - White do	8	67,672·00
7,998 - Levantines	9	71,982·00
5,645 - Do. satin	12½	70,562·00
6,963 - Satins	13	90,545·00
276 - Satin damask	18	4,968 00
3,500 - Camlets	9	31,500·00
10,677 - White pongees	11	117,447·00
33,901 - Sutchnen do.	4½	152,554·50
4,417 - Mixed lutestrings	7	30,919·00
350 piculs Sewings	400	140,000·00
109 - Raw silk	370	40,330·00
		1,708,719·00
54,700 pieces Blue Nankeens	70	38,290·00
67,585 - Company's Nankeens	50	33,792·50
3,541 piculs Cassia	10½	37,180·00
38 - Cassia oil	130	4,940·00
25 - Camphor	14	600·00
584 - Rhubarb	30	17,520·00
1,101 - Sweetmeats	15	16,515·00
2,318 - Sugar { 2,000	4	10,514·00
2,318 - Sugar { 318	8	10,514·00
15,915 boxes Crackers	1½	23,872·50
313 - Vermilion	42	13,146·00
2,844 rolls Matting	5	14,220·00
65,200 gross Pearl buttons	17	11,084·00
China ware and grass cloth, in value		7,550·00
Sundry merchandise, in value		100,000 00
		329,854·50

To Europe.

Chests.	*Piculs.*
300 Bohea	210·00
720 Souchong	468·00
1,550 Congou	1,007·50
413 Campoy	268·45
125 Twankay	77·50
321 Hyson skin	160·50
354 Young hyson	170·11
216 Hyson	103·68
74 Imperial	51·80
72 Gunpowder	57·60
294 Pekoe	145·00
4,485	2,720·13

30 piculs Sweetmeats.
150 - Cassia.
5 - Vermilion.
The above investments to Europe, per invoices — 150,000·00

To South America and the Sandwich Islands.

Brig Chilian's cargo, value	40,000·00
- Bogeta's	70,000·00
- Diana's	40,000·00
	150,000·00

	Dol.	
Disbursements of 22 vessels, at	6,000	132,000·00
8 Rice vessels	1,000	8,000·00
5 Lintin	400	2,000·00
		142,000·00
Dollars		5,999,731·97

It results from this statement, that the American trade at Canton, in 1831–32, amounted to about 12,000,000 dollars, being equal to *three fourths* of that carried on at Canton during the same year on account of the East India Company. It is of importance to observe that the dealings of the Americans are principally carried on with the outside merchants. Captain Coffin, and other American gentlemen examined by the late committee of the House of Commons on the China trade, speak in strong terms of the facility and expedition with which business may be conducted at Canton.

The following statement shows the amount of the American trade from 1829-30 to 1831-32, according to the returns furnished to parliament by the East India Company.

An Account of the Value of Imports into, and Exports from, the Port of Canton by the Subjects of the United States of America, in the Years 1829-30 to 1831-32.

Years.	Imports into China.			Exports from China.	Total Value Imports and Exports.
	Sale Value Merchandise.	Dollars.	Total Value.	Total Value.	
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1829-30	2,793,988	1,123,644	3,917,632	4,108,611	8,026,243
1830-31	2,871,320	183,655	3,054,975	4,263,551	7,318,526
1831-32	2,383,685	667,252	3,050,937	5,857,732	8,908,669

Bills of exchange negotiated by the Americans in 1829-30, 393,650 dollars; ditto in 1830-31, 1,168,500 dollars; ditto in 1831-32, 2,480,871 dollars. — (*Parl. Paper*, No. 229. Sess. 1833, p. 13.)

Trade of Portuguese, Spaniards, &c. at Canton. — Respecting the extent of the Portuguese, Spanish, French, Swedish, Danish, and Dutch trades, we have no data to lay before the reader on which reliance could be placed; but they are inconsiderable and fluctuating, compared with the branches already described. The Dutch trade is probably the largest; but even with the assistance of protecting duties in Holland, the Dutch are unable to withstand the enterprise and activity of the Americans. The Portuguese trade, particularly that with the possessions of Portugal on the continent of India, was considerable during the war, but has since greatly declined. A nation of more spirit than the Portuguese would, with the advantage they enjoy in the possession of the convenient station of Macao, be able to carry on the Chinese trade with superior success. There is a considerable intercourse, carried on in Spanish ships, between Canton and Manilla. The Philippine Islands afford many commodities in demand in the Chinese markets; and the Spaniards are the only European people allowed openly to trade with the busy and commercial port of Amoy, in the province of Fokien; unfortunately, however, they are deficient in the skill and enterprise required fully to avail themselves of these advantages. It appears from the official accounts, published by the French government, that in 1831, only 2 ships, of the burden of 585 tons, cleared out from French ports for China. This, we believe, is principally to be ascribed to the trifling extent to which the great article of Chinese produce, tea, is consumed in France.

Trade with the Indian Islands, &c. — In his evidence before the select committee of the House of Commons, Mr. Crawfurd gave the following instructive details with respect to the native foreign trade of China: —

Native Foreign Trade of China. — "The principal part of the junk trade is carried on by the four contiguous provinces of Canton, Fokien, Chekiang, and Kiannan.

"No foreign trade is permitted with the island of Formosa; and I have no means of describing the extent of the traffic which may be conducted between China, Corea, and the Lecchew Islands. The following are the countries with which China carries on a trade in junks: viz. Japan, the Philippines, the Soo-loo Islands, Celebes, the Moluccas, Borneo, Java, Sumatra, Singapore, Rhio, the east coast of the Malayan peninsula, Siam, Cochin China, Cambodia, and Tonquin. The ports of China at which this trade is conducted are Canton, Tchao-tcheou, Nomhong, Hoeitcheon, Suheng, Kongmoon, Chang-lim, and Hainan, in the province of Canton; Amoy and Chinchew, in the province of Fokien; Ningpo and Siang-hai, in the province of Chekiang; and Soutcheon, in the province of Kiannan. The following may be looked upon as an approximation to the number of junks carrying on trade with the different places already enumerated; viz.

	Junks.		Junks.
Japan 10 junks, two voyages -	20	Singapore 8, Rhio 1 -	9
Philippine Islands - - -	13	East coast of Malay peninsula -	6
Soo-loo Islands - - -	4	Siam - - - -	89
Borneo 13, Celebes 2 - - -	15	Cochin China - - -	20
Java - - - -	7	Cambodia - - -	9
Sumatra - - - -	10	Tonquin - - -	20
			— Total 222.

"This statement does not include a great number of small junks belonging to the island of Hainan, which carry on trade with Tonquin, Cochin China, Cambodia, Siam, and Singapore. Those for Siam amount yearly to about 50, and for the Cochin Chinese dominions to about 43; these alone would bring the total number of vessels carrying on a direct trade between China and foreign countries to 307. The trade with Japan is confined to the port of Ningpo, in Chekiang, and expressly limited to 10 vessels; but as the distance from Nangasaki is a voyage of no more than 4 days, it is performed twice a year.

"With the exception of this branch of trade, the foreign intercourse of the two provinces Chekiang and Kiannan, which are famous for the production of raw silk, teas, and nankeens, is confined to the Philippine Islands, Tonquin, Cochin China, Cambodia, and Siam; and none of this class of vessels, that I am aware of, have ever found their way to the western parts of the Indian Archipelago. The number of these trading with Siam is 24, all of considerable size; those trading with the Cochin Chinese dominions 16, also of considerable size; and those trading with the Philippines 5; making in all 45, of which the average burden does not fall short of 17,000 tons. I am the more particular in describing this branch of the Chinese commerce, as we do not ourselves at present partake of it, and as we possess no direct means of obtaining information in regard to it. All the junks carrying on this trade with Siam are owned in the latter country and not in China; and I am not sure how far it may not also be so in the other cases. I do not doubt but that a similar commerce will, in the event of a free trade, extend to Singapore; and that through this channel may eventually be obtained the green teas of Kiannan, and the raw silks of Chekiang.

"Besides the junks now described, there is another numerous class, which may be denominated the colonial shipping of the Chinese. Wherever the Chinese are settled in any numbers, junks of this description are to be found; such as in Java, Sumatra, the Straits of Malacca, &c.; but the largest commerce of this description is conducted from the Cochin Chinese dominions, especially from Siam, where the number was estimated to me at 200. Several junks of this description from the latter country come annually to Singapore, of which the burden is not less than from 300 to 400 tons

"The junks which trade between China and the adjacent countries are some of them owned and built in China; but a considerable number also in the latter countries, particularly in Siam and Cochin China. Of those carrying on the Siamese trade, indeed, no less than 81 out of the 89, of considerable size, were represented to me as being built and owned in Siam. The small junks, however, carrying on the trade of Hainan, are all built and owned in China.

"The junks, whether colonial or trading direct with China, vary in burden from 2,000 piculs to 15,000, or carry dead weight from 120 to 900 tons. Of those of the last size I have only seen 3 or 4, and these were at Siam, and the same which were commonly employed in carrying a mission and tribute yearly from Siam

to Canton. Of the whole of the large class of junks, I should think the average burden will not be overrated at 300 tons each, which would make the total tonnage employed in the native foreign trade of China between 60,000 and 70,000 tons, exclusive of the small junks of Hainan, which, estimated at 150 tons each, would make in all about 80,000 tons.

"The junks built in China are usually constructed of fir and other inferior woods. When they arrive in Cambodia, Siam, and the Malayan islands, they commonly furnish themselves with masts, rudders, and wooden anchors, of the superior timber of these countries. The junks built in Siam are a superior class of vessels, the planks and upper works being invariably teak. The cost of ship-building is highest at the port of Amoy in Fokien, and lowest in Siam. At these places, and at Chang-lim in Canton, the cost of a junk of 8,000 piculs, or 476 tons burden, was stated to me, by several commanders of junks, to be as follows: —

At Siam - - - - - -	7,400 dollars.
Chang-lim - - - - -	16,000 —
Amoy - - - - - -	21,000 —

A junk of the size just named has commonly a crew of 90 hands, consisting of the following officers, besides the crew; a commander, a pilot, an accountant, a captain of the helm, a captain of the anchor, and a captain of the hold. The commander receives no pay, but has the advantage of the cabin accommodation for passengers, reckoned on the voyage between Canton and Singapore worth 150 Spanish dollars. He is also the agent of the owners, and receives a commission, commonly of 10 per cent. on the *profits* of such share of the adventure, generally a considerable one, in which they are concerned. The pilot receives for the voyage 200 dollars of wages, and 50 piculs of freight out and home. The helmsman has 15 piculs of freight and no wages. The captains of the anchor and the hold have 9 piculs of freight each; and the seamen 7 piculs each. None of these have any wages. The officers and seamen of the colonial junks are differently rewarded. In a Siamese junk, for example, trading between the Siamese capital and Singapore, of 6,000 piculs burden, the commander and pilot had each 100 dollars for the voyage, with 12 piculs of freight apiece. The accountant and helmsman had half of this allowance, and each seaman had 13 dollars, with 5 piculs of freight.

"In construction and outfit, Chinese junks are clumsy and awkward in the extreme. The Chinese are quite unacquainted with navigation, saving the knowledge of the compass: notwithstanding this, as their pilots are expert, their voyages short, and as they hardly ever sail except at the height of the monsoons, when a fair and steady 7 or 8 knots' breeze carries them directly from port to port, the sea risk is very small. During 13 years' acquaintance with this branch of trade, I can recollect hearing of but 4 shipwrecks; and in all these instances the crews were saved.

"The construction and rigging of a Chinese junk may be looked upon as her proper registry, and they are a very effectual one; for the least deviation from them would subject her at once to foreign charges and foreign duties, and to all kinds of suspicion. The colonial junks, which are of a more commodious form and outfit, if visiting China, are subjected to the same duties as foreign vessels. Junks built in Siam, or any other adjacent country, if constructed and fitted out after the customary model, are admitted to trade to China upon the same terms as those built and owned in the country. If any part of the crew consist of Siamese, Cochin Chinese, or other foreigners, the latter are admitted only at the port of Canton; and if found in any other part of China, would be seized and taken up by the police exactly in the same manner as if they were Europeans. The native trade of China conducted with foreign countries is not a clandestine commerce, unacknowledged by the Chinese laws, but has in every case at least the express sanction of the viceroy or governor of the province, who, on petition, decides the number of junks that shall be allowed to engage in it; and even enumerates the articles which it shall be legal to export and import. At every port, also, where such a foreign trade is sanctioned, there is a hong or body of security merchants as at Canton; a fact which shows clearly enough that this institution is parcel of the laws or customs of China, and not a peculiar restraint imposed upon the intercourse with Europeans.

"The Chinese junks properly constructed pay no measurement duty, and no cumshaw or present; duties, however, are paid upon goods exported and imported, which seem to differ at the different provinces. They are highest at Amoy, and lowest in the island of Hainan. The Chinese traders of Siam informed me that they carried on the fairest and easiest trade, subject to the fewest restrictions, in the ports of Ningpo and Siang-hai in Chekiang, and Soutcheon in Kiannan. Great dexterity seems every where to be exercised by the Chinese in evading the duties. One practice, which is very often followed, will afford a good example of this. The coasting trade of China is nearly free from all duties and other imposts. The merchant takes advantage of this; and intending in reality to proceed to Siam or Cochin China, for example, clears a junk out for the island of Hainan, and thus avoids the payment of duties. When she returns she will lie 4 or 5 days off the mouth of the port, until a regular bargain be made with the Custom-house officers for the reduction of duties. The threat held out in such cases is to proceed to another port, and thus deprive the public officers of their customary perquisites. I was assured of the frequency of this practice by Chinese merchants of Cochin China, as well as by several commanders of junks at Singapore. From the last-named persons I had another fact of some consequence, as connected with the Chinese trade; viz. that a good many of the junks, carrying on trade with foreign ports to the westward of China, often proceeded on voyages to the northward in the same season. In this manner they stated that about 20 considerable junks, besides a great many small ones, proceeded annually from Canton to Souchong, one of the capitals of Kiannan, and in wealth and commerce the rival of Canton, where they sold about 200 chests of opium at an advance of 50 per cent. beyond the Canton prices. Another place where the Canton junks, to the number of 5 or 6, repair annually, is Chinchew, in the province of Canton, within the Gulf of Pecheley, or Yellow Sea, and as far north as the 37th degree of latitude." — (*Appendix, Report of* 1830, p. 298.)

A Chinese ship or junk is seldom the property of one individual. Sometimes 40, 50, or even 100 different merchants purchase a vessel, and divide her into as many different compartments as there are partners; so that each knows his own particular part in the ship, which he is at liberty to fit up and secure as he pleases. The bulk-heads, by which these divisions are formed, consist of stout planks, so well caulked as to be completely water-tight. A ship thus formed may strike on a rock, and yet sustain no serious injury; a leak springing in one division of the hold will not be attended with any damage to articles placed in another; and, from her firmness, she is qualified to resist a more than ordinary shock. A considerable loss of stowage is, of course, sustained; but the Chinese exports generally contain a considerable value in small bulk. It is only the very largest class of junks that have so many owners; but even in the smallest class the number is very considerable.

Population of China. — The most conflicting accounts have been given of the population of the Chinese empire. According to the statement of the Chinese authorities, it was found, by a census taken in 1813, to amount, for China Proper, to 367,821,000! Vast as this number must certainly appear, it does not, taking the prodigious extent of

territory over which it is spread into account, give more than 268 individuals to a square mile, — a density inferior to that of several European countries. It is said that the inhabitants are in the practice of under-rating their numbers in their returns to government. — (*Companion to Anglo-Chinese Calendar*, p. 156.) We are, however, wholly without the means of coming to any positive conclusion as to the degree of credit to be attached to this census.

Price Current.—A perusal of the subjoined Price Current, published at Canton, the 1st of December, 1832, will give the reader a tolerable notion of the various articles and their prices in the Canton market, at the very height of the shipping season.

CANTON, 1st of December, 1832.

Imports.

Amber	Sp. drs. 8 to 14	per catty.	
Assafœtida	4½	per picul.	
Balls de mer	8 to 15	—	
very superior	36 - 50	—	
Bees' wax	24 - 25	—	
Betel nut	3¾ - 4	—	
Bird's nests	26 - 40	per catty.	
Camphor, Barus	10 - 30	—	
Cloves, Malacca	50 - 32	per picul.	
Mauritius	18 - 20	—	
Cochineal, Europe, garbled	200 - 250	—	
ungarbled	180 - 200	—	
Copper, South America	15 - 16	—	
at Manila for exportation	23·50	—	
Japan	18 - 20	—	
Coral fragments	30 - 50	—	
Cotton, Bombay	taels 8 - 10 4	—	
Bengal	8·5 to 10·5	—	
Madras (old) 10·3: (new)	11	—	
Cotton goods, British, viz.			
Chintzes 28 yds.	Sp. drs. 2½ to 4½	per piece.	
Longcloths 40 do.	3½ - 4½	—	
Muslins 20 do.	2 - 2½	—	
Cambrics 12 do.	1½ - 1¾	—	
Mocaahs, handkerchiefs, scarlet	2¼ - 2½	—	
blue, &c.	1¼ - 1¾	—	
Cotton yarn, No. 16. to 20.	35	per picul.	
No. 20. to 30.	42	—	
No. 30. to 40.	58	—	
No. 40. to 70.	not wanted.		
Cow bezoar	30	per catty.	
Cubebs	25 to 26	per picul.	
Curch, Pegu	4 - 4½	—	
Ebony, Mauritius	3 - 4	—	
Ceylon	2 - 2½	—	
Elephants' teeth, 1st, 5 to 8 to a picul	90	—	
2d, 11 to 15 do.	80	—	
3d, 18 to 25 do.	70	—	
cuttings	70	—	
Fishmaws	50 to 70	—	
Flints	cts. 50	—	
Gamboge	Sp. drs. 1 to 1½	—	
Ginseng, crude	70 - 80	—	
clarified	80 - 85	—	
Iron bar, 1 to 3 inch	2¼ - 2½	—	
rod, ½ inch and under	3	—	
hoop	2 to 2½	—	
Lead, pig	4½	—	
Mace	none.		
Myrrh	4 to 18	—	
Nutmegs	none.		
Opium, garbled, 10: ungarbled	5 to 6	—	
Opium, Patna (nominal)	950	per chest.	
Benares do.	950	—	
Bombay do.	825	—	
Damaun do.	825	—	
Turkey do.	800	per picul.	
Pepper, Malay	7¾ to 8	—	
Putchuck	14 - 15	—	
Quicksilver	58 - 60	—	
Rattans	2¾ - 3½	—	
Rice	2 - 2·50	—	
Rose, Maloes	38	—	
Saltpetre at Whampoa	none.		
Lintin	8½ to 9	—	
Sandal wood, Indian	10 - 16	—	
Sandwich Island	1½ - 7	—	
Sapan wood,	1·80 to 2	—	
Sharks' fins	23 to 24	—	
very fine	28 - 40	—	
Skins, rabbit	45 - 50	per 100.	
seal	1·80 to 2	each.	
sea otter	45 to 50	—	
land do.	5 - 6½	—	
beaver	4½ - 6½	—	
fox	cts. 70 - 90	—	
Smalts, (for a small supply)	Sp. drs. 20 - 60	per picul.	
Steel, English	4½	—	
Swedish, in kits	5	per cwt.	
Stockfish	5 to 6	per picul.	
Sycee	3½ to 4	—	
Thread, gold and silver	32 - 35	per catty.	
Tin plates	6	per box.	
Tin, Banca	Sp. drs. 15	per picul.	
Straits', 1st quality	14 to 14½	—	
Woollens, broad-cloth	1·40 - 1·50	per yard.	
Camlets, English, 55 yds. by 30 ins.	14 - 15	per piece.	
———, Dutch, 40 do. by 28 do.	26 - 28	—	
———, do. broad, 40 do. by 33 do.	26 - 28	—	
Long-ells	7	—	
Scarlet cuttings	80 to 90	per picul.	

Exports.

Alum, at Macao, 1¾ to 2 here	Sp. drs. 2·25	per picul.	
Aniseed, star	10 to 11	—	
oil of	1·50	per catty.	
Bamboo canes	14 to 16	per 1,000.	
Brass leaf	45 - 46	per box.	
Camphor, at Macao, none: at Canton	28 - 30	per picul.	
Cassia (shipped outside), 9: at do.	12 - 13	—	
buds (new)	15	—	
China root	3½	—	
Cubebs	none.		
Dragon's blood	80 to 100	—	
Galangal	4¼	—	
Gamboge	75 to 85	—	
Glass beads	16 - 22	—	
Hartall	12 - 13	—	
Lead, white	10	—	
red	11	—	
Mother-of-pearl shells	20 to 22	—	
Musk	70 to 110	per catty.	
Nankeens, Company's 1st	72 to 74	per 100.	
2d, 1st sort	52	—	
2d do.	47 to 48	—	
3d,	38 - 40	—	
small	none.		
blue Nankin, small (9¾ yds. 12 ins.)	do.		
large, (10½ do. 13 do.)	85 to 90	—	
Canton	62 - 63	—	
Oil of cassia	1½	per catty.	
Rhubarb	52 to 55	per picul.	
Silk, raw, Nankin, Taysaam	333	—	
Tsatlee	352	—	
Canton, No. 1.	taels 260 to 265	—	
No. 2.	250	—	
No. 3.	225 to 230	—	
No. 4.	140	—	
No. 5. 1	Sp. drs. 90	—	
No. 5. 2	70	—	
No. 5. 3	63	—	
Sugar, raw	taels 5·2 to 5·6	—	
Pingfa	6·2 to 6·4	—	
Sugar candy, Chinchew	Sp. drs. 11	—	
Canton, 1st sort	taels 6·6	—	
2d do.	none.		
Tea, Bohea	12 to 15	—	
Congou	20 - 28	—	
Campoy	28 - 30	—	
Souchong	19 - 35	—	
Peko	38 - 60	—	
Ankoi souchong	18 - 20	—	
Hyson	55 - 70	—	
skin	26 - 55	—	
young	45 - 50	—	
Gunpowder	61 - 66	—	
Twankay	30 - 32	—	
Orange peko	20 - 21	—	
Caper	20 - 22	—	
Tortoiseshell	20 - 22	—	
Turmeric	Sp. drs. 5 - 5½	—	
Tutenague	13	—	
Vermilion	34 to 35	per box.	
Whangees	22 - 25	per 1,000.	

Bullion.

Gold - 98 touch	drs. 23¾	per tael.
Sycee silver at Lintin, 1 to 2 per cent. premium.		
Spanish dollars, entire	none.	
Republican do.	do.	

Exchanges.

London, per Sp. dr., 6 months' sight.		
Bills suitable for negotiation in India,	drs. 4·3.	
Other bills	drs. 4·4 to 4·5.	
Bengal Co.'s 207 Sicca rupees, per 100 Sp. drs.,	30 days' sight.	
Private bills 210 do.	do.	do.
Bombay 218 Bombay rupees	do.	do.

CANVAS (Fr. *Toile à voile*; Ger. *Segeltuch*; It. *Canevazza, Lona*; Rus. *Parussnoe volotno, Parussina*; Sp. *Lona*), unbleached cloth of hemp or flax, chiefly used for sails for shipping. Masters of ships are required to make entry of all foreign-made sails and cordage, not being standing or running rigging, in use on board their respective ships, under a penalty of 100*l*. Sails in actual use, and fit and necessary for such ship, are imported free; but when otherwise disposed of, they are liable to an *ad valorem* duty of 20 per cent. — (*3 & 4 Will. 4. c. 56.*) It had been the practice for a considerable period to grant bounties on the exportation of canvas or sail-cloth; these, however,

finally ceased on the 1st of January, 1832. By an act passed in the reign of Geo. 2., new sails were ordered to be stamped with the maker's name and place of abode; but this regulation was repealed by the 10 Geo. 4. c. 43. § 9.

CAOUTCHOUC. "This substance, which has been improperly termed elastic gum, and vulgarly, from its common application to rub out pencil marks on paper, *India rubber*, is obtained from the milky juice of different plants in hot countries. The chief of these are the *Jatropha elastica*, and *Urceola elastica*. The juice is applied in successive coatings on a mould of clay, and dried by the fire or in the sun; and when of a sufficient thickness, the mould is crushed, and the pieces shaken out. Acids separate the caoutchouc from the thinner part of the juice at once, by coagulating it. The juice of old plants yields nearly two thirds of its weight; that of younger plants less. Its colour, when fresh, is yellowish white, but it grows darker by exposure to the air. The elasticity of this substance is its most remarkable property; when warmed, as by immersion in hot water, slips of it may be drawn out to 7 or 8 times their original length, and will return to their former dimensions nearly. Cold renders it stiff and rigid, but warmth restores its original elasticity. Exposed to the fire, it softens, swells up, and burns with a bright flame. In Cayenne it is used to give light as a candle." — (*Ure's Dictionary.*)

Caoutchouc promises to become an article of very considerable importance. M. de la Condamine, who was one of the first to communicate authentic information with respect to it, mentions, that, owing to its being impervious to water, it was made into boots by the Indians.—(*Voyage de la Rivière des Amazones*, p. 76.) It is now employed in a similar way here. Means have, within these few years, been discovered of reducing it to a state of solution; and when thin filaments of it are spread over cloth or any other substance, it is rendered impervious alike to air and water. Air cushions and pillows are manufactured in this way; as are water-proof cloaks, hats, boots, shoes, &c. It is also extensively used in the manufacture of braces and other articles which it is desirable should possess considerable elasticity; and there can be little doubt that it will be employed still more extensively, and in a still greater variety of ways.

Previously to 1830, the importations of caoutchouc were comparatively inconsiderable. In that year they amounted to about 52,000 lbs.; while, during the year ended the 5th of April, 1833, the quantity entered for consumption amounted to 178,676 lbs. Its price varies from 6*d.* to 2*s.* 6*d.* per lb. The duty has been judiciously reduced from 5*d.* per lb. to 1*s.* per cwt.

CAPERS (Fr. *Capres;* Ger. *Kappern;* Du. *Kappers;* It. *Cappari;* Sp. *Alcaparras;* Rus. *Kapersziï;* Lat. *Capparis*), the pickled buds of the *Capparis spinosa*, a low shrub, generally growing out of the joints of old walls, and the fissures of rocks, in most of the warm parts of Europe. Capers are imported into Great Britain from different parts of the Mediterranean; the best from Toulon in France. Some small salt capers come from Majorca, and a few flat ones from about Lyons. The duty of 6*d.* per lb. on capers produced, in 1832, 1,553*l.* 5*s.* 4*d.* nett, showing that 62,130 lbs. had been entered for home consumption.

CAPE-TOWN, the capital of the British territory in South Africa; lat. 33° 55′ 56″ S., long. 18° 21′ E. It lies at the bottom of Table Bay, about 32 miles north from the Cape of Good Hope; and on the western side of the territory to which it gives its name. The town was founded by the Dutch in 1650; and remained, with the territory subject to it, in their possession, till it was taken by the British in 1795. It was restored to the Dutch by the treaty of Amiens; but being again captured by the British in 1806, it was finally ceded to us in 1815. The streets are laid out in straight lines, crossing each other at right angles; many of them being watered by canals, and planted on each side with oaks. The population in 1829-30 amounted, according to the statement in the *Cape Almanac*, to 13,103 free persons and 5,838 slaves, making together 18,491. The town is defended by a castle of considerable strength. Table Bay is capable of containing any number of ships; but it is exposed to the westerly winds, which, during the months of June, July, and August, throw in a heavy swell, that has been productive of many distressing accidents. This, in fact, is the great drawback upon Cape-Town, which in all other respects is most admirably fitted for a commercial station. At the proper season, however, or during the prevalence of the easterly monsoon, Table Bay is perfectly safe; while the cheapness and abundance of provisions, the healthiness of the climate, and above all its position, render it a peculiarly desirable resting place for ships bound to or from India, China, Australia, &c.

The subjoined plan of Table Bay is taken from the survey of the Cape of Good Hope, executed by Lieut. Vidal and others, under the direction of Captain Owen.

References to the Plan. — A, light-house, furnished with double lights. They may be seen clearly off deck at 16 miles' distance; but they do not appear double till within 6 or 7 miles to the westward; from the northward only one light is seen. B, Lion's Rump. C, Table Mountain. D, Devil's Peak, in lat. 33° 57 2″. E, Robbin Island. F Salt River. The figures denote the soundings in fathoms.

Port Instructions. — Art. 1. On the arrival of merchant vessels in Table Bay, a proper berth will be pointed out to the masters thereof by the port captain, when he boards them; and no master of a merchant vessel shall shift his berth without permission from the port captain, unless in case of extreme emergency, when he must report his having done so as early as possible at the Port-office.

2. Should it be the intention of a master of a vessel to discharge or receive on board any considerable quantity of merchandise, a berth will be pointed out to him as close to the jetty, or other landing place, as the safety of the vessel and other circumstances will admit. And the master will then moor with two bower anchors, with an open hawse to the N.N.E., taking especial care, in so mooring, not to overlay the anchors of any other ship, or in any way to give the vessel near him a foul berth. Ships and vessels touching in Table Bay for water and refreshments alone, may ride at single anchor in the outer anchorage; but in this case it is particularly recommended to veer out 80 or 90 fathoms, if they ride by a chain cable, as the liability of starting or fouling the anchor, or breaking the chain, will thereby be greatly lessened; and if riding by a rope or coir cable, to run out a stream or good kedge, to steady the ship; and in both cases the other bower anchor should be kept in perfect readiness to let go. When the vessel is properly moored with bower anchors, or well secured with a bower and stream anchor, and with good cables, buoys, and buoy-ropes, the master will then take the exact place of the ship by the bearings of 2 land-marks, and the depth of the water; and should accident occur, by which the vessel may drift from this situation, or lose her anchors, a good bearing and depth of water must be taken at the time, and the same must be notified in writing to the port captain. It is particularly recommended that vessels be kept as snug as possible, to counteract the effects of the periodical winds, which at times blow with considerable violence.

The district subject to Cape-Town is of very great extent, and contains every variety of soil, from the richest level land to the wildest mountain, and tracts destitute of even the appearance of vegetation. The climate fluctuates between the two extremes of rain and drought. On the whole, its advantages and disadvantages seem to be pretty equally balanced; and the prospects which it holds out to the industrious emigrant, if not very alluring, are certainly not discouraging.

Population. — According to the official returns, the population of the Cape Colony, in 1831, consisted of —

Whites and Free Coloured.		Slaves.		
Male.	Female.	Male.	Female.	
48,672	44,043	18,812	15,321	Total 126,848;

but it seems to be the general opinion that the population considerably exceeds what is given in this statement, and that it may be taken at 140,000.

Produce. — Large quantities of corn of a very good description are produced in the immediate neighbourhood of Cape-Town; but its free exportation is restrained; none being allowed to be sent abroad, except a specified quantity decided upon by government after an investigation into the state of the crops! This restriction, Mr. Thompson tells us (*Travels in Southern Africa*, p. 395.), has neither produced regular prices nor averted scarcity. It has, however, been in no common degree injurious to the colony; and it is really surprising that systems of policy universally condemned in England should be allowed to exert a pernicious influence over any of our colonies. The Mauritius and Rio Janeiro are the principal markets for the corn of the Cape.

Large quantities of wine, and of what is called brandy, are produced at the Cape; but, with the exception of Constantia, they are very inferior. Objections have been made to the duties recently imposed on Cape wines; but, as it appears to us, without any good foundation. The real effect of allowing their importation at a comparatively low duty is not to occasion their direct consumption, but to cause them to be employed as a convenient means of adulterating others; so that, besides being injurious to the revenue, such reduction of duty promotes fraudulent practices, and detracts from the comforts of the public.

Considerable quantities of hides, skins, and horns are exported. They are principally brought from Algoa Bay, on the eastern side of the colony; and the trade has increased very fast during the last 6 or 7 years. Horses, butter, beef, ivory, whale oil, aloes, argol, and various other articles, are among the exports.

The imports at the Cape consist of woollens, cottons, hardware, earthenware, furniture, haberdashery, soap, paper, books, and portions of most articles used in this country. Piece goods and teak timber are imported from India, tea from China, sugar from India and the Mauritius, &c.

Revenue, &c. — The total revenue of the Cape Colony for the year 1832 amounted to 130,808*l.* 7*s.* 3½*d.*; the expenditure for the same year was 126,889*l.* 0*s.* 9¾*d.*; leaving a balance of 3,919*l.* 6*s.* 10¾*d.* in favour of the former.

Trade. — The trade between the colonists and the independent natives is subjected to various restraints, of which it is not always very easy to discover the policy. The sale of gunpowder and fire-arms to the natives has been prohibited; a regulation which might have been a judicious one, had they not been able to obtain them from any one else. But the Americans have begun to trade at Natal, on the eastern coast, and have liberally supplied the natives with these and various other articles; so that by keeping up the regulation in question, we merely exclude ourselves from participating in what might be an advantageous trade.

According to the accounts published by the Board of Trade, the values of the products imported into and exported from the Cape of Good Hope in 1831, were as under —

Countries.	Imports.	Exports.
	£	£
Great Britain	281,445	127,468
British colonies	37,751	70,957
Foreign states	25,855	14,700
Totals	£345,051	£213,125

During the same year, the ships and tonnage entering inwards from, and clearing outwards to, the undermentioned countries, were: —

Countries.	Inwards.		Outwards.	
	Ships.	Tons.	Ships.	Tons.
Britain	79	20,737	104	33,393
British colonies	88	29,960	75	19,097
Foreign states	38	14,769	52	9,915
Totals	205	65,466	231	62,405

Articles exported from the Cape.—The following account of the exports from the Cape in 1829 is taken from the *Cape Almanac* for 1831. It is the most complete of any that we have seen, and its accuracy may be depended upon.

Articles, the Produce and Manufacture of the Cape Colony, exported during 1829.

Articles.	Amount. £	s.	d.
Aloes, 375,736 lbs. and 61 casks and cases, estimated value	2,794	0	0
Argol, 22,142 lbs.	555	0	0
Butter, 105,519 lbs. and 152 casks and jars	5,570	16	4½
Beef, pork, and tongues, salted, 1,780 casks and kegs	4,353	7	1½
Beer, 3,306 gallons	240	0	0
Biscuits and rusks, 20,000 lbs.	228	0	0
Corn, grain, meal, &c., viz.			
Barley and malt, 13,353 muids	4,163	6	0
Beans and peas, 60 muids	87	0	0
Bran, 50,312 lbs.	121	0	0
Flour, 78,224 lbs.	866	0	0
Wheat, 21,150 muids	23,449	0	0
Cheese	31	10	0
Curiosities	467	12	6
Confectionery	29	0	0
Candles, 11,584 lbs.	383	0	0
Carriages	58	0	0
Feathers, ostrich, 539 lbs. and 31 boxes	1,917	0	0
Fish	1,589	10	5
Fruits, dried, 135,333 lbs.	4,236	0	0
green	49	0	0
Garden seeds and bulbs	413	2	0
Gum, 16,945 lbs. and 2 cases	96	0	0
Hides, horse and ox, 79,035 pieces	33,722	18	5½
Horns, 214,610 in number	5,989	6	0
Hay, 29,160 lbs.	79	0	0
Horses, 314 in number	8,753	0	0
Ivory, 25,497 lbs. and 227 tusks, bundles and casks	3,759	0	0
Lime, 72 half-aams	10	0	0
Leather, 2 cases	10	0	0
Skins, 48 head	688	0	0
Oil, whale, 34,662 gallons and 90 casks	4,023	6	0
Oxen, cows, and calves, 444 head	1,782	0	0
Potatoes	63	0	0
Potatoes and onions, 367 muids	169	0	0
Poultry	138	0	0
Salt, 288 muids	28	16	0
Sheep, 3,282 in number; pigs, 33; goats, 2	1,506	10	0
Spirits, viz.			
Brandy, 1,408½ gallons	85	0	0
Liqueurs, 24 gallons	20	0	0
Soap, 1,218 lbs.	24	0	0
Saddlery and harness	23	0	0
Skins, viz.			
Goat, 91,781 pieces and 55 bundles	514	15	0
Seal, 3,928 pieces	834	0	0
Sheep, 77,343 pieces	3,795	0	0
Calf, 1,414 pieces and 2 bundles	169	0	0
Rabbit and mole, 490 pieces	14	0	0
Karosses, 1 case	7	10	0
Tallow, 13,333 lbs.	408	0	0
Vinegar, 428 gallons	13	0	0
Wine, ordinary, 1,548,977½ gallons	146,936	0	0
Constantia, 2,874 gallons	2,137	0	0
Wool, 35,250 lbs. and 11 bags	1,220	0	0
Wood	73	10	0
Whalebone, 13,038 lbs. and 229 bundles	1,392	0	0
Wax, bees', 910 lbs.	22	0	0
Zebras, 4 head	148	0	0
Supplies to his Majesty's Navy.			
Beef, fresh, 137,662 lbs.	717	0	0
Biscuit, 259,616 lbs.	2,859	0	0
Bread, soft, 118,480 lbs.	740	0	0
Flour, 57,422 lbs.	632	0	0
Hay, 5,630 lbs.	26	0	0
Raisins, 10,722 lbs.	191	0	0
Sheep, 31 in number, and oxen 23	83	0	0
Vegetables, 30,013 lbs.	306	0	0
Wine, ordinary, 18,091 Imperial quarts	1,432	0	0
Total estimated value of colonial produce and manufactures exported during the year 1829 £	285,247	15	10¼

Custom-house Regulations, Fees, &c.

On Admission of a Ship to Entry, observe—

1. The ship's register must be lodged in the Custom-house, and the vessel clear again for sea.

2. The manifest of the cargo on board for this place must be deposited there.

3. The cockets of cargoes shipped from any place in Great Britain or Ireland for this place must also be deposited there. From the inducement of such cockets, an extract is to be made, which will show the contents of the different packages on board, and facilitate the making out of the entries.

4. In making out the declarations, the value by invoice of the different commodities must be given by the importer, in order to enable the Custom-house to estimate the duties payable, and to send in to government, annually, the required statement of the total duties received upon the several articles imported.

In the clearing of a Ship outwards, observe—

1. The master must produce a certificate from the harbour master, that the tonnage duties of the port have been paid.

2. The export manifest must be examined with the permits granted, in order to ascertain whether packages have been shipped without a permit.

3. Export declarations must be sent in by the several shippers, of the quantity and value of goods or produce shipped by them, in order to ascertain the amount of the exports of the colony.

4. When Cape wine is shipped for exportation to England, affidavit of the particular description of such wine must be delivered, and a certificate granted, by the collector or comptroller of customs, to the master, of his having received such affidavit.

5. Manifests, in triplicate, of such goods as are shipped from the Cape for Great Britain, must be delivered, signed, and sworn to by the master, before the collector or comptroller.

The original of which is to be returned to the master to accompany the cargo.

The duplicate to be forwarded, by the first conveyance sailing subsequently to the vessel containing the original, to the commissioners of customs in England or Scotland respectively, as the case may happen.

And the triplicate, written on or covered with a stamp, to remain as an office copy.

N.B.—Ships taking in cargoes for other parts of the world, are required to deliver only original and duplicate manifests.

Description of Stamps required.	L.	s.	d.
From 1 to 10 tons of goods shipped from the Cape	0	7	6
10 - 20	0	15	0
20 - 50	1	10	0
50 and upwards	2	5	0

6. When whale oil or whale bone is shipped from the Cape for England, the proprietor of the whale fishery is to make oath, before the collector or comptroller, that the same were *bond fide* the produce of fish, or creatures living in the sea, actually taken and caught wholly by his Majesty's subjects usually residing in this colony; and the collector or comptroller is to grant a certificate under his hand and seal to the master, testifying that such oath hath been made before him.

7. When salted seal skins are shipped from the Cape for England, the shipper is to make oath before the collector or comptroller, that the same are really and *bond fide* the skins of seals taken and caught on the coast appertaining to the Cape of Good Hope, wholly by his Majesty's subjects usually residing in this colony; and that all the salt used in the curing or preserving of the same was not made in, or exported from, Great Britain or Ireland; and the collector or comptroller is to grant a certificate to the master accordingly.

8. The original manifest, and a copy thereof, of ships touching at the Cape of Good Hope, with cargoes from the eastward for England, to be delivered and sworn to by the master before the collector or comptroller. *The original to be returned to the master, and the copy forwarded from the Custom-house to the commissioner of customs.*

9. If any part of such cargo shall be discharged at the Cape of Good Hope, the collector or comptroller is to indorse upon the manifest the part of the cargo so discharged, and verify the same.

10. The usual fees to be charged, viz.—	L.	s.	d.
Entrance	0	6	0
Clearance	0	6	0
Landing (or shipping) cargo	0	15	0
Landing (or shipping) part cargo	0	7	6
Coastwise: Landing (or shipping) part cargo	0	1	6
Manifest of goods taken in here	0	1	6
Coastwise: Entrance—gratis.			
Clearance	0	1	6
Landing (or shipping) cargo	0	3	0

In obtaining Permits, observe—

1. No credit will be given to any person whatever.

2. The duties are to be collected on all imports, whether intended for private use, for presents, or for trade; except on wearing apparel accompanying the proprietor.

Or on specie.
On garden seeds.
On horses (exclusive of geldings).
On goods lodged in the Custom-house stores for exportation.
On goods transhipped in the bay for other ports (provided neither bargain nor sale of them have taken place).
On naval stores.
On government stores (provided an order be sent from government).

3. 1*s.* 6*d.* is charged for every permit for goods exceeding the value of 7*l.* 10*s.* shipped or landed, and 9*d.* on goods under 7*l.* 10*s.* value; as also 9*d.* for every baggage permit.

Wharfage Dues.	L.	s.	d.
Every pipe, puncheon, or cask equal in size or larger than a pipe	0	1	6
Every half-pipe, or any description of cask larger than a half-aam	0	0	9
For every hoist at the crane	0	0	9
For every horse	0	7	6
For all oxen	0	1	6
For a sheep	0	0	4½
For a pig	0	0	4½
For every case measuring ½ a ton, or larger	0	1	6

Port Dues.

Upon all vessels entering this port for the purposes of trade, per ton, 4½*d.*

Upon all vessels entering this port to procure refreshments, or for any purpose short of trade, per ton, 2¼*d.*

Regulations as to trade. — All goods, the produce or manufacture of the Cape of Good Hope, or the territories or dependencies thereof, are subject (on importation into England) to the same duties as are imposed on the like articles, the produce or manufacture of the British possessions within the limits of the East India Company's charter, except when any other duty is expressly laid on them. — (3 & 4 *Will.* 4. c. 56. § 9.)

The 6 Geo. 4. c. 114. enacts, that it shall be lawful for his Majesty, by any order in council to be issued from time to time, to give such directions and make such regulations touching the trade and commerce to and from any British possessions in Africa, as to his Majesty in council shall appear most expedient and salutary; and if any goods be imported or exported in any manner contrary to such order of his Majesty in council, the same shall be forfeited, together with the ship importing or exporting the same. — § 73.

It shall not be lawful for any person to re-export, from any of his Majesty's possessions abroad, to any foreign place, any coals, the produce of the United Kingdom; and no such coals shall be shipped at any of such possessions, to be exported to any British place, until the exporter or the master of the exporting vessel shall have given bond, with one sufficient surety, in double the value of the coals, that such coals shall not be landed at any foreign place. — § 85.

It shall be lawful for the shipper of any wine, the produce of the Cape of Good Hope or of its dependencies, which is to be exported thence, to go before the chief officer of customs, and make and sign an affidavit before him, that such wine was really and *bonâ fide* the produce of the Cape of Good Hope or of its dependencies; and such officer is hereby authorised and required to administer such affidavit, and to grant a certificate thereof, setting forth in such certificate the name of the ship in which the wine is to be exported, and the destination of the same. — § 78.

Duties. — A duty of 3½ per cent. is charged on the importation of all articles of the growth, production, or manufacture of Great Britain, or of the British plantations in the West Indies.

A duty of 10 per cent. is charged on the importation (by British vessels) of all articles of the growth, production, or manufacture of foreign Europe, America, or the eastward of the Cape, to be levied according to the declaration of the value by the importer. No abatement or reduction whatever admitted, except of the duties and landing charges payable on the importation thereof.

An additional duty of *1s. 6d.* per gallon is charged on the importation of arrack, rum, gin, liqueurs, whisky, or other spirituous liquors, *brandy excepted.*

No tea may be landed, unless the permission of the East India Company's agent be first obtained.

No ammunition may be landed or shipped, unless the permission of government be first obtained.

Commission. — The following rates of commission are charged and allowed, namely —

	Per cent.
1. On the nett amount of all sales of goods by public sale, and on the gross amount of all other sales	5
2. Goods consigned, and afterwards withdrawn	2½
3. On purchases effected from the proceeds of goods on which a commission has already been charged	2½
4. On all other purchases, or shipments of goods	5
5. On the sale or purchases of ships, houses, or lands	2½
6. On ships' disbursements	5
7. On procuring freight	5
8. On collecting freight on ships bound to this place	2½
9. On guaranteeing bills or bonds by indorsement or otherwise	2½
10. On collecting debts without recourse to law	2½
Ditto, where legal proceedings are taken	5
11. On effecting remittances by bills of exchange	1
12. On the negotiation of bills	1
13. On effecting insurances	0½
14. On the administration of estates	5
15. On cash advances	2½
16. On the debtor and creditor sides of cash accounts, on which no other commission is charged	1

Money. — Accounts are either kept in pounds, shillings, pence, and farthings, or in rix-dollars, schillings, and stivers.

1 Stiver	=	⅝ of a Penny.
6 Stivers	=	2¼ Pence, or 1 schilling.
8 Schillings	=	18 Pence, or 1 rix-dollar.

The commissariat department grant bills on the Treasury at a premium of 1½ per cent.

Weights and Measures. — The weights made use of in the Cape are derived from the standard pound of Amsterdam; and those assized are from 50 lbs. down to 1 loot, or the 32d part of a pound, which is regarded as unity.

Liquid Measure.

16 Flasks	=	1 Anker.
4 Ankers	=	1 Aam.
4 Aams	=	1 Leaguer.

Corn Measure.

4 Schepels	=	1 Muid.
10 Muids	=	1 Load. 107 schepels = 82 Winch. bushels, or 4 schepels = 3 Imp. bush. very nearly.

The muid of wheat weighs, at an average, about 110 lbs. Dutch, being somewhat over 196 lbs. English.

Cloth and Long Measures.

12 Rhynland inches	=	1 Rhynland foot.
27 ditto	=	1 Dutch ell.
144 ditto	=	1 Square foot.
144 Square feet	=	1 Rood.
600 Roods	=	1 Morgen.

Colonial Weights and Measures compared with those of England.

Weights.

100 lbs. Dutch	=	nearly 109 lbs. English avoirdupois.
100 lbs. English	=	nearly 92 lbs. Dutch.

Wine or Liquid Measure.

1 Flask	=	0·6	Old gallon, or	4·946 Imperial gallons.
1 Anker	=	9⅓	ditto,	7·9 ditto.
1 Aum	=	38	ditto,	31⅔ ditto.
1 Leaguer	=	152	ditto,	126·6 ditto.
1 Pipe	=	110	ditto,	91·6 ditto.

Saldanha Bay, in lat. 33° 6′ S., long. 17° 58′ 15″ E., being 16⅓ leagues north of Cape-Town, is one of the best and most commodious harbours in the world. It is perfectly safe at all seasons.

Besides the *Cape Almanac*, one of the best of that class of publications, and the other authorities referred to, we have derived part of the above details from papers laid before the Finance Committee.

CAPITAL, in political economy, is that portion of the produce existing in a country, which may be made directly available, either to the support of human existence, or to the facilitating of production. — (*Principles of Political Economy*, 2d ed. p. 97.) But in commerce, and as applied to individuals, it is understood to mean the sum of money which a merchant, banker, or trader adventures in any undertaking, or which he contributes to

the common stock of a partnership. It signifies likewise the fund of a trading company, or corporation; in which sense the word *stock* is generally added to it. Thus we say the *capital stock* of the Bank, &c. The profit derived from any undertaking is estimated by the *rate* which it bears to the capital that was employed.

CAPSICUM. See PEPPER.

CARAVAN, an organised company of merchants, or pilgrims, or both, who associate together in many parts of Asia and Africa, that they may travel with greater security through deserts and other places infested with robbers; or where the road is naturally dangerous. The word is derived from the Persian *kervan*, or *cârvân*, a trader or dealer. —(*Shaw's Travels in the Levant*, p. 9. 4to ed.)

Every caravan is under the command of a chief or aga (*caravan-bachi*), who has frequently under him such a number of troops or forces as is deemed sufficient for its defence. When it is practicable, they encamp near wells or rivulets; and observe a regular discipline. Camels are used as a means of conveyance, almost uniformly, in preference to the horse or any other animal, on account of their wonderful patience of fatigue, eating little, and subsisting three or four days or more without water. There are generally more camels in a caravan than men.—(See CAMEL.)

The commercial intercourse of Eastern and African nations has been principally carried on, from the remotest period, by means of caravans. During antiquity, the products of India and China were conveyed either from Suez to Rhinoculura, or from Bussorah, near the head of the Persian Gulf, by the Euphrates, to Babylon, and thence by Palmyra, in the Syrian desert, to the ports of Phœnicia on the Mediterranean, where they were exchanged for the European productions in demand in the East. Sometimes, however, caravans set out directly from China, and, occupying about 250 days in the journey, arrived on the shores of the Levant, after traversing the whole extent of Asia. (*Gibbon*, vol. vii. p. 93.) The formation of caravans is, in fact, the only way in which it has ever been possible to carry on any considerable internal commerce in Asia or Africa. The governments that have grown up in those continents have seldom been able, and seldomer indeed have they attempted, to render travelling practicable or safe for individuals. The wandering tribes of Arabs have always infested the immense deserts by which they are intersected; and those only, who are sufficiently powerful to protect themselves, or sufficiently rich to purchase an exemption from the predatory attacks of these freebooters, can expect to pass through territories subject to their incursions, without being exposed to the risk of robbery and murder.

Since the establishment of the Mohammedan faith, religious motives, conspiring with those of a less exalted character, have tended to augment the intercourse between different parts of the Eastern world, and to increase the number and magnitude of the caravans. Mohammed enjoined all his followers to visit, once in their lifetime, the Caaba, or square building in the temple of Mecca, the immemorial object of veneration amongst his countrymen; and in order to preserve continually upon their minds a sense of obligation to perform this duty, he directed that, in all the multiplied acts of devotion which his religion prescribes, true believers should always turn their faces towards that holy place. In obedience to a precept so solemnly enjoined and sedulously inculcated, large caravans of pilgrims used to assemble annually in every country where the Mohammedan faith is established; and though, owing either to a diminution of religious zeal, or the increasing difficulties to be encountered in the journey, the number of pilgrims has of late years declined greatly, it is still very considerable. Few, however, of the pilgrims are actuated only by devotional feelings. Commercial ideas and objects mingle with those of religion; and it redounds to the credit of Mohammed, that he granted permission to trade during the pilgrimage to Mecca; providing at the same time for the temporal as well as the lasting interests of his votaries. "It shall be no crime in you, if ye seek an increase from your Lord *by trading during the pilgrimage*."—(*Sale's Koran*, c. 2. p. 36. ed. 1764.)

The numerous camels of each caravan are loaded with those commodities of every country which are of easiest carriage and readiest sale. The holy city is crowded during the month of Dhalhajja, corresponding to the latter part of June and the beginning of July, not only with zealous devotees, but with opulent merchants. A fair or market is held in Mecca and its vicinity, on the twelve days that the pilgrims are allowed to remain in that city, which used to be one of the best frequented in the world, and continues to be well attended.

"Few pilgrims," says Burckhardt, "except the mendicants, arrive without bringing some productions of their respective countries for sale: and this remark is applicable as well to the merchants, with whom commercial pursuits are the main object, as to those who are actuated by religious zeal; for, to the latter, the profits derived from selling a few articles at Mecca diminish, in some degree, the heavy expenses of the journey. The Moggrebyns (pilgrims from Morocco and the north coast of Africa) bring their red bonnets and woollen cloaks; the European Turks, shoes and slippers, hardware, em-

broidered stuffs, sweetmeats, amber, trinkets of European manufacture, knit silk purses, &c.; the Turks of Anatolia bring carpets, silks, and Angora shawls; the Persians, Cashmere shawls and large silk handkerchiefs; the Afghans, tooth-brushes, called Mesouak Kattary, made of the spongy boughs of a tree growing in Bokhara, beads of a yellow soapstone, and plain coarse shawls manufactured in their own country; the Indians, the numerous productions of their rich and extensive region; the people of Yemen, snakes for the Persian pipes, sandals and various other works in leather; and the Africans bring various articles adapted to the slave trade. The pilgrims are, however, often disappointed in their expectations of gain; want of money makes them hastily sell their little adventures at the public auctions, and often obliges them to accept very low prices."—(*Travels in Arabia*, vol. ii. p. 21.)

The two principal caravans which yearly rendezvous at Mecca are those of Damascus and Cairo. The first is composed of pilgrims from Europe and Western Asia; the second of Mohammedans from all parts of Africa.

The Syrian caravan is said by Burckhardt to be very well regulated. It is always accompanied by the pacha of Damascus, or one of his principal officers, who gives the signal for encamping and starting by firing a musket. On the route, a troop of horsemen ride in the front, and another in the rear to bring up the stragglers. The different parties of pilgrims, distinguished by their provinces or towns, keep close together. At night torches are lighted, and the daily distance is usually performed between 3 o'clock in the afternoon and an hour or two after sunrise on the following day. The Bedouins or Arabs, who carry provisions for the troops, travel by day only, and in advance of the caravans; the encampment of which they pass in the morning, and are overtaken in turn and passed by the caravan on the following night, at their own resting place. The journey with these Bedouins is less fatiguing than with the great body of the caravan, as a regular night's rest is obtained; but their bad character deters most pilgrims from joining them.

At every watering-place on the route is a small castle and a large tank, at which the camels water. The castles are garrisoned by a few persons, who remain the whole year to guard the provisions deposited there. It is at these watering-places, which belong to the Bedouins, that the sheikhs of the tribe meet the caravan, and receive the accustomed tribute for allowing it to pass. Water is plentiful on the route; the stations are no where more distant than 11 or 12 hours' march; and in winter, pools of rain-water are frequently found. Those pilgrims who can travel with a litter, or on commodious camel-saddles, may sleep at night, and perform the journey with little inconvenience: but of those whom poverty, or the desire of speedily acquiring a large sum of money, induces to follow the caravan on foot, or to hire themselves as servants, many die on the road from fatigue. — (*Travels in Arabia*, vol. ii. p. 3—9.)

The caravan which sets out from Cairo for Mecca is not generally so large as that of Damascus; and its route along the shores of the Red Sea is more dangerous and fatiguing. But many of the African and Egyptian merchants and pilgrims sail from Suez, Cosseir, and other ports on the western shore of the Red Sea, for Djidda, whence the journey to Mecca is short and easy.

The Persian caravan for Mecca sets out from Bagdad; but many of the Persian pilgrims are now in the habit of embarking at Bussorah, and coming to Djidda by sea.

Caravans from Bagdad and Bussorah proceed to Aleppo, Damascus, and Diarbeker, laden with all sorts of Indian, Arabian, and Persian commodities; and large quantities of European goods, principally of English cottons, imported at Bussorah, are now distributed throughout all the eastern parts of the Turkish empire by the same means. The intercourse carried on in this way is, indeed, every day becoming of more importance.

The commerce carried on by caravans, in the interior of Africa, is widely extended and of considerable value. Besides the great caravan which proceeds from Nubia to Cairo, and is joined by Mohammedan pilgrims from every part of Africa, there are caravans which have no object but commerce, which set out from Fez, Algiers, Tunis, Tripoli, and other states on the sea-coast, and penetrate far into the interior. Some of them take as many as 50 days to reach the place of their destination; and as their rate of travelling may be estimated at about 18 miles a day at an average, the extent of their journeys may easily be computed. As both the time of their outset and their route is known, they are met by the people of the countries through which they travel, who trade with them. Indian goods of every kind form a considerable article in this traffic; in exchange for which, the chief commodity the inhabitants have to give is slaves.

Three distinct caravans are employed in bringing slaves and other commodities from Central Africa to Cairo. One of them comes direct from Mourzouk, the capital of Fezzan, across the Libyan desert; another from Senaar; and the third from Darfur. They do not arrive at stated periods, but after a greater or less interval, according to the success they have had in procuring slaves, ivory, gold dust, drugs, and such other articles

as are fitted for the Egyptian markets. The Mourzouk caravan is said to be under the best regulations. It is generally about 50 days on its passage; and seldom consists of less than 100, or of more than 300, travellers. The caravans from Senaar and Darfur used formerly to be very irregular, and were sometimes not seen in Egypt for 2 or 3 years together; but since the occupation of the former by the troops of Mohammed Ali, the intercourse between it and Egypt has become comparatively frequent and regular. The number of slaves imported into Egypt by these caravans is said to amount, at present, to about 10,000 a year. The departure of a caravan from Darfur is looked upon as a most important event; it engages for a while the attention of the whole country, and even forms a kind of era. — (*Browne's Travels in Africa*, 2d ed. p. 278.) A caravan from Darfur is considered large, if it has 2,000 camels and 1,000 slaves. Many of the Moorish pilgrims to Mecca cross the sea from Souakin and Massouah to the opposite coast of Arabia, and then travel by land to Mecca; and Burckhardt states, that of all the poor pilgrims who arrive in the Hedjaz, none bear a more respectable character for industry than those from Central Africa.

Caravans are distinguished into *heavy* and *light*. Camels loaded with from 500 to 600 lbs.* form a heavy caravan; light caravans being the term applied to designate those formed of camels under a moderate load, or perhaps only half loaded. The mean daily rate at which heavy caravans travel is about 18½ miles, and that of light caravans 22 miles.

The safety of a caravan depends materially on the conduct of the *caravan-bachi*, or leader. Niebuhr says, that when the latter is intelligent and honest, and the traveller understands the language, and is accustomed to the Oriental method of travelling, an excursion through the desert is rarely either disagreeable or dangerous. But it is not unusual for the Turkish pachas to realise considerable sums by selling the privilege of conducting caravans; and it is generally believed in the East, that leaders so appointed, in order to indemnify themselves, not unfrequently arrange with the Arabian sheikhs as to the attack of the caravans, and share with them in the booty! At all events, a leader who has paid a large sum for the situation, even if he should be honest, must impose proportionally heavy charges on the association. Hence the best way in travelling with caravans is, to attach oneself to one conducted by an active and experienced merchant, who has a considerable property embarked in the expedition. With ordinary precaution, the danger is then very trifling. It would be easy, indeed, were there anything like proper arrangements made by government, to render travelling by caravans, at least on all the great routes, abundantly secure. — (*Niebuhr, Voyage en Arabie*, tome ii. p. 194. ed. Amst. 1780.)

No particular formalities are required in the formation of a caravan. Those that start at fixed periods are mostly under the control of government, by whom the leaders are appointed. But, generally speaking, any dealer is at liberty to form a company and make one. The individual in whose name it is raised is considered as the leader, or *caravan-bachi*, unless he appoint some one else in his place. When a number of merchants associate together in the design, they elect a chief, and appoint officers to decide whatever controversies may arise during the journey. — (For further details with respect to caravans, see the *Modern Part of the Universal History*, vol. xiv. pp. 214—243.; *Robertson's Disquisition on Ancient India*, Note 54.; *Rees's Cyclopædia*, art. *Caravan*, most of which is copied from Robertson, though without a single word of acknowledgment; *Burckhardt's Travels in Arabia*, vol. ii. *passim*; *Urquhart on Turkey and its Resources*, p. 137. 151., &c.)

CARAVANSERA, a large public building or inn appropriated for the reception and lodgment of the caravans. Though serving in lieu of inns, there is this radical difference between them, — that, generally speaking, the traveller finds nothing in a caravansera for the use either of himself or his cattle. He must carry all his provisions and necessaries with him. They are chiefly built in dry, barren, desert places; and are mostly furnished with water brought from a great distance and at a vast expense. A well of water is, indeed, indispensable to a caravansera. Caravanseras are also numerous in cities; where they serve not only as inns, but as shops, warehouses, and even exchanges.

CARAWAY-SEED (Fr. *Carvi, Cumin des prés*; Ger. *Keummel, Brodkümmel*; It. *Carvi*), a small seed, of an oblong and slender figure, pointed at both ends, and thickest in the middle. It is the produce of a biennial plant (*Carum carui*), with a taper root like a parsnep, but much smaller. It should be chosen large, new, of a good colour, not dusty, and of a strong agreeable smell. It is principally used by confectioners; and is extensively cultivated in several parts of Essex.

CARBUNCLE (Ger. *Karfunkel*; Fr. *Escarboukle*; It. *Carbonchio*; Sp. *Carbunculo*; Lat. *Carbunculus*), a precious stone of the ruby kind, of a very rich glowing blood-red colour, highly esteemed by the ancients. — (See RUBY.)

* This is the burden of the small camel only. The large ones usually carry from 750 to 1,000 lbs.

CARD (Fr. *Cardes;* Ger. *Kardätschen, Karden, Wollkratzen;* It. *Cardi;* Rus. *Bardii;* Sp. *Cardas*), an instrument, or comb, for arranging or sorting the hairs of wool, cotton, &c. Cards are either fastened to a flat piece of wood, and wrought by the hand; or to a cylinder, and wrought by machinery.

CARDAMOMS (Fr. *Cardamomes;* Ger. *Kardamom;* It. *Cardamomi;* Sp. *Kardamomos;* Hind. *Gujarati elachi*), seed capsules produced by a plant, of which there are different species growing in India, Cochin China, Siam, and Ceylon. The capsules are gathered as they ripen; and when dried in the sun, are fit for sale. The small capsules, or lesser cardamoms, are produced by a particular species of the plant, and are the most valuable. They should be chosen full, plump, and difficult to be broken; of a bright yellow colour; a piercing smell; with an acrid, bitterish, though not very unpleasant taste; and particular care should be taken that they are properly dried. They are reckoned to keep best in a body, and are therefore packed in large chests, well jointed, pitched at the seams, and otherwise properly secured; as the least damp greatly reduces their value. The best cardamoms are brought from the Malabar coast. They are produced in the recesses of the mountains, by felling trees, and afterwards burning them; for wherever the ashes fall in the openings or fissures of the rocks, the cardamom plant naturally springs up. In Soonda Balagat, and other places where cardamoms are planted, the fruit or berry is very inferior to that produced in the way now mentioned. The Malabar cardamom is described as a species of bulbous plant, growing 3 or 4 feet high. The growers are obliged to sell all their produce to the agents of government, at prices fixed by the latter, varying from 550 to 700 rupees the candy of 600 lbs. avoirdupois: and it is stated that the contractor often puts an *enhanced value on the coins* with which he pays the mountaineers; or makes them take in exchange tobacco, cloths, salt, oil, betel nut, and such necessary articles, at prices which are frequently, no doubt, estimated above their proper level. Such a system ought assuredly to be put an immediate end to. Not more than *one hundredth* part of the cardamoms raised in Malabar are used in the country. They are sent in large quantities to the ports on the Red Sea and the Persian Gulf, to Sind, up the Indus, to Bengal, Bombay, &c. They form a universal ingredient in curries, pillaus, &c. The market price, at the places of exportation on the Malabar coast, varies from 800 to 1,200 rupees the candy. — (*Milburn's Orient. Commerce*, and the valuable evidence of T. H. Baber, Esq., before the Lords' Committee of 1830, p. 216.)

Malabar cardamoms are worth at present (September, 1833), from 3*s.* 8*d.* to 3*s.* 10*d.* a pound in the London market, duty (1*s.*) included. Ceylon cardamoms are worth from 1*s.* 8*d.* to 2*s.* 2*d.*

CARDS, OR PLAYING CARDS (Du. *Kaarten, Speelkarden;* Fr. *Cartes à jouer;* Ger. *Karten, Spiel karten;* It. *Carte da giuoco;* Rus. *Kartii;* Sp. *Carras, Naipes;* Sw. *Kort*). The only thing necessary to be noticed in this place with respect to cards, is the regulations as to their manufacture, sale, and the payment of the duty.

It is regulated by the 9 Geo. 4. c. 18., that an annual licence duty of 5*s.* shall be paid by every maker of playing cards and dice. The duty on every pack of cards is 1*s.* and is to be specified on the ace of spades. Cards are not to be made in any part of Great Britain, except the metropolis; nor in Ireland, except in Dublin and Cork; under a penalty of 100*l.* Cards are to be enclosed in wrappers, with such marks as the commissioners of stamps may appoint. Before licence can be had, bond must be given to the amount of £*M.*, for the payment of the duties, &c. Selling or exposing to sale any pack of cards not duly stamped, subjects a licensed maker to a penalty of 50*l.*; and any one else to a penalty of 10*l.* Any person having in his possession, or using, or permitting to be used, any pack of cards not duly stamped, to forfeit 5*l.* Second-hand cards may be sold by any person, if sold without the wrapper of a licensed maker; and in packs containing not more than 52 cards, including an ace of spades duly stamped, and enclosed in a wrapper with the words "*Second-hand Cards*" printed or written in distinct characters on the outside: penalty for selling second-hand cards in any other manner, 20*l.*

An Account of the Duty received on Playing Cards in Great Britain and Ireland in each Year from 1820, specifying the Rates of Duty charged. — (*Parl. Paper*, No. 427. Sess. 1832.)

Year.	Great Britain.		Ireland.	
	Rate.	Amount of Duty.	Rate.	Amount of Duty.
		£ s. d.		£ s. d.
1820	2*s.* 6*d.* per pack -	21,267 5 0	2*s.* per pack - -	2,019 14 1
1821	— - -	21,347 5 0	— - -	1,821 16 8½
1822	— - -	21,179 17 6	— - -	1,643 0 11
1823	— - -	22,006 12 6	— - -	1,657 4 5½
1824	— - -	25,874 12 6	— - -	1,598 12 8½
1825	— - -	22,577 17 6	— - -	1,559 8 0
1826	— - -	18,300 15 0	— - -	1,037 12 6
1827	— - -	20,864 12 6	— - -	1,001 12 5
1828	1*s.* per pack from May	17,365 5 6	2*s.* per pack to 5th of July, 1*s.* per pack for the remainder of the year -	640 19 0
1829	— - -	15,542 14 0	1*s.* per pack - -	403 11 0
1830	— - -	14,509 7 0	— - - -	244 12 0
1831	— - -	14,400 2 0	— - - -	104 18 0

CARMEN, of the City of London, are constituted a fellowship by act of common council. The rates which they are allowed to charge, and the regulations by which they are to be guided, are settled at the quarter sessions. In other respects they are subjected to the rule of the president and governors of Christ's Hospital, to whom the owner of every cart pays an annual licence duty of 17*s.* 4*d.*

Carmen are to help to load and unload their carts; and if any carman exacts more than the regular rates, upon due proof, before the Lord Mayor, or any two magistrates, he shall suffer imprisonment for the space of 21 days.

If any person shall refuse to pay any carman his hire, according to the regular rates, upon complaint made, the president of Christ's Hospital, or a justice of the peace, may compel payment.

Merchants or other persons may choose what cart they please, except such as stand for wharf-work, tackle-work, crane-work, at shops and merchants' houses, which are to be taken in turn; and every carman standing with his empty cart next to any goods to be loaded, shall, upon the first demand, load the same for the accustomed rates; and if any person shall cause a carman to attend at his house, shop, warehouse, or cellar, with his loaded cart, the carman being willing to help to unload the same, he shall pay the carman after the rate of 12*d.* for every hour after the first half-hour for his attendance.

Every licensed carman is to have a piece of brass fixed upon his cart, upon which is to be engraven a certain number; which number, together with the carman's name, is registered in a register kept at Christ's Hospital; so that, in case of any misbehaviour, the party offended, by taking notice of the number of the cart, may search for it in the register, and the name will be found.

Carmen not conforming to these rules, or working without a numbered piece of brass fixed on the cart, may be suspended from their employment.

Carmen riding upon the shafts of their carts, or sitting within them, not having some person on foot to guide the horses, shall forfeit 10*s.*

CARMINE (Ger. *Karmin;* Du. *Karmyn;* Fr. *Carmine;* It. *Carminio;* Lat. *Carminium*), a powder of a very beautiful red colour, bordering upon purple, and used by painters in miniature. It is a species of *lake*, and is formed of finely pulverised cochineal. It is very high priced.

CARNELIAN. See AGATE.

CARPET, CARPETS (Ger. *Teppiche;* Du. *Tapyten, Vloer-tapyten;* Fr. *Tapis;* It. *Tappeti;* Sp. *Alfombras, Alcatifas, Tapetes;* Rus. *Kowrii, Kilimi*). Persian and Turkish carpets are the most esteemed. In England, carpets are principally manufactured at Kidderminster, Wilton, Cirencester, Worcester, Axminster, &c.; and in Scotland, at Kilmarnock. Those made at Axminster are believed to be very little, if any thing, inferior to those of Persia and Turkey.

CARRIAGES. See COACHES.

CARROT (*Daucus carota* Lin.), a biennial plant, a native of Britain. Though long known as a garden plant, its introduction into agriculture has been comparatively recent. The uses of the carrot in domestic economy are well known. It is extensively cultivated in Suffolk, whence large quantities are sent to the London market. Horses are said to be remarkably fond of carrots.

CARRIERS, are persons undertaking for hire to carry goods from one place to another.

Proprietors of carts and wagons, masters and owners of ships, hoymen, lightermen, bargemen, ferrymen, &c. are denominated common carriers. The master of a stage coach who *only carries passengers for hire*, is not liable for goods; but if he undertake to carry *goods and passengers*, then he is liable for both as a common carrier. The post-master general is not a carrier in the common acceptation of the term, nor is he subjected to his liabilities.

1. *Duties and Liabilities of Carriers.* — Carriers are bound to receive and carry the goods of all persons, for a reasonable hire or reward; to take proper care of them in their passage; to deliver them safely, and in the same condition as when they were received (excepting only such losses as may arise from *the act of God or the king's enemies*); or, in default thereof, to make compensation to the owner for whatever loss or damage the goods may have received while in their custody, that might have been prevented.

Hence a carrier is liable, though he be robbed of the goods, or they be taken from him by irresistible force; and though this may seem a hard rule, yet it is the only one that could be safely adopted; for if a carrier were not liable for losses unless it could be shown that he had conducted himself dishonestly or negligently, a door would be opened for every species of fraud and collusion, inasmuch as it would be impossible, in most cases, to ascertain whether the facts were such as the carrier represented. On the same principle a carrier has been held accountable for goods accidentally consumed by fire while in his warehouse. In delivering the opinion of the Court of King's Bench on a case of this sort, Lord Mansfield said — "A carrier, by the nature of his contract, obliges himself to use all due care and diligence, and is answerable for any neglect. But there is something more imposed upon him by custom, that is, by the common law. *A common carrier is in the nature of an insurer.* All the cases show him to be so. This makes him liable for every thing except the act of God and the king's enemies; that is, even for *inevitable accidents*, with those exceptions. The question then is, *What is the act of God?* I consider it to be laid down in opposition to the act of *man;* such as

lightning, storms, tempests, and the like, which could not happen by *any human intervention*. To prevent litigation and collusion, the law presumes negligence except in those circumstances. An armed force, though ever so great and irresistible, does not excuse; the reason is, for fear it may give room for collusion, which can never happen with respect to the act of God. We all, therefore, are of opinion that there should be judgment for the plaintiff." — (*Forward* v. *Pittard*, 1 *T. R.* 27.)

A carrier is not obliged to have a new carriage for every journey; it is sufficient if he provide one that, without any extraordinary accident, may be fairly presumed capable of performing the journey.

A carrier may be discharged from his liability by any fraud or concealment on the part of the individual employing him, or of the bailor; as if the latter represent a parcel as containing things of little or no value, when, in fact, it contains things of great value. But when the carrier has not given a notice limiting his responsibility, and when he puts no questions with respect to the parcel to the bailor, the latter need not say any thing with respect to it; and though the bailor should represent the thing delivered to the carrier as of no value, yet *if the latter know it to be otherwise*, he will be responsible in the event of its being lost or damaged. If the bailor deliver goods imperfectly packed, and the carrier *does not perceive it*, he is not liable in the event of a loss occurring; but if the defect in the package were such that the carrier could not but perceive it, he would be liable. On this principle a carrier was made to answer for the loss of a greyhound that had been improperly secured when given to him.

A carrier may refuse to admit goods into his warehouse at an unseasonable time, or before he is ready to take his journey; but he cannot refuse to do the ordinary duties incumbent on a person in his situation.

It is felony, if a carrier open a parcel and take goods out of it with intent to steal them; and it has been decided, that if goods be delivered to a carrier to be carried to a specified place, and he carry them to a different place, and dispose of them for his own profit, he is guilty of felony: but the embezzlement of goods by a carrier, without a felonious taking, merely exposes to a civil action.

No carrier, wagonman, carman, or wainman, with their respective carriages, shall travel on Sundays, under a penalty of 20*s*. — (3 *Chas.* 1. c. 1.)

A carrier is always, unless there be an express agreement to the contrary, entitled to a reward for his care and trouble. In some cases his reward is regulated by the legislature, and in others by a special stipulation between the parties; but though there be no legislative provision or express agreement, he cannot claim more than a *reasonable* compensation.

2. *Limitation of Responsibility.* — Until the act of 1830, a carrier might, by express stipulation, giving *public notice* to that effect, discharge his liability from all losses by robbery, accident, or otherwise, except those which arose from *misfeazance and gross negligence* (from which no stipulation or notice could exempt him), and provided the notice did not contravene the express conditions of an act of parliament.

Notices generally bore, that the carrier would not be responsible for more than a certain sum (usually 5*l*.) on any one parcel, the value of which had not been declared and paid for accordingly; so that a person aware of this notice, entering a box worth 1,000*l*. without declaring its value, or entering it as being worth 200*l*., would, should it be lost, have got in the first case only 5*l*., and in the latter only 200*l*., unless he could have shown that the carrier had acted fraudulently or with gross negligence. But, to avail himself of this defence, the carrier was bound to show that the bailor or his servant was acquainted with the notice at the time of delivering the goods. No particular manner of giving notice was required. It might be done by express communication, by fixing it up in a conspicuous place in the carrier's office, by insertion in the public papers or Gazette, by the circulation of handbills, &c.; it being in all cases a question for the jury to decide whether the bailor was really acquainted with the notice of the limitation; since, if he were not, he was entitled to recover, whatever efforts the carrier may have made to publish it. Thus, a notice stuck up in a carrier's warehouse, where goods were delivered, was of no avail against parties who could not read; neither was it of any avail against those who could read, and who had seen it, *unless they had actually read it*. On this principle it was held, that a notice in a newspaper is not sufficient, even when it was proved that the bailor read the newspaper, unless it could also be proved that he had read the notice itself.

These attempts to limit responsibility gave rise to a great deal of litigation and uncertainty; and to obviate the inconveniences thence arising, the important statute, 1 Will. 4. c. 68., was passed. This act declares, that carriers *by land* shall not be liable for the loss of certain articles specified in the act, when their value exceeds 10*l*., unless the *nature and value* of such articles be stated at the time of their delivery to the carrier, and an increased charge paid or agreed to be paid upon the same. It is further declared, that no publication of any notices by carriers shall have power to limit their

responsibility at common law for all other articles except those specified in the act; but as the act is of great importance, we subjoin it.

From and after the passing of this act, no mail contractor, stage coach proprietor, or other common carrier *by land* for hire, shall be liable for the loss of or injury to any article or articles or property of the description following, viz. gold or silver coin of this realm or of any foreign state, or any gold or silver in a manufactured or unmanufactured state, or any precious stones, jewellery, watches, clocks, or timepieces of any description, trinkets, bills, notes of the Governor and Company of the Banks of England, Scotland, and Ireland respectively, or of any other bank in Great Britain or Ireland, orders, notes, or securities for payment of money, English or foreign stamps, maps, writings, title-deeds, paintings, engravings, pictures, gold or silver plate or plated articles, glass, china, silks in a manufactured or unmanufactured state, and whether wrought up or not wrought up with other materials, furs, or lace, or any of them, contained in any parcel or package which shall have been delivered, either to be carried for hire or to accompany the person of any passenger in any mail or stage coach or other public conveyance, when the value of such article or articles or property aforesaid contained in such parcel or package shall exceed the sum of 10*l.*, unless at the time of the delivery thereof at the office, warehouse, or receiving house of such mail contractor, &c. the value and nature of such article or articles or property shall have been declared by the person or persons sending or delivering the same, and such increased charge as hereinafter mentioned, or an engagement to pay the same, be accepted by the person receiving such parcel or package. — § 1.

When any parcel or package containing any of the articles above specified shall be so delivered, and its value and contents declared as aforesaid, and such value shall exceed the sum of 10*l.*, it shall be lawful for such mail contractors, stage coach proprietors, and other common carriers, to demand and receive an increased rate of charge, to be notified by some notice, affixed in legible character in some public and conspicuous part of the office, warehouse, or other receiving house, where such parcels or packages are received by them for the purpose of conveyance, stating the increased rates of charge required to be paid over and above the ordinary rate of carriage, as a compensation for the greater risk and care to be taken for the safe conveyance of such valuable articles; and all persons sending or delivering parcels or packages containing such valuable articles as aforesaid at such office shall be bound by such notice, without further proof of the same having come to their knowledge. — § 2.

Provided always, that when the value shall have been so declared, and the increased rate of charge paid, or an engagement to pay the same shall have been accepted as herein-before mentioned, the person receiving such increased rate of charge or accepting such agreement shall, if required, sign a receipt for the package or parcel, acknowledging the same to have been insured, which receipt shall not be liable to any stamp duty; and if such receipt shall not be given when required, or such notice as aforesaid shall not have been affixed, the mail contractor, stage coach proprietor, or other common carrier as aforesaid, shall not have or be entitled to any benefit or advantage under this act, but shall be liable and responsible as at the common law, and be liable to refund the increased rate of charge. — § 3.

And be it enacted, that from and after the 1st day of September 1830, no public notice or declaration heretofore made or hereafter to be made shall be deemed or construed to limit or in any wise affect the liability at common law of any such mail contractors, stage coach proprietors, or other public common carriers as aforesaid, for or in respect of any articles or goods to be carried and conveyed by them; but that all and every such mail contractors, stage coach proprietors, and other common carriers as aforesaid shall, from and after the said 1st day of September, be liable, as at the common law, to answer for the loss of any injury [*so in the act*] to any articles and goods in respect whereof they may not be entitled to the benefit of this act, any public notice or declaration by them made and given contrary thereto, or in anywise limiting such liability, notwithstanding. — § 4.

And be it further enacted, that for the purposes of this act every office, warehouse, or receiving house, which shall be used or appointed by any mail contractor, or stage coach proprietor, or other such common carrier, for the receiving of parcels to be conveyed as aforesaid, shall be deemed and taken to be the receiving house, warehouse, or office of such mail contractor, stage coach proprietor, or other common carrier; and that any one or more of such mail contractors, stage coach proprietors, or common carriers, shall be liable to be sued by his, her, or their name or names only; and that no action or suit commenced to recover damages for loss or injury to any parcel, package, or person, shall abate for the want of joining any co-proprietor or co-partner in such mail, stage coach, or other public conveyance by land for hire as aforesaid. — § 5.

Provided always, and be it further enacted, that nothing in this act contained shall extend or be construed to annul or in anywise affect any special contract between such mail contractor, stage coach proprietor, or common carrier, and any other parties, for the conveyance of goods and merchandises. — § 6.

Provided also, and be it further enacted, that where any parcel or package shall have been delivered at any such office, and the value and contents declared as aforesaid, and the increased rate of charges been paid, and such parcels or packages shall have been lost or damaged, the party entitled to recover damages in respect of such loss or damage shall also be entitled to recover back such increased charges so paid as aforesaid, in addition to the value of such parcel or package. — § 7.

Provided also, and be it further enacted, that nothing in this act shall be deemed to protect any mail contractor, stage coach proprietor, or other common carrier for hire, from liability to answer for loss or injury to any goods or articles whatsoever, arising from the felonious acts of any coachman, guard, bookkeeper, porter, or other servant in his or their employ, nor to protect any such coachman, guard, bookkeeper, or other servant, from liability for any loss or injury *occasioned by his or their own personal neglect or misconduct.* — § 8.

Provided also, and be it further enacted, that such mail contractors, stage coach proprietors, or other common carriers for hire, shall not be concluded as to the value of any such parcel or package by the value so declared as aforesaid, but that he or they shall in all cases be entitled to require, from the party suing in respect of any loss or injury, proof of the actual value of the contents by the ordinary legal evidence; and that the mail contractors, stage coach proprietors, or other common carriers as aforesaid, shall be liable to such damages only as shall be so proved as aforesaid, not exceeding the declared value, together with the increased charges as before mentioned. — § 9.

And be it further enacted, that in all actions to be brought against any such mail contractors, &c., the defendant or defendants may pay the money into court. — § 10.

It will be observed, that carriers continue, notwithstanding this act, liable, as before, for the felonious acts of their servants, and their own misfeazance or gross negligence. It is not possible, however, to lay down any general rule as to the circumstances which constitute this offence. Differing as they do in almost every case, the question, when raised, must be left to a jury. But it has been decided, that the *misdelivery* of a parcel, or its *nondelivery within a reasonable time*, is a misfeazance that can not be defeated by any notice on the part of the carrier limiting his responsibility. In like manner, the sending of a parcel by a different coach from that directed by the bailor, the removing it from one carriage to another, are misfeazances. Where a parcel is directed to a person at a particular place, and the carrier, knowing such person, delivers the parcel to another

who represents himself as the consignee, such delivery is gross negligence. Leaving parcels in a coach or cart unprotected in the street is also gross negligence.

At common law, there is no distinction between carriage performed by sea or land; but by the 7 Geo. 2. c. 15. and 26 Geo. 3. c. 86., corrected and amended by the 53 Geo. 3. c. 159., it is enacted that ship-owners are not to be liable for any loss or damage happening to goods on board through the fraud or neglect of the master, without their knowledge or privity, further than the value of the vessel and the freight accruing during the voyage.—(See Owners.)

3. *Commencement and Termination of Liability.*—A carrier's liability commences from the time the goods are actually delivered to him in the character of carrier. A delivery to a carrier's servant is a delivery to himself, and he will be responsible. The delivery of goods in an inn-yard or warehouse, at which other carriers put up, is not a delivery so as to charge a carrier, unless a special notice be given him of their having been so delivered, or some previous intimation to that effect.

A carrier's liability ceases, when he vests the property committed to his charge in the hands of the consignee or his agents, by actual delivery; or when the property is resumed by the consignor, in pursuance of his right of stopping it *in transitu*. It is in all cases the duty of the carrier to deliver the goods. The leaving goods at an inn is not a sufficient delivery. The rule in such cases, in deciding upon the carrier's liability, is to consider whether any thing remains to be done by the carrier, as such; and if nothing remains to be done, his liability ceases, and conversely.

A carrier has a lien upon goods for his hire. Even if the goods be stolen, the rightful owner is not to have them without paying the carriage.

For further details as to this subject see *Jeremy on the Law of Carriers*, passim; *Chitty's Commercial Law*, vol. iii. pp. 369—386.; and *Burn's Justice of the Peace*, tit. *Carriers*. There are some excellent observations with respect to it in *Sir William Jones's Essay on the Law of Bailments*.—(For an account of the regulations as to the conveyance of passengers in stage coaches, see Coaches, Stage.)

CARTS. Every cart, &c. for the carriage of any thing to and from any place, where the streets are paved, within the bills of mortality, shall contain 6 inches in the felly. No person shall drive any cart, waggon, &c. within 5 miles of the General Post Office, unless the name, surname, and place of abode of the owner, be painted in conspicuous letters, at least 1 inch in height, on the right or off side thereof, under a penalty of 5*l*. Any person may seize and detain any cart, waggon, &c. without such mark.—(1 & 2 *Will.* 4. c. 22.)

CASH, in commerce, means the ready money, bills, drafts, bonds, and all immediately negotiable paper in an individual's possession.

CASH ACCOUNT, in book-keeping, an account to which nothing but cash is carried on the one hand, and from which all the disbursements of the concern are drawn on the other. The balance is *the cash in hand*. When the credit side more than balances the debit, or disbursement side, the account is said to be *in cash*; when the contrary, to be *out of cash*.

Cash Account, in banking, is the name given to the account of the advances made by a banker in Scotland, to an individual who has given security for their repayment.—(See Banks (Scotch).)

CASHEW NUTS (Ger. *Akajunüsse, Westindische Anakarden*; Du. *Catsjoenooten*, Fr. *Noix d'acajou*; It. *Acaju*; Sp. *Nueces d'acaju*; Port. *Nozes d'acaju*), the produce of the *Anacardium occidentale*. They are externally of a greyish or brownish colour, of the shape of a kidney, somewhat convex on the one side, and depressed on the other. The shell is very hard; and the kernel, which is sweet and of a very fine flavour, is covered with a thin film. Between this and the shell is lodged a thick, blackish, inflammable oil, of such a caustic nature in the fresh nuts, that if the lips chance to touch it, blisters immediately follow. The kernels are used in cooking, and in the preparation of chocolate.

CASPIAN SEA. See Taganrog.

CASSIA. There are four species of cassia in the market, viz. *Cassia Fistula*; *Cassia Lignea*, or *Cassia Bark*; *Cassia Buds*, and *Cassia Senna*.

1. *Cassia Fistula* (Fr. *Casse*; Ger. *Rhonkasie*; It. *Polpa di cassia*; Lat. *Cassiæ pulpa*; Arab. *Khyar sheber*) is a tree which grows in the East and West Indies, and Egypt (*Cassia fistula* Lin.). The fruit is a woody, dark brown pod, about the thickness of the thumb, and nearly 2 feet in length. Those brought to this country come principally from the West Indies, packed in casks and cases; but a superior kind is brought from the East Indies, and is easily distinguished by its smaller smooth pod, and by the greater blackness of the pulp.

2. *Cassia Lignea*, or *Cassia Bark* (Fr. *Casse*; Ger. *Cassia*; Port. *Cassia lenhosa*; Arab. *Seleekeh*; Hind. *Tuj*; Malay, *Kayū-legi*), the bark of a tree (*Laurus Cassia* Lin.) growing in Sumatra, Borneo, the Malabar coast, Philippine Islands, &c.; but chiefly in the provinces of Quantong and Kingsi, in China, which furnish the greatest

part of the cassia met with in the European markets. The tree grows to the height of 50 or 60 feet, with large, spreading, horizontal branches. The bark resembles that of cinnamon in appearance, smell, and taste, and is very often substituted for it: but it may be readily distinguished; it is thicker in substance, less quilled, breaks shorter, and is more pungent. It should be chosen in thin pieces; the best being that which approaches nearest to cinnamon in flavour: that which is small and broken should be rejected. A good deal of the cassia in the Indian markets is brought from Borneo, Sumatra, and Ceylon. Malabar cassia is thicker and darker coloured than that of China, and more subject to foul packing: each bundle should be separately inspected. — (*Ainslie's Materia Indica; Milburn's Orient. Com.*, &c.)

The duty on cassia was reduced in 1825 from 2*s.* 6*d.* per lb. to 1*s.*, and in 1829 to 6*d.* Owing partly to these reductions, and partly to the heavy duty on and high price of cinnamon, the consumption of cassia has more than doubled since 1820. Still, however, it is very inconsiderable when compared with the importation. In 1832, the duty of 6*d.* per lb. produced 1,807*l.* 2*s.* 10*d.*, showing that 72,285 lbs. had been cleared for consumption. The imports in ordinary years, vary from about 400,000 lbs. to about 800,000 lbs.; the excess over what is made use of at home being principally sent to Germany, Italy, and Russia. Of 837,589 lbs. imported in 1830, 799,715 lbs. were brought from the East India Company's territories and Ceylon, 25,586 lbs. from the Philippine Islands, 6,290 lbs. from Brazil, and 5,995 lbs. from the Mauritius. Cassia was quoted in the London markets, in August, 1833, at from 86*s.* to 90*s.* a cwt. in bond. — (*Parl. Paper*, No. 367. Sess. 1832, &c.)

Cassia Buds, the dried fruit or berry of the tree (*Laurus cassia*) which yields the bark described in the previous article. They bear some resemblance to a clove, but are smaller, and, when fresh, have a rich cinnamon flavour. They should be chosen round, fresh, and free from stalks and dirt. Cassia buds are the produce of China. The exports from Canton in 1831 amounted to 1,334 piculs, or 177,866 lbs. The imports into Great Britain in 1832 were 75,173 lbs., but the entries for home consumption are not specified. They were quoted in the London markets in October, 1833, at 80*s.* a cwt. in bond. — (*Milburn's Orient. Com.; Anglo-Chinese Kalendar for* 1832; and *Parl. Paper*, No. 425. Sess. 1833.)

Cassia Senna. See Senna.

CASTOR (Fr. *Castoreum*; Ger. *Kastoreunt*; It. *Castoro*; Sp. *Castoreo*), the produce of the beaver. In the inguinal region of this animal are found four bags, a large and a small one on each side: in the two large ones there is contained a softish, greyish yellow, or light brown substance, which, on exposure to the air, becomes dry and brittle, and of a brown colour. This is castor. It has a heavy but somewhat aromatic smell, not unlike musk; and a bitter, nauseous, and subacrid taste. The best comes from Russia; but of late years it has been very scarce; and all that is now found in the shops is the produce of Canada. The goodness of castor is determined by its sensible qualities; that which is black is insipid, inodorous, oily, and unfit for use. Castor is said to be sometimes counterfeited by a mixture of some gummy and resinous substances; but the fraud is easily detected, by comparing the smell and taste with those of real castor. — (*Thomson's Dispensatory.*)

CASTOR OIL (Fr. *Huile du Ricin*; Ger. *Rizinusohl*; It. *Olio di Ricino*; Sp. *Ricinsoel*), is obtained from the seeds of the *Ricinus communis*, or *Palma Christi*, an annual plant, found in most tropical countries, and in Greece, the south of Spain, &c. The oil is separated from the seeds either by boiling them in water, or by subjecting them to the action of the press. It is said, that though the largest quantity of oil may be procured by the first method, it is less sweet, and more apt to become rancid, than that procured by expression, which, in consequence, is the process now most commonly followed. Good expressed castor oil is nearly inodorous and insipid; but the best leaves a slight sensation of acrimony in the throat after it is swallowed. It is thicker and heavier than the fat oils, being viscid, transparent, and colourless, or of a very pale straw colour. That which is obtained by boiling the seeds has a brownish hue; and both kinds, when they become rancid, thicken, deepen in colour to a reddish brown, and acquire a hot, nauseous taste. It is very extensively employed in the materia medica as a cathartic. — (*Thomson's Dispensatory.*)

The quantity cleared for home consumption in 1831 amounted to 327,940 lbs., being about double the quantity cleared for consumption in 1820; an increase principally ascribable to the reduction of the duty from 1*s.* 5*d.* to 3*d.* Of the total quantity imported in 1830, amounting to 490,558 lbs., no fewer than 141,257 lbs. were from the East Indies, 39,408 lbs. from British North America, 5,139 lbs. from the United States, and 4,718 lbs. from the British West Indies. Castor oil from foreign countries, being loaded with a duty of 1*s.*, is almost wholly re-exported. The price of East India castor oil in bond varies from 9*d.* to 1*s.* 7*d.* per lb.; that of the West Indies is much higher. — (*Accounts published by the Board of Trade*, p. 118.; *Parl. Paper*, No. 367. Sess. 1832, &c.)

CATECHU (Fr. *Cachou*; Ger. *Kaschu*; Hind. *Cut*; Mal. *Gambir*), a brown stringent substance, formerly known by the name of *Terra Japonica*, because supposed to be a kind of earth. It is, however, a vegetable substance obtained from two plants; viz. the *Mimosa*, or more correctly the *Acacia catechu*, and the *Uncaria gambir*. The first of these is a tree from 20 to 30 feet high, found in abundance in many of the forests of India, from 16° of lat. up to 30°. The places most remarkable for its production are, the Burmese territories; a large province on the Malabar coast, called the Con-

can; and the forests skirting the northern part of Bengal, under the hills which divide it from Nepaul. The catechu is obtained from this tree by the simple process of boiling the heart of the wood for a few hours, when it assumes the look and consistency of tar. The substance hardens by cooling; is formed into small balls or squares; and being dried in the sun, is fit for the market. The price to the first purchaser in the Concan is about 15*s.* a cwt. According to Dr. Davy, who analysed it, the specific gravity of Concan catechu is 1·39; and that of Pegu, 1·28. The taste of this substance is astringent, leaving behind a sensation of sweetness: it is almost wholly soluble in water. Of all the astringent substances we know, catechu appears to contain the largest portion of tannin. According to Mr. Purkis, 1 lb. is equivalent to 7 or 8 lbs. of oak bark for tanning leather. From 200 grs. of Concan catechu, Dr. Davy procured 109 of tannin, 68 of extractive matter, 13 of mucilage, and 10 of earths and other impurities: the same quantity of Pegu catechu afforded 97 grs. of tannin, 73 of extract, 16 of mucilage, and 14 of impurities. The *uncaria gambir* is a scandent shrub, extensively cultivated in all the countries lying on both sides of the Straits of Malacca; but chiefly in the small islands at their eastern extremity. The catechu is in this case obtained by boiling the leaves, and inspissating the juice; a small quantity of crude sago being added, to give the mass consistency: it is then dried in the sun, and being cut like the Concan catechu into small squares, is ready for use. There is a great consumption of this article throughout all parts of India as a masticatory; it forms an ingredient in the compound of betel pepper, areca nut, and lime, which is in almost universal use. Catechu may be purchased at the Dutch settlement of Rhio, or at Malacca, in the Straits of Singapore, at the rate of about 10*s.* a cwt. The quantity of it, under the corrupted name of cutch, imported yearly into Calcutta from Pegu, at an average of the 5 years ending with 1828-29, was about 300 tons, at a cost not exceeding 9*s.* per cwt. From Bombay a considerable quantity is annually imported into China. The quantity of catechu, under the name of gambir, produced in Rhio by the Chinese settlers, is equal to about 4,600 tons a year, about 2,000 of which are exported for the consumption of Java; the rest being sent to China, Cochin China, and other neighbouring countries.

Catechu, particularly from Singapore, has lately been imported in considerable quantities for trial in our tanneries; but with a duty of 1*l.* per cwt., equal to twice the prime cost, we fear the speculation is not likely to succeed. — (See *Ainslie's Materia Indica; Ure's Dictionary; Singapore Chronicle; Buchanan's Journey through Mysore Canara, and Malabar; Bell's Review of the external Commerce of Bengal.*)

CAT'S EYE, a mineral of a beautiful appearance, brought from Ceylon. Its colours are grey, green, brown, red, of various shades. Its internal lustre is shining, its fracture imperfectly conchoidal, and it is translucent. From a peculiar play of light, arising from white fibres interspersed, it has derived its name. The French call the appearance *chatoyant*. It scratches quartz, is easily broken, and resists the blowpipe. It is set by the jewellers as a precious stone.

CAT SKINS. The skin or fur of the cat, is used for a variety of purposes, but is principally dyed and sold as false sable. It appears from evidence taken before a late Committee of the House of Commons, that it is a common practice in London to decoy the animal and kill it for the sake of its skin. The fur of the wild cat is, however, far more valuable than that of the domestic cat. The wild cat skins imported into this country are brought almost wholly from the territories of the Hudson's Bay Company. The animal from which they are taken is a good deal larger than the English wild cat, and is sometimes called the *loup cervier*, or Canadian lynx. It is very courageous. At an average of the 3 years ending with 1831, the number of cat skins imported amounted to 40,000 a year, of which about 24,000 a year were retained for home consumption.

CATTLE, a collective term applied to designate all those quadrupeds that are used either as food for man, or in tilling the ground. By *neat* or *horned cattle* is meant the two species included under the names of the ox (*Bos*) and the buffalo (*Bubulus*); but as the latter is hardly known in this country, it is the former only that we have here in view.

The raising and feeding of cattle, and the preparation of the various products which they yield, have formed, in all countries emerged from the savage state, an important branch of industry.

It would be quite inconsistent with the objects and limits of this work, to enter into any details with respect to the different breeds of cattle raised in this or other countries. They are exceedingly various. In Great Britain they have been vastly improved, both in the weight of carcase, the quality of the beef, and the abundance of the milk, by the extraordinary attention that has been given to the selection and crossing of the best breeds, according to the objects in view. This sort of improvement began about the middle of last century, or rather later, and was excited and very much forwarded by the skill and enterprise of two individuals — Mr. Bakewell of Dishley, and Mr. Culley of Northumberland. The success by which their efforts were attended roused a spirit of

emulation in others; and the rapid growth of commerce and manufactures since 1760 having occasioned a corresponding increase in the demand for butcher's meat, improved systems of breeding, and improved breeds, have been very generally introduced.

But the improvement in the size and condition of cattle has not been alone owing to the circumstances now mentioned. Much of it is certainly to be ascribed to the great improvement that has been made in their feeding. The introduction and universal extension of the turnip and clover cultivation has had, in this respect, a most astonishing influence, and has wonderfully increased the food of cattle, and consequently the supply of butcher's meat.

It was stated in the First Report of the Select Committee of the House of Commons on Waste Lands (printed in 1795), that cattle and sheep had, at an average, increased in size and weight about *a fourth* since 1732; but there are strong grounds for supposing that the increase had been much more considerable than is represented by the committee.

According to an estimate of Dr. Davenant in 1710, the average weight of the *nett* carcase of black cattle was only 370 lbs., of calves 50 lbs., and of sheep only 28 lbs.; but according to Sir F. M. Eden (*Hist. of the Poor*, vol. iii. Appen. p. 88.) and Mr. Middleton (*Agric. of Middlesex*, 2d ed. p. 541.), the weight of the carcase of bullocks killed in London is now, at an average, 800 lbs., calves 140 lbs., sheep 80 lbs., and lambs 50 lbs., including offal; and deducting the latter, the nett weight of the carcases is nearer a half than a fourth greater than the weight assigned by Davenant.

Consumption of Butcher's Meat in London. — The number of head of cattle, sheep and lambs, sold in Smithfield market, each year since 1732, has been as follows: —

Years.	Cattle.	Sheep.	Years.	Cattle.	Sheep.	Years.	Cattle.	Sheep.	Years.	Cattle.	Sheep.
1732	76,210	514,700	1758	84,252	550,930	1783	101,840	701,610	1808	144,042	1,015,280
1733	80,169	555,050	1759	86,439	582,260	1784	98,143	616,110	1809	137,600	989,250
1734	78,810	566,910	1760	88,594	622,210	1785	99,047	641,470	1810	132,155	962,750
1735	83,894	590,970	1761	82,514	666,010	1786	92,270	665,910	1811	125,012	966,400
1736	87,606	587,420	1762	102,831	772,160	1787	94,946	668,570	1812	133,854	953,630
1737	89,852	607,330	1763	80,851	653,110	1788	92,829	679,100	1813	137,770	891,240
1738	87,010	589,470	1764	75,168	556,360	1789	93,269	693,700	1814	135,071	870,880
1739	86,787	568,980	1765	81,630	537,000	1790	103,708	749,660	1815	124,948	962,840
1740	84,810	501,020	1766	75,534	574,790	1791	101,164	740,360	1816	120,439	968,560
1741	77,714	536,180	1767	77,324	574,050	1792	107,348	760,859	1817	129,888	1,044,710
1742	79,601	503,260	1768	79,660	626,170	1793	116,848	728,480	1818	138,047	963,250
1743	76,475	468,120	1769	82,131	642,910	1794	109,448	719,420	1819	135,226	949,900
1744	76,648	490,620	1770	86,890	649,690	1795	131,092	745,640	1820	132,933	947,990
1745	74,188	563,990	1771	93,573	631,860	1796	117,152	758,840	1821	129,125	1,107,230
1746	71,582	620,790	1772	89,503	609,540	1797	108,377	693,510	1822	142,043	1,340,160
1747	71,150	621,780	1773	90,133	609,740	1798	107,470	753,010	1823	149,552	1,264,920
1748	67,631	610,060	1774	90,419	585,290	1799	122,986	834,400	1824	163,615	1,239,720
1749	72,706	624,220	1775	93,581	623,950	1800	125,073	842,210	1825	156,985	1,130,310
1750	70,765	656,340	1776	98,372	671,700	1801	134,546	760,560	1826	143,460	1,270,530
1751	69,589	631,890	1777	93,714	714,870	1802	126,389	743,470	1827	138,363	1,335,100
1752	73,708	642,100	1778	97,360	658,540	1803	117,551	787,430	1828	147,698	1,288,460
1753	75,252	648,440	1779	97,352	676,540	1804	113,019	903,940	1829	158,313	1,240,300
1754	70,437	631,350	1780	102,383	706,850	1805	125,043	912,410	1830	159,907	1,287,070
1755	74,290	647,100	1781	102,543	743,330	1806	120,250	858,570	1831	148,168	1,189,010
1756	77,257	624,710	1782	101,176	728,970	1807	134,326	924,030	1832	166,224	1,364,160
1757	82,612	574,960									

Down to 1820, this table is extracted from papers laid before parliament; since 1820, it is made up from returns procured, for this work, from the Chamberlain's office.

The number of *fatted calves*, exclusive of sucklers, of which no account is taken, sold annually in Smithfield from 1821 inclusive, has been as follows: —

1821	21,768	1827	20,720
1822	24,255	1828	20,832
1823	22,739	1829	20,879
1824	21,949	1830	20,300
1825	20,958	1831	—
1826	22,118	1832	19,522

(Obtained from the clerk of the market, 5th of Nov. 1833.)

The contract prices of butcher's meat per cwt. at Greenwich Hospital, since 1730, have been as below: —

	£	s.	d.		£	s.	d.		£	s.	d.
1730	1	5	8	1785	1	17	6½	1823	2	2	7¼
1735	0	16	11	1790	1	16	10	1824	2	2	8¼
1740	1	8	0	1795	2	2	10	1825	2	19	6½
1745	1	2	2	1800	3	4	4	1826	2	17	8
1750	1	6	6	1805	3	0	4	1827	2	15	4½
1755	1	7	9½	1810	3	12	0	1828	2	10	7¼
1760	1	11	6	1815	3	8	0	1829	2	6	3½
1765	1	7	3	1820	3	10	4½	1830	2	3	6
1770	1	8	6	1821	2	18	10	1831	2	4	3½
1775	1	13	5	1822	1	19	5½	1832	2	6	2¼
1780	1	12	6								

We suspect, from what we have heard from practical men of great experience, that the weight assigned by Sir F. M. Eden and Mr. Middleton to the cattle sold in Smithfield is a little beyond the average. It must also be observed, as already stated, that it is the *gross* weight of the carcase, or the weight of the animal under deduction of blood

and refuse; and therefore to get the *nett* weight, we have further to deduct the offal, or the hide, tallow, entrails, feet, &c. We have been informed that the following quantities may be deducted from the carcase weights, in order to obtain the nett weights of the different animals; viz. from neat cattle, 250 lbs. each; calves, 35 lbs.; sheep, 24 lbs.; lambs, 12 lbs. If these estimates be nearly right, we should be able, provided we knew the respective numbers of sheep and lambs, to estimate the total quantity of butcher's meat furnished for London by Smithfield market, exclusive of hogs and pigs. Sheep and lambs are not, however, distinguished in the returns; but it is known that the former are to the latter nearly as 3 to 1; so that we may estimate the average gross weight of the sheep and lambs at about 70 lbs., and their average nett weight at about 50 lbs. The account for 1830 will then stand as under: —

Number and Species of Animals.	Gross Weight.	Offal.	Nett Weight.	Butcher's Meat.
	Lbs.	Lbs.	Lbs.	Lbs.
159,907 Cattle - -	800	250	550	87,948,850
1,287,070 Sheep and lambs -	70	20	50	64,353,500
20,300 Calves - -	140	35	105	2,131,500
			Total	154,434,850

This quantity, estimated at the average price of 6*d.*, would cost 3,860,871*l.*; at 8*d.*, it would cost 5,147,828*l.*

A part of the cattle sold at Smithfield go to supply the towns in the vicinity; but, on the other hand, many cattle are sold in the adjoining towns, and slaughtered for the use of London, of which no account is taken. We have reason to think that the latter quantity rather exceeds the former; but, supposing that they mutually balance each other, the above quantity of 154,434,850 lbs. may be regarded as forming the annual supply of butcher's meat at present required for London; exclusive, however, of hogs, pigs, suckling calves, &c., and exclusive also of bacon, hams, and salted provisions brought from a distance. The quantities thus omitted from the account are very considerable; nor can there, we apprehend, be any doubt that, with the addition of such parts of the offal as are used for food, they may be considered as more than balancing the butcher's meat required for the *victualling of ships*. On this hypothesis, therefore, it will follow, assuming the population of the metropolis to amount to 1,450,000, that the annual consumption of butcher's meat by each individual, young and old, belonging to it, is, at an average, very near 107 lbs.

This, though not nearly so great as has been sometimes represented *, is, we believe, a larger consumption of animal food than takes place any where else by the same number of individuals. According to M. Chabrol, the consumption of butcher's meat in Paris amounts to between 85 lbs. and 86 lbs. for each individual. At Brussels the consumption is a little greater, being supposed to average 89 lbs. each individual; being rather more than 3 lbs. above the mean of Paris, and 18 lbs. under the mean of London.

According to the reports of the inspectors of hides and skins, the following are the numbers of cattle, calves, and sheep, slaughtered in Liverpool, Manchester, Leeds, and Sheffield, from 1815 to 1820 inclusive: —

	Cattle.	Calves.	Sheep.
Liverpool - - -	74,671	100,329	457,268
Manchester - -	95,054	96,574	489,557
Leeds - - - -	22,976	34,598	317,642
Sheffield - - -	30,097	28,455	184,859
Totals -	222,798	259,956	1,443,326

(*Appen. to Agric. Report of* 1821, p. 267.)

In estimating the weights of the animals killed at these towns, a lower standard must be adopted than that which we have taken for London; first, because the largest and finest cattle are brought to the metropolis; and secondly, because a very large proportion of the calves are sucklers, which are excluded from the London accounts. These considerations have not been sufficiently attended to by the framers of the estimate in the report now quoted. Sheep, in the above table, means, no doubt, sheep and lambs.

We extract from Dr. Cleland's valuable work on the statistics of Glasgow the subjoined account of the number, weight, &c. of the animals slaughtered and sold in that city during the year 1822.

* Mr. Middleton (*Agriculture of Middlesex*, p. 643.) estimates the consumption of animal food in London, exclusive of fish and poultry, at 234 lbs. a year for every individual! And he further estimates the total average annual expense incurred by each inhabitant of the metropolis, for *all* sorts of animal food, at 8*l.* 8*s.*! To make any comments on such conclusions would be worse than useless; but the fact of their being met with in a work, otherwise of considerable merit, is one of the many proofs, every where to be met with, of the low state of statistical knowledge in this country.

Butcher's Meat sold in the Glasgow Market in 1822.

	Royalty.	Suburbs.	Total,			£ s. d.	£ s. d.
Bullocks	13,009	1,557	14,566	average 28 stone,	407,848, at 7s.	142,746 16 0	
Calves	7,957	630	8,557	—	— 36s.	15,402 12 0	
Sheep	48,896	8,624	57,520	—	— 20s.	57,520 0 0	
Lambs	59,424	9,213	68,637	—	— 6s.	20,591 2 0	
Swine	5,899	640	6,539	—	— 20s.	6,539 0 0	
Total	135,155	20,664	155,819				242,799 10 0
Tallow, &c. belonging to these Carcasses.							
Bullocks - -			14,566,	averaging 3½ stone,	50,981, at 7s.	17,843 7 0	
Hides - - -			14,566,	—	— 28s	20,392 8 0	
Heads and offals			14,566,	—	— 8d.	5,826 8 0	
Calf skins -			8,557,	—	— 2s.	855 14 0	
Sheep tallow			57,520,	averaging 3½ lbs.,	201,320, - 5d.	4,194 3 4	
Heads and offals			8,557,	—	— 1s. 6d.	641 15 6	
Sheep skins -			57,520,	—	— 1s. 6d.	4,314 0 0	
Heads and offals			57,520,	—	— 7d.	1,677 13 4	
Lamb skins -			68,337,	—	— 1s. 3d	4,289 16 3	
Heads and offals			68,637,	—	— 4d.	1,143 19 0	
							61,179 4 5
			Total value of Carcasses, Tallow, Hides, &c.				303,978 14 5

N. B. — The weight is estimated in this statement by the stone of 16 lbs., each of 22½ oz. The office of hide-inspector having been abolished, there are no means of continuing this table to a later period; but the returns of the cattle sold in the market at Glasgow since 1822, show that the increase in the supply of animal food has at least kept pace with the increase of population.

The population of Glasgow, when this account was taken, amounted to 147,043, which shows that the consumption of butcher's meat in that city, is, as compared with its population, but little inferior to that of London. This statement, taken in connection with the fact that, so late as 1760, the slaughter of bullocks for the supply of the public market was unknown in Glasgow, sets the wonderful improvement that has since taken place in the food of the Scotch people in the most striking point of view. Previously to 1780 it was customary in Glasgow, Edinburgh, and the principal Scotch towns, for families to purchase in November what would now be reckoned a small half-fed cow or ox, the salted carcase of which was the only butcher's meat they tasted throughout the year. In the smaller towns and country districts this practice prevailed till the present century; but it is now everywhere abandoned. We believe, indeed, that there has never been in any country a more rapid increase in the quantity, or a greater improvement in the quality of the food brought to market, than has taken place in Scotland since 1770. In so far as respects butcher's meat, this has been occasioned partly by the growing numbers and opulence of all classes, and partly by the vast increase in the food of cattle consequent to the introduction of green crops, and of an improved system of cultivation. — (See BREAD.)

The introduction of steam navigation, and the improved means of communication by rail-roads and otherwise, has already had, and will, no doubt, continue to have, a material influence over the supply of butcher's meat. Owing to the difficulty and expense of their conveyance, cattle could not formerly be conveniently fattened at any very considerable distance from the great markets; but steam navigation has gone far to remove this difficulty. Instead of selling their cattle, lean or half-fed, to the Norfolk graziers, by whom they were fattened for the London market, the producers, in various districts of Scotland, are now beginning to fatten them at home, either sending the live animals or the carcasses by steam to London, Liverpool, &c. This practice is indirectly as well as directly advantageous to the farmer, inasmuch as it enables him to turn his green crops to better account, and to raise larger supplies of manure. The same practice is also extending in Ireland; and will, no doubt, spread itself over every part of the country where feeding can be carried on, that has the required facility of transport.

Exclusive of the cattle raised in Great Britain, we import considerable supplies of beef and of live cattle from Ireland.

Account of the number of Cows and Oxen, and of the quantities of Beef, imported into Great Britain from Ireland, from 1801: —

Years.	Cows and Oxen.	Beef.	Years.	Cows and Oxen.	Beef.	Years.	Cows and Oxen.	Beef.
	No.	*Barrels.*		*No.*	*Barrels.*		*No.*	*Barrels.*
1801	31,543	58,911	1810	44,553	71,605	1818	58,165	80,587
1802	42,501	59,448	1811	67,680	108,282	1819	52,176	70,504
1803	28,016	62,226	1812	79,122	114,504	1820	39,014	52,591
1804	15,646	59,342	1813	48,973	104,516	1821	26,725	65,905
1805	21,862	88,519	1814	16,435	83,162	1822	34,659	43,139
1806	27,704	91,261	1815	33,809	60,307	1823	46,351	69,079
1807	26,252	85,255	1816	31,752	39,495	1824	62,314	54,810
1808	13,958	88,366	1817	45,301	105,555	1825	63,519	63,557
1809	17,917	89,771						

In 1825 the trade between Great Britain and Ireland was placed on the footing of a coasting trade, so that there are no means of continuing this account to a later date; but for some further particulars, the reader is referred to Liverpool, art. DOCKS; for an account of the sales of cattle at the great fair of Ballinasloe, see FAIRS AND MARKETS.

Number of Head of Cattle in Great Britain. — It would, on many accounts, be very desirable to be able to form an accurate estimate of the number and value of the stock of cattle in Great Britain, and of the proportion annually killed and made use of; but owing to the little attention that has been paid to such subjects in this country, where every sort of statistical knowledge is at the very lowest ebb, there are no means of arriving at any conclusions that can be depended upon. The following details may not, however, be unacceptable.

Arthur Young has given, both in his *Eastern* and *Northern Tours*, estimates of the number and value of the different descriptions of stock in England. The greatest discrepancy, unaccompanied by a single explanatory sentence, exists between them; but there can be no doubt that the following estimate (*Eastern Tour*, vol. iv. p. 456.), though, perhaps, rather under the mark, is infinitely nearer the truth than the other, which is about twice as great: —

Number of Draught cattle	684,491
Cows	741,532
Fatting cattle	513,369
Young cattle	912,656
Total	2,852,048

Now, taking this number at the round sum of 3,000,000, and adding a third to it for the increase since 1770, and 1,100,000 for the number of cattle in Scotland (*General Report of Scotland*, iii. *Addenda*, p. 6.), we shall have 5,100,000 as the total head of cattle of all sorts in Great Britain. The common estimate is, that about a *fourth* part of the entire stock is annually slaughtered; which, adopting the foregoing statement, gives 1,275,000 head for the supply of the kingdom; a result which all that we have heard inclines us to think is very near the mark.

Dr. Colquhoun estimated the total head of cattle in England and Wales only, in 1812, at 5,500,000; but he assigns no data for his estimate, which is entitled to very little attention.

Cattle of the Continent. — Baron Malchus has given, in his work on European Statistics, published at Stuttgard in 1826, an account of the number of horned cattle, sheep, swine, &c., in most European countries. In so far as respects the British empire, the statements are mostly copied from Colquhoun and are ludicrously inexact. Perhaps, however, they may, in so far as regards the Continental states, be better entitled to credit. The following are some of the items in his Table: —

Countries.	Cattle.	Countries.	Cattle.
Sweden and Norway	2,647,000	Baden	421,000
Russia	19,000,000	Bavaria	1,895,700
Denmark	1,607,000	Austria	9,912,500
Netherlands	2,500,000	France	6,681,900
Prussia	4,275,700	Spain	2,500,000
Saxony	345,000	Portugal	650,000
Hanover	794,000	Switzerland	800,000
Wirtemberg	713,000	Italy	3,500,000

On the whole the Baron estimates the neat or horned cattle of Europe, including the British isles, but excluding Turkey, at 70,270,974. At best, however, this estimate can only be considered as a very rough approximation.

Laws as to Cattle. — No salesman, broker, or factor, employed in buying cattle for others, shall buy for himself in London, or within the bills of mortality, on penalty of double the value of the cattle bought and sold. — (31 *Geo.* 2. c. 40.)

Cattle not to be driven on Sunday, on penalty of 20*s.* — (3 *Cha.* 1. c. 1.)

Any person unlawfully and maliciously killing, wounding, or maiming any cattle, shall be guilty of felony, and, upon conviction, may be transported, at the discretion of the court, beyond seas for life, or for any term not less than 7 years, or be imprisoned for any term not exceeding 4 years, and kept to hard labour; and, if a male, may be once, twice, or thrice publicly or privately whipped, if the court shall think fit so to order. — (7 & 8 *Geo.* 4. c. 30.)

Persons wantonly and cruelly abusing, beating, or ill-treating cattle, may, upon being convicted before a justice of such offence, be fined in any sum not exceeding 5*l.* and not below 10*s.*; and upon nonpayment of fine, may be committed to the house of correction for any time not exceeding 3 months.

Complaint must be made within 10 days after the offence. Justices are instructed to order compensation to be made, not exceeding 20*s.*, to persons vexatiously complained against. — (3 *Geo.* 4. c. 71.)

CAVIAR (Fr. *Caviar, Cavial;* Ger. *Kaviar;* It. *Caviario, Caviale;* Sp. *Caviario;* Rus. *Ikra;* Lat. *Caviarium*), a substance prepared in Russia, consisting of the salted roes of large fish. The Uralian Cossacks are celebrated for making excellent caviar. The best is made of the roe of the sturgeon, appears to consist entirely of the eggs, and does not easily become fetid. This is packed in small casks or kegs; the inferior sort being in the form of dry cakes. Caviar is highly esteemed in Russia, and considerable quantities are exported to Italy. It is principally made of the sturgeon caught in the Wolga, in the neighbourhood of Astrachan. — (See *Tooke's Russia*, 2d ed. vol. iii. p. 345.)

CAYENNE PEPPER, OR GUINEA PEPPER. See CHILLIES.

CEDAR (Ger. *Zeder;* Du. *Ceder;* Fr. *Cedre;* It. and Sp. *Cedro;* Rus. *Kedr;* Lat. *Cedrus*). The cedar of Lebanon, or great cedar (*Pinus cedrus*), is famous in Scripture: it is a tall, majestic-looking tree. "Behold," says the inspired writer, "the Assyrian was a cedar in Lebanon with fair branches, and with a shadowing shroud, and

of an high stature; and his top was among the thick boughs. His height was exalted above all the trees of the field, and his boughs were multiplied, and his branches became long. The fir trees were not like his boughs, and the chestnut trees were not like his branches; nor any tree in the garden of God was like unto him in beauty." — (*Ezekiel*, xxxi. 3. 5. 8.) The cedar grows to a very great size. The timber is resinous, has a peculiar and powerful odour, a slightly bitter taste, a rich yellowish brown colour, and is not subject to the worm. Its durability is very great; and it was on this account (*propter æternitatem*, Vitruvius, lib. ii. § 9.) employed in the construction of temples, and other public buildings, in the formation of the statues of the gods, and as tablets for writing upon. In the time of Vitruvius, cedars were principally produced in Crete, Africa, and some parts of Syria. — (*Loc. cit.*) Very few are now found on Lebanon; but some of those that still remain are of immense bulk, and in the highest preservation.

Cedar exceeds the oak in toughness, but is very inferior to it in strength and stiffness. Some very fine cedars have been produced in England.

There are several other kinds of timber that are usually called cedar: thus, a species of cypress is called white cedar in America; and the cedar used by the Japanese for building bridges, ships, houses, &c., is a kind of cypress, which Thunberg describes as a beautiful wood, that lasts long without decay. The *Juniperus oxycedrus* is a native of Spain, the south of France, and the Levant; it is usually called the brown berried cedar. The Bermudian cedar (*Juniperus Bermudiana*), a native of the Bermuda and Bahama islands, is another species that produces valuable timber for many purposes; such as internal joiners' work, furniture, and the like. The red cedar, so well known from its being used in making black-lead pencils, is produced by the Virginian cedar (*Juniperus Virginiana*), a native of North America, the West India islands, and Japan. The tree seldom exceeds 45 feet in height. The wood is very durable, and, like the cedar of Lebanon, is not attacked by worms. It is employed in various ways, but principally in the manufacture of drawers, wardrobes, &c., and as a cover to pencils. The internal wood is of a dark red colour, and has a very strong odour. It is of a nearly uniform texture, brittle, and light. — (See *Tredgold's Principles of Carpentry; Lib. of Entertaining Knowledge, Veget. Substances; Rees's Cyclop.*, &c.)

The duty on cedar (2*l.* 10*s.* a ton from a foreign country, and 10*s.* from a British possession) produced 2,549*l.* 19*s.* 11*d.* in 1832. Its price in bond varies from 6*d.* to 9*d.* a foot.

CERTIFICATES, in the customs. No goods can be exported by certificate, except foreign goods formerly imported, on which the whole or a part of the customs paid on importation is to be drawn back. The manner of proceeding is regulated by the 3 & 4 Will. 4. c. 52. § 68, &c. The person intending to enter outwards such goods, is to deliver to the collector or comptroller of the port where the goods were imported or warehoused, two or more bills, specifying the particulars of the importation of such goods, and of the entry outwards intended to be made; and the officers, if they find such bills to agree with the entry inwards, are to issue a *certificate* of such entry, with the particulars necessary for the computation of the drawback upon the goods, the names of the person and ship by whom and in which the goods are to be exported, &c. The merchant then enters the goods outwards, as in the common way of exportation. The cocket granted upon this occasion is called a *certificate cocket*, and differs a little in form from common over-sea cockets. Notice of the time of shipping is to be given to the searcher. Some time after the departure of the vessel, the exporter may apply for the drawback. The collector and comptroller then make out on a proper stamp a debenture, containing a distinct narration of the transaction, with the exporter's or merchant's oath that the goods are really and truly exported beyond seas, and not relanded, nor intended to be relanded; and also with the searcher's certificate of the quantity and quality of the goods at the time of shipping. The debenture being thus duly made out and sworn to, the duties to be repaid are indorsed, the merchant's receipt taken below, and the money paid.

Certificates of origin, subscribed by the proper officers of the places where the goods were shipped, are required, to entitle the importers of sugar, coffee, cocoa, and spirits, from any British plantation, to get them entered as such. A similar certificate is required in the case of blubber — (see BLUBBER); and in the case of wine from the Cape of Good Hope; and sugar from the limits of the East India Company's charter, &c. — (See IMPORTATION AND EXPORTATION.)

CHAIN, *in surveying*, a measure of length, composed of a certain number of links made of iron wire, serving to take the distance between two or more places. Gunter's chain contains 100 such links, each measuring $7\frac{92}{100}$ inches, consequently equal to 66 feet, or 4 poles.

CHALDRON, a dry English measure. 36 coal bushels make a chaldron, and 21 chaldrons a score. The coal bushel is $19\frac{1}{2}$ inches wide from the outside, and 8 inches deep. It contains 2,217·6 cubic inches; but when heaped, 2,815·5, making the chaldron 58·65 cubic feet. There are 12 sacks of coal in a chaldron; and 4

5 chaldrons be purchased at the same time, the seller must deliver 63 sacks: the 3 sacks additional are called the *ingrain*. But coals are now sold in London, and almost every where else, by the ton of 20 cwt. avoirdupois. The Newcastle chaldron of coals is 53 cwt., and is just double the London chaldron. — (See Coal.)

CHAMBER OF COMMERCE, is an assembly of merchants and traders, where affairs relating to trade are treated of. There are several establishments of this sort in most of the chief cities of France; and in this country, chambers of this kind have been erected for various purposes.

Chamber of Assurance, in France, denotes a society of merchants and others for carrying on the business of insurance; but in Holland it signifies a court of justice, where causes relating to insurances are tried.

CHAMPAGNE, one of the most esteemed and celebrated of the French wines. See Wine.

CHANKS, or CHANK SHELLS, common conch shells, are fished up by divers in the Gulf of Manar, on the coast opposite Jaffnapatam, in Ceylon, in about 2 fathoms water; and at Travancore, Tuticoreen, and other places. Large fossil beds of chanks have also been found. They are of a spiral form, and form a considerable article of trade in India, where they are in extensive demand all over the country. They are sawn into narrow rings or bracelets, and are worn as ornaments for the arms, legs, fingers, &c. by the Hindoo women; many of them are also buried with the bodies of opulent and distinguished persons. Those which, from being taken with the fish, are called green chanks, are most in demand. The white chank, which is the shell thrown upon the beach by strong tides, having lost its gloss and consistency, is not worth the freight up to Calcutta. The value of the green chank depends upon its size. A chank opening to the right, called in Calcutta the right-handed chank, is so highly prized, as sometimes to sell for 400, or 500, or even 1,000 rupees. — (*Bell's Commerce of Bengal*, and *private communications*.)

The fishery of chanks is monopolised by government, who most commonly let the banks for about 4,000*l*. a year. Sometimes, however, they are fished by the servants of government on its account. But as the fishermen of the coast, and those belonging to the little islands where they are found, cannot be prevented from taking chanks, the better plan, as it appears to us, would be to give every one leave to fish them; but to lay a somewhat heavier duty on their exportation. We have been assured by those well acquainted with the circumstances, that this would be advantageous to all parties, but especially to government. We have heard that an arrangement of this sort has recently been made, but we have not learned anything positive respecting it.

CHARCOAL (Fr. *Charbon de bois*; Ger. *Reine Kohle*; It. *Carbone di legna*; Sp. *Carbon de lena*; Lat. *Carbo ligni*), a sort of artificial coal, consisting of wood burned with as little exposure to the action of the air as possible. "It was customary among the ancients to *char* the outside of those stakes which were to be driven into the ground, or placed in water, in order to preserve the wood from spoiling. New-made charcoal, by being rolled up in clothes which have contracted a disagreeable odour, effectually destroys it. When boiled with meat beginning to putrefy, it takes away the bad taint: it is, perhaps, the best tooth-powder known. When putrid water at sea is mixed with about $\frac{1}{9}$ of its weight of charcoal powder, it is rendered quite fresh; and a much smaller quantity of charcoal will serve, if the precaution be taken to add a little sulphuric acid previously to the water. If the water casks be charred before they are filled with water, the liquid remains good in them for years: this precaution ought always to be taken for long sea voyages. The same precaution, when attended to for wine casks, will be found very much to improve the quality of the wine." — (*Thomson's Chemistry*.)

CHARLESTON, a city and sea-port of the United States, in South Carolina, in lat. 32° 47′ N., long. 79° 48′ W. Population in 1830, including the suburbs, 40,300. The situation of Charleston has a good deal of resemblance to that of New York, being built on a point of land between the Ashley and Cooper rivers, at their point of confluence. The exports principally consist of cotton and rice (particularly the former), which are the staple products of the state. There are a few other articles exported, such as naval stores, hams, bacon, &c., but their value is quite inconsiderable. All the cotton sent from South Carolina to foreign countries is shipped at Charleston. In 1831–32, the exports are said to have amounted to 182,628 bales, of which 138,683 were for Great Britain.* The value of the cotton exported in 1831 amounted, according to the customhouse valuation, to 4,885,431 dollars, and that of the rice to 1,218,859 do. But exclusive of the exports to foreign countries, South Carolina sends a great deal of cotton and rice to other ports of the Union. The shipments of cotton coastwise in

* This statement is taken from an American paper, and is believed to be nearly accurate, but it is not official.

1831-32 were estimated at about 43,000 bales. The imports from foreign countries principally consist of cottons, woollens and linens, hardware, iron and steel, coffee, sugar, tea, wine, spices, &c. The greater part of the imports do not, however, come from abroad, but from the northern and middle states. The former supply her with fish, shoes, and all sorts of coarse manufactured goods for the use of the slave population; while the latter supply her with wheat, flour, &c. Most part of the imports of foreign produce are also brought at second-hand from New York, which occupies the same rank in the Union that Liverpool and London do in Great Britain. There were, in 1830, 5 banks in this city, including the branch of the United States Bank, with an aggregate capital of 4,975,000 dollars: the total dividends for the same year amounted to 317,000 dollars; being at the rate of 6·371 per cent. There were also 2 marine insurance companies, having a capital of 750,000 dollars. — (*Statement by J. H. Goddard, Esq., New York Daily Advertiser*, 29th of January, 1831.) The registered, enrolled, and licensed tonnage belonging to Charleston, in 1831, amounted to 13,008 tons, of which 7,147 tons were employed in the coasting trade. The total value of the articles imported into South Carolina, in the year ending 30th of September, 1832, was 1,213,725 dollars; the total value of the exports during the same year being 7,752,781 dollars. — (*Papers laid before Congress*, 15th of February, 1833.) In South Carolina, the dollar is worth 4*s.* 8*d.* currency; so that 1*l.* sterling = 1*l.* 0*s.* $8\frac{8}{9}$*d.* currency. *Weights and Measures* same as in England. — (For further details, see New York.)

Port. — Charleston harbour is spacious and convenient; but the entrance to it is incommoded by a range of sand-banks, stretching from Sullivan's Island on the north to Folly Island on the south, about $2\frac{1}{4}$ leagues. There are several channels through these banks, but only three, the middle or direct channel, the ship channel, and Lawford channel, between the latter and the mainland, that ought to be attempted by ships of considerable burden. The entrance to the ship channel is in lat. 32° 40′. The depth of water on the shallowest part of the bar at ebb tide is 12 feet, and at flood from 17 to 18 feet; whilst the depth in the middle channel at low water does not exceed 9 feet, and in Lawford channel it does not exceed 10 or 11 feet. A lighthouse has been erected on the south point of Lighthouse Island, bearing from the middle of the bar of the ship channel W. N. W. $\frac{1}{2}$ N. It is 80 feet high, having a revolving light, alternately brilliant and obscure, the period of obscuration being double that of brilliancy; but on approaching the light, the latter gains upon the former, and within $1\frac{1}{2}$ league it is never wholly dark. The light may be seen in fine weather at from 3 to 4 leagues off. After getting into the channel, which is marked by the breakers and buoys on each side, the proper course for a ship to steer is to bring the lighthouse to bear N.W. by W., and stand direct for it till you get within the banks, when the course is N. by W. But it is unnecessary to enter into further details on these points, as all ships entering Charleston harbour are bound, provided they are hailed by a licensed pilot off the bar, to pay him full pilotage fees whether they accept his services or not. In point of fact, however, they are always accepted; for the shifting of the sands, the influence of the tides, &c. render the entrance so difficult to those not perfectly familiar with it, that even the packet ships that sail regularly to and from New York uniformly heave-to without the bar for a pilot. — (See Plan of Charleston Harbour, reduced from the original survey of Major H. Bache.)

Ships usually moor alongside quays or wharfs, where they are in perfect safety.

Shipping Charges. — The charges of a public nature paid by ships entering this port differ but little in amount on a native and a foreign ship. On a vessel supposed to be of 300 tons burden, entering, unloading, taking on board a mixed cargo, and clearing out, they would be as under: —

	Dollars. Cents.	*L. s. d.*
Fee on entry at the customhouse -	2 60	or 0 11 1½
Surveyor's fee, on a foreign ship -	5 00	- 1 1 4½
Ditto, on a native ship -	3 00	- 0 12 9½
Harbour-master's fee - -	2 00	- 0 8 6½
Port warden's survey, when required -	10 00	- 2 2 8½
Fees on clearance at the customhouse, of a native ship - -	3 50	- 0 14 11½
Ditto, of a foreign ship - -	2 70	- 0 11 6½
Pilotage inwards and outwards, supposing the ship to draw 14 ft. water	50 00	- 10 13 6½
Wharfage, per diem - - -	1 00	- 0 4 3½

The difference in the fees on the clearance at the Customhouse of a native and a foreign ship, is owing to the former being obliged to give certain bonds which are not required of the latter.

The greater or smaller tonnage of the ship makes no difference on any of the above charges, except that of pilotage, which is in proportion to her draft of water, and is the same whether for a foreign or a native ship.

Departures from Charleston. — The following is

An Account of the Number of Ships, with a Specification of their Tonnage, and the Countries to which they belonged, that cleared from Charleston for Foreign Ports during each of the Three Years ending with 1831: —

Nation.	1829.		1830.		1831.	
	Vsls.	Tons.	Vsls.	Tons.	Vsls.	Tons.
British	55	19,052	51	16,250	91	26,631
United States	238	61,783	269	64,742	186	43,369
French	22	5,481	11	2,777	6	1,848
Spanish	5	420	12	1,106	27	2,671
Bremen	3	811	5	872	3	371
Dutch	1	193	—	—	—	—
Danish	1	45	1	125	1	125
Total	345	87,785	349	85,872	314	75,015

Rates of Commission. — The rates of commission or factorage usually charged and allowed at Charleston on transacting different sorts of business, are as follows, viz.—

For selling domestic produce, $2\frac{1}{2}$ per cent.
For selling foreign merchandize, 5 per cent.
For guaranteeing either of these sales, $2\frac{1}{2}$ per cent. additional is commonly allowed.
For purchasing with funds in hand, or drawing domestic bills for reimbursement, $2\frac{1}{2}$ per cent.
For purchasing goods and drawing foreign bills for reimbursement, 5 per cent. is charged.
For the sale of real or personal estate, the regular charge is 5 per cent.; but where the property to be sold is of any considerable value, the parties in general enter into an agreement beforehand, and a much lower rate of commission is allowed.

Charges on Rice and Cotton shipped at Charleston.

	Cents.	
Drayage, wharfage, &c. -	- 12½	per barrel.
Cooperage - - -	- 18¾	ditto.
	Total 31	cents per barrel.

On cotton the charges are —

On square bales,	*Cents.*	
Drayage, wharfage, &c. -	- 10	per bale.
Labour, mending bagging, &c.	- 10	ditto.
	Total 20	cents per bale.

On round bales or bags,	*Cents.*	
Drayage, wharfage, &c. -	- 10	per bale.
Labour, mending bagging, &c.	- 15	ditto.
	Total 25	cents per bale.

For commission, see above.

These particulars have been principally derived from the answers made by the Consul at Charleston, to the circular queries; answers which do great credit to his intelligence and industry.

CHART (Ger. *Seekarten;* Du. *Zeekarten;* Fr. *Cartes marines;* It. *Carte marine;* Sp. and Port. *Cartas de marear*) is properly applied to a projection of some part of the sea, as the term *Map* is to a portion of the land; wherefore charts are sometimes denominated "Hydrographical Maps." They are distinguished into several kinds, as plain, globular, and Mercator charts.

CHARTERPARTY, the name given to a contract in writing, between the owner or master of a ship and the freighter, by which the former hires or lets the ship, or a part of the ship, under certain specified conditions, for the conveyance of the goods of the freighter to some particular place or places. Generally, however, a charterparty is a contract for the use of the whole ship: it is in commercial law, what an indenture is at common law.

No precise form of words, or set of stipulations, is requisite in a charterparty. The forms subjoined to this article are those most commonly in use; but these may, and, indeed, in many cases must, be varied, to suit the views and intentions of the parties.

A charterparty is generally under seal: but sometimes a printed or written instrument is signed by the parties, called a *memorandum of a charterparty;* and this, if a formal charterparty be not afterwards executed, is binding. The stamp in either case is the same.

Charterparties, when ships are let or hired at the place of the owners' residence, are generally executed by them, or some of them; but when the ship is in a foreign port, it must necessarily be executed by the master, and the merchant or his agent, unless the owners have an agent in such port, having proper authority to act for them in such matters.

A charterparty made by the master in his name, when he is in a foreign port in the usual course of the ship's employment, and, therefore, under circumstances which do not afford evidence of fraud; or when it is made by him at home, under circumstances which afford evidence of the expressed or implied assent of the owners; is binding upon the latter. But, according to the law of England, no *direct* action can be maintained upon the instrument itself against the owners, unless it be signed and sealed by them, or unless they authorise the master (or agent, as the case may be) to enter into the contract, and unless it be distinctly expressed in the charterparty that he acts only as agent.

When a ship is chartered by several owners to several persons, the charterparty should be executed by each, or they will not be liable to an action for nonperformance. But if the charterparty be not expressed to be made between the parties, but runs thus—"This charterparty indented witnesseth, that C., master of the ship W., with consent of A. and B., the owners thereof, lets the ship to freight to E. and F.," and the instrument contains covenants by E. and F. to and with A. and B.; in this case A. and B. may bring an action upon the covenants expressed to be made with them; but unless they seal the deed, they cannot be sued upon it. This, therefore, is a very proper form.

The general rule of law adopted in the construction of this, as of other mercantile instruments, is, that the interpretation should be liberal, agreeable to the real intention of the parties, and conformable to the usage of trade in general, and of the particular trade to which the contract relates.

The charterparty usually expresses the burden of the ship; and by the famous French Ordinance of 1681, it is required to do so. According to Molloy (book ii. c. 4. § 8.), if a ship be freighted by the ton, and found of less burden than expressed, the payment shall be only for the real burden; and if a ship be freighted for 200 tons, or *thereabouts*, the addition of thereabouts (says the same author) is commonly reduced to *five* tons more or less; but it is now usual to say so many tons "register measurement."

The usual covenant, that the ship shall be seaworthy, and in a condition to carry the goods, binds the owners to prepare and complete every thing to commence and fulfil the voyage. But though the charterparty contained no such covenant, the owner of the vessel would be, at common law, bound, as a *carrier*, to take care that the ship should be fit to perform the voyage; and even though he should give notice, limiting his responsibility from losses occasioned to any cargo put on board his vessel, unless such loss should arise from want of ordinary care, &c., he would be liable if his ship were not seaworthy. —(See SEAWORTHY.)

In all maritime transactions, expedition is of the utmost consequence; for even by a short delay, the object or season of a voyage may be lost; and therefore, if either party be not ready by the time appointed for the loading of the ship, the other may seek another ship or cargo, and bring an action to recover the damages he has sustained.

The manner in which the owner is to lade the cargo is, for the most part, regulated by the custom and usage of the place where he is to lade it, unless there be any express stipulation in the charterparty with respect to it. Generally, however, the owner is bound to arrange the different articles of the cargo in the most proper manner, and to take the greatest care of them. If a cask be accidentally staved, in letting it down into the hold of the ship, the master must answer for the loss.

If the owner covenants to load a full and complete cargo, the master must take as much on board as he can do with safety, and without injury to the vessel.

The master must not take on board any contraband goods, whereby the ship or cargo may be liable to forfeiture and detention; nor must he take on board any false or colourable papers; but he must take and keep on board all the papers and documents required

for the protection and manifestation of the ship and cargo by the law of the countries from and to which the ship is bound, by the law of nations in general, or by any treaties between particular states.

If the master receive goods at the quay or beach, or send his boat for them, his responsibility commences with the *receipt* in the port of London. With respect to goods intended to be sent coastwise, it has been held, that the responsibility of the wharfinger ceases by the delivery of them to the mate of the vessel *upon the wharf*. As soon as he receives the goods, the master must provide adequate means for their protection and security; for even if the crew be overpowered by a superior force, and the goods taken while the ship is in a port or river within the country, the master and owners are liable for the loss, though they may have committed neither fraud nor fault. This may seem a harsh rule; but it is necessary, to put down attempts at collusive or fraudulent combinations.

The master must, according to the terms of the charterparty, commence the voyage without delay, as soon as the weather is favourable, but not otherwise.

Sometimes it is covenanted and agreed upon between the parties, that a specified number of days shall be allowed for loading and unloading, and that it shall be lawful for the freighter to detain the vessel a further specified time, on payment of a daily sum as *demurrage*.—(See DEMURRAGE.) If the vessel be detained beyond both periods, the freighter is liable to an action on the contract. The rate of demurrage mentioned in the charterparty will, in general, be the measure of the damages to be paid; but it is not the absolute or necessary measure; more or less may be payable, as justice may require, regard being had to the expense and loss incurred by the owner. When the time is thus expressly ascertained and limited by the terms of the contract, the freighter is liable to an action for damages if the thing be not done within the time, *although this may not be attributable to any fault or omission on his part;* for he has engaged that it shall be done. —(*Abbott on the Law of Shipping*, part iii. c. 1.)

If there has been any undertaking or warranty to sail with convoy, the vessel must repair to the place of rendezvous for that purpose; and if the master neglect to proceed with convoy, he will be answerable for all losses that may arise from the want of it.

The owners or master should sail with the ship for the place of her destination with all due diligence, and by the usual or shortest course, unless in cases of convoy, which the master must follow as far as possible. Sometimes the course is pointed out in the charterparty. A *deviation* from the usual course may be justified for the purpose of repairs, or for avoiding an enemy or the perils of the seas, as well as by the sickness of the master or mariners, and the mutiny of the crew.

By an exception in the charterparty, not to be liable for injuries arising from the act of God and the king's enemies, the owner or master is not responsible for any injury arising from the sea or the winds, unless it was in his power to prevent it, or it was occasioned by his imprudence or gross neglect. "The question," said Lord Mansfield, in an action brought by the East India Company, "is, whether the owners are to pay for the damage occasioned by the storm, the act of God; and this must be determined by the intention of the parties, and the nature of the contract. It is a charter of freight. The owners let their ships to hire, and there never was an idea that they insure the cargo against the perils of the sea. What are the obligations of the owners which arise out of the fair construction of the charterparty? Why, that they shall be liable for damages incurred by their own fault, or that of their servants, as from defects in the ship, or improper stowage, &c. If they were liable for damages occasioned by storms, they would become insurers." The House of Lords confirmed this doctrine by deciding (20th of May, 1788) that the owner is not liable to make satisfaction for damage done to goods by storm.

The charterer of a ship may lade it either with his own goods, or, if he have not sufficient, may take in the goods of other persons, or (if not prevented by a clause to that effect in the charterparty) he may wholly underlet the ship to another.—(For further details, see *Abbott on the Law of Shipping*, part iii. c. 1.; *Chitty's Commercial Law*, vol. iii. c. 9, &c.; and the articles BILL OF LADING, FREIGHT, MASTER, &c. in this Dictionary.)

Forms of Charterparties.

The following is one of the most usual forms of a charterparty:—

THIS charterparty, indented, made, &c., between A. B., &c., mariner, master, and owner, of the good ship or vessel, called, &c., now riding at anchor, &c., of the burthen of 200 tons, or thereabouts, of the one part, and C. D. of, &c., merchant, of the other part, witnesseth, that the said A. B., for the consideration hereinafter mentioned, hath granted, and to freight letten, and by these presents doth grant, and to freight let, unto the said C. D., his executors, administrators, and assigns, the whole tonnage of the hold, stern-sheets, and half-deck of the said ship or vessel, called, &c., from the port of London, to, &c., in a voyage to be made by the said A. B. with the said ship, in manner hereinafter mentioned, (that is say,) to sail with the first fair wind and weather that shall happen after, &c. next, from the port of London, with the goods and merchandise of the said C. D., his factors or assigns, on board, to, &c. aforesaid, (the act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navi-

gation, of whatever nature and kind, in so far as ships are liable thereto, during the said voyage always excepted,) and there unlade and make discharge of the said goods and merchandises; and also shall there take into and on board the said ship again, the goods and merchandises of the said C. D., his factors or assigns, and shall then return to the port of London with the said goods, in the space of, &c. limited for the end of the said voyage. In consideration whereof, the said C. D., for himself, his executors, and administrators, doth covenant, promise, and grant, to and with the said A. B., his executors, administrators, or assigns, by these presents, that the said C. D., his executors, administrators, factors, or assigns, shall and will well and truly pay, or cause to be paid, unto the said A. B., his executors, administrators, or assigns, for the freight of the said ship and goods, the sum of, &c. (or so much per ton,) within twenty-one days after the said ship arrived, and goods returned, and discharged at the port of London aforesaid, for the end of the said voyage; and also shall and will pay for demurrage, (if any shall be by default of him, the said C. D., his factors or assigns,) the sum of, &c. per day, daily, and every day, as the same shall grow due. And the said A. B., for himself, his executors, and administrators, doth covenant, promise, and grant, to and with the said C. D., his executors, administrators, and assigns, by these presents, that the said ship or vessel shall be ready at the port of London to take in goods by the said C. D., on or before, &c. next coming. And the said C. D., for himself, his, &c., doth covenant and promise, within ten days after the said ship or vessel shall be thus ready, to have his goods on board the said ship, to proceed on in the said voyage; and also, on arrival of the said ship at, &c., within, &c. days to have his goods ready to put on board the said ship, to return on the said voyage. And the said A. B., for himself, his executors, and administrators, doth further covenant and grant, to and with the said C. D., his executors, administrators, and assigns, that the said ship or vessel now is, and at all times during the voyage shall be, to the best endeavours of him, the said A. B., his executors and administrators, and at his and their own proper costs and charges, in all things made and kept stiff, staunch, strong, well-apparelled, furnished, and provided, as well with men and mariners sufficient and able to sail, guide, and govern the said ship, as with all manner of rigging, boats, tackle, and apparel, furniture, provision, and appurtenances, fitting and necessary for the said men and mariners, and for the said ship during the voyage aforesaid. In witness, &c.

The great variety of circumstances under which different voyages are made produce a corresponding diversity in charterparties. The charterparty of which the following is a copy affords a good example of the more complex species of these instruments.

It is this day mutually agreed between Mr. T. B. Rann, owner of the good ship or vessel called the Mermaid, William Henniker, master, of the measurement of 472 tons, or thereabouts, now in the river Thames, and Mr. David Thomson, of the firm of Messrs. Thomson, Passmore, and Thomson, of Mauritius, merchants, that the said ship, being tight, staunch, and strong, and every way fitted for the voyage, shall with all convenient speed, sail and proceed to Calcutta, with leave to take convicts out to New South Wales, and from thence troops, merchandise, or passengers, to the aforementioned port of Calcutta, with leave to touch at Madras on her way thither, if required on owner's account, or so near thereunto as she may safely get, and there load, from the factors of the said merchants at Calcutta, a full and complete cargo of rice, or any other lawful goods which the charterer engages to ship, and proceed with the same to Port Louis, in the Isle of France, and deliver the same free of freight; afterwards load there a full and complete cargo of sugar in bags, or other lawful merchandise of as favourable tonnage, which the charterer engages to ship, not exceeding what she can reasonably stow and carry over and above her tackle, apparel, provisions, and furniture; and, being so loaded, shall therewith proceed to London, or so near thereunto as she may safely get, and deliver the same on being paid freight, viz. for such quantity of sugar equal to the actual quantity of rice, or other goods, that may be shipped at Calcutta, at the rate of 5*l.* 12*s.* 6*d.* per ton of 20 cwt. nett, shipped there; and should the vessel deliver more nett sugar in the port of London than the quantity of rice, or other goods, actually shipped in Calcutta, the owners to be paid on the excess at the regular current rate of freight for sugar which other vessels, loading at the same time at Port Louis, receive; the tonnage of the rice, wheat, or grain, to be reckoned at 20 cwt. nett per ton; that of other goods at the usual measurement (the act of God, the king's enemies, fire, and all and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, during the said voyage, always excepted). The freight to be paid on unloading and right delivery of the cargo, as is customary in the port of London. Ninety running days are to be allowed the said merchant (if the ship is not sooner despatched) for loading the ship at Calcutta, discharging the cargo at Port Louis, and loading the cargo there; the said lay days to commence on the vessel being ready to receive cargo, the master giving notice in writing of the same at Calcutta, and to continue during the loading there; and from the time of her arrival at Port Louis, and being ready to discharge, till the final loading at that port, and to be discharged in the port of London with all possible despatch; and 20 days on demurrage over and above the said laying days, at 12*l.* per day. Penalty for non-performance of this agreement, 4,000*l.* The cargo to be brought to and taken from alongside at the expense and risk of the merchants. The necessary cash for the disbursements of the vessel at Calcutta, not exceeding 350*l.*, to be advanced by the charterer's agents; they taking the master's drafts on the owner for the same, at the regular current rate of exchange, and at three months' sight; and if the said bills be not regularly accepted and paid when due, the same to be deducted from the freight payable by this charterparty. The vessel to be disbursed at Port Louis by the chartering agents; sum not to exceed 300*l.*, free of commission; and the amount to be deducted from the freight at the final settlement at the port of London. Captain not to ship goods without consent. In the event of the ship being prevented, by damage or any other cause, reaching the Mauritius on or before the 1st day of January, 1831, the charterer or his agents shall be at liberty to employ the vessel for one or two voyages to Calcutta, at the rate of 2*l.* per ton of rice, or other goods, delivered at Mauritius. Fifty running days, to load and discharge, to be allowed on each voyage; it being understood that the charterer or his agents shall load the ship, as before agreed, either at the end of the first or second voyage, as the case may be. The freight on the intermediate voyages (if any) to be paid on delivery of the cargo, in cash, or by bills on London at usance, at the option of the master. The vessel to be addressed, both at Calcutta and Isle of France, to the agents of the charterer. In witness whereof, the said parties have hereunto set their hands and seals, at London, the 2d day of December, 1829.

Signed, sealed, and delivered, in the presence of (Signed) E. FORSYTH.

(Signed) THOS. B. RANN, (L.S.)
D. THOMSON, (L.S.)

Stamp Duty on Charterparties.—The statute 55 Geo. 3. c. 184. enacts, that any charterparty, or any agreement or contract for the charter of any ship or vessel, or any memorandum, letter, or other writing, between the captain, master, or owner of any ship or vessel, and any other person, for or relating to the freight or conveyance of any money, goods, or effects, on board of such ship or vessel, shall be charged with a duty of 1*l.* 15*s.*

And when the same, together with any schedule, receipt, or other matter, put or indorsed thereon, or annexed thereto, shall contain 2,160 words or upwards, then for every

entire quantity of 1,080 words contained therein over and above the first 1,080 words, there shall be charged a further *progressive* duty of 1*l.* 5*s.*

CHAY OR CHOY ROOT, the roots of a small biennial, rarely triennial, plant, growing spontaneously in light, dry, sandy ground near the sea; and extensively cultivated, especially on the coast of Coromandel. The cultivated roots are very slender, and from 1 to 2 feet in length, with a few lateral fibres; but the wild are shorter, and supposed to yield one fourth part more of colouring matter, and of a better quality. The roots are employed to dye the durable reds for which the Indian cotton yarn and chintzes have been long famous, and which can only be equalled by the Turkey red.

Chay root forms a considerable article of export from Ceylon. Only a particular set of people are allowed to dig it. It is all bought up by government, who pay the diggers a fixed price of 75 or 80 rix-dollars a candy, and sell it for exportation at about 175 rix-dollars. — (*Bertolacci's Ceylon*, p. 270.)

This root has been imported into Europe, but with no success. Dr. Bancroft suspects it may be injured by the long voyage; but he adds, that it can produce no effect which may not be more cheaply produced from madder. It is a very bulky article, and is consequently burdened with a very heavy freight. — (*Permanent Colours*, vol. ii. pp. 282—303.)

CHECKS, CHEQUES, OR DRAFTS, are orders addressed to some person, generally a banker, directing him to pay the sum specified in the check to the person named in it, or bearer, on demand. The following is the usual form: —

£100. *London, 30th October*, 1833.

Pay Mr. A. B. or bearer, One Hundred Pounds, on account of

Messrs. Jones, Loyd, and Co. C. D.

In point of form, checks nearly resemble bills of exchange, except that they are *uniformly payable to bearer*, and should be drawn upon a regular banker, though this latter point is not essential. They are assignable by delivery only; and are payable instantly on presentment, without any days of grace being allowed. But by the custom of London, a banker has until 5 of the afternoon of the day on which a check is presented for payment, to return it; so that where a check was returned before 5, with a memorandum of "cancelled by mistake" written under it, it was held a refusal to pay. If a check upon a banker be lodged with another banker, a presentment by the latter at the clearing-house is sufficient. Checks are usually taken conditionally as cash; for unless an express stipulation be made to the contrary, if they be presented in due time and not paid, they are not a payment. It is difficult to define what is the due or reasonable time within which checks, notes, or bills, should be presented. A man, as Lord Ellenborough has observed, is not obliged to neglect all other business that he may immediately present them: nevertheless it is the safest plan to present them without any avoidable delay; and if received in the place where payable, they had better be presented that day, or next at furthest. If a check be not presented within a reasonable time, the party on whom it is drawn will be justified in refusing to pay it; and the holder will lose his recourse upon the drawer. Checks drawn on bankers residing 10 miles or more from the place where they are drawn, must be on a stamp of the same value as a bill of exchange of an equal amount; but checks drawn on a banker, acting as such within 10 miles of the place where they are issued, may be on plain paper. — (*Chitty on Commercial Law*, vol. iii. p. 591.; *Woolrych on Commercial Law*, c. 3. § 2., &c.)

CHEESE (Ger. *Käse*; Du. *Kaas*; Fr. *Fromage*; It. *Formaggio, Cacio*; Sp. *Queso*; Rus. *Sur*; Lat. *Caseus*), the curd of the milk separated from the whey, and pressed or hardened. It has been used as an article of food from the earliest ages: vast quantities of it are consumed in Great Britain, and in most countries of Europe.

There is an immense variety of cheeses, the qualities of which depend principally on the richness and flavour of the milk of which they are made, and partly on the way in which they are prepared. England is particularly celebrated for the abundance and excellence of its cheese. Cheshire and Gloucestershire are, in this respect, two of its most famous counties; the cheese produced in the former has been estimated at 11,500 tons a year. There are two kinds of Gloucester cheese, double and single; the first is made of the milk and cream, the latter of the milk deprived of about half the cream. They are of various sizes, from 20 to 70 and even 80 lbs.; but they generally run from 50 to 60 lbs. A great deal of cheese is also made in that part of Shropshire which borders upon Cheshire, and in North Wiltshire. The former goes under the name of Cheshire cheese: the latter was, till lately, called Gloucestershire cheese; now it receives its appellation from the county where it is made. A strong cheese, somewhat resembling Parmesan, is made at Chedder in Somersetshire. The celebrated rich cheese,

called Stilton, is made in Leicestershire, principally in the villages round Melton Mowbray. It is not reckoned sufficiently mellow for cutting unless it be two years old; and is not saleable unless it be decayed, blue, and moist. A rich cheese is also made at Leigh, in Lancashire. The other cheeses made in England, which have acquired a peculiar name, either from the quantity made, or from the quality, are the Derbyshire, Cottenham, and Southam cheeses. The two last are new milk cheeses, of a peculiarly fine flavour: the places where they are made are in Cambridgeshire. Bath and York are remarkable for their cream cheeses. The county of Warwick, and Banbury in Oxfordshire, are also remarkable for cheeses; the former for the quantity made in it, about 20,000 tons being annually sent to London, besides a very large supply to Birmingham. Banbury cheese is distinguished for its richness.

Scotland is not celebrated for its cheese: the best is called Dunlop cheese, from a parish in Ayrshire, where it was originally manufactured. Dunlop cheeses generally weigh from 20 to 60 lbs. each; and are, in all respects, similar to those of Derbyshire, except that the latter are smaller.

Turmeric, marigolds, hawthorn buds, &c. were formerly used to heighten and improve the colour of cheese; but annotto (which see) is decidedly the best ingredient that can be employed for that purpose, and is at present used in Cheshire and Gloucestershire to the exclusion of every thing else. An ounce of genuine annotto will colour a hundred weight of cheese.

Large quantities of very good cheese are produced in Holland. In the manufacture of Gouda cheese, which is reckoned the best made in Holland, muriatic acid is used in curdling the milk instead of rennet. This renders it pungent, and preserves it from mites.

Parmesan cheese, so called from Parma in Italy, where it is manufactured, is merely a *skim-milk* cheese, which owes its rich flavour to the fine herbage of the meadows along the Po, where the cows feed. The best Parmesan cheese is kept for 3 or 4 years, and none is ever carried to market till it be at least 6 months old.

Swiss cheese, particularly that denominated Gruyère, from the bailiwick of that name in the canton of Fribourg, is very celebrated. Gruyère cheeses are made of skimmed or partially skimmed milk, and are flavoured with herbs. They generally weigh from 40 to 60 lbs. each, and are packed for exportation in casks containing 10 cheeses each.

According to Mr. Marshall, the average yearly produce of cheese from the milk of a cow, in England, is from 3 to 4 cwt., or more than double the weight of the butter.

For further details, see *Loudon's Ency. of Agriculture;* art. *Dairy* in *Supp. to Ency. Brit.; Stevenson's* art. on *England*, in the *Edinburgh Ency., &c.*

The imports of cheese, in 1831, amounted to 134,459 cwt., almost the whole of which came from the Netherlands. The quantity re-exported was but inconsiderable. The duty of 10*s.* 6*d.* a cwt. on imported cheese produced, in 1823, 69,049*l.* 2*s.* 8*d.*; showing that the quantity entered for home consumption amounted to about 132,000 cwt.

The contract price of the cheese furnished to Greenwich Hospital, in the undermentioned years, has been as follows: —

Years.	Prices per lb.	Years.	Prices per lb.	Years.	Prices per lb.	Years.	Prices per lb.
	d.		*d.*		*d.*		*d.*
1730	3¼	1800	6¼	1814	8¾	1824	4¼
1740	3¼	1805	7¼	1815	8	1825	5¼
1750	3¼	1806	7⅛	1816	6½	1826	6
1760	3½	1807	7½	1817	5½	1827	5¼
1770	3¾	1808	7⅞	1818	6	1828	5¼
1775	3¼	1809	8	1819	8	1829	5
1780	3⅝	1810	8⅛	1820	7	1830	4
1785	3¾	1811	8¼	1821	6	1831	4¾
1790	4	1812	8⅜	1822	5	1832	3¾
1795	5¼	1813	8¾	1823	4	See art. Prices.	

It is not possible to form any estimate of the value of the cheese annually consumed in Great Britain. Dr. Colquhoun states that the butter and cheese consumed in the United Kingdom must be worth at least 5,000,000*l.* a year, exclusive of the milk of which they are made; but he assigns no grounds for this statement; which we are inclined to think is very greatly exaggerated. — (See Butter.)

CHERRIES, the fruit of a tree (*Prunus Cerasus* Lin.) too well known to require any description. They derive their name from Cerasus, a city of Pontus, whence the tree was brought by Lucullus, about half a century before the Christian era. It soon after spread into most parts of Europe, and is supposed to have been carried to Britain about a century after it came to Rome. The principal supplies of cherries for the London market are brought from the cherry orchards in Kent and Herts. The wood of the cherry is close, takes a fine polish, and is not liable to split. — (*Rees's Cyclopædia; Loudon's Ency. of Agric., &c.*)

CHESNUT, a forest tree (*Fagus castanea*) growing abundantly in most parts of the southern countries of Europe. It was at one time very common in England; and is still frequently met with. It is long lived; grows to an immense size; and is very ornamental. The wood is hard and compact; when young, it is tough and flexible; but when old, it is brittle, and often shaky. The chesnut contains only a very small proportion of sap-wood; and hence the wood of young trees is found to be superior to even the oak in durability. It is doubtful whether the roof of Westminster Hall be of oak or chesnut; the two woods being, when old, very like each other, and having been formerly used almost indifferently in the construction of buildings. A good deal of chesnut has been planted within the last thirty years. — (*Tredgold's Principles of Carpentry.*)

CHESNUTS (Fr. *Châtaignes;* Ger. *Kastanien;* It. *Castagne;* Sp. *Castanas*), the fruit of the chesnut tree. Chesnuts grow in this country, but are very inferior both in size and perfection to those imported from the south of Europe. In some parts of the Continent they are frequently used as a substitute for bread, and form a large proportion of the food of the inhabitants. This is particularly the case in the Limousin, in Corsica, and in several districts of Spain and Italy. The inhabitants of the Limousin are said to prepare them in a peculiar manner, which deprives them of their astringent and bitter properties. Chesnuts imported from Spain and Italy are frequently kiln-dried, to prevent their germination on the passage. In this country they are principally served up roasted at desserts.

During the 3 years ending with 1831, the entries of foreign chesnuts for home consumption averaged 20,548 bushels a year. The duty of 2*s.* a bushel produced, in 1832, 2,321*l.* 12*s.* 10*d.* nett, showing that the consumption must have amounted to 23,216 bushels.

CHETWERT, a measure of corn in Russia, equal to $5\frac{19}{20}$ Winchester bushels, so that 100 chetwerts = $74\frac{1}{2}$ Winchester quarters.

CHILLIES (Hind. *Gas Murridge;* Javan. *Lombok;* Malay, *Chabai*), the pods or fruit of the *Capsicum annuum*, or Guinea pepper. This is one of the hardiest and most productive plants found in tropical climates; growing luxuriantly in almost all dry soils, however indifferent. In the wild state, the pods are small, and so pungent and acrid as to blister the tongue; but when raised on rich soils, they are large, and comparatively mild. The plant is said to be a native of both Indies. It is very extensively cultivated; and, with the exception of salt, is far more extensively used than any other condiment. In tropical countries, the pods are frequently made use of when unripe and green: when ripe, they become of a deep red colour; and in this state they are exported dry and entire, or reduced to powder — that is, to *Cayenne pepper;* which, when genuine, consists wholly of the ground pods of the *capsicum.* — (See PEPPER.)

CHINA ROOT (Ger. *Chinawurzel;* Du. *Chinawortel;* Fr. *Squine, Esquine;* Sp. *Raiz China, Cocolmeca;* Arab. *Rhubsinie*), the root of a species of climber (*Smilax China* Lin.). It comes from the West Indies as well as from China; but that from the latter is best. It is oblong and thick-jointed, full of irregular knobs, of a reddish brown colour on the outside, and a pale red within; while new, it will snap short, and look glittering within; if old, the dust flies from it when broken, and it is light and kecky. It should be chosen large, sound, heavy, and of a pale red colour internally. It is of no value if the worm be in it. — (*Milburn's Orient. Commerce.*)

CHINA WARE. See PORCELAIN.

CHINTS OR CHINTZ (Fr. *Indiennes;* Ger. *Zitze;* It. *Indiane;* Rus. *Siz;* Sp. *Chites, Zaraza*), fine printed calico, first manufactured in the East Indies, but now largely manufactured in Europe, particularly in Great Britain. — (See CALICO.)

CHIP HATS. See HATS.

CHOCOLATE (Du. *Chocolade;* Fr. *Chocolat;* Ger. *Schokolate;* It. *Cioccolata;* Por. *Chocolate;* Rus. *Schokolad;* Sp. *Chocolate*), a kind of cake or confection, prepared principally from the cacao nut. The nuts are first roasted like coffee; and being next reduced to powder and mixed with water, the paste is put into tin moulds of the desired shape, in which it speedily hardens, being, when taken out and wrapped in paper, fit for the market. Besides cacao nut, the Spaniards use vanilla, sugar, maize, &c. in the preparation of chocolate. This article, which is celebrated for its nutritious qualities, is but little used in Great Britain; a circumstance that seems to be principally owing to the very heavy duties with which it has been loaded. The importation of chocolate used formerly to be prohibited; and though this prohibition no longer exists, yet, as the duties on it are proportionally much heavier than upon cacao, we manufacture at home almost all that is required for our consumption. British chocolate is said to be very largely adulterated with flour and Castile soap. — (See *Edward's West Indies*, vol. ii. p. 364. ed. 1819.; and the art. CACAO.) The quantity of chocolate brought from abroad, entered for home consumption in the United Kingdom, in 1830, only amounted to $1,324\frac{1}{2}$ lbs., producing 160*l.* of revenue.

"Alike easy to convey and employ as an aliment, it contains a large quantity of nutri-

tive and stimulating particles in a small compass. It has been said with truth, that in Africa, rice, gum, and *shea* butter, assist man in crossing the deserts. In the New World, chocolate and the flour of maize have rendered accessible to him the table lands of the Andes, and vast uninhabited forests." — (*Humboldt's Pers. Nar.* vol. iv. p. 234. Eng. trans.)

CHRISTIANIA, the capital of Norway, situated at the bottom of a fiord or gulf, in the province of Aggerhuus; in lat. 59° 55½′ N., lon. 10° 48¾ E. Population, according to the *Weimar Almanack* for 1832, about 20,000. Christiania is about 60 miles from the open sea: the gulf is in some places very narrow, and its navigation somewhat difficult; but it is sufficiently deep for the largest vessels, having 6 or 7 fathoms water close to the quay. It is compulsory on all ships to take a pilot on board at the mouth of the bay. The trade of the town is considerable. The principal exports are timber and deals; glass, particularly bottles; linseed and oil-cake, iron and nails, smalts, bones, oak bark, &c. Salted and pickled fish, one of the staple products of Norway, is principally exported from Bergen. The deals of Christiania have always been in the highest estimation; a consequence of the excellence of the timber, and of the care with which the sap-wood and other defective parts is cut away; and not, as Mr. Coxe seems to have supposed, of the skilful sawing of the plank. The saw mills were formerly licensed to cut a certain quantity only, and the proprietors were bound to make oath that it was not exceeded. — (*Coxe's Travels in the North of Europe*, 5th edit. vol. iv. p. 28.) This absurd regulation no longer exists. There are far fewer restrictions on industry and commerce in Norway than in Sweden. In the former, British manufactured goods are admitted on moderate duties, and are very generally made use of. The principal articles of import are corn, colonial produce; woollen, linen, and cotton goods; butter, wine, brandy, &c.

Trade of Norway. — The following tables give a comprehensive view of the foreign trade of Norway.

Imports. — An Account of the Quantities of the principal Articles imported into Norway, during each of the Three Years ending with 1831.

Articles.	1829.		1830.		1831.	
	Norwegian Weight and Measure.	English Weight and Measure.	Norwegian Weight and Measure.	English Weight and Measure.	Norwegian Weight and Measure.	English Weight and Measure.
Cotton goods	132,629 lbs.	6,499 tons	180,563 lbs.	88·47 tons	174,385 lbs.	85·45 tons
French brandy	551,397 pot.	140,589 gals.	809,630 pot.	206,431 gals.	314,184 pot.	80,107 gals.
Coffee	1,547,575 lbs.	758·31 tons	1,576,130 lbs.	772·30 tons	1,814,185 lbs.	888·95 tons
Vinegar	104,430 pot.	26,626 gals.	119,826 pot.	30,552 gals.	73,956 pot.	18,856 gals.
Hemp	2,209,653 lbs.	1,082·73 tons	1,369,549 lbs.	671·08 tons	1,416,248 lbs.	693·96 tons
Hops	96,984	47·52	75,164	36·83	66,807	32·73
Flax	763,973	374·35	651,802	319·38	462,552	226·65 tons
Grain, wheat	13,766 tond.	6,700 qrs.	15,675 tond.	7,625 qrs.	11,962 tond.	5,822 qrs.
Rye	232,602	113,219	252,405	122,858	305,306	148,607
Barley	300,644	146,338	304,019	147,981	330,730	160,982
Oats	15,179	7,384	10,330	5,028	32,045	15,597
Malt	42,530	20,701	56,240	27,374	36,277	17,657
Wheaten flour	573,087 lbs.	280·81 tons	682,071 lbs.	334·21 tons	688,640 lbs.	337·43 tons
Rye flour	27,395	13·42	90,525	44·35	146,464	71·76
Barley flour	146,815	71·94	165,616	76·25	65,696	32·18 tons
Peas	11,202 tond.	5,452 qrs.	8,264 tond.	4,022 qrs.	9,330 tond.	4,541·50 qrs.
Oil	203,423 lbs.	99·68 tons	223,144 lbs.	109·34 tons	254,623 lbs.	124·76 tons
Cheese	238,438	116·83	222,363	108·96	215,885	105·78
Rice	273,093	133·81	341,110	167·14	255,917	125·40
Raisins	102,271	50·11	103,836	50·88	117,955	57·80
Rum	12,142 pot.	3,095 gals.	17,386 pot.	4,432 gals.	13,815 pot.	3,522 gals.
Salt	284,375 tond.	138,419 qrs.	283,600 tond.	- -	294,799 tond.	
Sail cloth	3,580 pieces	- - -	2,013 pces. & 49,400lbs.	24·02 tons	235 pces. & 160,316 lbs.	78·55 tons
Silks	4,270 lbs.	2·09 tons	4,883 lbs.	2·39	4,902 lbs.	2·40
Syrup	720,738	353·16	807,635	395·74	719,631	352·62
Grindstones	133 chald. & 5,587 pcs.	- - -	22 chald. & 1,337 pces.	- -	No return.	
Butter	417,824 lbs.	204·73 tons	365,808 lbs.	179·24 tons.	391,818 lbs.	191·99 tons
Coals	39,506 tond.	4,807·48 chald.	27,001 tond.	3,285·75 chal.	21,253 tond.	2,583·83 chal.
Sugar	2,195,752 lbs.	1,075·91 tons	2,342,225	1,147·69 tons	2,421,816 lbs.	1,186·69 tons
Soap, green	126,219	61·85	145,774	71·43	137,708	67·48
Soap, white	100,456	49·22	123,023	60·28	132,959	65·15
Tea	41,435	20·30	45,560	22·32	44,247	21·68
Tobacco	1,405,952	688·91	2,209,469	1,082·63	1,083,193	530·76
Woollens	180,926	88·65	186,058	91·17	193,900	95·01
Wine	474,218 pot.	120,911 gallons	638,794 pot.	162,873 gals.	189,001 pot.	48,313 gals.

	1826.		1827.		1828.	
Linen cloth	205,291 lbs.	100·59 tons	159,226 lbs.	78·02 tons	263,325 lbs.	129·02 tons

Exports. — An Account of the Quantities of the principal Articles exported from Norway during each of the Three Years ending with 1831.

Articles.	1829.		1830.		1831.	
	Norwegian Weight and Measure.	English Weight and Measure.	Norwegian Weight and Measure.	English Weight and Measure.	Norwegian Weight and Measure.	English Weight and Measure.
Anchovies (pickled sprats)	7,390 kegs	- -	6,172 kegs	- -	9,413 kegs	
Oak bark	- -	- -	6,876 sk.lbs.	1,078·15 tons	12,320 sk.lbs.	1,931·77 tons
Bones	820,916 lbs.	402·25 tons	1,097,755	537·89	955,742	468·31
Bottles	161,520 bot.	- -	144,028 bot.	- -	344,987 bot.	
Smalts	208,418 lbs.	102·12	257,340 lbs.	126·09	183,700 lbs.	90·01
Chromate of lead	578,658	283·53	538,608	263 91	594,506	291·30
Lobsters	1,634,905 lobs.	- -	1,196,904 lob.	- -	872,944 lob.	
Dried fish	44,417,712 lbs.	21,764·67	43,447,887 lbs	21,289·46	25,448,895 lb.	12,469·95
Salted fish	397,846 tond.	38,039 bar.	313,993 tnd.	300,218 bar.	469,659 tnd.	449,051·15 bar.
Horns	26,198 lbs.	12·83 tons	52,391 lbs.	25 67 tons	39,858 lbs.	19·41 tons
Iron	6,458,192	3,164·51	6,125,057	3,000·28	5,135,677	2,516·48
Rags	6,·86	3·27	14,238	6·97	8,640	4·23
Copper	610,225	299	751,825	368·39	524,894	257·20
Caraway seed	1,605	0·78645	1,518	0·74382	1,535	0·75215
Fish roes	17,029 tond.	16,282 bar.	22,677 tnd.	21,682 bar.	17,011 tnd.	16,264 bar.
Buck and goat skins	84,101 lbs.	41·20 tons	113,847 lbs.	55·78 tons	114,951 lbs.	56·32 tons
Rock moss	337,515	175·17	109,803	53·80 tons	91,812	44·98
Tar	1,257 tond.	1,201 bar.	1,017 tnd.	972 bar.	604 tnd.	577·50 bar.
Train oil	21,806	20,849	20,476	19,577	18,708	17,887
Wood, timber and deals	183,802 woodlæster	- - 360,251·92 tons	194,615 woodlæster	- - 381,445·4 tns.	172,979 woodlæster	339,038·84 tons
Zaffre	35,860 lbs.	16·59 tons	no return	- -	610 lbs.	0·29,890

Trade with England. — According to the official accounts rendered by the British Custom-house, there were imported from Norway, in 1831, 48,151 cwt. oak bark, 377 tons iron, 18,219 goat skins, 206,840 lbs. smalts, 118 cwt. tallow, 8,439 great hundreds battens and batten ends, 10,457 great do. deal and deal ends, 4,826 masts, &c. under 12 inches diameter, and 23,527 loads of timber, exclusive of about 1,000,000 lobsters, of which no account is kept. During the same year we exported to Norway 535,491 lbs. coffee, 7,755 lbs. indigo, 8,189 lbs. pepper, 4,981 lbs. pimento, 4,585 gallons rum, 3,169 cwt. muscovado sugar, 566,464 lbs. tobacco, 83,566 lbs. cotton wool, 3,774 tons coal, 434,744 yards cotton cloth, earthenware of the value of 3,402*l.*, cutlery of the value of 2,648*l.*, 92,150 bushels of salt, soap and candles of the value of 2,694*l.*, woollen manufactures of the value of about 13,000*l.*, and some minor articles. — (*Parl. Paper*, No. 550. Sess. 1833.)

Nothing would do so much to extend our trade with Norway, and not with it only, but with the whole north of Europe, as the repeal of the discriminating duty on Norwegian and Baltic timber. And, as this measure would be, in other respects, highly advantageous, it is to be hoped that its adoption may not be long deferred.

Customs Duties. — As previously remarked, these, when compared with the Swedish duties — (see GOTTENBURGH), are moderate. They amounted, in 1831, inwards, to 161,810*l.* 5*s.* 3*d.*; outwards, to 47,381*l.* 8*s.* 3*d*; making together, 209,221*l.* 13*s.* 6*d.* To these have to be added 27,436*l.* 19*s.* 5*d.* received on account of tonnage duties, lights, &c.

Customs Regulations. — Within 24 hours after a vessel has got to her moorings, the master should deliver to the collector his general report as to ship and cargo, or present the requisite documents for having such report made out with the assistance of a ship broker, whose services masters of foreign vessels cannot entirely dispense with. On making this general report, the measuring bill is to be exhibited, and payment of the tonnage and other dues inward is to be made. If the ship have not been previously measured in Norway, and is, consequently, not provided with a Norwegian measuring bill, she is to be measured, to ascertain her burden in Norwegian commercial lasts, for the calculation of the tonnage duty.

The general report having been made, the Custom-house officers in charge of the vessel are furnished with the books for delivery, and the discharge of the cargo commences under their inspection; and the consignees may make their special reports under their responsibility and signature. If they are without precise information as to the contents of any or all of the packages or bales to their address, these bales or packages may, at their request, be opened in the presence of the officers before report is made. If a consignee omits availing himself of this permision, his pretending thereafter that more or other goods than he had ordered, or been advised of, have been sent to his address, will not be attended to. In the reports or entries is to be stated, whether it is intended to pay the duties forthwith, whether the goods are intended for exportation, or whether they are to be landed.

Prior to commencing loading outwards, the master is to give verbal notice of his intention at the Custom-house. If he have no Norwegian measuring bill, the vessel is to be measured. This being done, the shipper or shippers of the outward bound cargo are each of them to make their special entries as to the quality, weight, and measure of the goods they mean to load. A copy of such entries is to be deposited at the Custom-house, and the loading commences under the control of the officers. This applies to all mixed cargoes; but if the outward bound cargo consist exclusively of wood, the shipper or shippers are only to notify that they intend loading wood, without specifying quantity, measure, &c., as the export duty on wood is charged according to the burden of the vessel. When the master clears outwards, he produces the proper documents for showing the burden of his vessel, and to what port she belongs, and he is then, on proper application being made, provided with a pilot, who takes his vessel to sea.

Warehousing. — In Norway, goods brought from abroad may be bonded or warehoused, with a view to their being again exported at some future period. Goods entered for home consumption may also be bonded for a certain period, in order to facilitate the payment of the duties.

The former is called "*transit oplag*," that is, depositing or warehousing goods for exportation, subject to transit duties only. The latter is called "*credit oplag*," that is, warehousing or bonding on credit.

1. *Transit Oplag.* — Under this system, goods from abroad may be warehoused for exportation free of import duty, paying on exportation a transit duty, which, in most cases, is 1-10th of what they would pay if entered for home consumption. If the goods are deposited in the Custom-house warehouses, they lie free of rent or dues during 14 days, and if in private warehouses, under the key and seal of the customs, during 6 months. If they remain long, viz. beyond 14 days in the one, and beyond 6 months in the other case, they pay rent or dues equal to 1-8th of the transit duty per month; which, after the lapse of 3 months, as regards goods in the Custom-house warehouses, is increased to 1-4th of the transit duty per month.

2. *Credit Oplag.* — This system allows most goods imported from abroad to be placed in the owner's or importer's own warehouses, under his own lock, free of duty, for a given time, on his reporting to the customs, every 3 months, how much he has sold, otherwise consumed, or exported, and then paying the duty on such amount; the Custom-house officers, who are bound quarterly to examine the goods, convincing themselves, by ocular demonstration, that no more is missing than the quantity reported to have been taken away.

This credit on the duties in no case to exceed 2 years from the time the goods were imported.

By way of security for payment of the duties on which the credit is granted, government reserve to themselves —

1. Priority of mortgage on all the goods in question.

2. Priority, or first right, in the property, goods, and effects of every description belonging to the trader availing himself of this credit, in as far as such property is not previously legally mortgaged.

3. Liberty for the Custom-house officers, when and as often as they shall deem it expedient, between the stated quarterly inspection, to look over the stock on hand, with a view of ascertaining whether there remains sufficient value for the duties; and if they see reason to doubt this, full right, in default of other satisfactory security being offered, to seize the stock, and to sell the whole, or as much as shall cover the duties.

4. In case of death or failure of the party, an equal right to sell forthwith the whole of his stock at public auction, and to retain as much of the proceeds as shall cover the duties; and in case of deficiency, an established claim for the remainder on the estate of the deceased or bankrupt, as the case may be.

In charging the duties, no allowance is made for waste or damage in the warehouses.

The warehouse rent charged on goods bonded under the transit system, in the Custom-house warehouses, is as follows:

	s.	*d.*	
On a quarter of wheat, for the first 3 months	0	0·5538	per month.
Afterwards	0	1·1076	—
On a ton of raw sugar, for the first 3 months	0	11·5384	per month.
Afterwards	1	11·0769	—

Money, Weights, and Measures. — In Norway there are no gold coins. The principal silver coin, called a species dollar, is divided into 120 skillings. There are, also, half species, or 60 skilling pieces; 1-5th species, or 24 skilling pieces; 1-15th species, or 8 skilling pieces; and what is denominated skillemynt, or small change — that is, 4 and 2 skilling pieces. The species dollar contains 390·58 Eng. grs. pure silver, and is, consequently, worth 4*s.* 6½*d.* sterling, the par of exchange being 4 species dollars 42 6-17 skill. = 1*l.* All Norway coins, except the small change, are alloyed with 1-7th copper, so that the species dollar weighs 448·38 Eng. grs., and its divisions in proportion. Small change coins are alloyed with three times their weight of copper. There are 1 and 2 skilling pieces of copper.

Weights and Measures, same as at COPENHAGEN; which see.

Table showing the Number of Ships, their Destination, and Tonnage in Norwegian Lasts and English Tons, that cleared out from Christiania; and also the Number of Ships, their Destination, and Tonnage, that cleared out from Norwegian Ports generally, Christiania included; during each of the Three Years ending with 1831.

Destination.	Sailed from Christiania.				Sailed from Norway.		
	Year.	Ships.	Lasts.	Tons.	Ships.	Lasts.	Tons.
Sweden	1829	15	376	940	568	13,172	32,930
	1830	10	217	542	423	10,323	25,807
	1831	11	302	755	546	13,226	33,065
Denmark, Altona excepted	1829	117	1,899	4,747	2,062	24,442	61,105
	1830	126	2,216	5,540	1,968	24,396	60,990
	1831	155	2,678	6,695	2,096	26,817	67,042
Russia	1829						
	1830	-	-	-	117	4,537	11,342
	1831	1	17	42	133	6,638	16,595
Other Baltic ports	1829	2	44	110	354	11,827	29,567
	1830	2	60	150	222	6,092	15,230
	1831	8	302	755	240	7,210	18,025
Hamburgh, Altona, and Bremen	1829	6	207	517	89	2,067	5,167
	1830	7	239	597	97	2,268	5,670
	1831	9	326	815	114	2,865	7,162
Great Britain and Ireland	1829	96	8,144	20,360	228	44,027	110,067
	1830	86	7,189	17,972	840	44,819	112,047
	1831	122	9,981	24,952	970	53,735	134,337
Holland, Hanover, and Oldenburg	1829	1	60	150	982	43,595	108,977
	1830	5	381	952	1,030	50,170	125,425
	1831	5	349	872	823	33,024	82,560
France	1829	127	8,825	22,062	579	35,706	89,265
	1830	145	9,683	24,207	569	35,120	87,800
	1831	101	6,685	16,712	423	25,855	64,637
Portugal and Spain	1829	-	-	-	86	3,674	9,185
	1830	-	-	-	81	3,189	7,972
	1831	1	91	227	63	3,015	7,537
Other Mediterranean ports	1829	-	-	-	65	4,307	10,767
	1830	-	-	-	90	6,357	15,892
	1831	-	-	-	67	5,004	12,510
Ports beyond Europe	1829	-	-	-	2	71	177
	1830						
	1831						

Shipping Charges. — The various charges of a public nature payable by a ship of about 300 tons burden, entering the port of Christiania with a mixed cargo on board, unloading there, taking on board another cargo, and clearing out, are as follow: —

	L.	*s.*	*d.*
1. *Charges Inwards.* — Pilotage from Farder, at the mouth of Christiania Bay, where all ships must take a pilot on board	2	2	2
Bill of health, assuming that the crew, including the master, consists of 14 persons	0	17	9
Tonnage dues and light money	9	16	9
Brokers' fees	1	5	4
L.	14	2	0
2. *Charges Outwards.* — Pilotage	0	9	2
Castle dues	0	1	7
Muster roll of crew	1	0	5
Pale or stake money	0	3	2
Measuring bill	2	4	5
Charity chest	0	1	7
Tonnage dues and light money	10	11	1
Higholm light	0	0	9
Pilotage to Farder	1	16	8
Brokers' fees	1	18	11
L.	18	6	11

N. B. — There is no difference between the charges on native ships in Norwegian ports, and privileged foreign ships, that is, the ships of countries having reciprocity treaties with Norway; nor in the duties on goods imported by native ships and such privileged foreign ships. Great Britain is a privileged country.

The shipping of Norway has declined considerably of late years; a proof, if any such were wanting, of the groundlessness of the clamours kept up in this country as to the supposed pernicious influence of reciprocity treaties on our shipping.

Banking. — There are no private banking establishments in Norway; but there is a public bank, having its principal office at Drontheim, with branches at Christiania, Bergen, and Christiansand. It was established by a compulsory assessment in 1816. Its capital consists of 2,000,000 species dollars, in transferable shares, divided amongst those who were forced to contribute to its formation. These shares are now at a premium of 30 per cent. Its managers are appointed by, and are accountable to, the Storthing or Norwegian parliament. It issues notes for 100, 50, 10, and so low as 1 species dollar. These notes should be payable in specie on demand; but they are at a discount of 35 per cent., and are paid by the bank at that rate. It discounts bills at 2 and 3 months date at 6 per cent. per annum; advances money on mortgage at 4 per cent.; and transacts the ordinary banking business of individuals. It does not allow interest on deposits. The dividend is, at present, from 6 2-3ds to 7 per cent.

Credit. — Goods are sold partly for ready money, and partly on credit, but principally the former.

Commission, &c. — The number of brokers in Christiania is limited to 4. Commission on the sale of goods, 2 per cent., or, *del credere* included, 3 per cent. Brokerage is fixed by law at 5-6ths per cent., which, in practice, is paid by the sellers.

Insurance. — All houses situated in Norwegian market towns must be insured in the General Insurance Company at Christiania, which is guaranteed by the state. The premium is moderate, being, on buildings situated in towns, 1-4th, and on those situated in the country, 1-8th per cent. Sometimes, however, when very destructive fires occur, it is raised.

Provisions, &c. — Christiania is not a favourable place for careening and repairing ships; but supplies of beef, pork, water, and other sea stores, may be had as cheap or cheaper than in any other port of Norway; but its distance from the sea is too great to allow of its being visited by ships desirous merely of victualling. — (We have derived these details from various sources, but principally from the able *Answers* of the *Consul* at Christiania to the *Circular Queries.*)

Timber. — A standard Christiania deal is 11 feet long, 1¼ inch thick, and 9 inches broad; and 51·2 such deals make a last.

Freight of deals from Norway to England is calculated at the rate of single deals, the standard measure of which for Christiania and all the southern ports of Norway, except Dram (a small town on the Drammen, about 20 miles S.W. of Christiania), is 11 feet long, and 1¼ inch in thickness. A single deal from Dram is reckoned 10 feet long and 1¼ inch thick.

Battens. — Three battens make 2 deals, retaining their own length and thickness. Half deals are only counted as deal ends if they run under 6 feet; but if they run 6 or 7 feet long, then 2 half deals are counted a deal, retaining their own thickness.

Ends of Deals. — Four ends of deals, although 5 feet long, make but a deal 11 feet long, retaining their thickness, which the owners and captains of ships think unreasonable; but as the freighters of ships seldom wish to have this assortment, which commonly run from 3 to 5 feet, and are taken on board as stowage, consequently for the advantage of the ship and to the freighter, the ship ought to bear the burden.

Ends of Battens, called *Larwick Pulings.* — No less than 6 ought to be counted a single deal, 11 feet long and 1¼ inch thick.

Pale-boards, when they have their proper length, are 7 feet long; 3 pale-boards are counted a single deal.

Staves for hogsheads take up much room; in consequence of which more than 10 cannot be computed a single deal.

The width of deal is never noticed in the calculation of freight: a good deal ought to run 9 inches within the sap, which not a twentieth part of a cargo does at present; but, though some may be above 9 inches wide, many are only 8, therefore one must make up for the other.

Timber, or *Hewn Goods*, cannot be exactly computed according to the contents in deals, because it cannot be stowed in a ship in the same manner as deals; the freight is, therefore, agreed for by the lump, or according to the number of deals which the vessel may have taken on board on a former occasion.

One hundred deals = 120.

A ton = 40 solid feet of timber, cut to a square.

One load of *oak*, or *timber*, = 50 solid feet.

Two loads of timber are reckoned for 150 deals.

The several bills of lading contain together an exact account of the cargo which the captain has received on board his ship, consequently binding him to deliver according to their contents: when, therefore, the deals are mentioned as usual 9 and 10 feet, and 11 and 12 feet, he cannot insist on more freight than half of the length, according to its description.

One thousand Norway standard deals are reckoned equal to a keel of coals, which is 21 tons.

Bowsprits pay duty as masts; capravens are above 12 and under 18 inches in circumference at the middle, and without bark. Clapboard is exported in whole pieces and unquartered. Deals from Germany pass as Norway deals; spruce deals are upwards of 20 feet in length; deals from Norway, above 7 feet long, are counted as whole deals; above 5 feet, and not above 7 feet in length, are accounted as half deals, and two of them pass as one whole deal.

The difference between the Christiania and Dram standard being nearly 1-11th part, the freights to Dram ought to be varied proportionally. It has sometimes happened that ships both for Christiania and Dram have been in company, and those for Christiania have got up loaded, and sailed, before the others for Dram have got over Dramstroom, which runs very strong down in the spring of the year. — (*Rordansz' European Commerce.*)

CHUNAM, the name given in India to lime. The best, obtained by the calcination of shells, is employed in the composition of Betel — (which see), to prevent, it is said, its injuring the stomach.

CIDER, or CYDER (Fr. *Cidre*; Ger. *Zider, Apfelwein*; It. *Cidro*; Rus. *Sidor*; Sp. *Sidra*), the juice of apples expressed and fermented. The produce of the duty on cider and perry (the expressed and fermented juice of pears) amounted, in 1828, to 37,220*l.*; which, as the duty was 10*s.* a barrel, shows that the quantity produced must have amounted to 74,440 barrels, exclusive of what might be clandestinely manufactured. The perry is supposed to have amounted to about a fourth part of this quantity. The duty was repealed in 1830. — (See Apples.)

CIGARS. See Tobacco.

CINNABAR (Ger. *Zinnober*; Du. *Cinaber, Vermilioen*; Fr. *Cinnabre*; It. *Cinabro*; Sp. *Cinabrio*; Rus. *Kinowar*; Lat. *Cinnabrium*).

1. *Native Cinnabar* — a mineral substance, red, heavy, and brilliant. It is found in various places, chiefly in quicksilver mines, being one of the ores of that metal. The cinnabar of the Philippine Islands is said to be of the highest colour; but that of Almaden, in Spain, is the richest. The best native cinnabar is of a high colour, brilliant, and free from earthy or stony matter.

2. *Artificial Cinnabar.*—"When two parts of mercury and one of sulphur are triturated together in a mortar, the mercury gradually disappears, and the whole assumes the form of a black powder, formerly called *Ethiops mineral.* When this mineral is heated red hot, it sublimes; and if a proper vessel be placed to receive it, a cake is obtained of a fine red colour. This cake was formerly called cinnabar; and, when reduced to a fine powder, is well known in commerce under the name of *vermilion.*" — (*Thomson's Chemistry.*)

CINNAMON (Du. *Kaneel*; Fr. *Cannelle*; Ger. *Zimmet, Kanehl*; It. *Canella*; Lat. *Cinnamomum, Canella*; Por. *Canella*; Sp. *Canela*; Pers. and Hind. *Darchinie*; Arab. *Darsini*; Malay, *Kaimanis*; Greek, Κιναμον), the bark of the cinnamon tree (*Laurus cinnamomum*), a native of Ceylon, where it grows in great abundance; it is also found in Cochin China, but no where else. The cinnamon said to be found in China, Borneo, &c. is merely *Cassia lignea.* It is brought home in bags or bales weighing 92½ lbs. each; and, in stowing it, black pepper is mixed with the bales to preserve the cinnamon. The best cinnamon is thin and rather pliable: it ought to be about the substance of royal paper, or somewhat thicker; is of a light yellow colour, approaching nearly to that of Venetian gold; it is smooth and shining; fractures splintery; has an agreeable, warm, aromatic flavour, and a mild sweetish taste; when chewed, the pieces become soft, and seem to melt in the mouth; it is not so pungent but that it may be borne on the tongue without pain, and is not succeeded by any after taste. Whatever is hard, thick as a half-crown piece, dark-coloured or brown, or so hot that it cannot be borne, should be rejected. Particular care should be taken that it be not false packed, or mixed with cinnamon of an inferior sort. — (*Milburn's Orient. Comm.*; *Marshall's Essay*, quoted below.)

The cinnamon of Cochin China grows in the dry sandy districts lying N. W. of the town of Faifoe, between 15° and 16° N. lat. It is preferred in China to the cinnamon of Ceylon: the annual imports into Canton and other ports vary from 250,000 to 300,000 lbs. There are no fewer than 10 varieties of this species in the market. It is not cured, like that of Ceylon, by freeing it from the epidermis. — (*Crawfurd's Embassy to Siam, &c.* p. 475.)

Cinnamon Monopoly. — Down to the present year, the cultivation of cinnamon in Ceylon was restricted to a few gardens in the neighbourhood of Colombo; the production and sale of the article being wholly monopolised by government. Upon the transference of the island from the East India Company to the king's government, the former agreed to pay 60,000*l.* a year for 400,000 lbs. or 4,342½ bales of cinnamon; it being stipulated, that if the quantity collected exceeded this amount, *the surplus was to be*

burned! * But this agreement was afterwards broken off; and, for these some years past, the cinnamon has been sent to England by government, and sold on its account at quarterly sales. The revenue derived by the Ceylon treasury from the cinnamon monopoly, in 1831, is said to have amounted to 106,434*l.* 11*s.* 11*d.*; but it is not said whether this is the nett or gross revenue, that is, whether it be exclusive or inclusive of the expenses attending its management. — (*Ceylon Almanac for* 1833, p. 82.) As the monopoly could not be enforced, except by confining the culture of cinnamon to certain districts, it necessarily led to the most oppressive interferences with the rights of individuals, to the creation of numberless imaginary offences, and the multiplication of punishments, forming a heavy drawback upon the prosperity of the island. We are, therefore, glad to have to state that it has been at length abandoned; and that we are no longer liable to the charge of upholding, without improving, the worst part of the Dutch policy; but have restored to the natives their right to cultivate cinnamon any where and in any way they think fit. We subjoin a copy of the advertisement issued by the Ceylon government in reference to this important subject.

Notice is hereby given, that in direct pursuance of instructions received from the secretary of state, from and after the 10th of July next, the general export of cinnamon from the ports of Colombo and Point de Galle exclusively, in the island of Ceylon, will be allowed, on payment of an export duty of 3*s.* per pound, without distinction of quality.

From the same period, all restrictions and prohibitions against the cultivation, possession, or sale of cinnamon by private individuals will cease; and such quantities of cinnamon as government now has in its possession, or may hereafter be obliged to receive in payment of rent, or from the government plantations (until they can otherwise be disposed of), will be sold at periodical sales, subject always to the payment of the said export duty, and under conditions as to the completion of the purchase, and the actual payment of the purchase money in cash or government bills, on delivery of the cinnamon, similar to those heretofore stipulated at the sales held in London, and which will be fully notified and explained hereafter.

No collections will, for the future, be made in the forests on account of government.

The first sale will be held on the 10th day of July next, at the office of the commissioner of revenue; when 1,000 bales of cinnamon will be put up to sale in lots at the undermentioned prices, and will be sold to the highest bidder above the reserved price.

	s.	*d.*
1st sort, per lb.	3	6
2d —	2	0
3d —	0	9

The proportion of each sort to be put up will be notified hereafter.

The stock of cinnamon in the hands of the agent in London, in September, 1832, and which was to be sold at the 4 usual quarterly sales, in October, 1832, and January, April, and July, 1833, amounted to 4,658 bales; two consignments, amounting to 826 bales, have since been sent to England, viz. 500 bales in July, 1832; 326 bales in October, 1832; since which no shipments have been made, and none will be made hereafter.

The sales for the 2 years ending with that of July, 1832, somewhat exceeded 5,500 bales per annum.

Chief Secretary's office, Colombo, March 9. 1833.

Duties on Cinnamon. — Nothing can be more satisfactory than this document, in so far as the free culture of cinnamon is concerned; but it is deeply to be regretted, that the abolition of the old monopoly system should be accompanied by the imposition of the exorbitant duty of 3*s.* per lb. on all cinnamon exported, without distinction of quality. Its natural cost does not, we believe, exceed 6*d.* or 8*d.* per lb.; but taking it at 1*s.*, the duty is no less than 300 per cent.! So enormous a tax, by confining the export of cinnamon within the narrowest limits, will go far to deprive the island of the advantages it would otherwise derive from the repeal of the monopoly, and will be, in all respects, most injurious. We have heard, that it is contended, in vindication of this oppressive tax, that Ceylon having a natural monopoly of cinnamon, it is sound policy to burden it with the highest duty it will bear; as the largest revenue is thus obtained at the least expense to the island. But in addition to the cinnamon produced in Cochin China, and which it is more than probable will speedily find its way to the European markets, the extent to which cassia lignea is substituted for cinnamon, shows that the monopoly possessed by Ceylon is of very trifling importance. But though it were otherwise, though cassia lignea did not exist, and cinnamon were to be found no where but in Ceylon, we should not the less object to so exorbitant an export duty. So long as it is maintained, it will confine within the narrowest limits, what might otherwise become a most important branch of industry, and a copious source of wealth to the island. According to the crown commissioners, the average quantity and value of the different sorts of cinnamon annually sold of late years has been, —

Sorts of Cinnamon.	Quantity.	Rate.		Amount.	
	Lbs.	*s.*	*d.*	£	*s.*
First sort	90,000	7	2½	32,842	15
Second sort	230,000	5	10½	67,562	10
Third sort	180,000	4	3¼	38,437	10
All sorts	500,000	-	-	138,343	15

* See an article by H. Marshall, Esq., staff surgeon to the forces in Ceylon, in *Thomson's Annals of Philosophy*, vol. x. p. 356.

It is not at all probable that the exports will materially increase under the new system; but had the duty varied from about 6*d.* per lb. on the best, to 3*d.* or 4*d.* on the inferior sorts, we have little doubt, now that the culture is free, that the exports would, at no very distant period, have amounted to some millions of pounds. It is the high price of cinnamon, — a price not caused by its scarcity or the difficulty of its production, but by the oppressive monopolies and duties to which it has been subjected, — that has made it be regarded as a luxury attainable only by the rich. There is no other spice that is so universally acceptable; and there is none, were it charged with a *reasonable duty*, that would be so sure to command an immense sale. We know, quite as well as the writer of an article on this subject in the Colombo Journal, that "the cook who employs 1 ounce of cinnamon to improve the flavour of his dishes, will not employ 4 ounces when the spice is a fourth of the price;" but we further know, what the journalist would seem to be ignorant of, that were its price reduced, as it might be, to a third of what it has hitherto cost, it would be used by ten or a dozen cooks, for every one who employs it at present. In fact, the entire consumption of cinnamon in Great Britain is under 20,000 lbs. a year!

Should the exports of cinnamon from Ceylon under the new plan amount to 500,000 lbs. a year, government will receive from it an annual revenue of 75,000*l.*; and supposing them to amount to 600,000 lbs., the revenue will be 90,000*l.* And to secure the immediate payment of this trifling sum, every ulterior consideration of profit and advantage has been sacrificed. It is, however, pretty clear, that this short-sighted rapacity will be, in the end, no less injurious to the revenue, than to the industry and trade of the island. Were cinnamon allowed to be exported for a few years under a low duty, or till such time as the taste for it was fully diffused throughout this and other countries, it would then be easy, by gradually raising the duty, to obtain from it, without materially checking the consumption, a *very large revenue;* at least 5 or 6 times more than it will ever produce under the present plan.

Suppose that we had had the power effectually to monopolise the inventions by which Sir Richard Arkwright and others have so prodigiously facilitated the spinning of cotton; what would have been thought of the policy of those who should have proposed laying a duty on exported cottons equivalent to the peculiar advantages we enjoyed in their production? Had this been done, we should have got a *monopoly value* for our exports of cotton; but instead of amounting, as at present, to 17,000,000*l.* a year, they would not, under such a plan, have amounted, to 170,000*l.*; and instead of affording subsistence for some 1,300,000 or 1,400,000 individuals, the cotton manufacture would not have supported 50,000! And yet this is the mischievous nostrum, — for it would be an abuse of terms to call it a principle, — on which we have proceeded to regulate the export of the staple product of Ceylon.

The following table shows the quantities of cinnamon retained for home consumption, the rates of duty, and the nett amount of the duties in each year, since 1810.

Years.	Quantities retained for Home Consumption in the United Kingdom.	Nett Amount of Duty received thereon.	Rates of Duty charged thereon.	Years.	Quantities retained for Home Consumption in the United Kingdom.	Nett Amount of Duty received thereon.	Rates of Duty charged thereon.
	Lbs.	£ s. d.	*Of the East Indies.*		*Lbs.*	£ s. d.	*Of the East Indies.*
1810	12,793	5,609 7 3	2*s.* per lb. and 2*l.* 13*s.* 4*d.* per cent. ad valorem.	1820	10,618½	1,331 3 6	2*s.* 6*d.* per lb.
				1821	12,002	1,503 18 2	do.
				1822	14,507½	1,816 19 0	do.
1811	8,748	3,715 16 7	do.	1823	14,225	1,767 8 7	do.
1812	13,416	4,081 10 1	do.	1824	13,766¾	1,723 16 4	do.
1813	Records destroyed		(From April 15.) 2*s.* 4½*d.* per lb. and 3*l.* 3*s.* 4*d.* per cent. ad valorem.	1825	14,098½	1,766 0 2	do.
				1826	14,155½	1,782 14 9	do.
				1827	14,451¼	1,807 19 7	do.
				1828	15,696½	1,773 16 9	do.
1814	9,565	8,977 3 11	(From April 10.) 2*s.* 6*d.* per lb.	1829	29,720	1,342 8 4	(From June 21.) 6*d.* per lb. from British possessions.
1815	9,355	1,175 17 7	do.				
1816	9,863	1,235 14 1	do.				
1817	10,689	1,324 0 9	do.	1830	Nil.*	709 5 0	do.
1818	11,281	1,424 18 11	do.	1831	23,172	583 17 6	do.
1819	13,077¼	1,637 1 1	(From April 10.) 2*s.* 6*d.* per lb.	1832	15,271	435 0 10	do.

In the London market, cinnamon is divided into 3 sorts. The first is worth, at present (Sept. 1833), duty included, from 8*s.* 6*d.* to 10*s.* per lb.; the second, 6*s.* to 7*s.* 6*d.*; and the third from 5*s.* to 6*s.*

CINQUE PORTS. These are ancient trading towns, lying on the coast of Kent and Sussex, which were selected from their proximity to France, and early superiority in navigation, to assist in protecting the realm against invasion, and vested with certain privileges by royal charter.

"The ports so privileged, as we at present account them, are Dover, Sandwich, Romney, Hastings, Hythe, and the two ancient towns of Winchelsea and Rye; although

* The export having exceeded the quantity charged with duty within the year.

the two latter places appear to have been originally only members. The services which they were appointed to perform were either honorary, viz. assisting at the coronation and sending members to parliament; or auxiliary to the defence of the realm, as furnishing a certain supply of vessels and seamen, on being summoned to that service by the king's writ.

"In process of time the Cinque Ports grew so powerful, and, by the possession of a warlike fleet, so audacious, that they made piratical excursions in defiance of all public faith; on some occasions they made war, and formed confederacies as separate independent states. It seems, however, that these irregularities were soon suppressed, when the government was strong, and sufficiently confident to exert its powers. So long as the mode of raising a navy by contributions from different towns continued, the Cinque Ports afforded an ample supply; but since that time their privileges have been preserved, but their separate or peculiar services dispensed with. Their charters are traced to the time of Edward the Confessor; they were confirmed by the Conqueror, and by subsequent monarchs. William the Conqueror, considering Dover Castle the key of England, gave the charge of the adjacent coast, with the shipping belonging to it, to the constable of Dover Castle, with the title of Warden of the Cinque Ports; an office resembling that of the Count of the Saxon coast (*Comes littoris Saxonici*) on the decline of the Roman power in this island. The lord warden has the authority of admiral in the Cinque Ports and its dependencies, with power to hold a court of admiralty; he has authority to hold courts both of law and equity; is the general returning officer of all the ports,—parliamentary writs being directed to him, on which he issues his precepts; and, in many respects, he was vested with powers similar to those possessed by the heads of counties palatine. At present the efficient authority, charge, or patronage, of the lord warden is not very great; the situation is, however, considered very honourable, and the salary is 3,000*l*. He has under him a lieutenant and some subordinate officers; and there are captains at Deal, Walmer, and Sandgate Castles, Archcliff Fort, and Moats Bulwark.

"There is an exclusive jurisdiction in the Cinque Ports (before the mayor and jurats of the ports), into which exclusive jurisdiction the king's ordinary writ does not run; that is, the court cannot direct their process immediately to the sheriff, as in other cases. In the Cinque Ports, the process is directed to the constable of Dover Castle, his deputy, or lieutenant. A writ of error lies from the mayor and jurats of each port to the lord warden of the Cinque Ports, in his court of Shepway, and from the court of Shepway to the King's Bench; a memorial of superiority reserved to the crown at the original creation of the franchise; and prerogative writs, as those of habeas corpus, prohibition, certiorari, and mandamus, may issue, for the same reason, to all these exempt jurisdictions, because the privilege that the king's writ runs not must be intended between party and party, and there can be no such privilege against the king."—(*Chitty's Commercial Law*, vol. ii. p. 12.)

CITRON (Ger. *Succade*; Da. *Sukkat*; It. *Confetti di cedro*; Sp. *Acitron verde*; Fr. *Citronat verd*), an agreeable fruit, resembling a lemon in colour, smell, and taste. The principal difference lies in the juice of the citron being somewhat less acid, and the yellow rind being somewhat hotter, and accompanied with a considerable bitterness.—(*Lewis's Mat. Med.*) It is imported, preserved and candied, from Madeira, of the finest quality.

CIVET (Ger. *Zibeth*; Du. *Civet*; Fr. *Civette*; It. *Zibetto*; Sp. *Algalia*), a perfume taken from the civet cat. It is brought from the Brazils, Guinea, and the interior of Africa. When genuine, it is worth 30*s*. or 40*s*. an ounce.

CLARET, one of the best French wines. See the articles Bordeaux and Wine.

CLEARING, "among *London Bankers*, is a method adopted by them for exchanging the drafts on each other's houses, and settling the differences. Thus, at half-past 3 o'clock, a clerk from each banker attends at the clearing-house, where he brings all the drafts on the other bankers, which have been paid into his house that day, and deposits them in their proper drawers (a drawer being allotted to each banker); he then credits their accounts separately with the articles which they have against him, as found in the drawer. Balances are then struck from all the accounts, and the claims transferred from one to another, until they are so wound up and cancelled, that each clerk has only to settle with two or three others, and their balances are immediately paid.

"Such drafts as are paid into a banker's too late for clearing, are sent to the houses on which they are drawn, to be *marked*, which is understood as an engagement that they will be paid the next day."—(*Kelly's Cambist.*)—(For an account of the saving of money effected by this device, see *antè*, p. 65. The technical operations carried on at the clearing-house have been described by Mr. Gilbart, in his *Practical Treatise on Banking*, pp. 16—20.)

CLEARING-HOUSE, the place where the operation termed clearing is carried on.

CLOCK, CLOCKS (Ger. *Uhren, Grosse Uhren, Wianduhren*; Du. *Uuren, Uurwerken, Horologien*; Fr. *Horloges*; It. *Orologgi, Orinoli*; Sp. *Relojes*; Rus. *Tschasi*),

a kind of machine, put in motion by a gravitating body, and so constructed as to divide, measure, and indicate the successive portions of time with very great accuracy. Most clocks mark the hour by striking or chiming. It is a highly useful instrument, and is extensively employed for domestic and philosophical purposes. Clocks are made of an endless variety of materials and models, so as to suit the different uses to which they are to be applied, and the different tastes of their purchasers. Their price consequently varies from a few shillings to more than 100*l*. The Germans and Dutch are particularly celebrated for their skill in the manufacture of wooden clocks; while the English, French, and Genevese, especially the former, have carried the art of making metallic clocks, so as to keep time with the greatest precision, to a high degree of perfection.

The history of the invention, introduction, and successive improvements in the manufacture of clocks, has been carefully investigated by some very learned and industrious antiquaries — (see *Beckmann's Hist. of Inventions*, vol. i. pp. 419—462. Eng. ed.; and *Rees's Cyclopædia*); but, notwithstanding these researches, the subject is still involved in considerable obscurity. It seems, however, that the middle of the fourteenth century may be regarded as the epoch when clocks, having weights suspended as a moving power, and a regulator, began to be introduced. The period when, and the individual by whom, the pendulum was first applied to clockwork, have been subjects of much contention. Galileo and Huygens have disputed the honour of the discovery. "But whoever may have been the inventor, it is certain that the invention never flourished till it came into the hands of Huygens, who insists, that if ever Galileo thought of such a thing, he never brought it to any degree of perfection. The first pendulum clock made in England was in the year 1662, by one Fromantel, a Dutchman." — (*Hutton's Math. Dictionary.*)

The clock manufacture is of considerable importance and value. It is carried on to a great extent in London.

The *ad valorem* duty of 25 per cent. on foreign clocks produced, in 1832, 6,023*l*. 8*s*. nett. It is principally derived from the wooden clocks brought from Holland and Germany.

Under the article Watches, the reader will find some statements as to the importation and exportation of clocks, as well as watches.

Clockmakers are obliged to engrave upon the dial-plate of all clocks made by them their name, and the place of their residence. No outward or inward box, case, or dial-plate of any clock or watch, with the maker's name engraved thereon, shall be exported without the movement or machinery being in or with such box or case, under forfeiture of double its value. — (3 & 4 *Will.* 4. cap. 52. § 104.) It is illegal to import, or to enter to be warehoused, any clock or watch impressed with any mark purporting to represent any legal British mark, or not having the name of some foreign maker visible on the frame, and also on the face, or not being in a complete state. — (§ 57.)

It is said, however, not to be an uncommon practice among the less reputable portion of the trade, to engrave their names and "London" on foreign clocks and watches, and to sell them to the public as English work. The fraud may be detected by referring to any respectable watchmaker.

By a Treasury order of the 4th of September, 1828, clocks and watches for private use, though not marked in the manner now specified, may be admitted on payment of the duty, on the parties making affidavit of their entire ignorance of the law in question.

Persons hired by, or in the employment of, clock and watch makers, who shall fraudulently embezzle, secrete, sell, &c. any metal, material, or precious stone, with which he may happen to be intrusted, shall, upon trial and conviction before a justice of the peace, forfeit 20*l*. for the first offence; and for the second, and every subsequent offence, he shall forfeit 40*l*.; and, in default of payment, is to be committed to the house of correction. — (27 *Geo.* 2. c. 7. § 1.) — (See Watch.)

CLOTH. See Wool, Linen, &c.

CLOVER (Ger. *Klee*; Du. *Klaver*; Fr. *Trefle, Luzerne*; It. *Trifoglio*; Sp. *Trebol*; Rus. *Trilistnik*; Lat. *Trifolium*), a very important species of grass. Some of the species in cultivation are annual; others biennial or triennial; and others perennial. The seed used formerly to be principally imported from Holland; but that which is raised in this country is now said to be of a superior quality. — (*Loudon's Encyclopædia of Agriculture.*) Culture for seed is, however, very precarious, and of uncertain profit.

The entries of foreign clover seed for home consumption, at an average of the 3 years ending with 1831, were 29,046 cwt. a year. But for the high duty of 20*s*. a cwt., there can be little doubt that the importation would be much more considerable. The price of foreign clover seed in the London market, at present (September, 1833), varies, duty included, from 50*s*. to 66*s*. a cwt.

CLOVES (Ger. *Näglein, Gewürznelken*; Du. *Kruidnagelen*; Fr. *Clous de girofle, Girofles*; It. *Chiovi di garofano, Garofani, Garoffoli*; Sp. *Clavos de especia, Clavillos*; Rus. *Gwosdika*; Arab. *Kerenful*; Malay, *Chankee*), the fruit, or rather cups of the unopened flowers, of the clove tree, or *Caryophyllus aromaticus*. The clove tree is a native of the Moluccas, where it was originally found; but plants have since been carried to Cayenne and other places, where they succeed tolerably well. Cloves are shaped like a nail; whence the name, from the French *clou*, nail. They are imported from the Dutch settlements; the best in chests, and an inferior kind in bags. The best variety of the Amboyna cloves is smaller and blacker than the other varieties, very scarce, and, as a mark of pre-eminence, is termed the Royal clove. Good cloves have a strong, fragrant, aromatic odour; and a hot, acrid, aromatic taste, which is very permanent.

They should be chosen large sized, perfect in all parts; the colour should be a dark brown, almost approaching to black; and, when handled, should leave an oily moisture upon the fingers. Good cloves are sometimes adulterated by mixing them with those from which oil has been drawn; but these are weaker than the rest, and of a paler colour; and whenever they look shrivelled, having lost the knob at the top, and are light and broken, with but little smell or taste, they should be rejected. As cloves readily absorb moisture, it is not uncommon, when a quantity is ordered, to keep them beside a vessel of water, by which means a considerable addition is made to their weight. — (*Thomson's Dispensatory; Milburn's Oriental Commerce.*)

Policy of the Dutch as to the Trade in Cloves. — From the expulsion of the English from Amboyna, in 1623, the Dutch have, a few short intervals only excepted, enjoyed the exclusive possession of the Moluccas, or Clove Islands. In their conduct as to the clove trade, they have exhibited a degree of short-sighted rapacity, which has been, we believe, seldom equalled even in the annals of monopoly. Their object has not been to encourage the growth and trade of cloves, but to confine both within the narrowest limits. They have preferred deriving a large profit from a stunted and petty trade, to a moderate profit from a trade that might have afforded employment for a very large amount of capital; and to prevent their narrow and selfish projects from being counteracted by the operations of the natives, they have subjected them to the most revolting tyranny. "That they might," says Mr. Crawfurd, "regulate and control production and price just as they thought proper, the clove trees were extirpated every where but in Amboyna, the seat of their power; and the surrounding princes were bribed, by annual stipends, to league with them for the destruction of their subjects' property and birthright. This plan was begun about the year 1551. The contracts are still in force, and an annual fleet visits the surrounding islands to suppress the growth of cloves, which, in their native country, spring up with a luxuriance which these measures of Satanic rigour, and of sacrilege towards bountiful nature, can scarce repress. By the plan on which the clove trade is now conducted, — a plan carried into effect through so much iniquity and bloodshed, — the country of spices is rendered a petty farm, of which the natural owners are reduced to the worst condition of predial slavery; and the great monopoliser and oppressor is that government, whose duty it should have been to insure freedom and afford protection. Human ingenuity could hardly devise a plan more destructive of industry, more hostile to the growth of public wealth, or injurious to morals, than this system framed in a barbarous age; and it reflects disgrace upon the character of a civilised people to persevere in it.

"It is curious to remark how the monopolisers, in carrying the details of this system into effect, at once impose upon the natives and deceive themselves. The *nominal* price paid to the natives is actually above the natural price of the commodity, but they are cheated in the details. The cultivator brings his produce to the public stores, where it is subjected at once to a deduction of one fifth for payment of the salaries of the civil and military officers. The price of the remainder is fixed at the rate of 9·6 Spanish dollars the picul: but before payment is made, another deduction of one fifth is made; one half of which is for the chiefs or *rajas*, and the other for the native *elders*, who are overseers of the forced culture. The real price, therefore, paid to the grower is 8 Spanish dollars per picul, or $3\frac{1}{4}d.$ per lb. avoirdupois, instead of $11\frac{52}{100}$ Spanish dollars per picul, or $4\frac{2}{3}d.$ per lb., which is pretended to be given.

"When cloves have been sold on the spot, the price usually exacted has been about 64 Spanish dollars the picul, or 8 times the price paid to the cultivator. The average price in Holland, previously to the war of the French revolution, may be taken at 6*s.* per lb., or $177\frac{78}{100}$ Spanish dollars per picul, being 2,122 per cent. advance on the real cost of the commodity in the place of its growth. When brought direct to England, they have cost at an average 3*s.* 8*d.* the lb., making $108\frac{64}{100}$ Spanish dollars per picul, an advance on the natural export price of 1,258 per cent." — (*Eastern Archipelago*, vol. iii. pp. 388—390.)

Duty on Cloves. — This was considerably reduced in 1819; and there has, in consequence, been a decided increase in the consumption of the article; though not nearly so great as it would have been, had it been supplied under a more liberal system. The cloves at present entered for home consumption in Great Britain, amount to about 80,000 lbs. a year, of which a part comes from Cayenne. But the cultivation of the clove in Cayenne depends entirely on the existence of the present system in the Moluccas. The superiority which the latter enjoy over every other place in the production of cloves is so very great, that were any thing like freedom given to those engaged in their culture, they would very speedily exclude every other from the market. It is not to be imagined, that so liberal and intelligent a government as that of Holland can much longer continue insensible to the disgrace of supporting a system like the present, and to the many advantages that would result from its abolition. Subjoined is

An Account of the Quantity of Cloves entered for Home Consumption each Year since 1810; of the Nett Amount of Duty received therefrom, and the Rates of Duty.

Years.	Quantities retained for Home Consumption in the United Kingdom.	Nett Amount of Duty received thereon.			Rates of Duty charged thereon.		
					Of the East Indies.	Of the British Possessions in America.	Of the Foreign Possessions in America.
	Lbs.	£	*s.*	*d.*			
1810	35,584	10,197	19	10	4*s.* 8*d.* per lb. and 2*l.* 13*s.* 4*d.* per cent. ad valorem.	2*s.* per lb.	4*s.* 8*d.* per lb.
1811	28,977	8,370	1	1	- do. -	- do. -	- do.
1812	35,552	8,547	19	10	- do. -	- do. -	- do.
1813	Records destroyed			-	From 15th of April 5*s.* 6½*d.* per lb. and 3*l.* 3*s.* 4*d.* per cent. ad valorem.	2*s.* 4½*d.* per lb.	5*s.* 6½*d.* per lb.
1814	31,975	9,540	9	3	From 10th of April 5*s.* 7½*d.* per lb.	- do. -	- do.
1815	50,462	5,708	3	9	- do. -	- do. -	31*l.* 13*s.* 4*d.* per cent. ad valorem, equal to about 1*s.* 6*d.* per lb.
1816	16,470	1,867	6	10	- do. -	- do. -	- do.
1817	73,973	6,390	13	6	- do. -	- do. -	- do.
1818	18,281	1,777	5	3	- do. -	- do. -	- do.
1819	34,254¾	3,354	4	7	From 5th of July 2*s.* 4½*d.* per lb.	2*s.* per lb.	3*s.* per lb.
1820	36,534½	3,657	0	5	- do. -	- do. -	- do.
1821	32,963	3,285	9	2	- do. -	- do. -	- do.
1822	49,765¼	5,026	16	8	- do. -	- do. -	- do.
1823	57,780½	5,747	14	4	- do. -	- do. -	- do.
1824	60,321¼	6,035	10	0	- do. -	- do. -	- do.
1825	45,261	4,543	9	10	- do. -	- do. -	- do.
					Of British Possessions.		Of Foreign Possessions.
1826	52,701½	5,279	4	9	- 2*s.* per lb. -		- 3*s.* per lb. -
1827	85,990¾	8,602	1	9	- - do. - -		- - do. - -
1828	61,216¼	6,148	19	2	- - do. - -		- - do. - -
1829	48,637½	4,875	13	2	- - do. - -		- - do. - -
1830	60,111	6,061	9	7	- - do. - -		- - do. - -
1831	83,885	8,379	8	2	- - do. - -		- - do. - -
1832	82,672	8,169	6	9	- - do. - -		- - do. - -

The price of cloves, exclusive of the duty, in the London market, is, at present (October, 1833), as follows: —

Amboyna, Bencoolen, &c. - 1*s.* 2*d.* to 1*s.* 6*d.* per lb. | Bourbon, Cayenne, &c. - 1*s.* 2*d.* to 1*s.* 3*d.* per lb.

Cloves, Oil of, is procured from cloves by distillation. When new, it is of a pale reddish brown colour, which becomes darker by age. It is extremely hot and fiery, and sinks in water. The kind generally imported from India contains nearly half its weight of an insipid expressed oil, which is discovered by dropping a little into spirits of wine; and on shaking it, the genuine oil mixes with the spirit, and the insipid separating, the fraud is discovered. — (*Milburn.*)

COACHES, vehicles for commodious travelling. They have sometimes two, and sometimes four wheels. The body of the coach is generally suspended, by means of springs, upon the framework to which the wheels are attached. They are usually drawn by horses, but recently have been impelled by steam. The forms and varieties of coaches are almost innumerable.

1. *Historical Notice.* — Beckmann has investigated the early history of coaches with his usual care and learning. It is certain that a species of coaches were used at Rome; but whether they were hung on springs, like those now made use of, is not certain. After the subversion of the Roman power, horseback was almost the only mode of travelling. About the end of the fifteenth century, however, covered carriages began to be employed by persons of distinction on great occasions. In 1550, there were at Paris only three coaches: one of which belonged to the queen; another to the celebrated Diana of Poitiers; and the third to a corpulent, unwieldy nobleman, René de Laval, lord of Bois Dauphin. Coaches were seen, for the first time, in Spain, in 1546. They began to be used in England about 1580; and were in common use among the nobility in the beginning of the seventeenth century. — (*Hist. of Invent.* vol. i. pp. 111. 127. Eng. trans.)

2. *Manufacture of Carriages.* — This is a department of considerable value and importance. The best built and handsomest carriages are made in London, where only the trade of a coach currier is carried on; but the carriages made at Edinburgh, and some other places, are also very superior. Down to 1825, a duty was laid on all carriages made for sale; and it appears from the following account, that, in 1812, 1,531 four-wheeled carriages, 1,700 two-wheeled ditto, and 105 taxed carts (small carriages without springs), were made for sale.

3. *Duties on Carriages.* — These duties have been long imposed, and have fluctuated considerably at different periods. The following table shows the number of four-wheeled and other carriages (exclusive of hackney coaches) charged with duties in the

years 1812, 1825, and 1830, the rates of duty on each species of carriage, and the produce of the duties. — (Compiled from *Parl. Paper*, No. 686. Sess. 1830. and Papers published by the Board of Trade.)

	1812.			1825.			1830.		
	Number of Carriages.	Rates of Duty.	Amount of Duty.	Number of Carriages.	Rates of Duty.	Amount of Duty.	Number of Carriages.	Rates of Duty.	Amount of Duty.
		£ s. d.	£ s. d.		£ s. d.	£ s. d.			£ s. d.
Four-wheeled Carriages.									
Carriages charged at progressive rates:									
Persons keeping 1	12,866	12 0 0	154,392 0 0	17,242	6 0 0	103,452 0 0	19,417	The same as for 1825	116,502 0 0
— 2	2,792	13 0 0	39,296 0 0	3,292	6 10 0	21,398 0 0	5,173	do.	33,624 10 0
— 3	657	14 0 0	9,198 0 0	693	7 0 0	4,851 0 0	1,006	do.	7,042 0 0
— 4	180	15 0 0	27,000 0 0	172	7 10 0	1,290 0 0	216	do.	1,620 0 0
— 5	60	15 15 0	945 0 0	75	7 17 6	590 12 6	101	do.	795 7 6
— 6	18	16 8 0	295 4 0	30	8 4 0	246 0 0	30	do.	246 0 0
— 7	7	17 0 0	119 0 0	- -	8 10 0	- - -	35	do.	297 10 0
— 8	16	17 12 0	281 12 0	- -	8 16 0	- - -	- -	do.	- - -
— 9 and upwards	- -	18 3 0	- - -	10	9 1 6	90 15 0	14	do.	127 1 0
Total	16,596	- - -	204,226 16 0	21,514	- - -	131,918 7 6	25,992	- - -	160,254 8 6
Additional bodies	143	6 6 0	900 18 0	68	3 3 0	214 4 0	54	do.	170 2 0
Carriages let to hire without horses	249	12 0 0	2,288 0 0	419	6 0 0	2,514 0 0	518	do.	3,108 0 0
Post chaises and other carriages let to hire with horses	5,295	10 10 0	55,597 10 0	5,786	5 5 0	30,376 10 0	6,983	do.	36,660 15 0
Public stage coaches	1,355	10 10 0	14,227 10 0	2,747	5 5 0	14,421 15 0	3,138	do.	16,474 10 0
Two-wheeled Carriages.									
Drawn by 1 horse	25,957	6 10 0	168,720 10 0	39,121	3 5 0	127,143 5 0	47,962	do.	155,811 10 0
2 or more horses	1,329	9 0 0	11,961 0 0	539	4 10 0	2,425 10 0	408	do.	1,836 0 0
Total	27,286	- - -	180,681 10 0	39,660	- - -	129,568 15 0	59,133	- - -	214,060 17 0
Additional bodies	11	3 3 0	34 13 0	20	1 11 6	31 10 0	18	do.	28 7 0
Taxed Carts.									
Without springs	7,592	1 9 0	11,008 8 0						
With springs, not metallic	11,549	2 15 0	31,759 15 0						
Total	19,141	- - -	42,768 3 0						
Duties paid by coachmakers and by persons selling carriages.									
Four-wheeled carriages made for sale	1,531	1 5 0	1,913 15 0						
Two-wheeled do. do.	1,701	0 12 6	1,063 2 6						
Taxed carts made for sale	407	0 3 0	61 1 0						
Four-wheeled carriages sold by auction, or on commission	105	1 5 0	131 5 0						
Two-wheeled carriages do.	184	0 12 6	115 0 0						
Taxed carts do.	46	0 3 0	6 18 0						
Total	3,974	- - -	3,291 1 6						

Repealed in 1825.

Exclusive of the above, there paid duty in 1830 —

	£ s. d.
Four-wheeled carriages drawn by 1 horse, 5,838, at 4*l.* 10*s.*	26,271 0 0
with wheels of less diameter than 30 inches, drawn by ponies, 383, at 3*l.* 5*s.*	1,244 5 0
used by carriers, 179, at 2*l.* 10*s.*	447 10 0
Two-wheeled carriages let to hire 2,246, at 3*l.* 5*s.*	7,299 10 0
used by carriers 241, at 1*l.* 5*s.*	301 5 0
	35,563 10 0
Total duty collected from carriages in 1830	409,907 2 6

Rates of Duty on Carriages. — On those having —

Four wheels.	Rate. L. s. d.		Rate. L. s. d.
Persons keeping 1	5 0 0	Persons keeping 6	8 4 0
— 2	6 10 0	— 7	8 10 0
— 3	7 0 0	— 8	8 16 0
— 4	7 10 0	9 and upwards	9 1 6
— 5	7 17 6		
Additional bodies	3 3 0		
Carriages let to hire	6 0 0		
Post chaises	5 5 0		
Carriages with wheels of less diameter than 30 inches, drawn by ponies or mules not exceeding 13 hands	3 5 0		

	Rate. L. s. d.
Carriages drawn by 1 horse	4 10 0
Carriages used by common carriers	2 10 0
Two wheels.	
Drawn by 1 horse	3 5 0
Drawn by 2 or more	4 10 0
Additional bodies	1 11 6
Described in act 2 & 3 Will. 4. cap. 32. No. I. charged	1 10 0
Ditto, ditto, No. II., common stage carts	1 10 0
Let out to hire	3 5 0
Carriages used by common carriers	1 5 0

4. *Hackney Coaches* are coaches stationed in the streets or other public places, and bound to carry such persons as require their services, for certain rates of hire according to the distances travelled. They have generally been licensed by authority, and subjected to certain regulations, intended to prevent strangers and others using them from fraud and imposition. It may be doubted, however, whether these regulations have had any good effect; and whether the public would not be as well accommodated, at least in all large towns, by throwing the business open, and trusting to competition to rectify abuses. As respects London, nothing can be said in favour of its hackney coach establishment. Speaking generally, the coaches are the dirtiest, most disagreeable vehicles that can well be imagined, and the horses and drivers are but little superior; forming a striking contrast to the elegance and commodiousness of the private carriages, the excellence of the horses, and the neatness of the servants.

Hackney coaches were first established in London in 1625; but they were not then stationed in the streets, but at the principal inns. In the reign of Charles II. their number was considerable. Commissioners for licensing and superintending hackney coaches were established by the act 9 Ann. c. 23.; and successive acts have been passed, specifying the number of coaches that might be licensed, the duties payable to government, and the conditions under which licences were to be granted. The total number of hackney coaches, chariots, and cabriolets, actually licensed in the metropolis, on the 1st of January, 1830, appears, from the following table, to have been 1,265.

An Account of the Number of Hackney Coaches, Chariots, and Cabriolets, licensed in the Metropolis, in each of the Five Years to the 1st of January 1830; showing the Rates of Duty, and the Produce of the Duties. — (*Parl. Paper*, No. 687. Sess. 1830.)

	Number licensed.	Rates of Duty.	Produce of the Duties, including Fines. £	s.	d.
Years ending 1st of January 1826	1,150	2*l.* per lunar month each carriage.	29,392	12	6
— 1st of January 1827	1,200	do.	30,606	12	6
— 1st of January 1828	1,200	do.	31,333	7	6
— 1st of January 1829	1,265	do.	32,176	17	6
— 1st of January 1830	1,265	do.	32,908	18	6

5. *Hackney Coach Regulations, Fares, &c.* — The laws as to hackney coaches in the city of London were consolidated by the act 1 & 2 Will. 4. c. 22., which placed the collection of the duties, &c. in the hands of the commissioners of stamps. We notice a few of the more important clauses.

Definition. — A hackney coach is any carriage with 2 or more wheels, standing or plying for hire in any public street or road. — § 4.

Licensing, Plates, &c. — A licence to keep a hackney coach costs 5*l.*, and a weekly sum of 10*s.* has to be paid per advance on every licence. A plate specifying the number of the licence is to be placed inside the coach; and 2 other plates, on which are painted the names of the proprietor, or of one of the proprietors of the coach, are to be placed externally one on each side. Penalty on proprietor for letting or employing a hackney coach without having properly numbered plates properly fixed upon such coach, 10*l.*: ditto on driver, if proprietor, 10*l.*; if not, 5*l.* — §§ 22, 23.

Obligation to ply. — Carriages standing on the streets with plates, to be deemed hackney coaches; and, unless actually hired, shall be compellable, under a penalty of 40*s.*, to go with any person offering to hire the same. — § 35.

Distance. — Drivers of hackney coaches compellable, under a penalty of 40*s.*, to go any distance not exceeding 5 miles from the General Post Office, or from the place where they shall have been hired. — § 34.

Number of Passengers. — To prevent disputes, the number of persons to be carried by hackney coaches is to be painted in some conspicuous place outside; and they are compellable, under a penalty of 40*s.*, to carry this number if required. — § 46.

Rates and Fares.—These may be charged, at the option of the proprietor or driver, either by time or distance; that is, by the hour or mile, but not by the day. The terms are, when charged by *distance*,

For every hackney coach drawn by 2 horses, for any distance within and not exceeding 1 mile, 1*s.*; and for every distance exceeding 1 mile after the rate of 6*d.* for every ½ mile, and for any fractional part of ½ a mile over and above any number of ½ miles completed.

Fares when taken by *time* are — For any time within and not exceeding 30 minutes, 1*s.*; above 30 minutes and not exceeding 45 do., 1*s.* 6*d.*; above 45 minutes and not exceeding 1 hour, 2*s.*; and for any further time exceeding 1 hour, then after the rate and proportion of 6*d.* for every 15 minutes completed, and 6*d.* for any fractional part of the period of 15 minutes.

Cabriolets, or carriages with one horse, are entitled *to two thirds*, and no more, of the rates and charges above mentioned. —s. 38. and schedules.

Back Fare. — The driver of a hackney coach discharged beyond the limits of the metropolis, that is, beyond 3 miles from the General Post Office, after 8 o'clock in the evening, or before 5 o'clock in the morning, shall be entitled to full fare from the place of such discharge to the nearest part of said limits, or to the stand where the coach shall have been hired beyond the limits, at the option of the hirer. Coaches discharged during the day beyond the limits, are entitled to a back fare at the rate of 6*d.* a mile; but such back fare is not payable for any distance less than 4 miles. — § 39.

Coaches waiting are entitled to a reasonable deposit, to be accounted for in the fare. Penalty on drivers refusing to wait, or to account for deposit, 40*s.* — § 47.

Refusal to pay Fare, or defacing or injuring any hackney coach, may be punished, unless reasonable satisfaction be made for the same, by imprisonment for 1 calendar month. — § 41.

Drivers exacting more than legal Fare liable to a penalty of 40*s*. — § 42.

Agreement to pay more than legal Fare, not binding; sum paid beyond such legal fare may be recovered back, and driver be liable in a penalty of 40*s*. — § 43.

Drivers demanding more than Sum agreed upon, though distance be exceeded, or it be less than the legal fare, forfeit 40*s*. for each offence. — § § 44, 45.

Drivers to hold Check Strings, under a penalty of 20*s*. — § 48.

Property left in Hackney Coaches to be carried to Stamp Office, under a penalty of 20*l*. If not claimed within a year, to be given up to driver; or if not applied for, to be sold. — § 49.

Court of Aldermen authorised to make orders for regulating hackney coaches in city. — § 54.

Offences may be tried either by a justice appointed for that purpose by the secretary of state, or by any other of his Majesty's justices. — § 62.

Hackney coaches were first established at Edinburgh in 1673; but the number licensed was inconsiderable till after the American war.

5. *Stage Coaches, Travelling by.*—Owing to the improvement in the breed of horses and the building of carriages, but, above all, to the extraordinary improvements that have been effected, within these few years, in the laying out, construction, and keeping of roads, the ordinary rate of travelling by stage coaches is seldom under 9 or 10 miles an hour, stoppages included, and, on some roads, is as much as 11 or 12! The stages having been shortened, this wonderful speed is not found to be materially more injurious to the horses than the slower rate at which they travelled some years ago. The surface of the roads being perfectly smooth, and most sharp turns or rapid descents having been got rid of, travelling even at this speed has been rendered comparatively safe; and it is astonishing, considering the number of coaches, how few accidents occur. They are occasioned, for the most part, by the misconduct of the drivers; and principally by their endeavouring to make up by increased speed for time lost at stoppages, or by their attempting to pass each other.

6. *Law as to Stage Coaches.* — This is now embodied in the acts 2 & 3 Will. 4. c. 120. and 3 & 4 Will. 4. c. 48.

Definition. — A stage coach is any carriage travelling along the road at the rate of 3 miles or more an hour, without regard to form, provided the passengers pay separate fares for their places therein; but all carriages used wholly on a railway, or impelled by steam, are excepted from this definition. — (2 & 3 *Will.* 4. c. 120. § 4.)

Licences, Duties, &c. — A large portion of the act is occupied with regulations as to licences, duties plates, &c. But it is sufficient for our purpose to give the following schedule of the duties: —

	Duty. *L s. d.*
For and in respect of every original licence to be taken out yearly by the person who shall keep, use, or employ any stage carriage in Great Britain, (that is to say,) for every such stage carriage -	5 0 0
And for and in respect of every supplementary licence for the same carriage, for which any such original licence shall have been granted, which shall be taken out in any of the several cases provided for by this act, during the period for which such original licence was granted - -	0 1 0
And for and in respect of every mile which any such stage carriage shall be licensed to travel, the several sums following respectively, (that is to say,) if such stage carriage shall be licensed to carry —	Duty per Mile.
Not more than 4 passengers - -	0 0 1
More than 4 and not more than 6 passengers -	0 0 1½
More than 6 and not more than 9 passengers	0 0 2
More than 9 and not more than 12 passengers	0 0 2½
More than 12 and not more than 15 passengers	0 0 3
More than 15 and not more than 18 passengers	0 0 3½
More than 18 and not more than 21 passengers	0 0 4

	L s. d.
And if such stage carriage shall be licensed to carry more than 21 passengers, then for every 3 additional passengers exceeding 21 which such stage carriage shall be licensed to carry, the additional duty of - - - - -	0 0 0½

And where such excess above 21 shall not be exactly 3, or a multiple of 3, then such additional duty of ½*d*. shall be payable for any number of such excess being less than 3, or progressively less than any multiple of 3, which such stage carriage shall be licensed to carry.

Provided always, that the number of passengers for carrying of which any stage carriage shall be licensed, shall be reckoned exclusive of the coachman or driver, and also exclusive of the conductor or guard, if there shall be a conductor or guard.

And also the duties on passengers conveyed for hire by carriages travelling upon railways; (that is to say,)

The proprietor or company of proprietors of every railway in Great Britain, along which any passengers shall be conveyed for hire, in or upon carriages drawn or impelled by the power of steam, or otherwise, shall pay for and in respect of all such passengers at and after the rate of ½*d*. per mile for every 4 passengers so conveyed.

Want of Licence, &c. — Keeping, using, &c. any stage carriage without a licence, or without plates, or with recalled plates, or contrary to their licences, or with improper plates, are offences punishable each by a penalty of 20*l*.—§ § 27, 28.

Penalty on Drivers of Coaches without Plates, if not the owner, 10*l*.; if the owner, 20*l*.—§ 30.

Forging Plates, a misdemeanor.—§ 32.

Names of Proprietors, &c. to be painted outside, in legible and conspicuous characters, the names of the extreme places between which such carriage shall be licensed to go, and also the greatest number of passengers licensed to be carried inside and outside. Penalty for neglect in this particular, 5*l*.—§ 36.

Certain Carriages not to carry outside Passengers or Luggage, viz. those, the top or roof of which shall be more than 8 feet 9 inches from the ground, or the bearing of which on the ground, that is, the distance between the centres of the tracks of the wheels, shall be less than 4 feet 6 inches. Penalty 5*l*.—§ 37.

Luggage on the Roof not to exceed a certain Height, viz. 10 feet 9 inches from the ground on a carriage drawn by 4 or more horses; and 10 feet 3 inches from ditto, if on a carriage drawn by 2 or 3 horses. Driver of any carriage where such offence is committed liable in a penalty of 5*l*.—§ 43.

The clauses in the act 2 & 3 Will. 4. c. 120. relating to the distribution of outside passengers, &c. have been repealed by the act 3 & 4 Will. 4. c. 48., which substitutes the following in their stead.

Number of outside Passengers, &c. — Any licensed stage carriage with 4 wheels or more, the top or roof of which shall not be more than 8 feet 9 inches from the ground, and the bearing of which on the ground shall not be less than 4 feet 6 inches from the centre of the tracks of the wheels, if such carriage shall be licensed to carry any number not more than 9 passengers, shall be allowed to carry not more than 5 of such passengers outside; and if licensed to carry more than 9 and not more than 12 passengers, shall be allowed to carry not more than 8 of such passengers outside; and if licensed to carry more than 12 and not more than 15 passengers, shall be allowed to carry not more than 11 of such passengers outside; and if licensed to carry more than 15 and not more than 18 passengers, shall be allowed to carry not more than 12 of such passengers outside; and if licensed to carry any greater number than 18 passengers, shall be allowed to carry not more than 2 additional passengers outside for every 3 additional passengers which such carriage shall be so licensed to carry in the whole; provided that in no case a greater number of passengers shall be carried on the outside than is authorised by the licence. If more be carried, driver to forfeit 5*l*.—§ 2.

Driver, Guard, and Children in lap, not to be counted as passengers; 2 children under 7 years reckoned as 1 passenger.—§ 3.

No Person to sit on Luggage on the Roof, nor more than 1 person besides driver on the box. Penalty 5*l*. —§ 14.

Justices, Road-surveyors, Toll-keepers, &c. authorised to cause stage carriages and luggage to be measured; any passenger authorised to require the driver to stop at a toll-gate, and to require the gate-keeper to measure the carriage and luggage, and to count the number of inside and outside passengers. Penalty on driver refusing to stop, 5*l*.; on gate-keeper neglecting to provide a measure, or refusing to measure and count, 5*l*.—(2 & 3 *Will.* 4. c. 120. § 45.)

Conduct of Drivers, &c.—Drivers quitting the box before a proper person shall stand at the head of the horses; such person leaving the horses before some other person shall be placed in like manner, or have the command of the horses, or before the driver has resumed his seat on the box and taken the reins; driver allowing any passenger or other person to drive for him, or leaving the box without any reasonable occasion, or for a longer time than is absolutely necessary; concealing or misplacing plates; guard discharging fire-arms unnecessarily; driver, conductor, or guard, neglecting to take care of luggage; asking more than the proper fare; neglecting to account to his employer; or assaulting or using abusive language to any person having travelled, or about to travel, as a passenger, or to any person accompanying the same: shall in each and every such case forfeit 5*l*.—§ 47.

Drunkenness, &c.—Drivers, conductors, or guards having the care of any stage carriage, endangering, through intoxication, negligence, or wanton and furious driving, the safety of any passenger or other person, or the property of the owner of such carriage or other person, shall each person so offending forfeit 5*l*.—§ 49.

Owners liable for penalties, when driver or guard is not known or cannot be found.—§ 49.

Railway Proprietors are to render accounts of the passengers conveyed along the same to the Stamp Office, and to give security to keep and render such accounts, and to pay the duties.—§§ 50, 51.

Treasury may compound with proprietors of railways for the duties chargeable on passengers conveyed by them.—§ 52.

Mail Coaches are under the regulations of the post-master general; and the enactments in this act as to plates, inscriptions, outside passengers, and luggage, do not extend to them; but the other regulations as to the conduct of drivers, guards, &c. do apply to them. Mail coaches have only four outside passengers; one on the box, and three immediately behind the box. No passenger allowed to sit beside the guard. The rate of travelling, the time allowed for stoppages, the quantity of luggage to be carried, &c. are all regulated by the post-master general.

COAL (Du. *Steenkull*; Du. *Steenkoolen*; Fr. *Charbon de terre*; Ger. *Steinkohlen*; It. *Carboni fossili*; Lat. *Lithanthrax*; Port. *Carvoes de terra, ou de pedra*; Rus. *Ugolj, Kamennoe*; Sp. *Carbones de tierra, Carbones de piedra*; Sw. *Stenkol*). This highly important combustible mineral is divided by mineralogists into the three great families of black coal, uninflammable coal, and brown coal; each of these being again divided into many subordinate species.

All the common coals, as slate coal, foliated coal, cannel coal, &c. belong to the black coal family. Slate and foliated coal is found in vast quantities in Durham and Northumberland, at Whitehaven in Cumberland, in the river district of the Forth and Clyde, &c. The best Newcastle coal kindles easily; in burning it cakes or runs together into a solid mass, emitting a great deal of heat, as well as of smoke and flame; it leaves a small quantity of heavy, dark-coloured residuum or ashes. Most of the Scotch coals are what are familiarly called *open burning* coals. They do not last so long as the Newcastle coal, yield less heat, do not cake or run together in burning, and usually leave a considerable quantity of light, white ashes. They make, however, a very pleasant, cheerful fire; and, for most household purposes, the best fire is said to be made of a mixture of Scotch and Newcastle coal.

Cannel coal is sometimes met with in the Newcastle pits, in Ayrshire, &c.; but the largest beds of it, and of the purest kind, are near Wigan in Lancashire. It burns with a beautiful clear flame, emitting a great deal of light, but not a great deal of heat. It takes a good polish; and articles made of it are often passed off for pure jet.

The uninflammable coals are those known by the names of Welsh culm or stone coal, Kilkenny coal, and the *blind* or *deaf* coal of Scotland. These coals are difficult to kindle, which has given rise to their name; but when once thoroughly ignited, they burn for a long time: they make a hot, glowing fire, like charcoal, without either flame or smoke; but owing to their emitting noxious vapours, they cannot be used in dwelling houses, though they are in considerable demand among maltsters, dyers, &c.

Brown, or Bovey coal, so called from its being principally found at Bovey near Exeter, is light, yields but little heat in burning, and is seldom used as fuel.

In all, about *seventy* species of coal are said to be imported into London, of which *forty-five* are sent from Newcastle! Of course, many of them differ from each other by almost imperceptible degrees, and can only be distinguished by those thoroughly conversant with the trade.

Origin of Coal. Phenomena of Combustion, &c. — Coal beds, or strata, lie among those of gravel, sand, chalk, clay, &c. which form great part of the present surface of the earth, and have been evidently accumulated during remote ages by the agency of "moving water," — similar to accumulations now in process of formation at the mouths of all great rivers, and in the bottoms of lakes and seas. When these strata had, by long contact and pressure, been solidified into a rocky crust to the earth, this crust, by subsequent convulsions of nature, of which innumerable other proofs remain, has been in various parts broken and heaved up above the level of the sea, so as to form the greater part of our dry or habitable land; in some places appearing as lofty mountains, in others as extended plains. In many situations, the fracture of the crust exhibits the edges of the various distinct strata found in a given thickness of it. When the fracture has the form

of a precipitous cliff, these edges appear one above another, like the edges of piled planks or books; but often also they are met with in horizontal succession along a plain, as the edges of a pile of books laid down upon a table; or they may be seen surrounding hills of granite, which protrude through them. Coal, and other precious minerals, were first discovered by man at the fractures of the strata above described, and by his continued digging of the strata or veins he has gradually formed the vast excavations called mines. When it was at last discovered, that, all the world over, the mineral strata occur among themselves in nearly the same order or succession, so that the exposure any where of a portion of one stratum is a good indication of the other strata lying near, the operations of the miner became of much surer result, and expensive boring through superior strata might be prudently undertaken, even where no specimen of the desired but more deeply buried substance had yet been seen.

Before the discovery of coal mines, or the invention of cheap means of working them, wood was the general fuel of the earth; and in many countries where the arts have not much flourished, it is still the chief fuel. Coal, however, for many purposes, answers much better than wood. Now, coal and wood, although in appearance so different, are in their ultimate composition very nearly allied. They both have for their basis or chief ingredient the substance called by the chemists *carbon*, and for their chief other ingredient, the substance called hydrogen, which, when separated, exists in the form of air or gas. The hydrogen is easily driven away or volatilised from either coal or wood, by heating in a close place; and when it is caught and preserved, it forms the gas now used to light our streets and public buildings. What remains of coal, after being so treated, is the substance called *coke;* and what remains of wood, similarly treated, is the substance called *charcoal*, — both being nearly pure carbon, but differing as to the states of compactness. This kindred nature of coal and wood does not surprise, when the fact is known, that much of our coal is really transformed wood; many coal mines being evidently the remains of antediluvian forests, swept together in the course of the terrestrial changes already alluded to, and afterwards solidified to the state now seen. In these mines, the species of the plants or trees which formed them are still quite evident in abundant specimens, mixed often with the remnants of the animals which inhabited the earth at the same time. The extensive peat-mosses now existing on the surface of the earth, consist chiefly of vegetable remains in an early stage of the kind of change which terminates in the formation of coal.

A substance which, like coal or wood, cheaply answers the purpose of producing great heat and light, is called fuel, and the phenomenon of that production is called combustion. Now, modern discovery has ascertained that, in every instance, combustion is merely an appearance which accompanies the mutual action, when very intense, of two substances in the act of forming an intimate or chemical union. Where that act is less energetic, the heat produced is less intense, and there is no light. Thus, water and sulphuric acid when mixing produce great heat, but no light. Water and quicklime produce still greater heat; sufficient, it is known, to set fire to a ship in which the mixture unfortunately occurs. It is an occurrence of the same kind when heat is evolved from an acid dissolving a metal; and it is still of the same kind when a mass of coal or wood in a fire-grate is, with the appearance of combustion, undergoing solution in the oxygen of the atmosphere. In this last case, however, the temperature of the fuel is, by the very intense action, raised so much that the fuel becomes incandescent or luminous; an appearance assumed by every substance, whether burning or not, — of a stone, for instance, or piece of metal, — when heated beyond the temperature indicated by 800° of Fahrenheit's thermometer. The inferior degrees of such incandescence are called *red heat;* the superior degrees *white heat.* The reason why any strongly heated body throws out light, we cannot yet explain. When a quantity of wood or coal has been burned to ash in a confined portion of air, the whole of the fuel, vanished from view, is held in solution by the air, as salt is held in water, and is again recoverable by the art of the chemist. The phenomenon of common fire, or combustion, then, is merely the fuel being chemically dissolved in the air of the atmosphere. If the fuel has nothing volatile in it, as is true of pure carbon, and therefore nearly true of coke and charcoal, it burns with the appearance of red-hot stones; but if there be an ingredient, as hydrogen, which, on being heated, readily assumes the form of air, that ingredient dilates before burning, and in the act produces the more bulky incandescence called flame.

The two great purposes which combustion serves to man, are to give light and heat. By the former he may be said to lengthen considerably the duration of his natural existence; for he converts the dismal and almost useless night into what, for many ends, serves him as well as day; and by the latter, besides converting winter into any climate which he desires, he is enabled to effect most important mutations on many of the substances which nature offers for his use; and, since the invention of the steam engine, he makes heat perform a great proportion of the work of society. From these considerations

may be perceived the importance of having fire at command; and, as the cheapest means of commanding fire, of having abundance of coal.

In respect to the natural supply of coal, Britain, among the nations, is most singularly favoured: much of the surface of the country conceals under it continuous and thick beds of that valuable mineral, — vastly more precious to us than would have been mines of the precious metals, like those of Peru and Mexico; for coal, since applied to the steam engine, is really hoarded power, applicable to almost every purpose which human labour directed by ingenuity can accomplish. It is the possession of her coal mines which has rendered Britain, in relation to the whole world, what a city is to the rural district which surrounds it, — the producer and dispenser of the rich products of art and industry. Calling her coal mines the coal cellars of the great city, there is in them a supply, which, at the present rate of expenditure, will last for 2,000 years at least; and therefore a provision which, as coming improvements in the arts of life will naturally effect economy of fuel, or substitution of other means to effect similar purposes, may be regarded as inexhaustible.

The comparative values of the different kinds of fuel have been ascertained, by finding how much ice a certain quantity of the different kinds, while burning, will melt; and thus,

1 lb. of good coal - -	melts of ice 90 lbs.	1 lb. of good wood - -	melts of ice 52 lbs.
— coke - -	— 94 do.	— peat - -	— 19 do.
— charcoal of wood	— 95 do.	— hydrogen gas -	— 370 do.

The kinds or differences of coal depend on the comparative proportions in them of carbon and hydrogen, and of earthy impurities totally incombustible. While some species of coal contain nearly a third of their weight of hydrogen, others have not a fiftieth. The former kinds are flaming coal, pleasing in parlour fires, and fit for the manufacture of gas. The other kinds — some of the Welch stone coal, for instance — will only burn when in large heaps, or when mixed with more inflammable coal: they have no flame. When flaming coal is burned where a sufficiency of oxygen cannot pass through or enter above the fire, to combine with and consume the hydrogen as fast as it rises, a dense smoke is given out, consisting of hydrogen and carbon combined in the proportions which form a pitchy substance. The Welch coal above mentioned can as little give out smoke as flame, and hence is now much used in great breweries, and in the steam engine furnaces of towns, where smoke is a serious nuisance.

According to Mr. Kirwan —

	Charcoal.	Bitumen.	Earth.	Sp. gr.
100 parts Kilkenny coal yield - -	97·3	0	3·7	1·526
— comp. cannel - -	75·2	21·68 maltha	3·1	1·232
— Swansea - - -	73·53	23·14 mixt.	3·33	1·357
— Leitrim - - -	71·43	23·37 do.	5·20	1·351
— Wigan - - - -	61·73	36·7 do.	1·57	1·268
— Newcastle - - -	58·00	40·0 do.	—	1·271
— Whitehaven - - -	57·0	41·3	1·7	1·257
— slaty cannel - - -	47·62	32·52 maltha	20·0	1·426
— asphaltum - - -	31·0	68·0 bitumen.	—	1·117
— maltha - - -	8·0	—	—	2·07

100 parts of the best English coal give, of coak 63·0 by Mr. Jars.
100 do. - - - - 73 0 Hielm.
100 do. Newcastle do. - - - 58 0 Dr. Watson.

The foliated or cubical coal, and slate coal, are chiefly used as fuel in private houses; the caking coals, for smithy forges; the slate coal, from its keeping open, answers best for giving great heats in a wind furnace, as in distillation on a large scale; and glance coal, found in Staffordshire, is used for drying grain and malt. The coals of South Wales contain less volatile matter than either the English or the Scotch; and hence, in equal weight, produce a double quantity of cast iron in smelting the ores of this metal. It is supposed that 3 parts of good Newcastle coal are equivalent, as fuel, to 4 parts of good Scotch coal.

Consumption of Coal. Number of Persons engaged in the Trade. Supply of Coal. — The great repositories of coal in this kingdom are in Northumberland and Durham, whence London and most parts of the south of England are at present supplied; in Cumberland, whence large quantities of coal are exported to Ireland; and in Staffordshire, Derbyshire, Lancashire, Yorkshire, Leicestershire, Warwickshire, South Wales, &c. In Scotland, coal is found in the Lothians, Lanarkshire, Renfrewshire, Ayrshire, and other counties. In Ireland, coal is both deficient in quantity and inferior in quality to that of Great Britain; and turf forms the great article of fuel.

Mr Taylor, an experienced coal owner and coal agent, estimates the annual consumption of coal in Great Britain, as follows: —

	Tons.
The annual vend of coals carried coastwise from Durham and Northumberland is - -	3,300,000
Home consumption, say one fifth - - - - - - -	660,000
	3,960,000

	Tons.
Which quantity supplies about 5,000,000 persons; and supposing the whole population of Great Britain to be 15,000,000, this must be trebled; for though these two thirds of population are perhaps less able to afford fuel, yet, taking into consideration the manufacturing districts, and the cheapness of coal in the interior, the estimate will not be too high - - - - - - -	11,880,000
Consumed by iron works, say 600,000 tons of metal, to produce which requires at least 4 times the quantity of coal in making even pig metal, and the extraordinary consumption in the Cornwall, &c. mines - - - - - - - -	3,000,000
Consumed in Great Britain - - - - - -	14,880,000
Exported to Ireland, say - - - - - - - -	700,000
Total tons, exclusive of foreign exportation - -	15,580,000

This estimate does not differ materially from that of Mr. Stevenson (*Edinburgh Encyc.* art. *England*, p. 740.), and Mr. Bakewell—(see *post*); and may be regarded as sufficiently accurate.

Mr. Buddle, of Wallsend, an extremely well informed coal engineer, gives the following estimate of the number of persons engaged in the different departments of the coal trade on the Tyne and Wear, in the conveyance of coal to London, and in the London coal trade: —

"I hold a paper in my hand stating the number of people employed in the coal trade in each department. I would beg to observe, the returns from the Tyne are official documents; from the Wear I have no returns, but it is by an approximate calculation. The number of persons employed under-ground on the Tyne are, — men, 4,937; boys, 3,554; together, 8,491: above-ground, — men, 2,745; boys, 718; making 3,463: making the total employed in the mines above and below ground, 11,954, which in round numbers I call 12,000, because I am pretty sure there were some omissions in the returns. On the river Wear, I conceive there are 9,000 employed; making 21,000 employed in digging the coal, and delivering it to the ships on the two rivers. From the best calculations I have been able to make, it would appear that, averaging the coasting vessels that carry coals at the size of 220 London chaldrons each vessel, there would be 1,400 vessels employed, which would require 15,000 seamen and boys. I have made a summary. There are, seamen, 15,000; pitmen and above-ground people employed at the collieries, 21,000; keel-men, coal-boatmen, casters, and trimmers, 2,000: making the total number employed in what I call the Northern Coal Trade, 38,000. In London, whippers, lightermen, and so forth, 5,000; factors, agents, &c. on the Coal Exchange, 2,500; — 7,500 in all, in London. Making the grand total in the North country and London departments of the trade, 45,500. This does not, of course, include the persons employed at the outports in discharging the ships there."

In another place, Mr. Buddle states, that "colliers are always paid by the piece," and consequently their wages, although at the same rate per chaldron, vary according to the quantity of work they have to do; and it is difficult to form an average, they vary so very considerably: they have varied from 14*s.* a week, to, in some instances, 40*s.* "The colliers can earn up to 5*s.* or even more per day; but there is not full employment for them; they sometimes do not earn more than half that sum; 2*s.* 6*d.* is the certain wages that they are hired to receive from their employers, whether they are employed or not; that is, consequently, a tax on the coal owner, during the suspension of his colliery from any accident. The men have the option of finding work elsewhere; but if they cannot do this, they may call upon their master to pay them 14*s.* per week; it was 15*s.* a week till 1828.

We regret that we are unable to lay any estimates before our readers of the number of persons employed in the other branches of the coal trade; but taking into view the proportion which the trade on the Tyne and the Wear bears to the trade of Great Britain, as shown in Mr. Taylor's statement, we are inclined to think that the total number of persons directly engaged in the coal trade may be set down at from 160,000 to 180,000.

The importance of coal as a necessary of life, and the degree in which our superiority in arts and manufactures depends upon our obtaining supplies of it at a cheap rate, has naturally attracted a good deal of attention to the question as to the period when the exhaustion of the coal mines may be anticipated. But the investigations hitherto made as to the magnitude and thickness of the different coal-beds, and the extent to which they may be wrought, are too vague and unsatisfactory to afford grounds for forming any thing like a tolerably near approximation to a solution of this question. But such as they are, they are sufficient to show that *many centuries* must elapse before posterity can feel any serious difficulties from a diminished supply of coal. According to Mr. Taylor, whose estimate of the consumption of coal is given above, the coal-fields of Durham and Northumberland are adequate to furnish the present annual supply for more than 1,700 years. We subjoin Mr. Taylor's estimate.

ESTIMATE OF THE EXTENT AND PRODUCE OF THE DURHAM AND NORTHUMBERLAND COAL-FIELDS.

Durham.

	Sq. Miles.
" From South Shields southward to Castle Eden, 21 miles; thence westward to West Auckland, 32 miles; north-east from West Auckland to Eltringham, 33 miles; and then to Shields, 22 miles; being an extent or area of - - - - - -	594

Northumberland.

" From Shields northward, 27 miles, by an average breadth of 9 miles - - -	243
	— 837

Portion excavated.

" In Durham, on Tyne, say - - - - - - - -	39
— on Wear - - - - - - - -	40
	79
" In Northumberland, say 13 miles by 2 - - - - - -	26
	— 105
	732

	Tons.
" Estimating the workable coal strata at an average thickness of 12 feet, the contents of 1 square mile will be 12,390,000 tons, and of 732 square miles - - - -	9,069,480,000
" Deduct one third part for loss by small coal, interceptions by dikes, and other interruptions - - - - - - - -	3,023,160,000
Remainder -	6,046,320,000

" This remainder is adequate to supply the present vend from Newcastle, Sunderland, Hartley, Blyth, and Stockton, of 3,500,000 tons, for a period of 1,727 years.

" It will be understood that this estimate of the quantity of coal in Durham and Northumberland can only be an approximation, especially as the south-eastern coal district of Durham is yet almost wholly unexplored; but the attempt is made, in the hope of satisfying your Lordships that no apprehension need be entertained of this valuable mineral being exhausted for many future generations.

" There is also a considerable extent of coal-field in the northern and south-western districts of Northumberland; but the foregoing comprises that which is continuous, and most suitable and available for exportation." — (*Lords' Report*, 1829, p. 124.)

Dr. Buckland, the celebrated geologist, considers this estimate as very greatly exaggerated; but in his examination before the committee of the House of Commons, he quotes and approves a passage of Bakewell's *Geology*, in which it is stated that the coal-beds in South Wales are alone sufficient to supply the whole present demand of England for coal for 2,000 years. The passage is as follows: —

" Fortunately we have in South Wales, adjoining the Bristol Channel, an almost exhaustless supply of coal and ironstone, which are yet nearly unwrought. It has been stated, that this coal-field extends over about 1,200 square miles; and that there are 23 beds of workable coal, the total average thickness of which is 95 feet; and the quantity contained in each acre is 100,000 tons, or 65,000,000 tons per square mile. If from this we deduct one half for waste, and for the minor extent of the upper beds, we shall have a clear supply of coal equal to 32,000,000 tons per square mile. Now, if we admit that 5,000,000 tons from the Northumberland and Durham mines is equal to nearly one third of the total consumption of coal in England, each square mile of the Welsh coal-field would yield coal for 100 years' consumption; and as there are from 1,000 to 1,200 square miles in this coal-field, it would supply England with fuel for 2,000 years, after all our English coal mines are worked out!"

It is, therefore, quite idle either to prohibit, or impose heavy duties on, the exportation of coal, on the ground of its accelerating the exhaustion of the mines. The abolition of the expensive and destructive process of *screening* — (see *post*) — will more than balance any export that is ever likely to take place to foreign countries.

Profits of Coal Mining. Coal Owners' Monopoly, &c. — Instead of the business of coal mining being, generally speaking, an advantageous one, it is distinctly the reverse. Sometimes, no doubt, large fortunes have been made by individuals and associations engaged in this business; but these are rare instances. The opening of a mine is a very expensive and hazardous operation, and of very uncertain result. Collieries are exposed to an infinite number of accidents, against which no caution can guard. The chances of explosion have, it is true, been a good deal lessened by the introduction of Sir Humphry Davy's lamp; and some mines are now wrought, that but for the invention of this admirable instrument, must have been entirely abandoned. But besides explosions, which are still every now and then occurring, from the carelessness of the workmen, and other contingencies, mines are very liable to be destroyed by *creeps*, or by the sinking of the roof, and by drowning, or the irruption of water from old workings, through fissures which cannot be seen, and consequently cannot be guarded against. So great, indeed, is the hazard attending this sort of property, that it has never been possible to effect an insurance on a coal-work, against fire, water, or any other accident.

Mr. Buddle, who is intimately acquainted with the state of the coal trade, informed the committee of the House of Lords, that " Although many collieries, in the hands of fortunate individuals and companies, have been, perhaps, making more than might be deemed a reasonable and fair profit, according to their risk, like a prize in a lottery; yet,

as a trade, taking the whole capital employed on both rivers, he should say that certainly it has not been so."—(*First Report*, p. 56.) Again, being asked, "What have the coal owners on the Tyne and Wear, in your opinion, generally made on their capital employed?" he replied, "According to the best of my knowledge, I should think that *by no means ten per cent. has been made at simple interest, without allowing any extra interest for the redemption of capital.*"—(p. 57.)

In addition to the vast expense attending the sinking of shafts, the erection of steam engines, &c., and the risk of accidents, the coal, after being brought to the surface, has frequently to be conveyed 7 or 8 miles to the place of shipping; and those whose collieries are in that situation, have to pay *way-leave* rents, amounting, in some cases, to 500*l.* a year, for liberty to open a communication, or a railroad, through the properties lying between them and the shore.

Much has frequently been said of the monopoly of the coal owners on the Tyne and the Wear; but we are satisfied, after a pretty careful investigation of the circumstances, that no such monopoly has ever existed; and that the high price of coal in the metropolis is to be ascribed wholly to the various duties and charges that have been laid upon it, from the time that it has passed from the hands of the owner, to the time that it is lodged in the cellar of the consumer. What means have the coal owners of obtaining a *monopoly price* for their coal? They enjoy no exclusive privileges of any sort; they are a numerous body; and the trade is as open as any other to all capitalists to engage in. The number of places on the east and west coasts, both of England and Scotland, and the southern parts of Wales, from which coals are exported, render it quite visionary to suppose that any general agreement to keep up prices can take place amongst the various coal proprietors. And though such an agreement were entered into, it is impossible it could be maintained. The *power* of producing coal greatly exceeds the present demand; many new mines have been recently opened, and many others would be brought into activity were the price artificially enhanced. It is true that the coal owners referred to, having experienced the ruinous effects of throwing a superabundant quantity of coal upon restricted and already glutted markets, have occasionally met together; and each having named the price he thinks his coal will command, and at which he intends to sell it, they have proceeded jointly to regulate, according to the probable demand, the quantity that each shall raise during any particular period. By means of this arrangement, the supply and price of coal have been kept, during the time it has existed, comparatively steady. Common prudence prompts and justifies such an arrangement; but it also suggests the necessity of reducing the price of coal to the lowest level that will afford the customary rate of profit. For were the price demanded by the northern coal owners raised above this level, new mines would be opened in Durham and Northumberland; the imports from the Tees, whence a large supply of excellent coal *is at present brought* to the London market, would be augmented; and fresh competitors, from Swansea and other places, would come into the field and undersell them. Government should encourage and promote this fair competition; but it ought, at the same time, to do equal justice by all the competitors. It is not to lend assistance to, or remove burdens from, one set of adventurers, which it does not lend to or remove from others. It is no part of its duty to say *how* coals, or any species of produce, shall be carried to market. It is bound to give every reasonable facility for the opening of new channels or modes of conveyance between all parts of the country; but it would be glaringly unjust to lay a tax on the coals conveyed by a particular channel, from which those conveyed by other channels were exempted.

Mr. Buddle thinks that the aggregate capital employed by the coal owners on the Tyne amounts to about 1,500,000*l.* exclusive of the craft in the river: and supposing this estimate to be nearly correct, it will follow, allowing for the value of the ships, that the total capital employed in the coal trade may be moderately estimated at from *eight* to *ten* millions; an immense sum to be almost wholly at the risk of the owners, without any insurance upon it.

Progressive Consumption of Coal. Duties and Regulations affecting it, particularly in the Port of London.—There are no mines of coal in either Greece or Italy; and no evidence has been produced to show that the ancients had learned to avail themselves of this most useful mineral. Even in England, it does not seem to have been used previously to the beginning of the thirteenth century; for the first mention of it occurs in a charter of Henry III., granting licence to the burgesses of Newcastle to dig for coal. In 1281, Newcastle is said to have had a considerable trade in this article. About the end of this century, or the beginning of the fourteenth, coals began to be imported into London, being at first used only by smiths, brewers, dyers, soap-boilers, &c. This innovation was, however, loudly complained of. A notion got abroad, that the smoke was highly injurious to the public health; and, in 1316, parliament petitioned the king, Edward I., to prohibit the burning of coal, on the ground of its being an intolerable nuisance. His Majesty issued a proclamation conformably to the prayer of the petition;

but it being but little attended to, recourse was had to more vigorous measures; a commission of oyer and terminer being issued out, with instructions to inquire as to all who burned sea-coal within the city, or parts adjoining, to punish them for the first offence, by "pecuniary mulcts;" and upon a second offence, to demolish their furnaces; and to provide for the strict observance of the proclamation in all time to come.

But notwithstanding the efforts that were thus made to prohibit the use of coal, and the prejudice that was long entertained against it; it continued progressively to gain ground. This was partly, no doubt, owing to experience having shown that coal smoke had not the noxious influence ascribed to it, but far more to the superior excellence of coal as an article of fuel, and the growing scarcity and consequent high price of timber. In the reign of Charles I. the use of coal became universal in London, where it has ever since been used to the exclusion of all other articles of fuel. At the Restoration, the quantity imported was supposed to amount to about 200,000 chaldrons. In 1670, the imports had increased to 270,000 chaldrons. At the Revolution, they amounted to about 300,000 chaldrons, and have since gone on increasing with the growing magnitude and population of the city; being, in 1750, about 500,000 chaldrons; in 1800, about 900,000 chaldrons; and at present about 1,700,000 chaldrons. — (*Campbell's Political Survey of Great Britain*, vol. ii. p. 30.; *Edington on the Coal Trade*, p. 41. &c.)

It might have been supposed, considering that coal is, in this country, a prime necessary of life, and by far the most important of all the instruments of manufacturing industry, that it would have been exempted from every species of tax; and that every possible facility would have been given for its conveyance from the mines to the districts in the south of England, and other places in want of it. But such, we regret to say, has not been the case. The coal trade of Great Britain has been for more than a century and a half subjected to the most oppressive regulations. From a very early period, the corporation had undertaken the task of weighing and measuring the coal brought to London; and had been accustomed to charge 8*d.* a ton for their trouble. In 1613, the power to make this charge was confirmed to the city by royal charter, it being at the same time ordered that no coal should be unladen from any vessel till the Lord Mayor had given leave. The right to charge this sum according to the chaldron of coal, has since been confirmed to the city by act of parliament; and as the labouring meters, notwithstanding they have been very well paid, have received only 5*d.* out of the 8*d.*, the balance of 3*d.* per chaldron, producing at present about 20,000*l.* a year, goes to the city treasury.

But besides the above, duties for civic purposes have been laid on the coal imported into London from the reign of Charles II. downwards. They were originally imposed in 1667, after the great fire, in order to assist in the rebuilding of churches and other public edifices; and have ever since been continued, to enable the corporation to execute improvements in the city; though it is probable most of our readers will be inclined to think that few improvements could be so great, as a reduction in the price of so very important an article as coal. At present, a duty of 10*d.* per chaldron, denominated the orphans' duty, is appropriated, until 1858, to defray the expense of the approaches to London Bridge.

Exclusive of the corporation duties, a duty payable to government was laid on *all sea-borne* coal in the reign of William III., which was only repealed in 1830. This duty was at once glaringly unjust and oppressive: unjust, inasmuch as it fell only on those parts of the empire to which coals had to be carried by sea; and oppressive, inasmuch as it amounted to full *fifty* per cent. upon the price paid to the coal owner for the coal. It is not very easy to calculate the mischief that this tax has done to the southern counties. We, however, are satisfied that the depressed condition of the peasantry of the south, as compared with those of the north, is, in no inconsiderable degree, to be ascribed to the operation of the coal tax. This tax, after being long stationary at 5*s.* a chaldron, was raised to 9*s.* 4*d.* during the late war; but was reduced to 6*s.* in 1824. But the inequality of the tax was not confined to its affecting those parts only of the empire to which coal had to be carried by sea. Even there its pressure was not equal: for, while it amounted to 6*s.* a chaldron, or 4*s.* a ton, in the metropolis and all the south of England, it only amounted to 1*s.* 7$\frac{1}{4}$*d.* a ton on coal carried by sea to Ireland, and to 1*s.* 8*d.* on that carried to Wales; while Scotland was for many years entirely exempted from the duty.

Besides this striking partiality and injustice, various troublesome Custom-house regulations were required, in consequence of distinctions being made between the duties on large and small coal, between those on coal and culm (a species of coal), and coal and cinders, and of coal being allowed to be imported duty free into Cornwall, Devon, &c. for the use of the mines. These distinctions are now, however, wholly abolished; and no duties exist on coal except those collected in London and a few other ports, and appropriated to local purposes.

A small supply of coal was of late years brought to London from Staffordshire, by

canal navigation. This coal was charged with a duty of 1*s.* a chaldron; but this is now also repealed.

The regulations to which the sale and delivery of coals have been subjected in the city of London, have been, if possible, still more objectionable than the duties imposed on them. Instead of being sold by weight, all coals imported into the Thames have been sold by measure. It is curious to observe the sort of abuses to which this practice has given rise. It is stated by the celebrated mathematician, Dr. Hutton, who, being a native of Newcastle, was well acquainted with the coal trade, that, "If one coal, measuring exactly a cubic yard (nearly equal to 5 bolls), be broken into pieces of a moderate size, it will measure $7\frac{1}{2}$ bolls; if broken very small, it will measure 9 bolls; which shows that the proportion of the weight to the measure depends upon the size of the coals; therefore, accounting by weight is the most rational method." The shippers were well aware of this, and insisted upon the coal owners supplying them with large coal only; and to such an extent was this principle carried, that all coal for the London market was *screened*, as it is technically termed, or passed over gratings, to separate the smaller pieces. Inasmuch, however, as coals were sold in all their subsequent stages by measure, no sooner had they been delivered by the owner, than it was for the interest of every one else into whose hands they came before reaching the consumer, to break them into smaller portions. In fact, the profit of many of the retailers in London has arisen chiefly from the increase of measure by the breakage of coal. And Mr. Brandling, a very intelligent and extensive coal owner, stated to the Commons' committee, that, in consequence of the breakage, coals are reduced in London to a size inferior to what they would be, were they put on board *unscreened*, and subjected to no additional breakage.

The statements now made sufficiently evince the nullity of all the regulations enforcing the sale of coal by correct measures: for even though these regulations had been enforced, instead of being, as they usually were, wholly neglected, they would have been of almost no use; inasmuch as any dishonest dealer was as able to cheat, by breaking his coals a little smaller than usual, as if he had sold them in deficient measures.

The loss occasioned by the useless process of screening has been very great. The quantity of coal separated by it has amounted in some cases to from 20 to 25 per cent. of the whole; and the greater part of this residue, containing a portion of the very best coal, is *burned on the spot*. "I have known," says Mr. Buddle, "at one colliery, as many as from 90 to 100 chaldrons a day destroyed. If they were not consumed, they would cover the whole surface, and in the burnings of them they are extremely destructive; they destroy the crops a great way round, and we pay large sums for injury done to the crops, and for damage to the ground." — (*First Lords' Rep.* p. 72.) The waste of coal has been in this way enormous; and the coal owner has been obliged to charge a higher price upon the coal sold, in order to indemnify himself for the loss of so great a quantity, and for the mischief he does to others in burning.

The fact, that so monstrous a system should have been persevered in for more than a century, sets the power of habit in reconciling us to the most pernicious absurdities in a very striking point of view. Happily, however, the nuisance has been at last abated; the sale of coal by weight taking away both the temptation to break coal, and the necessity of screening.

But the abuses that have infected the coal trade were not confined to those that grew out of the duties, and the sale by measure. They have insinuated themselves into most departments of the business; and to such an extent have they been carried, that it takes, at this moment, a larger sum to convey a chaldron of coal from the *pool*, a little below London Bridge, to the consumers in the city, *than is sufficient to defray the entire cost of the coal in the north*, including the expense of digging them from the mine, their conveyance to the shore, landlord's rent, &c.! The following statement shows the various items that made up the price of coal to the London consumer, in October, 1830, distributed under their proper heads. They have been carefully abstracted from the evidence before the parliamentary committees.

Charges up to the Time of Arrival in the Port of London.	£ s. d.	£ s. d.
Coal Owner.		
Paid coal owner for coals	0 14 0	
Deduct river duty paid by him for improvement of Sunderland harbour	0 0 3	
		0 13 9
Coal Fitter.		
Keel dues, and fittage (including seven miles' water-carriage)	0 2 3	
Ship Owner.		
For freight, including insurance of ship and cargo, pilotage, seamen's wages, wear and tear of the ship and materials, discharging ballast, &c.	0 8 6½	
Carried over	0 10 9½	0 13 9

	£	s.	d.	£	s.	d.
Brought forward				0	10	9⅛	0	13	6
Municipal Dues.	£	s.	d.						
River duty, as above	0	0	3						
Pier duty, lights, &c. paid by ship	0	0	5¼						
				0	0	8¼			
							0	11	5⅜
CHARGES IN THE PORT OF LONDON.									
Government Tax				0	6	0			
Municipal Dues.									
Trinity and Nore lights, tonnage duty, Trinity House for ballast, &c.	0	0	5						
Entries, &c.	0	0	2⅜						
Corporation of London metage	0	0	4						
Ditto orphans' dues	0	0	10						
Ditto meter's pay and allowance	0	0	4						
Ditto market dues	0	0	1						
Ditto Lord Mayor's groundage, &c.	0	0	0½						
Ditto land metage	0	0	6						
Ditto undertaker	0	0	1						
Coal-whippers	0	1	7						
				0	4	4⅞			
Coal Factor.									
Factorage and del credere commission				0	0	4½			
Coal Merchant.									
Buyer's commission	0	1	0						
Lighterage	0	2	0						
Cartage	0	6	0						
Credit	0	2	0						
Shootage	0	1	3						
Add for even money	0	0	3						
[See *Com. Rep.* p. 8.)	0	12	6						
Add for discount, *scorage*, and *ingrain** (see same *Rep.* p. 9.)	0	2	2⅛						
				0	14	8⅛			
							1	5	5⅛
Making the price paid by the consumer							2	10	7½
Which is thus apportioned:—									
Coal owner for coal				0	13	9			
Ship owner, &c. for voyage to London				0	11	5⅜			
Government duty, corporation charges, and London coal merchant				1	5	5⅛			
							2	10	7½

Of these charges but little reduction need be looked for in those incurred in the rivers Tyne and Wear, and in the rate of freight: and as the government duty of 6*s.* per chaldron has been abolished, the charges that admit of further reduction are the municipal dues, and those attending the delivery of coal to the consumers; and in these, certainly, there is ample room for retrenchment.

Of the items which make up the sum of 4*s.* 4⅞*d.* of charges in the port of London, a sum of 1*s.* 2*d.* (10*d.* as orphan duty, appropriated to the new bridge, and 4*d.* as corporation metage) is a species of public tax. So soon, however, as the term for which the orphan duty is appropriated has expired, it ought to be abolished; and it would be highly desirable were some means then also found of indemnifying the corporation for the 4*d.* of metage claimed by them; inasmuch as the abolition of these duties would not only occasion a direct saving in the price of coal, but would afford great facilities for its delivery. — (See *post*, for an account of the local duties in 1832.)

The most important item, in those forming the charges in the port of London, is the fee of the *coal-whipper*, or coal-heaver — that is, the deliverer of the coals from the ship to the barge or lighter. This fee is about 1*s.* 7*d.*, and is at least 5 times as great as it ought to be. At Newcastle and Sunderland the filling of a chaldron of coal into the wagon costs from 1¼*d.* to 1⅜*d.*; and admitting that to raise coal from the hold is a little more difficult, still, if 4*d.* were allowed, it would be a most liberal payment. But the truth is, that this item should be struck off altogether. It is occasioned by a regulation peculiar to the Thames, which prevents the crews of colliers from performing this indispensable part of their peculiar duty. In the outports, to which luckily this preposterous regulation does not extend, the crews act as coal-heavers, and they do so without either asking or obtaining additional wages. And there certainly is no reason whatever for supposing that the case would be materially different in the port of London, were it not for the regulation referred to. In 1829, the total amount of money paid to the coal-heavers was 107,566*l.* 12*s.*; of which at least 90,000*l.* may be saved to the citizens, by simply *allowing* the crew to perform the function of coal-heavers.

The evidence given by the ship owners and captains before the parliamentary committees establishes, in the fullest manner, all that has now been stated. To discharge a ship when loaded with timber is admitted to be rather more difficult than when she is loaded with coal. Luckily, however, the masters of all ships other than colliers may employ, in their discharge, either the crew, or such other labourers as they think fit, without any sort of interference. And it is proved, that while the cost of discharging a ship of 300 tons, laden with coal, amounts to about 36*l.*, a ship of the same burden, laden with timber, may be discharged for 9*l.* or 10*l.* — (*Com. Rep.* p. 321.) This, certainly, is a subject deserving of the immediate attention of parliament.

Besides the charge of 8*d.* on account of ship metage, there has been a further charge of 6*d.* per chaldron on account of land metage. But the new regulations enforcing sale by weight will lead to the abolition of the land as well as the ship meters. Their inefficiency for all useful purposes was conclusively shown by the witnesses examined by the parliamentary committees. In fact, the system of metage has rather been a means of concealing than of discovering fraud.

The duties appropriated to public purposes, those claimed by the city of London as private property, and those required to defray the cost of the coal exchange, and the weighing establishments, &c., are, in future, to be charged in the aggregate at so much a ton on the coal imported, and paid into the City Chamberlain's office: accounts of the distribution of the produce of the duty being annually prepared and laid before parliament.

But the charges on account of the delivery of coal from the ship to the consumer are the most oppressive. They amount in all to no less than 14*s.* 8⅛*d.*! One item is *lighterage*, being a sum of 2*s.* a chaldron

* Scorage and ingrain were allowances that grew out of the system of selling by measure. As this system is now repealed, it is unnecessary to describe them.

paid for conveying the coals from the ship to the wharf. This charge seems to be in no ordinary degree exorbitant. It is mentioned by Mr. Buddle, in his evidence (*First Lords' Rep.* p. 121.), that the Tyne keelmen, who take the coals from the spouts or staiths, as they are termed, to deliver them to the ships, are paid only 1*s.* 6*d.* a chaldron, though they have to navigate *their keels from* 7 *to* 8 *miles*, and though it is far more difficult to shovel the coals from the keels into the port-holes of the ships, than from a lighter to a wharf. Were the charge for lighterage reduced to the same level in the Thames as in the Tyne, it would not certainly exceed 8*d.* or 9*d.* a chaldron. But before this desirable result can be accomplished, this department of the trade must, like all the rest, be thrown open. Here again the trammels of monopoly interfere. At present no individual can act as a lighterman, who is not free of the Waterman's Company, and who has not served 7 years as an apprentice upon the river. Competition is thus wholly excluded, and the charges rendered far higher than they would be under a different system.

The next item in the charge for delivery is 6*s.* a chaldron for cartage from the wharf to the consumer's residence. The best way, perhaps, to judge of the reasonableness of this charge, is by comparing it with the sums charged for similar work done elsewhere. Now, assuming the average weight of the chaldron to be 27 cwt., and the average distance to which coals are carted 1½ mile, the charge will be 3*s.* 5½*d.* per ton per mile; but in the north, in Durham, Lancashire, &c., it is usual to let the cartage of coals, including the loading, by contract, at from 7*d.* to 8*d.* a ton on turnpike roads, and 9*d.* and 10*d.* on heavy country roads. So that the expense of cartage in London is *four* or *five* times as much as it costs in the north. It seems difficult to account for this difference by the greater expense attending the keep of men, horses, &c. in the metropolis, though that certainly is very heavy. Perhaps a part of it is owing to the system of licensing carts, and regulating the fees of cartage. At all events the subject is one that ought to be investigated.

Exclusive of the charge of 6*s.* for cartage, there is a further charge of 1*s.* 6*d.* for *shooting*, that is, for unloading the wagon into the cellar. Next to the item for whippers, this is the most outrageous overcharge in this lengthened catalogue of abuses. There are thousands of labourers in London who would be glad to be allowed to perform the same work for 3*d.* or 4*d.*, for which the citizens are obliged to pay 1*s.* 6*d.* Indeed, we believe it might be done for a good deal less. Mr. Buddle says, "At the rate we pay our wagon-men for filling the wagons, I believe they would be very glad, for 2*d.*, to heave these same coals out of the cellar again up the hole," — (*First Lords' Rep.* p. 121.); an operation which, every one knows, would be about 10 times as troublesome as pouring them down.

Such of our readers as may have gone through these statements will, we think, feel but little disposed to differ from the committee of the House of Lords, who observe, in the *Second Report*, "that in every stage, from the port of shipment to the coal merchant's wharf, and thence to the consumer's cellar, the regulations under which the trade is conducted are productive of delay, of an aggravation of expense, and an encouragement to fraud!" — (*Rep.* p. 8.)

The sale of coal by weight, and the abolition of the metage system, have undoubtedly eradicated some of the more flagrant abuses that infected the trade. But the statements now laid before the reader show that there are other departments that require to be thoroughly examined. The exorbitancy of the existing charges for the delivery of coal from the ships to the wharf, and for carting, shooting, &c. demand that nothing should be left untried that may have any chance of contributing to their effectual reduction.

Regulations as to Sale in London. — A seller's ticket is to accompany all coals sold within the city of London and its environs, specifying the species of coal, and the number of sacks and weight of coal sent. The coals may be either in bags containing 1 or 2 cwt., or in bulk. The carman is in all cases bound to carry a weighing machine with the coal, which machine is to be made conformably to regulation; and, upon being desired, he is to weigh any one sack, or the whole sacks in his wagon. Penalty on refusing to weigh, or otherwise obstructing the weighing, 20*l.* Penalty on non-delivery of ticket to purchaser, 20*l.* In the event of the weight being deficient, a penalty is imposed of 10*l.* or 50*l.*, according to deficiency. Quantities of less than 560 lbs. may be sold without being weighed. — (1 & 2 *Will.* 4. c. 76.)

In order to save trouble in collecting the duties that still attach to coal in the port of London, the corporation is authorised to compound with the owner or master of any ship or vessel importing coal, for the tonnage upon which the duties are to be paid. A certificate of such composition, expressing the number of tons of coal, cinders, or culm, agreed to be taken as the cargo of the ship or vessel compounded for, is to be given to the master or owner of the same, and to be taken as evidence of the quantity on board. When no composition is entered into, the coal is to be weighed in the presence of an officer of the customs *at the port of shipment;* and the duties are to be paid upon the weight so shipped.

The shipment of coal in the Tyne is at present regulated by the act 5 Geo. 4. c. 72., commonly called the *Turn Act.* The object of this act is to make all ships engaged in the trade of the Tyne be loaded in the order in which they arrive. It prevents any preference being given to particular ships; and renders it nearly impossible for any coal owner to give constant employment to any vessel in the trade which he may wish to employ. In some respects this act is probably advantageous, but, on the whole, its policy seems very questionable. Why should a coal owner be prevented from employing certain ships in preference to others? Under this act, if more ships engage in the trade than can be profitably employed in it, the loss produced by detention in port, and waiting for a cargo, instead of falling, as it naturally would, were the trade free, on particular ships, and driving them from the business, falls equally on every ship employed, and depresses the whole trade. There is no regulation of this sort in the Wear.

Exportation of Coal. — For a considerable number of years past a duty of 17*s.* 6*d.* a chaldron was laid on all large, and of 4*s.* 6*d.* a chaldron on all small coal exported. The first of these duties is quite excessive; and is not to be vindicated, unless the policy of preventing the exportation of coal were admitted. Inasmuch, however, as small coal is the only species used in manufactories, no ground could be assigned for prohibiting the exportation of round coal, except the risk of exhausting the mines. But the statements previously made show the futility of this apprehension. There cannot, therefore, be any reasonable doubt as to the policy of the reduction that has recently been made in the duty on large coal exported. We believe, indeed, that it might have been carried a good deal further, with advantage to the revenue and to all parties. — (For the existing duties on coal exported, see TARIFF.)

Price of Coal. — The following is an account of the contract price of coal supplied to Greenwich Hospital in the undermentioned years: —

Years.	Per Chaldron.			Years.	Per Chaldron.			Years.	Per Chaldron.		
	£	s.	d.		£	s.	d.		£	s.	d.
1730	1	4	6	1785	1	14	2½	1824	2	3	8
1735	1	5	0	1790	1	14	4¼	1825	2	3	2
1740	1	9	0	1795	1	19	9	1826	2	0	4
1745	1	10	0	1800	2	11	7	1827	2	1	5¼
1750	1	7	7½	1805	2	11	8¾	1828	2	0	8½
1755	1	8	7½	1810	3	0	8	1829	1	16	7
1760	1	12	8	1815	2	15	6¾	1830	1	12	11
1765	1	12	4½	1820	2	5	9	1831	1	7	0
1770	1	9	1½	1821	2	6	6	1832	1	4	3
1775	1	10	11½	1822	2	4	6¼				
1780	1	17	3¾	1823	2	6	7		(See art. PRICES.)		

This table sets the beneficial influence of the abolition of the duty on coals, and of the other alterations that have been made in the management of the trade, in a very striking point of view.

Imports of Coal into London, and public Duties thereon. — The following table shows the quantity of coal and culm (small coal) imported into London during each of the 7 years ending with 1832, the public duties charged on the same, and the produce of the duties. — (*Parl. Paper*, No. 197. Sess. 1833.)

Coals, Cinders, and Culm, imported into the Port of London.

Years.	Total Quantity imported, Stated in Chaldrons.	Total Quantity imported, Stated in Tons, allowing 25½ cwt. to the Chaldron, 1 & 2 Will. 4. c. 76. s. 44.	Rates of Public Duties charged on Importation.	Produce of the Duties.
				£
1826	1,600,229	2,040,291	Coals and cinders:	467,852
1827	1,476,551	1,882,921	Charged by measure, 6s. per chaldron.	416,804
1828	1,537,094	1,960,559	Charged by weight, 4s. per ton.	443,217
1829	1,583,511	2,018,975	Culm, 6d. per chaldron.	464,659
1830	1,630,804	2,079,275	Duties repealed from 1st of March, 1831, per act 1 & 2 Will. 4. c. 16.	467,716
1831	1,604,151	2,045,292		40,702
1832	1,677,708	2,139,078		

Account of the various Local or Municipal Duties charged on Coals imported into the Port of London since 1825; specifying such Duties in detail, the Rate of each, and the Amount of Duty annually produced by each. — (*Parl. Paper*, No. 296. Sess. 1833.)

Years.	Description of Duties.	Rate of each Duty.	Annual Produce of each Duty. £	s.	d.
1826	Duty on coals delivered in the year ending 5th of January, 1827, pursuant to the act of the 5th & 6th of Will. & Mary, c. 10., for the relief of the orphans and other creditors of the city of London, and continued by various acts of parliament for effecting public works	6d. per chald.			
	Additional metage duty, pursuant to the said act of 5 & 6 W. & M. and applicable to the purposes of the said orphans' fund	4d. per chald.	65,548	3	5
1827	Ditto	- ditto -	59,292	9	9
1828	Ditto	- ditto -	63,211	14	6
1829	Ditto	- ditto -	65,029	14	10
1830	Ditto	- ditto -	66,689	10	11
1831	Ditto	- ditto -	65,364	15	6
1832	Commutation pursuant to the act of 1 & 2 Will. 4. c. 76. for the said duties of 6d. and 4d. per chaldron, continued by the act of 10 Geo. 4. c. 136. for making the approaches to London Bridge	8d. per ton -	71,020	5	4
1826	Duty charged by 43 Geo. 3. c. 134. for establishing a market in the city of London for the sale of coals	1d. per chald.	6,649	8	10¼
1827	Ditto	- ditto -	6,091	18	2¾
1828	Ditto	ditto -	6,472	15	1½
1829	Ditto	- ditto -	6,639	18	5½
1830	Ditto	- ditto -	6,785	9	11
1831	Ditto, including 267*l.* 8*s.* 6½*d.* for duty on coals imported in 1831, but delivered in 1832	- ditto -	6,865	2	0½
1832	Continued by the act of the 1 & 2 Will. 4. c. 76. for the support of the said market, and for paying the compensations of the land coal-meters of London, Westminster, and Middlesex, for the abolition of their offices	1d. per ton -	8,877	10	8
1826	Duty payable to the corporation of the city of London, for metage	4d. per chald.	26,624	1	4
1827	Ditto	- ditto -	24,367	12	11
1828	Ditto	- ditto -	25,893	13	11
1829	Ditto	- ditto -	26,559	13	10
1830	Ditto	- ditto -	27,141	19	5
1831	Ditto	- ditto -	26,390	14	0
1832	Commutation for the said duty of 4d. per chaldron, water-bailliage and groundage of coals, and fees to Lord Mayor on permit, &c. pursuant to the act of the 1 & 2 Will. 4. c. 76., chargeable with the compensations to the clerks, officers, and deputy sea-coal meters, for the abolition of their places by the said act	4d. per ton -	35,510	2	8
1826	Duty of water-bailliage on coals and groundage of colliers, payable to the corporation of London by non-freemen only	¼d. per Newcastle, or double chald. and 6d. per ship groundage -	999	4	7½
1827	Ditto	- ditto -	903	11	3½
1828	Ditto	- ditto -	942	11	9
1829	Ditto	- ditto -	990	2	5
1830	Ditto	- ditto -	1,010	6	3¾
1831	Ditto	- ditto -	991	15	0¼
1832	Commuted by said act 1 & 2 Will. 4. c. 76., as before stated		Nil.		
1826	Fees payable to the Lord Mayor of London for permit and registering certificates of the quantity and quality of coals, pursuant to the act 9 Anne, c. 28.	1*s.* 6*d.* per ship	517	11	6
1827	Ditto	- ditto -	467	16	0
1828	Ditto	- ditto -	495	19	0
1829	Ditto	- ditto -	515	13	6
1830	Ditto	- ditto -	524	19	0
1831	Ditto	- ditto -	481	14	6
1832	Commuted under the said act 1 & 2 Will. 4. c. 76., as before mentioned.		Nil.		

Note. — The act of the 47 Geo. 3. c. 68. (repealed by the act 1 & 2 Will. 4. c. 76.) imposed a duty of 6*d.* per chaldron on all coals sold by wharf measure, and 1*s.* per 5 chaldrons, sold by pool measure; but the corporation of London have no means of ascertaining the amount of those duties paid in the districts of Westminster, Middlesex, and Surrey. — Guildhall, 15th of May, 1833.

It appears from this account, that the various local and municipal duties charged on coal in the port of London in 1832, amounted to 115,107*l.* 18*s.* 8*d.*, being at the rate of about 1*s.* 4½*d.* per chaldron on the coal imported that year. Were these duties wholly abolished, or commuted for some other tax, and all regulations as to the unloading of ships in the river, with the exception of those necessary to preserve order, swept off, we have no doubt that the price of coal would be materially reduced.

An Account of the Quantity of Coals, Culm, and Cinders exported from the different Ports of England, Scotland, and Wales, for the Ten Years ending with 1828; distinguishing those sent Coastways, to Ireland, to British Colonies, and to all Foreign Countries; and distinguishing the Quantities sent to each.—(*Parl. Paper*, No. 57. Sess. 1829.)

Years.	To other Ports of Great Britain (Coastwise).					To Ireland.					To British Colonies.					To Foreign Countries.				
	Coals (except Small Coals) and Cinders.		Small Coals.	Culm.	Total Quantity sent Coastwise, stated in Tons Weight.	Coals (except Small Coals) and Cinders.		Small Coals.	Culm.	Total Quantity exported to Ireland, stated in Tons Weight.	Coals (except Small Coals) and Cinders.		Small Coals.	Culm.	Total Quantity exported to British Colonies, stated in Tons Weight.	Coals (except Small Coals) and Cinders.		Small Coals.	Culm.	Total Quantity exported to Foreign Countries stated in Tons Weight.
	Tons.	Chaldrons Imperial Measure.	Chaldrons Imperial Measure.	Chaldrons Imperial Measure.		Tons.	Chaldrons Imperial Measure.	Chaldrons Imperial Measure.	Chaldrons Imperial Measure.		Tons.	Chaldrons Imperial Measure.	Chaldrons Imperial Measure.	Chaldrons Imperial Measure.		Tons.	Chaldrons Newcastle Measure.	Chaldrons Newcastle Measure.	Chaldrons Newcastle Measure.	
1819	438,045	2,105,745	18	70,934	3,459,508	156,581	354,439	21	15,168	669,660	9,895	42,813	1,333	233	71,497	9,475	22,732	35,712	9	164,575
1820	437,074	2,423,263	71	105,911	3,947,908	119,609	399,743	-	-	606,400	9,191	56,500	1,784	254	90,447	7,081	20,536	36,509	159	158,672
1821	463,974	2,256,757	105	97,396	3,731,908	140,851	352,600	-	-	644,787	10,521	55,431	2,016	115	90,423	8,236	23,671	37,509	218	170,941
1822	491,094	2,301,770	427	88,953	3,810,239	156,236	376,943	-	-	694,024	9,741	54,821	18,719	-	111,882	9,692	22,425	38,892	216	172,754
1823	534,835	2,672,456	62	92,425	4,372,839	166,131	373,333	112	6,415	693,413	13,606	51,281	3,448	99	89,713	5,446	16,579	42,599	526	163,662
1824	547,939	2,587,880	232	121,091	4,368,571	162,878	367,815	1,607	11,352	691,429	12,211	60,254	2,684	-	99,575	10,952	18,783	44,349	515	179,617
1825	539,760	2,623,354	25,036	121,357	4,384,433	159,723	368,815	2,368	15,036	695,832	10,527	69,648	5,022	63	114,264	27,827	15,501	47,671	755	197,534
1826	557,355	2,788,125	78,758	139,360	4,730,307	236,052	367,849	119	23,599	779,584	42,490	55,231	2,796	288	123,437	45,518	9,922	57,565	270	223,219
1827	595,278	2,539,871	103,115	127,026	4,440,318	198,857	306,289	30	19,214	650,728	43,963	53,645	3,095	278	123,109	54,090	11,403	59,867	478	244,922
1828	645,471	2,586,266	75,097	121,201	4,507,935	242,944	336,550	486	21,100	740,071	50,563	53,277	2,458	118	128,092	38,507	11,056	60,315	26	227,709

Aggregate Quantities shipped to all Parts.

Years.	Coals (except Small Coals) and Cinders.			Small Coals.		Culm.		Total Quantity shipped to all Parts, stated in Tons Weight.
	Tons.	Chaldrons Newcastle Measure.	Chaldrons Imperial Measure.	Chaldrons Newcastle Measure.	Chaldrons Imperial Measure.	Chaldrons Newcastle Measure.	Chaldrons Imperial Measure.	
1819	613,996	22,732	2,502,997	35,712	1,372	9	86,335	4,365,040
1820	572,955	20,536	2,819,506	36,509	1,855	159	117,111	4,803,427
1821	623,582	23,671	2,664,788	37,509	2,121	218	107,952	4,638,059
1822	666,763	22,425	2,733,534	38,892	19,146	216	99,439	4,788,839
1823	720,018	16,579	3,097,070	42,599	3,622	526	98,939	5,319,627
1824	733,980	18,783	3,015,949	44,349	4,523	515	132,443	5,279,192
1825	737,837	15,501	3,061,817	47,671	32,426	755	136,456	5,391,763
1826	881,415	9,222	3,211,205	57,565	81,673	270	163,247	5,856,547
1827	892,188	11,403	2,899,805	59,867	106,240	478	146,518	5,458,477
1828	977,485	11,056	2,976,093	60,315	78,041	26	142,419	5,603,807

Customs Revenue on Coals, Cinders, and Culm.

Years.	Gross Revenue.		Total Gross Revenue.	Nett Produce of the Duties on Coals, Cinders, and Culm in the United Kingdom.
	On Coals, Cinders, and Culm brought or carried Coastwise, or by Inland Navigation, in the United Kingdom.	On Coals, Cinders, and Culm exported to Foreign Parts.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1819	957,899 9 10½	48,861 7 11⅛	1,006,760 17 9⅜	986,869 4 7½
1820	1,086,564 17 3½	48,359 3 9	1,134,924 1 0⅛	1,115,995 7 9½
1821	1,019,865 10 5⅛	50,911 13 1¼	1,070,777 3 6¾	1,050,032 14 4¼
1822	1,006,506 2 3⅜	52,771 4 6¼	1,059,277 6 10	1,037,852 6 2
1823	1,145,659 1 3⅜	44,020 5 6⅜	1,189,679 6 9⅛	1,167,767 17 11
1824	948,810 16 10	42,821 16 10¾	991,632 13 8⅜	968,291 16 5½
1825	899,918 14 9⅜	43,421 1 10	943,339 16 7⅜	917,230 4 10½
1826	972,839 19 9⅛	40,553 17 8	1,013,393 17 5¼	987,083 17 7¼
1827	862,526 8 6⅛	45,182 9 3	907,718 17 9¼	883,369 9 4⅜
1828	922,682 1 4⅛	41,423 6 2	964,105 7 6¼	936,088 4 10

COASTING TRADE, the trade or intercourse carried on by sea between two or more ports or places of the same country.

It has been customary in most countries to exclude foreigners from all participation in the coasting trade. This policy began in England in the reign of Elizabeth (5 Eliz. c. 5.), or, perhaps, at a more remote era; and was perfected by the acts of navigation passed in 1651 and 1660. A vast number of regulations have been since enacted at different periods. The existing rules with respect to it, which have been a good deal simplified, are embodied in the act 3 & 4 Will. 4. c. 52., and are as follow: —

Definition of Coasting Trade. — All trade by sea from any one part of the United Kingdom to any other part thereof, or from one part of the Isle of Man to another thereof, shall be deemed to be a coasting trade, and all ships while employed therein shall be deemed to be coasting ships; and no part of the United Kingdom, however situated with regard to any other part thereof, shall be deemed in law, with reference to each other, to be parts beyond the seas in any matter relating to the trade or navigation or revenue of this realm. — § 105.

Lords of Treasury to regulate what shall be deemed trading by Sea under this Act. — It shall be lawful for the said commissioners of his Majesty's treasury to determine and direct in what cases the trade by water from any place on the coast of the United Kingdom to another of the same shall or shall not be deemed a trade by sea within the meaning of this act or of any act relating to the customs. — § 106.

Coasting Ship confined to coasting Voyage. — No goods shall be carried in any coasting ship, except such as shall be laden to be so carried at some port or place in the United Kingdom, or at some port or place in the Isle of Man respectively; and no goods shall be laden on board any ship to be carried coastwise until all goods brought in such ship from parts beyond the seas shall have been unladen; and if any goods shall be taken into or put out of any coasting ship at sea or over the sea, or if any coasting ship shall touch at any place over the sea, or deviate from her voyage, unless forced by unavoidable circumstances, or if the master of any coasting ship which shall have touched at any place over the sea shall not declare the same in writing under his hand to the collector or comptroller at the port in the United Kingdom or in the Isle of Man where such ship shall afterwards first arrive, the master of such ship shall forfeit the sum of 200*l.* — § 107.

Before Goods be laden or unladen, Notice of Intention, &c. to be given, and proper Documents to issue. — No goods shall be laden on board any ship in any port or place in the United Kingdom or in the Isle of Man to be carried coastwise, nor having been brought coastwise shall be unladen in any such port or place from any ship, until due notice in writing, signed by the master, shall have been given to the collector or comptroller, by the master, owner, wharfinger, or agent of such ship, of the intention to lade goods on board the same to be so carried, or of the arrival of such ship with goods so brought, as the case may be, nor until proper documents shall have been granted as herein-after directed for the lading or for the unlading of such goods; and such goods shall not be laden or unladen except at such times and places, and in such manner, and by such persons, and under the care of such officers, as are herein-after directed; and all goods laden to be so carried, or brought to be so unladen, contrary hereto, shall be forfeited. — § 108.

Particulars in Notice. — In such notice shall be stated the name and tonnage of the ship, and the name of the port to which she belongs, and the name of the master, and the name of the port to which she is bound or from which she has arrived, and the name or description of the wharf or place at which her lading is to be taken in or discharged, as the case may be; and such notice shall be signed by the master, owner, wharfinger, or agent of such ship, and shall be entered in a book to be kept by the collector, for the information of all parties interested; and every such notice for the unlading of any ship or vessel shall be delivered within 24 hours after the arrival of such ship or vessel, under a penalty of 20*l.* to be paid by the master of such ship or vessel; and in every such notice for the lading of any ship or vessel shall be stated the last voyage on which such ship or vessel shall have arrived at such port; and if such voyage shall have been from parts beyond the seas there shall be produced with such notice a certificate from the proper officer of the discharge of all goods, if any, brought in such ship, and of the due clearance of such ship or vessel inwards of such voyage. — § 109.

From and to Ireland. — Upon the arrival of any coasting ship at any port in Great Britain from Ireland, or at any port in Ireland from Great Britain, the master of such ship shall, within 24 hours after such arrival, attend and deliver such notice, signed by him, to the collector or comptroller; and if such ship shall have on board any goods subject on arrival to any duty of excise, or any goods which had been imported from parts beyond the seas, the particulars of such goods, with the marks and numbers of the packages containing the same, shall be set forth in such notice; and if there shall be no such goods on board, then it shall be declared in such notice that no such goods are on board; and the master shall also answer any questions relating to the voyage as shall be demanded of him by the collector or comptroller; and every master who shall fail in due time to deliver such notice, and truly to answer such questions, shall forfeit the sum of 100*l.* — § 110.

After Notice given of lading, Collector may grant a general Sufferance. — When due notice shall have been given to the collector or comptroller at the port of lading of the intention to lade goods on board any coasting ship, such collector or comptroller shall grant a general sufferance for the lading of goods (without specifying the same) on board such ship, at the wharf or place which shall be expressed in such sufferance; and such sufferance shall be a sufficient authority for the lading of any sort of goods, except such, if any, as shall be expressly excepted therein: provided always, that before any sufferance be granted for any goods prohibited to be exported, or subject to any export duty other than any *ad valorem* duty, the master or owner of any such ship, or the shipper of such goods, shall give bond, with one sufficient surety, in treble the value of the goods, that the same shall be landed at the port for which such sufferance is required, or shall be otherwise accounted for to the satisfaction of the commissioners of his Majesty's customs. — § 111.

Master of Coasting Vessel to keep a Cargo Book. — The master of every coasting ship shall keep or cause to be kept a cargo book of the same, stating the name of the ship and of the master, and of the port to which she belongs, and of the port to which bound on each voyage; and in which book shall be entered, at the port of lading, an account of all goods taken on board such ship, stating the descriptions of the packages, and the quantities and descriptions of the goods therein, and the quantities and descriptions of any goods stowed loose, and the names of the respective shippers and consignees, as far as any of such particulars shall be known to him; and in which book, at the port of discharge, shall be noted the respective days upon which any of such goods be delivered out of such ship, and also the respective times of departure from the port of lading, and of arrival at any port of unlading; and such master shall produce such book for the inspection of the coast-waiter or other proper officer, so often as the same shall be demanded, and who shall be at liberty to make any note or remark therein; and if such master shall fail correctly to keep such book, or to produce the same, or if at any time there be found on board such ship any goods not entered in the cargo book as laden, or any goods noted as delivered, or if at any time it be found that any goods entered as laden, or any goods not noted as delivered, be not on board, the master of such ship shall forfeit the sum of 50*l.*; and if, upon examination at the port of lading, any package entered in the cargo book as containing any foreign goods shall be found not to contain such goods, such package, with its contents, shall be forfeited; and if at the port of discharge any package shall be found to contain any foreign goods which are not entered in such book, such goods shall be forfeited. — § 112.

Accounts of Foreign Goods, &c. to be delivered to Collector. — Before any coasting ship shall depart from the port of lading, an account, together with a duplicate of the same, all fairly written, and signed by the master, shall be delivered to the collector or comptroller; and in such account shall be set forth such particulars as are required to be entered in the cargo book of all foreign goods, and of all goods subject to export duty (other than any *ad valorem* duty), and of all corn, grain, meal, flour, or malt, laden on board, and generally, whether any other British goods or no other British goods be laden on board, as the case may be, or whether such ship be wholly laden with British goods not being of any of the descriptions before mentioned, as the case may be; and the collector or comptroller shall select and retain one of such accounts, and shall return the other, dated and signed by him, and noting the clearance of the ship thereon; and such account shall be the clearance of the ship for the voyage, and the transire for the goods expressed therein; and if any such account be false, or shall not correspond with the cargo book, the master shall forfeit the sum of 50*l.* — § 113.

Transire to be delivered to Collector. — Before any goods be unladen from any coasting ship at the port of discharge, the master, owner, wharfinger, or agent of such ship shall deliver the transire to the collector or comptroller of such port, who shall thereupon grant an order for the unlading of such ship at the wharf or place specified in such order: provided always, that if any of the goods on board such ship be subject to any duty of customs or excise payable on arrival coastwise at such port, the master, owner, wharfinger, or agent of such ship, or the consignee of such goods, shall also deliver to the collector or comptroller a bill of the entry of the particulars of such goods, expressed in words at length, together with a copy thereof, in which all sums and numbers may be expressed in figures, and shall pay down all duties of customs, or produce a permit in respect of all duties of excise, which shall be due and payable on any of such goods, as the case may be; and thereupon the collector and comptroller shall grant an order for the landing of such goods, in the presence or by the authority of the coast-waiter. — § 114.

Collector in certain Cases may grant general Transire for Coasting Vessels. — It shall be lawful for the collector and comptroller, in the cases herein-after mentioned, to grant for any coasting ship a general transire, to continue in force for any time not exceeding one year from the date thereof, for the lading of any goods (except such goods, if any, as shall be expressly excepted therein), and for the clearance of the ship in which the goods shall be laden, and for the unlading of the goods at the place of discharge; (that is to say,)

For any ship regularly trading between places in the river Severn eastward of the Holmes;
For any ship regularly trading between places in the river Humber;
For any ship regularly trading between places in the Frith of Forth;
For any ship regularly trading between places to be named in the transire, and carrying only manure, lime, chalk, stone, gravel, sand, or any earth, not being fullers' earth:

Provided always, that such transire shall be written in the cargo book herein-before required to be kept by the masters of coasting ships: provided also, that if the collector and comptroller shall at any time revoke such transire, and notice thereof shall be given to the master or owner of the ship, or shall be given to any of the crew when on board the ship, or shall be entered in the cargo book by any officer of the customs, such transire shall become void, and shall be delivered up by the master or owner to the collector or comptroller. — § 115.

Coast-waiter, &c. may go on board and examine any Coasting Ship. — It shall be lawful in any case, and at all legal times, for the coast-waiter, and also for the landing-waiter, and for the searcher, and for any other proper officer of the customs, to go on board any coasting ship in any port or place in the United Kingdom or in the Isle of Man, or at any period of her voyage, and strictly to search such ship, and to examine all goods on board, and all goods being laden or unladen, and to demand all documents which ought to be on board such ship. — § 116.

Times and Places for landing and shipping. — No goods shall be unshipped from any ship arriving coastwise in the United Kingdom or in the Isle of Man, and no goods shall be shipped, or waterborne to be shipped, in the United Kingdom or in the Isle of Man, to be carried coastwise, but only on days not being Sundays or holidays, and in the daytime, (that is to say,) from the 1st of September until the last day of March betwixt sun-rising and sun-setting, and from the last day of March until the 1st of September between the hours of 7 o'clock in the morning and 4 o'clock in the afternoon; nor shall any such goods be so unshipped, shipped, or waterborne, unless in the presence or with the authority of the proper officer of the customs, nor unless at places which shall be appointed or approved by the proper officer of the customs. — § 117.

Goods prohibited or restrained. — Whenever any goods which may be prohibited to be exported by proclamation or by order in council under the authority of this act shall be so prohibited, it shall be lawful in such proclamation or order in council to prohibit or restrict the carrying of such goods coastwise; and if any such goods shall be carried coastwise, or shall be shipped or waterborne to be carried coastwise, contrary to any such prohibition or restriction, the same shall be forfeited. — § 118.

Dues of the City of London. — For the purpose of enabling the dues payable to the city on articles imported coastwise to be ascertained and collected, it is enacted, that if all or any of the following goods, viz. firkins of butter, tons of cheese, fish, eggs, salt, fruit, roots eatable, and onions, brought coastwise into the port of the said city, and which are liable to the said dues, be landed or unshipped at or in the said port before a proper certificate of the payment of the said dues shall have been obtained, such goods shall be forfeited, and may be seized by an officer of customs empowered to seize any goods that may be landed without due entry thereof. — (7 & 8 *Geo.* 4. c. 56. § 15.)

Account of the Tonnage of Vessels employed in the Coasting Trade, which have entered at and cleared out from the Ports of Great Britain, from 1827 to 1831, both inclusive. — (*Parl. Paper*, No. 429. Sess. 1832.)

Years.	Tonnage entered Inwards.	Tonnage cleared Outwards.	Years.	Tonnage entered Inwards.	Tonnage cleared Outwards.
1827	8,186,004	8,648,868	1830	9,121,619	9,439,099
1828	8,811,109	8,957,286	1831	9,176,758	9,372,870
1829	8,933,633	9,158,525			

COBALT (Ger. *Kobalt;* Du. *Kobal;* Sw. *Cobolt,* Fr. *Cobalt;* It. *Cobalto;* Rus. *Kobolt;* Lat. *Cobaltum*), a mineral of a grey colour, with a shade of red, and by no means brilliant. It has scarcely any taste or smell; is rather soft; specific gravity about 8·6. Sometimes it is composed of plates, sometimes of grains, and sometimes of small fibres adhering to each other. Its oxides are principally employed. — (See SMALTS or SMALTZ.) They form the most permanent blue with which we are acquainted. The colouring power of oxide of cobalt on vitrifiable mixtures is greater, perhaps, than that of any other metal. One grain gives a full blue to 240 grains of glass. — (*Thomson's Chemistry*, and *Ure's Dictionary.*)

COCCULUS INDICUS, or INDIAN BERRY (Sans. *Kakamari*; Malay, *Tuba-bidgi*), the fruit of the *Menispermum Cocculus*, a large tree of the Malabar coast, Ceylon, &c. It is a small kidney-shaped berry, having a white kernel inside, of a most unpleasant taste. It is of a poisonous and intoxicating quality, and has been employed to adulterate ale and beer. But its employment in that way is prohibited, under a penalty of 200*l.* upon the brewer, and of 500*l.* upon the seller of the drug, by the 56 Geo. 3. c. 58.

COCHINEAL (Ger. *Koschenilje*; Du. *Conchenilje*; Fr. *Cochenille*; It. *Cocciniglia*; Sp. *Cochinilla, Grana*; Port. *Cochenilha*; Rus. *Konssenel*), an insect (*Coccus cacti*) found in Mexico, Georgia, South Carolina, and some of the West India islands; but it is in Mexico only that it is reared with care, and forms an important article of commerce. It is a small insect, seldom exceeding the size of a grain of barley; and was generally believed, for a considerable time after it began to be imported into Europe, to be a sort of vegetable grain or seed. There are two sorts or varieties of cochineal: the best or domesticated, which the Spaniards called *grana fina*, or fine grain; and the wild, which they call *grana sylvestra*. The former is nearly twice as large as the latter; probably because its size has been improved by the favourable effects of human care, and of a more copious and suitable nourishment, derived solely from the *Cactus cochinellifer*, during many generations. Wild cochineal is collected six times in the year; but that which is cultivated is only collected thrice during the same period. The insects are detached from the plants on which they feed by a blunt knife; they are then put into bags, and dipped in boiling water to kill them, after which they are dried in the sun; and though they lose about two thirds of their weight by this process, about 600,000 or 700,000 lbs. (each pound being supposed to contain 70,000 insects) are brought annually to Europe. It is principally used in the dyeing of scarlet, crimson, and other esteemed colours. The watery infusion is of a violet crimson; the alcoholic of a deep crimson; and the alkaline of a deep purple, or rather violet hue. It is imported in bags, each containing about 200 lbs.; and has the appearance of small, dry, shrivelled, rugose berries or seeds, of a deep brown, purple, or mulberry colour, with a white matter between the wrinkles. In this state they suffer no change from length of keeping. Dr. Bancroft says that that cochineal is the best, which "is large, plump, dry, and of a *silver white* colour on the surface."

The species of cochineal called *granilla*, or dust, is supposed by Dr. Bancroft to be principally formed of *grana sylvestra*. The insects of which it consists are smaller than those composing the fine cochineal; and it does not yield more than a third of the colouring matter that is yielded by the latter. The cochineal insect was introduced into India in 1795; but a very inferior sort only is produced. It has also been introduced into Java and Spain, but with what success remains to be seen.—(*Thomson's Dispensatory; Bancroft on Colours, &c.*)

The imports of cochineal usually vary from 1,100 to 1,650 bags, or from 220,000 to 330,000 lbs. In 1831, the quantity imported amounted to 224,371 lbs.; of which 95,728 lbs. were brought from Mexico, 69,824 lbs. from the United States, 51,146 lbs. from the British West Indies, and 4,370 lbs. from Cuba and the foreign West Indies. The exports during the same year amounted to about 90,000 lbs. The duty on foreign cochineal was reduced, in 1826, from 1*s.* per lb. to 6*d.* At an average of the 3 years ending with 1831, the entries for home consumption amounted to 148,131 lbs. a year.

The price of cochineal fluctuated very much during the war, partly on account of the obstacles which it occasionally threw in the way of importation, and partly on account of its being an article of direct government expenditure. In 1814, the price of the best cochineal was as high as 36*s.* and 39*s.*; and it has since gone on regularly declining, with hardly a single rally, till it has sunk to 8*s.* or 10*s.* Previously to the war it had never been under 12*s.* or 13*s.* Lac dye has recently been employed to some extent in dyeing scarlet; but notwithstanding this circumstance, the consumption of cochineal, occasioned, no doubt, partly by its cheapness, and partly, perhaps, by some change of fashion, has been materially increased since 1824. This, however, has not had any material influence on its price; and it would appear, from the long continuance of low prices, without any diminution of imports, that they are still sufficient to remunerate the growers of the article.—(*Tooke on High and Low Prices; Cook's Commerce of Great Britain for* 1830; *Parl. Papers, &c.*)

COCOA. See Cacao.

COCO, COKER, or, more properly, COCOA NUTS (Ger. *Kokosnüsse*; Du. *Kokosnooten*; Fr. and Sp. *Cocos*; It. *Cocchi*; Rus. *Kokos*; Sans. *Narikēla*), the fruit of a species of palm tree (*Cocos nucifera* Lin.). This tree is common almost every where within the tropics, and is one of the most valuable in the world. It grows to the height of from 50 to 90 feet; it has no branches, but the leaves are from 12 to 14 feet in length, with a very strong middle rib. The fruit is nearly as large as a man's head; the

external rind is thin, tough, and of a brownish red colour; beneath this there is a quantity of very tough fibrous matter, which is used in many countries in the manufacture of cordage, and coarse sail-cloth — (see Coir); within this fibrous coating is the shell of the nut, which is nearly globular, very hard, susceptible of a high polish, and used for many domestic purposes; the kernel is white, in taste and firmness resembling that of a hazel nut; it is hollow in the interior, the hollow being filled with a milky fluid. While the nut is green, the whole hollow of the shell is filled with fluid, which is refreshing, agreeable, and pleasant to the taste. The solid part of the ripe kernel is extremely nutritious, but rather indigestible. The kernels yield by expression a great deal of oil, which, when recent, is equal to that of sweet almonds; but it soon becomes rancid, and is then employed by painters. A tree generally yields about 100 nuts, in clusters near the top of about a dozen each. The wood of the tree is made into boats, rafters, the frames of houses, and gutters to convey water. The leaves are used for thatching buildings; and are wrought into mats, baskets, and many other things, for which osiers are employed in Europe; so that every part of it is applied to some useful purpose.

If the body of the tree be bored, there exudes from the wound a white liquor, called palm wine or toddy. It is very sweet when fresh; kept a few hours, it becomes more poignant and agreeable; but next day it begins to grow sour, and in the space of 24 hours is changed into vinegar. When distilled, it produces the best species of Indian arrack; it also yields a great deal of sugar. Toddy is obtained from several species of palms, but that of the *Cocos nucifera* is the best. — (See *Ainslie's Materia Indica; Rees's Cyclopædia, &c.*)

An improvement has recently been effected in the preparation of cocoa oil, which promises to be of much importance in the arts, by making it available in the manufacture of candles and soap, and for various purposes to which it was not previously applicable.

The palm oil met with in the market is not obtained from the *Cocos nucifera*, but from another species of palm. It is chiefly imported from the coast of Guinea. — (See Palm Oil.)

Cocoa nuts are produced in immense quantities in Ceylon, forming, with their products, — oil, arrack, and coir, — the principal articles of export from that island. They are also very abundant in the Maldive Islands, Siam, and on several places of the coast of Brazil. Cocoa oil is in very extensive use all over India, and large quantities are manufactured in the lower provinces of Bengal. This latter is said to be superior to that imported from Ceylon.

The duty on cocoa nuts, which is imposed by tale, was judiciously reduced in 1832, from 5*s.* per 120 on those from a British possession to 1*s.* per 1,200; those from a foreign country pay 20 per cent. *ad valorem.*

COD (Ger. *Kabljau, Bakalau;* Du. *Kabeljaauw, Baukaelja;* Da. *Kabliau, Skreitorsh, Bakelau;* Sw. *Kabeljo, Bakelau;* Fr. *Morue, Cabillaud;* It. *Baccala, Baccalare,* Sp. *Bacalao;* Port. *Bacalhão;* Lat. *Gadus*), a species of fish, too well known to require any description. "It is amazingly prolific. Leewenhoek counted 9,384,000 eggs in a cod-fish of a middling size; a number that will baffle all the efforts of man to exterminate. In our seas they begin to spawn in January, and deposit their eggs in rough ground, among rocks. Some continue in roe till the beginning of April.

"The cod is only found in the northern parts of the world; it is an ocean fish, and never met with in the Mediterranean. The great rendezvous of the cod-fish is on the banks of Newfoundland, and the other sand banks that lie off the coasts of Cape Breton, Nova Scotia, and New England. They prefer those situations, by reason of the quantity of worms produced in these sandy bottoms, which tempt them to resort there for food. But another cause of the particular attachment the fish have to these spots is their vicinity to the polar seas, where they return to spawn: there they deposit their roes in full security; but want of food forces them, as soon as the more southern seas are open, to repair thither for subsistence. Few are taken to the north of Iceland, but they abound on its south and west coasts. They are also found to swarm on the coasts of Norway, in the Baltic, and off the Orkney and Western Isles; after which their numbers decrease in proportion as they advance towards the south, when they seem quite to cease before they reach the mouth of the Straits of Gibraltar.

"Before the discovery of Newfoundland, the greater fisheries of cod were on the seas of Iceland, and off our Western Isles, which were the grand resort of ships from all the commercial nations; but it seems that the greatest plenty was met with near Iceland. The English resorted thither before the year 1415; for we find that Henry V. was disposed to give satisfaction to the King of Denmark, for certain irregularities committed by his subjects on those seas. In the reign of Edward IV. the English were excluded from the fishery, by treaty. In later times, we find Queen Elizabeth condescending to ask permission to fish in those seas, from Christian IV. of Denmark. In the reign of her

successor, however, no fewer than 150 English ships were employed in the Iceland fishery; which indulgence might arise from the marriage of James with a princess of Denmark."—(*Pennant's British Zoology.*)

Cod is prepared in two different ways; that is, it is either gutted, salted, and then barrelled—in which state it is denominated green or pickled cod,—or it is dried and cured—in which state it is called dried cod. Ready access to the shore is indispensable to the prosecution of the latter species of fishery.

Cod Fishery, British. — Newfoundland was discovered by John or Sebastian Cabot, in 1497; and the extraordinary abundance of cod-fish on its banks was speedily ascertained. The French, Portuguese, and Spaniards engaged in the fishery soon after this discovery. The English were later in coming into the field. In 1578, France had on the banks of Newfoundland 150 vessels, Spain 120 or 130, Portugal 50, and England from 30 to 50. During the first half of last century, the fishery was principally carried on by the English, including the Anglo-Americans, and the French; but the capture of Cape Breton, and of their other possessions in America, gave a severe blow to the fishery of the latter. The American war divided the British fishery; that portion of it which had previously been carried on from New England, being thereafter merged in that of the United States. Still, however, we contrived to preserve the largest share. At an average of the 3 years ending with 1789, we are said to have had 402 ships, 1,911 boats, and 16,856 men, engaged in the American fisheries. During last war, the French being excluded from the fisheries, those of England attained to an extraordinary degree of prosperity; the total value of the produce of the Newfoundland fishery in 1814 having exceeded 2,800,000*l.* But since the peace, the British fishery on the Newfoundland banks has rapidly declined; and can hardly, indeed, be said, at this moment, to exist. It is now carried on almost entirely by the French and the Americans; the facilities enjoyed by the latter for its prosecution being greater than those of any other people, and the former being tempted to engage in it by the extraordinary encouragements afforded by government. At present, the British fishery carried on by the inhabitants of Newfoundland is confined entirely to the shore or boat fishery. But this, though probably not so good a nursery of sailors as the bank fishery, is admitted to be "the most productive of merchantable fish and oil."—(*M'Gregor's British America*, 2d ed. vol. i. p. 206.) The average annual produce of the fisheries of all sorts, including seal, salmon, &c., exported from Newfoundland, during the 3 years ended with 1832, is stated by Mr. M'Gregor at *516,417l.*—(vol. i. p. 161.). A considerable fishery is also carried on from the ports and harbours of Nova Scotia and Cape Breton, New Brunswick, &c. But next to that of Newfoundland, the principal British fishery is carried on along the coast of Labrador. We borrow from the valuable work now referred to, the following recent and authentic statements with respect to it:—

"During the fishing season, from 280 to 300 schooners proceed from Newfoundland to the different fishing stations on the coast of Labrador, where about 20,000 British subjects are employed for the season. About one third of the schooners make two voyages, loaded with dry fish, back to Newfoundland during the summer; and several merchant vessels proceed from Labrador with their cargoes direct to Europe, leaving, generally, full cargoes for the fishing vessels to carry to Newfoundland. A considerable part of the fish of the second voyage is in a green or pickled state, and dried afterwards at Newfoundland. Eight or 9 schooners from Quebec frequent the coast, having on board about 80 seamen and 100 fishermen. Some of the fish caught by them is sent to Europe, and the rest to Quebec; besides which, they carry annually about 6,000*l.* worth of furs, oil, and salmon, to Canada.

"From Nova Scotia and New Brunswick, but chiefly from the former, 100 to 120 vessels resort to Labrador: the burden of these vessels may amount to 6,000 or 7,000 tons, carrying about 1,200 seamen and fishermen. They generally carry the principal part of their cargoes home in a green state.

"One third of the resident inhabitants are English, Irish, or Jersey servants, left in charge of the property in the fishing rooms, and who also employ themselves, in the spring and fall, catching seals in nets. The other two thirds live constantly at Labrador, as furriers and seal-catchers on their own account, but chiefly in the former capacity, during winter; and all are engaged in the fisheries during summer. Half of these people are Jerseymen and Canadians, most of whom have families.

"From 16,000 to 18,000 seals are taken at Labrador in the beginning of winter and in spring. They are very large; and the Canadians, and other winter residents, are said to feast and fatten on their flesh. About 4,000 of these seals are killed by the Esquimaux. The whole number caught produce about 350 tuns of oil, value about 8,000*l.*

"There are 6 or 7 English houses, and 4 or 5 Jersey houses, established at Labrador, unconnected with Newfoundland, who export their fish and oil direct to Europe. The quantity exported last year (1832) to the Mediterranean was about

To England, about	54,000 quintals cod-fish, at 10*s.*	£27,000
	1,050 tierces salmon, at 60*s.*	3,150
	200 tuns cod oil	5,200
	220 do. seal do.	4,880
	Furs	3,150
		£43,380
By Newfoundland houses,	27,500 quintals cod-fish, at 10*s.*	13,750
	280 tierces salmon, at 10*s.*	840
	Total direct export from Labrador	£57,970

Brought forward	£57,970
Produce sent direct to Newfoundland from Labrador: —	
32,120 quintals cod-fish, at 10*s.* best quality -	16,060
312,000 quintals cod-fish, at 8*s.* - - -	124,800
1,800 tuns cod oil, at 20*l.* - - - -	36,000
Salmon, &c. - - - - -	3,220
Fish, &c. sent to Canada, about - - -	12,000
Do. carried to Nova Scotia and New Brunswick, should be in value at least - - -	52,000
Estimated value of the produce of Labrador, exclusive of what the Moravians send to London - - - - - -	£302,050

"The Labrador fishery has, since 1814, increased more than *sixfold*, principally in consequence of our fishermen being driven from the grounds (on the Newfoundland coast) now occupied by the French. In 1829, the Americans had about 500 vessels and 15,000 men employed on the coast; and three "catch" amounted to 1,100,000 quintals fish, and about 3,000 tuns oil; value together about 610,000*l.*"—(*British America*, vol. i. pp. 185—187.)

The total produce of the British fisheries in the various seas and rivers of America, including seal oil and skins, is estimated by Mr. M'Gregor, at an average of the 5 years ending with 1832, at 857,210*l.* a year.—(Vol. ii. p. 596.; see, also, for further particulars, the useful pamphlet of Mr. Bliss on the *Statistics, Trade, &c. of British America.*)

About eight tenths of the dried fish exported from Newfoundland by British subjects, are sent to Spain, Portugal, Italy, and other Continental nations; the rest goes to the West Indies and to Great Britain.

By the act 26 Geo. 3. c. 26. bounties were given, under certain conditions specified in the act, to a certain number of vessels employed in the fishery on the coasts and banks of Newfoundland; but these bounties have entirely ceased several years since. A bounty was, however, paid, down to the 5th of April, 1830, to all persons residing in Great Britain and Ireland, curing, drying, or pickling cod-fish, ling, or hake; the bounty being 4*s.* a cwt. on the dried cod, &c., and 2*s.* 6*d.* a barrel on that which was pickled. A tonnage bounty was at the same time paid on vessels fitted out for the cod, ling, and hake fishery on the coasts of Great Britain and Ireland; but this has also ceased.

The act 5 Geo. 4. c. 51. contains several regulations with respect to the Newfoundland fisheries. Aliens are prohibited from fishing on the coasts, or in the bays or rivers of Newfoundland; excepting, however, the rights and privileges granted by treaty to foreign states at amity with his Majesty.

All British subjects may take, cure, and dry fish, occupy vacant places, cut down trees for building, and do other things useful for the trade. — § 3.

Certificates shall be granted to vessels clearing out for the fishery; and on arrival at Newfoundland a report shall be made of such certificate, and registered; and on leaving the fishery the usual clearance shall be obtained. Vessels having on board any goods other than fish, &c. to forfeit the fishing certificate. — § 4.

Persons throwing out ballast, &c. to the prejudice of the harbours in Newfoundland, shall be subject to a penalty. — § 5.

A contract in writing, specifying wages, and how to be paid, must be entered into with seamen and fishermen. — § 7.

A fisherman is prohibited receiving more than three fourths of his wages during service; but the balance due to him is to be paid immediately upon the expiration of the covenanted time of service. No fisherman to be turned off, except for wilful neglect of duty, or other sufficient cause, under a penalty, for each offence, of not less than 5*l.* nor more than 50*l.*

In order to fulfil the conditions in any treaty with a foreign state, his Majesty may empower the governor of Newfoundland to remove any works erected by British subjects for the purpose of carrying on the fishery between Cape St. John and Cape Ray, and to compel them to depart to another place. — § 12.

Every person so refusing to depart shall forfeit 50*l.* — § 13.

The governor is empowered to sell or lease places within the island called Ship-rooms. — § 14.

There are no means whatever by which to form any estimate of the number of ships and boats employed, either regularly or occasionally, in the cod fishery on the coasts of Great Britain, and on those of Norway, the Orkney and Shetland Islands, the Well-bank, the Dogger-bank, the Broad-fourteens, &c. or of the quantity and value of the fish annually caught. They must, however, be very considerable. See Fish.

For the regulations, &c. as to the importation of fish into Great Britain, see Fish.

It is doubtful whether the distant cod fishery may not have passed its zenith. Spain, Italy, and other Catholic countries, have always been the great markets for dried fish: but the observance of Lent is every day becoming less strict; and the demand for dried fish will, it is most likely, sustain a corresponding decline. The relaxed observance of Lent in the Netherlands and elsewhere has done more than any thing else to injure the herring fishery of Holland.

Cod Fishery, American. — The Americans have at all times prosecuted the cod fishery with great vigour and success. Their fishermen are remarkable for their activity and enterprise, sobriety and frugality; and their proximity to the fishing grounds, and the other facilities they possess for carrying on the fishery, give them advantages with which it is very difficult to contend. In 1795, the Americans employed in the cod fishery about 31,000 tons of shipping; in 1807, they are said to have employed 70,306 tons: but it subsequently declined for several years, and was almost entirely suspended during the late war. According to the official returns, the Americans had 85,687 tons of shipping engaged in the cod fishery in 1828; but owing to the slovenly and inaccurate way in which the navigation accounts laid before Congress have been prepared,—(for proofs of this, see New York,)—this statement is entitled to no credit. The corrected accounts for 1831 (laid before Congress the 15th of February, 1833) represent the

shipping engaged that year in the cod fishery as amounting to 60,977 tons. During the year ended the 30th of September, 1832, the Americans exported 250,514 quintals of dried, and 102,770 barrels of pickled cod; their aggregate value being about 1,050,000 dollars.

"The Americans follow two or more modes of fitting out for the fisheries. The first is accomplished by 6 or 7 farmers, or their sons, building a schooner during winter, which they man themselves (as all the Americans on the sea coast are more or less seamen as well as farmers); and after fitting the vessel with necessary stores, they proceed to the banks, Gulf of St. Lawrence, or Labrador; and, loading their vessel with fish, make a voyage between spring and harvest. The proceeds they divide, after paying any balance they may owe for outfit. They remain at home to assist in gathering their crops, and proceed again for another cargo, which is salted down, and not afterwards dried: this is termed mud-fish, and kept for home consumption. The other plan is, when a merchant, or any other, owning a vessel, lets her to 10 or 15 men on shares. He finds the vessel and nets. The men pay for all the provisions, hooks, and lines, and for the salt necessary to cure their proportion of the fish. One of the number is acknowledged master; but he has to catch fish as well as the others, and receives only about 20*s.* per month for navigating the vessel: the crew have five eighths of the fish caught, and the owners three eighths of the whole.

"The first spring voyage is made to the banks; the second either to the banks, Gulf of St. Lawrence, or the coast of Labrador; the third, or fall voyage, is again to the banks; and a fourth, or second fall voyage, is also made, sometimes, to the banks."—(*M'Gregor*, vol. i. p. 220.)

It is stipulated in the first article of a convention between Great Britain and the United States, signed at London, 20th of October, 1818, that the subjects of the United States shall have liberty to take all sorts of fish "on that part of the coast of Newfoundland from Cape Ray to the Rameau Islands, on the western and northern coasts of Newfoundland from Cape Ray to the Quirpon Islands, on the Magdalen Islands, and also on the coasts, bays, harbours, and creeks, from Mount Joly, on the southern coast of Labrador, to and through the Straits of Belleisle, and thence northwardly indefinitely along the coast, without prejudice, however, to any of the exclusive rights of the Hudson's Bay Company; and that the American fishermen shall also have liberty, for ever, to dry and cure fish in any of the unsettled bays, harbours, and creeks, of the southern part of the coast of Newfoundland here above described, and of the coast of Labrador; but so soon as the same, or any portion thereof, shall be settled, it shall not be lawful for the said fishermen to dry or cure fish without previous agreement for such purpose with the inhabitants, proprietors, or possessors of the ground. And the United States hereby renounce for ever any liberty heretofore enjoyed or claimed by the inhabitants thereof, to take, dry, or cure fish on or within 3 marine miles of any of the coasts, bays, creeks, or harbours of his Britannic Majesty's dominions in America not included within the above mentioned limits." The American fishermen are, however, admitted into all bays, &c. for the purpose of shelter, of repairing damages, of purchasing wood, and of obtaining water, and for no other purpose whatever; and when there, they are to be placed under such restrictions as may be necessary to prevent their abusing the privileges hereby reserved to them.

Cod Fishery, French. — France has always enjoyed a considerable share of the cod fishery. The following Table shows the extent to which she has carried it since the peace: —

Account of the Number of Ships, with their Tonnage, Crews, and Cargoes, that have entered the different Ports of France from the Cod Fishery during the Nine Years ending with 1831. — (From the *Tableau Général du Commerce de la France* for 1831, p. 346.)

Years.	Ships.	Tonnage.	Crew.	Cod, green.	Cod, dry.	Oil.
				Kilog.	*Kilog.*	*Kilog.*
1823	184	16,558	3,655	4,407,730	4,423,739	415,210
1824	348	30,999	6,672	7,677,824	14,691,189	1,353,898
1825	336	35,172	6,311	7,288,949	15,823,731	1,294,336
1826	341	38,938	7,088	8,627,341	15,591,664	1,063,670
1827	387	44,868	8,238	9,046,145	15,970,250	1,201,623
1828	381	45,094	7,957	12,838,291	17,256,155	1,395,897
1829	414	50,574	9,428	10,548,878	30,377,594	1,909,147
1830	377	45,036	8,174	10,410,302	13,645,790	1,156,059
1831	302	35,180	6,243	9,922,680	12,817,943	1,163,229

The quantities of oil are exclusive of *draches* (huiles non epurés); there are also sounds, &c. Marseilles, Granville, Dunkirk, Bordeaux, La Rochelle, and Nantes, are the principal ports whence ships are fitted out for the fishery.

But notwithstanding the apparent prosperity of this branch of industry, it may be doubted whether it be really so beneficial to France as would at first sight appear. It depends more upon artificial regulations than upon any thing else. Foreign cod is excluded from the French markets by the oppressive duty with which it is loaded; and the comparatively great demand for dried fish in Catholic countries renders this a very great boon to the French fishermen. But it is admitted, that this would not be enough to sustain the fishery; and bounties amounting to about 1,500,000 fr., or 60,000*l.* a year, are paid to those engaged in it. These, however, have been recently reduced.

St. Pierre and Miquelon, small islands on the coast of Newfoundland, belong to the French. Their right of fishing upon the shores of that island, and upon the great bank, was replaced, in 1814, upon the footing on which it stood in 1792. This concession has been much objected to by Mr. M'Gregor and others; we believe, however, that they have materially over-rated its influence.

COFFEE (Ger. *Koffe, Koffebohnen*; Du. *Koffy, Koffiboonen*; Da. *Kaffe, Kaffebönner*; Sw. *Kaffe*; Fr. It. and Port. *Caffè*; Sp. *Café*; Rus. *Kofé*; Pol. *Kawa*; Lat. *Coffea, Caffea*; Arab. *Bun*; Malay, *Kāwa*; Pers. *Tochem, Kéwèh*; Turk. *Chaube*), the berries of the coffee plant (*Coffea Arabica* Lin.). They are generally of an oval form, smaller than a horse-bean, and of a tough, close, and hard texture; they are prominent on the one side and flattened on the other, having a deeply marked furrow running length-

wise along the flattened side; they are moderately heavy, of a greenish colour, and a somewhat bitterish taste.

Historical Notice of Coffee. — The coffee plant is a native of that part of Arabia called *Yemen;* but it is now very extensively cultivated in the southern extremity of India, in Java, the West Indies, Brazil, &c. We are ignorant of the precise period when it began to be roasted, and the decoction used as a drink, though the discovery is not supposed to date further back than the early part of the fifteenth century. No mention of it is made by any ancient writer; nor by any of the moderns previously to the sixteenth century. Leonhart Rauwolf, a German physician, is believed to be the first European who has taken any notice of coffee. His work was published in 1573, and his account is, in some respects, inaccurate. Coffee was, however, very accurately described by Prosper Albinus, who had been in Egypt as physician to the Venetian consul, in his works *de Plantis Egypti,* and *de Medicina Egyptiorum,* published in 1591 and 1592.

A public coffee-house was opened for the first time, in London, in 1652. A Turkey merchant, of the name of Edwards, having brought along with him from the Levant some bags of coffee, and a Greek servant accustomed to make it, his house was thronged with visiters to see and taste this new sort of liquor. And being desirous to gratify his friends without putting himself to inconvenience, he allowed his servant to make and sell coffee publicly. In consequence of this permission, the latter opened a coffee-house in St. Michael's Alley, Cornhill, on the spot where the Virginia Coffee-house now stands. Garraway's was the first coffee-house opened after the great fire in 1666. — (*Moseley on Coffee,* 5th ed. p. 15.) *

M. de la Roque mentions that the use of coffee was first introduced into France in the period between 1640 and 1660; and he further states, that the first coffee-house for the sale of coffee in France was opened at Marseilles, in 1671; and that one was opened at Paris in the following year. — (*Voyage de la Syrie,* tom. ii. pp. 310–319.)

Some time between 1680 and 1690, the Dutch planted coffee beans they had procured from Mocha, in the vicinity of Batavia. In 1690, they sent a plant to Europe; and it was from berries obtained from this plant that the first coffee plantations in the West Indies and Surinam were derived.

Progressive Consumption of Coffee in Great Britain. Influence of the Duties. — In 1660, a duty of 4*d.* a gallon was laid on all coffee made and sold. Previously to 1732, the duty on coffee amounted to 2*s.* a pound; but an act was then passed, in compliance with the solicitations of the West India planters, reducing the duty to 1*s.* 6*d.* a pound; at which it stood for many years, producing, at an average, about 10,000*l.* a year. In consequence, however, of the prevalence of smuggling, caused by the too great magnitude of the duty, the revenue declined, in 1783, to 2,869*l.* 10*s.* 10½*d.* And it having been found impossible otherwise to check the practice of clandestine importation, the duty was reduced, in 1784, to 6*d.* The consequences of this wise and salutary measure were most beneficial. Instead of being reduced, the revenue was immediately raised to near *three* times its previous amount, or to 7,200*l.* 15*s.* 9*d.*, showing that the consumption of legally imported coffee must have increased in about *a ninefold proportion!* — a striking and conclusive proof, as Mr. Bryan Edwards has observed, of the effect of heavy taxation in defeating its own object. — (*Hist. of the West Indies,* vol. ii. p. 340. 8vo ed.)

The history of the coffee trade abounds with similar and even more striking examples of the superior productiveness of low duties. In 1807, the duty was 1*s.* 8*d.* a pound; and the quantity entered for home consumption amounted to 1,170,164 lbs., yielding a revenue of 161,245*l.* 11*s.* 4*d.* In 1808, the duty was reduced from 1*s.* 8*d.* to 7*d.*; and in 1809, there were no fewer than 9,251,847 lbs. entered for home consumption, yielding, notwithstanding the reduction of duty, a revenue of 245,856*l.* 8*s.* 4*d.* The duty having been raised, in 1819, from 7*d.* to 1*s.* a pound, the quantity entered for home consumption, in 1824, was 7,993,041 lbs., yielding a revenue of 407,544*l.* 4*s.* 3*d.* In 1824, however, the duty being again reduced from 1*s.* to 6*d.*, the quantity entered for home consumption, in 1825, was 10,766,112 lbs., and in 1831 it had increased to 22,740,627 lbs., yielding a nett revenue of 583,751*l.*

The consumption of the United Kingdom may, *at present,* be estimated at about 23,000,000 lbs., producing about 600,000*l.* of revenue.

We subjoin

* Charles II. attempted, by a proclamation issued in 1675, to suppress coffee-houses, on the ground of their being resorted to by disaffected persons who "devised and spread abroad divers false, malicious, and scandalous reports, to the defamation of his Majesty's government, and to the disturbance of the peace and quiet of the nation." The opinion of the Judges having been taken as to the legality of the proceeding, they resolved, "That retailing coffee might be an innocent trade; but as it was used to nourish sedition, spread lies, and scandalise *great men,* it might also be a common nuisance!"

I. Quantities of the different Sorts of Coffee entered for Home Consumption in the United Kingdom, each Year since 1822.

Years ended	British Plantation.	Foreign Plantation.	East India.	Total.	Years ended	British Plantation.	Foreign Plantation.	East India.	Total.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*		*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
5th Jan. 1822	7,386,060	764	206,177	7,593,001	5th Jan. 1828	14,676,968	1,210	888,198	15,566,376
— 1823	7,494,218	3,416	171,717	7,669,351	— 1829	16,151,239	2,984	973,410	17,127,633
— 1824	8,218,342	881	235,697	8,454,920	— 1830	18,495,407	6,197	974,576	19,476,180
— 1825	7,947,890	1,540	313,513	8,262,943	— 1831	21,697,966	3,971	989,585	22,691,522
— 1826	10,622,376	2,849	457,745	11,082,970	— 1832	21,501,966	3,940	1,234,721	22,740,627
— 1827	12,409,000	2,753	791,570	13,203,323	— 1833	20,964,301	17,591	1,970,635	22,952,527

II. An Account of the Quantity of Coffee retained for Home Consumption in Great Britain, the Rates of Duty thereon, and the Produce of the Duties, each Year since 1789.

Years.	Quantities retained for Home Consumption.	Rates of Duty on British Plantation.	Rates of Duty on East India.		Nett Revenue of Customs and Excise.
	Lbs.	Per lb. *s.* *d.*	Per lb. *s.* *d.*	Per cent. ad valorem. *£* *s.* *d.*	*£* *s.* *d.*
1789	930,141	0 10⅝	2 0⅛	Nil.	46,286 17 11
1790	973,110	—	—	—	50,799 7 4
1791	1,047,276	—	—	—	57,659 5 11
1792	946,666	—	—	—	48,825 6 2
1793	1,070,438	—	—	—	67,357 11 9
1794	969,512	—	—	—	74,430 4 6
1795	1,054,588	1 5⅛	2 6⅛	—	65,788 3 7
1796	396,953	—	—	—	30,048 6 11
1797	637,001	1 5⅛	3 7	—	92,469 3 11
1798	697,487	1 5⅞	2 7⅜	—	78,966 6 9
1799	682,432	1 5⅞	2 7⅜	2 0 0	74,001 2 2
1800	826,590	—	—	—	142,867 11 5
1801	750,861	1 5⅛	2 7	2 0 0	106,076 2 7
1802	829,435	1 6	2 7½	2 0 0	72,183 2 3
1803	905,532	1 6¾	1 11⅝	2 16 3	72,093 15 8
1804	1,061,327	1 7¼	2 0¼	3 2 6	151,388 0 11
1805	1,201,756	1 7⅜	2 0⅝	3 3 9	120,172 18 7
1806	1,157,014	1 7⅞	2 0¾	3 7 11	152,759 6 9
1807	1,170,164	—	—	—	161,245 11 4
1808	1,009,691	0 7	0 10	3 7 11	229,738 16 8
1809	9,251,837	0 7	0 10	3 6 8	245,886 8 4
1810	5,308,096	—	—	—	175,567 1 4
1811	6,390,122	—	—	—	212,890 12 10
1812	8,118,734	—	—	—	255,184 7 1
1813	8,788,601	0 7¾	0 10¾	3 19 2	Custom records destroyed.
1814	6,324,267	0 7¾	0 11⅛	Nil.	213,513 18 4
1815	6,117,311	—	—	—	258,762 18 3
1816	7,557,471	—	—	—	290,834 0 11
1817	8,688,726	—	—	—	298,540 5 1
1818	7,967,857	—	—	—	250,106 4 10
1819	7,429,592	1 0	1 6	—	292,154 8 10
1820	6,869,286	—	—	—	340,223 6 7
1821	7,327,283	—	—	—	371,252 5 6
1822	7,404,304	—	—	—	374,596 19 7
1823	8,209,245	—	—	—	416,324 3 9
1824	7,993,040	—	—	—	407,544 4 3
1825	10,766,112	0 6	0 9	—	307,204 14 2
1826	12,724,139	—	—	—	324,667 11 1
1827	14,974,378	—	—	—	384,994 13 2
1828	16,522,423	—	—	—	425,389 3 7
1829	18,906,373	—	—	—	484,975 10 8
1830	21,840,520	—	—	—	558,544 3 10
1831	21,747,813	—	—	—	559,431 19 6
1832	22,053,326	—	—	—	575,264 18 8

III. Account of the Quantity of Coffee imported into the United Kingdom from the several British Colonies and Plantations, from the British Possessions in the East Indies, and from Foreign Countries, in the Year ended the 5th of January, 1833; distinguishing the several Sorts of Coffee, and the Colonies and Countries from which the same was imported. — (*Parl. Paper*, No. 321. Sess. 1833.)

Colonies and Countries from which imported.	Of the British Possessions in America, and of Sierra Leone.	Of the East Indies and Mauritius.	Of the Foreign Plantations.	Total Quantity imported.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*
British colonies and plantations in America; viz.				
Antigua	49,888	-	-	49,888
Barbadoes	158,191	-	7	158,198
Dominica	1,350,401	-	-	1,350,401
Grenada	8,749	-	-	8,749
Jamaica	19,405,843	-	90	19,405,933
Montserrat	164	-	-	164
Nevis	112	-	-	112
St. Christopher	1,074	-	-	1,074
St. Lucia	84,512	-	-	84,512
Trinidad	91,532	-	-	91,532
Bahamas	-	-	31,036	31,036
Bermudas	33	-	-	33

III. Account of the Quantity of Coffee imported into the United Kingdom — *continued.*

Colonies and Countries from which imported.	Of the British Possessions in America, and of Sierra Leone.	Of the East Indies and Mauritius.	Of the Foreign Plantations.	Total Quantity imported.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*
Demerara	1,200,791	- -	- -	1,200,791
Berbice	2,291,497	- -	- -	2,291,497
British North American colonies	60	- -	3	63
Sierra Leone	33	- -	- -	33
West coast of Africa	- -	- -	72,930	72,930
Cape of Good Hope	- -	17,321	- -	17,321
St. Helena	- -	257	- -	257
Mauritius	- -	26,646	- -	26,646
British possessions in the East Indies; viz.				
East India Company's territories, exclusive of Singapore	- -	2,780,668	- -	2,780,668
Singapore	- -	3,611,456	- -	3,611,456
Ceylon	- -	2,824,998	- -	2,824,998
Java	- -	1,136,234	- -	1,136,234
Philippine Islands	- -	27,578	- -	27,578
China	- -	54	- -	54
Hayti	- -	- -	1,261,971	1,261,971
Foreign colonies in the West Indies; viz.				
Cuba	- -	- -	4,778,722	4,778,722
Porto Rico	- -	- -	196,943	196,943
United States of America	- -	301,710	1,120,578	1,422,288
Mexico	- -	- -	402	402
Columbia	- -	- -	451,673	451,673
Brazil	- -	- -	6,661,151	6,661,151
States of the Rio de la Plata	- -	- -	1,067	1,067
Chili	- -	- -	2,077	2,077
Peru	- -	- -	241	241
Europe	10	104	34,132	34,246
Total	24,642,890	10,727,026	14,613,023	49,982,939

IV. Account of the Quantity of Coffee exported from the United Kingdom, in the Year ended the 5th of January, 1833; distinguishing the several Sorts of Coffee, and the Countries to which the same was exported. — (*Parl. Paper*, No. 321. Sess. 1833.)

Countries to which exported.	Of the British Possessions in America, and of Sierra Leone.	Of the East Indies and Mauritius.	Of the Foreign Plantations.	Total Quantity exported.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*
Russia	217,321	62,023	1,171,102	1,450,446
Sweden	779	- -	35,216	35,995
Norway	1,800	- -	280,997	282,797
Denmark	8,435	23,164	74,894	106,493
Prussia	69,539	240,060	567,073	876,672
Germany	77,577	657,133	2,380,414	3,115,124
The Netherlands	10,903	7,940,677	6,135,672	14,087,252
France	- -	740	51,851	52,591
Portugal, the Azores and Madeira	- -	10,059	7,870	17,929
Spain and the Canaries	- -	563	624	1,187
Gibraltar	- -	3,559	787	4,346
Italy	253,116	633,870	3,163,767	4,050,753
Malta	- -	163	79,065	79,228
The Ionian Islands	- -	385	57,141	57,526
Turkey and Continental Greece	58,047	45,093	1,106,875	1,210,015
Morea and Greek islands	- -	- -	166	166
Guernsey, Jersey, Alderney and Man	12,632	17,609	10,410	40,651
	710,149	9,635,098	15,123,924	25,469,171
Cape of Good Hope	- -	2,719	1,056	3,775
Other parts of Africa	16,695	9,882	10,911	37,488
East Indies and China	350	17,032	13,261	30,643
New South Wales, Swan River, and Van Diemen's Land	2,066	17,246	10,378	29,690
British North American colonies	4,875	22,795	68,940	96,610
British West Indies	849	5,026	7,907	13,782
Foreign West Indies	- -	- -	3,097	3,097
United States of America	161	3,538	14,496	18,195
Mexico	- -	183	1,794	1,977
Columbia	- -	165	425	590
Brazil	167	801	4,725	5,693
States of the Rio de la Plata	- -	- -	3,559	3,559
Chili	- -	575	1,576	2,151
Peru	- -	264	1,239	1,503
Total from Great Britain	735,312	9,715,324	15,267,288	25,717,924
Africa	287	- -	- -	287
British North American colonies	339	- -	1,192	1,531
Total from Ireland	626	- -	1,192	1,818
Total quantity exported from the United Kingdom	735,938	9,715,324	15,268,480	25,719,742

V. Account of the Amount of Duties received on Coffee in Great Britain and Ireland respectively in the Year ending 5th of January, 1833; distinguishing each Sort of Coffee, and the nett Produce of the Duties on Coffee in the United Kingdom in such Year. — (*Parl. Paper*, No. 321. Sess. 1833.)

Year ending 5th of January, 1833.	In Great Britain.	In Ireland.	In the United Kingdom.
	£ s. d.	£ s. d.	£ s. d.
Of the British possessions in America	503,025 18 6	21,895 0 0	524,920 18 6
Of Sierra Leone	106 0 3	- -	106 0 3
Of the East Indies and Mauritius	73,016 14 2	878 7 9	73,895 1 11
Other sorts	108 17 9	0 17 6	109 15 3
Total gross receipt	576,257 10 8	22,774 5 3	599,031 15 11
Nett produce £	575,264 18 8	22,773 7 3	598,038 5 11

The introduction of tea and coffee, it has been well remarked, "has led to the most wonderful change that ever took place in the diet of modern civilised nations, — a change highly important both in a moral and physical point of view. These beverages have the admirable advantage of affording stimulus without producing intoxication, or any of its evil consequences. Lovers of tea or coffee are, in fact, rarely drinkers; and hence the use of these beverages has benefited both manners and morals. Raynal observes that the use of tea has contributed more to the sobriety of the Chinese than the severest laws, the most eloquent discourses, or the best treatises on morality." — (*Scotsman*, 17th of October, 1827.)

Supply and Consumption of Coffee. — Owing to the rapidly increasing consumption of coffee in this country, the Continent, and America, the great value of the article, the large amount of capital and labour employed in its production, and the shipping required for its transport, it has become a commodity of primary commercial importance. It deserves particular attention, too, inasmuch as there are few, if any, articles that exhibit such variations, not only as to consumption, but also as to growth and price. These are occasioned partly by changes of commercial regulations and duties, and partly, also, by the plant requiring 4 or 5 years before it comes to bear; so that the supply is neither suddenly increased when the demand increases, nor diminished when it falls off. St. Domingo used formerly to be one of the greatest sources of supply, having exported, in 1786, about 35,000 tons; and it is supposed that, but for the negro insurrection which broke out in 1792, the exports of that year would have amounted to 42,000 tons. The devastation occasioned by this event caused, for a series of years, an almost total cessation of supplies. Recently, however, they have again begun to increase; and are understood to amount, at present, to above 20,000 tons a year. From Cuba, the exports of coffee have within these few years rather declined, owing partly to an increased consumption in the island, and partly to the efforts of the planters having, a little time back, been more directed to the cultivation of sugar: they may at present amount to from 18,000 to 20,000 tons; or, including Porto Rico, to 25,000 or 27,000 tons. In Java, also, the exports of coffee have, of late, been on the decline, but not to any considerable extent. In Jamaica and the other British West India colonies, the cultivation of coffee was greatly extended during the prevalence of the high prices, but the imports have fallen off from 12,000 tons in 1829, to about 10,800 tons in 1832. In Brazil, the growth of coffee has increased with unprecedented rapidity. So late as 1821, the quantity of coffee exported from Rio de Janeiro did not exceed 7,500 tons; whereas it now amounts to about 30,000 tons!* This extraordinary increase has probably been, in some measure, owing to the continuance of the slave trade; and it remains to be seen, whether the growth of coffee may not now be checked by the late cessation of that abominable traffic. The culture of coffee in India and Ceylon is daily becoming of more importance. In India, it is raised chiefly on the coast of Malabar, and the quantity exported is, at present, believed to exceed 4,000,000 lbs. The exports from Ceylon, in 1830, were 1,660,490 lbs. The total imports of coffee into Great Britain from the East Indies, in 1832, were 10,407,897 lbs.

The following may, we believe, be regarded as a pretty fair estimate of the annual *exports* of coffee from the principal places where it is produced, and of the annual *consumption* in those countries into which it is imported from abroad, at the present time: —

Exports.	Tons.
Mocha, Hodeida, and other Arabian ports	10,000
Java	18,000
Sumatra and other parts of India	8,000
Brazil and the Spanish Main	42,000
St. Domingo	20,000
Cuba and Porto Rico	25,000
British West India colonies	11,000
Dutch West India colonies	5,000
French West India colonies and the Isle de Bourbon	8,000
	147,000

* M. Montveran is pleased to inform us, in his *Essai de Statistique sur les Colonies*, a work in other respects of considerable merit (*Pièces Justificatives*, p. 11.), that the exports of coffee from Brazil in 1830-31 amounted to 1,875,000 kilog. = 1,836 tons! In point of fact they were more than 20 times as much.

Consumption.	Tons.
Great Britain	10,500
Netherlands and Holland	40,500
Germany and countries round the Baltic	32,000
France, Spain, Italy, Turkey in Europe, the Levant, &c.	35,000
America	20,500
	138,500

Of this quantity, the consumption of Great Britain and America amounts to nearly a fourth part, and may be said to have arisen almost entirely since 1807.

Of the entire export of coffee from Arabia, not more, perhaps, than 5,000 or 6,000 tons finds its way to the places mentioned above; so that, supposing these estimates to be about correct, it follows that the supply of coffee is, at present, about equal to the demand. The latter is, however, rapidly increasing; and it is impossible to say whether it be destined to outrun, keep pace with, or fall short of the supply. On the whole, however, we should be inclined to think, that though they may occasionally vary to the extent of a few thousand tons on the one side or the other, the probability is that they will be pretty nearly balanced; so that, supposing peace to be preserved, we do not anticipate any very great variation of price. The prices of 1827, 1828, 1829, and 1830, seem to have been a good deal below the average. This depression naturally checked production and stimulated consumption, so that prices rose considerably in 1831, 1832, and 1833; but the advance, in the last, has not been maintained, at least to the whole extent. Such oscillations will, no doubt, continue to take place; but unless the cost of producing coffee should be permanently increased or diminished, they can only be temporary.

The consumption of coffee in the United States has been more than trebled since 1821, in which year it amounted to 6,680 tons. Part of this increase is, no doubt, to be ascribed to the reduction of the duty from 5 to 2 cents per pound; part to the fall in the price of coffee; and a part, perhaps, to the increase of temperance societies. Probably, also, it was in some degree ascribable to the comparatively high duties formerly laid on the teas imported into the United States; these, however, finally ceased in 1833.

Account of the Imports of Coffee into the United States, the Exports from the same, and the Quantities left for Home Consumption, during each of the Twelve Years ending with the 30th of September, 1832. —(*Papers published by Order of Congress.*)

Years.	Imports.	Exports.	Left for Home Consumption.	
	Lbs.	*Lbs.*	*Lbs.*	*Tons.*
1821	21,273,659	9,387,596	11,886,063	5,306
1822	25,782,390	7,267,119	18,515,271	8,266
1823	37,337,732	20,900,687	16,437,045	7,338
1824	39,224,251	19,427,227	19,797,024	8,838
1825	45,190,630	24,512,568	20,678,062	9,231
1826	43,319,497	11,584,713	31,734,784	14,167
1827	50,051,986	21,697,789	28,354,197	12,658
1828	55,194,697	16,037,964	39,156,733	17,481
1829	51,133,538	18,083,843	33,049,695	14,754
1830	51,488,248	13,124,561	38,363,687	17,127
1831	81,759,386	6,056,629	75,702,757	33,796
1832	91,722,329	55,251,158	40,471,171	18,067

Mr. Cook gives the following statement of the imports of coffee into the Continent and Great Britain, and of the stocks on hand on the 31st of December each year: —

Places.	Imports.			Stocks.		
	1830.	1831.	1832.	1830.	1831.	1832.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
France	13,000	8,300	13,130	6,150	2,900	5,100
Trieste, Genoa, and Leghorn	12,100	6,430	13,570	4,300	1,250	6,300
Antwerp	21,200	5,130	8,400	4,000	2,850	1,900
Rotterdam	4,500	11,740	14,200	3,600	4,500	7,500
Amsterdam	9,000	10,700	10,550	5,800	6,000	7,480
Hamburgh	20,250	17,380	22,500	10,700	7,500	11,000
Bremen	4,960	4,330	6,130	2,000	1,750	2,680
Copenhagen	1,340	1,570	1,670	350	490	600
Petersburgh	500	1,200	1,700	300	1,000	960
Totals	86,850	66,780	91,850	37,200	28,240	43,420
Great Britain	18,290	19,350	22,370	13,420	12,530	12,180
Continent and Great Britain	105,140	86,130	114,220	50,620	40,770	55,600

(*State of Commerce of Great Britain for* 1832, p. 19. & 21.)

According to Mr. Cook, the prices of Jamaica and St. Domingo coffee, exclusive of the duty, in the London market, at the close of each year since 1814, have been —

Years.	Jamaica.	St. Domingo.	Years.	Jamaica.	St. Domingo.
	Per cwt.	Per cwt.		Per cwt.	Per cwt.
	£. s.	s. s.		s. s.	s. s.
1814	81 to 105	90 to 104	1824	50 to 102	58 to 61
1815	61 — 110	72 — 80	1825	48 — 100	55 — 56
1816	68 — 102	74 — 75	1826	42 — 95	50 — 51
1817	86 — 105	93 — 98	1827	30 — 80	37 — 39
1818	134 — 155	141 — 148	1828	28 — 80	36 — 38
1819	147 — 165	128 — 134	1829	30 — 75	32 — 34
1820	112 — 135	118 — 120	1830	32 — 78	34 — 35
1821	85 — 125	98 — 102	1831	50 — 86	45 — 46
1822	85 — 135	95 — 100	1832	60 — 90	55 — 57
1823	72 — 117	75 — 79	1833	77 — 110	65 — 66

The following extract from the Price Current of Messrs. Corrie and Co. shows the prices of the different sorts of coffee in London on the 20th of September, 1833.

Coffee, ℔ cwt.		s. d.	s. d.	Duty.
Jamaica,	triage and ord. *bd.*	80 0 to	91 0	56*s.*
	good and fine ord. —	92 0 —	100 0	
	low to good mid. —	101 0 —	113 0	
	fine mid. and fine —	114 0 —	123 0	
Demerara, and Berbice,	triage and ord. —	60 0 —	84 0	
	good and fine ord. —	82 0 —	90 0	
	low to good mid. —	92 0 —	100 0	
	fine mid. and fine —	101 0 —	105 0	
Dominica, &c.	triage and ord. —	80 0 —	91 0	
	good and fine ord. —	93 0 —	98 0	
	low to good mid. —	99 0 —	105 0	
	fine mid. and fine —			
Sierra Leone		58 0 —	61 0	84*s.*

		s. d.	s. d.	Duty.
Mocha	*bd.*	75 0 to	120 0	For. 112*s.* Brit. Poss. 84.
E. India Co.'s	—	160 0 —	180 0	
Ceylon	—	64 6 —	67 6	
Sumatra	—	55 0 —	59 0	
Samarang	—	60 0 —	63 0	
Batavia	—	61 0 —	72 0	
Brazil ord. to good ord.	—	59 0 —	64 0	140*s.*
fine ord. and coloury	—	65 0 —	67 0	
St. Domingo	—	64 0 —	66 0	
Havannah	—	58 0 —	80 0	
St. Jago de Cuba	—	58 0 —	75 0	
Porto Rico	—	58 0 —	68 0	
La Guayra	—	60 0 —	67 0	

Notwithstanding the great reduction of the duties on coffee in 1824, there can be no doubt that they are still too high. At this moment they amount to 50 per cent. on the price of very fine coffee, and to 75 or 90 per cent. on the price of inferior sorts. Were the duties on British plantation coffee reduced to 3*d.* per lb. (28*s.* a cwt.), and those on Mocha and East India coffee to 4*d.* per lb. (37*s.* 4*d.* a cwt.), the consumption would be so much extended, that, instead of being diminished, the revenue would be decidedly increased. The increase of consumption mentioned above must not, however, be *wholly* attributed to the reduction of the duty in 1824: the low prices from that year to 1830 had, no doubt, a material effect in facilitating the formation of a taste for coffee. The great reduction in the price of low brown sugar (at least 1½*d.* per lb.) must also have assisted the consumption of coffee, — the one being so necessary to the extensive use of the other. The small increase of consumption since 1830 is wholly to be ascribed to the rise of prices; but were the duty reduced to 3*d.*, this rise would be counteracted, and the consumption would again rapidly increase; nor, provided East India were admitted at a duty of 4*d.*, and foreign at a duty of 6*d.*, is there any reason to fear that the increased consumption would have any material influence on the price.

Species of Coffee. Roasting, &c. — The coffee of Mocha is generally esteemed the best; then follow the coffees of Jamaica, Dominica, Berbice, Demerara, Bourbon, Java, Martinique, and Hayti. Arabian or Mocha coffee is produced in a very dry climate, the best being raised upon mountainous slopes and sandy soils. The most fertile soils are not suitable for the growth of very fine coffee. Mr. Bryan Edwards observes, that "a rich deep soil, frequently meliorated by showers, will produce a luxuriant tree and a great crop; but the beans, which are large, and of a dingy green, prove, for many years, rank and vapid." And the same remark is made by Mr. Crawfurd, with respect to the coffee of Java. — (*East Indian Archipelago*, vol. i. p. 487.) Coffee is improved by being kept; it then becomes of a paler colour.

Mocha, or, as it is commonly called, Turkey coffee, should be chosen of a greenish light olive hue, fresh and new, free from any mustiness, the berries of a middling size, clean, plump, and without any intermixture of sticks or other impurities. Particular care should be taken that it be not false packed. Good West India coffee should be of a greenish colour, fresh, free from any unpleasant smell, the berries small and unbroken.

Coffee berries readily imbibe exhalations from other bodies, and thereby acquire an adventitious and disagreeable flavour. Sugar placed near coffee will, in a short time, so impregnate the berries, as to injure their flavour. Dr. Moseley mentions, that a few bags of pepper, on board a ship from India, spoiled a whole cargo of coffee.

"The roasting of the berry to a proper degree requires great nicety: the virtue and agreeableness of the drink depend upon it; and both are often injured by the ordinary method. Bernier says, when he was at Cairo, where coffee is so much used, he was assured by the best judges, that there were only two people in that great city who understood how to prepare it in perfection. If it be under-done, its virtues will not be imparted, and, in use, it will load and oppress the stomach; if it be over-done, it will

yield a flat, burnt, and bitter taste, its virtues will be destroyed, and, in use, it will heat the body, and act as an astringent." — (*Moseley*, p. 39.)

Adulteration of Coffee. — A mill for grinding coffee may be bought for a small sum; and no one who has the means of grinding it at home ought to purchase it ground, unless from shops of the first respectability. Ground coffee is liable to be, and in point of fact *is*, very extensively adulterated with succory, beans, roasted corn, &c. The facilities for this fraudulent intermixture are so very great as to render it impossible materially to lessen them otherwise than by a reduction of the duty.

Regulations with respect to Sale, Importation, &c. — Roasted beans and rye, reduced to powder, have frequently been used to adulterate ground coffee: and the possession of such substitutes for coffee was formerly an offence punishable by the forfeiture of the articles, and a penalty of 100*l.* But by the act 3 Geo. 4. c. 53., persons who are *not dealers in coffee* may take a licence for roasting and selling corn, peas, beans, or parsneps, labelling the parcels with the names, and conforming to the various regulations prescribed in the act.

Dealers in coffee must take out a licence, renewable annually, which, at present, costs 11*s.*

No coffee can be imported in packages of less than 100 lbs. *nett* weight.

No abatement of duties is made on account of any damage coffee may have received.

Coffee cannot be entered as being the produce of any British possession in America or of the Mauritius, until the master of the ship in which the coffee is imported deliver to the collector or comptroller a certificate of its origin, and declare that the coffee is the produce of such place. — (3 & 4 *Will.* 4. c. 52. §§ 36, 37.)

We subjoin two *pro formâ* accounts, one of the sale of 100 bags Brazil coffee, the other of the sale of 10 tierces Jamaica coffee. They may be depended upon as accurate; and are interesting from their showing in detail the various charges, exclusive of duty, affecting this important article.

PRO FORMA ACCOUNT SALE of A. B. 100 Bags Coffee per "London," from Rio Janeiro, on Account of C. D. and Co.

1833.									L.	s.	d.	L.	s.	d.
Oct. 30.	By E. F. for 100 bags. Prompt 1 month.													
		Cwt.	*qrs.*	*lbs.*										
	Lots 1 to 5. weighing	145	0	0	gross.									
		3	2	8	Tare 2 lb. Draft 2 lb. per bag.									
		141	1	20	nett	-	-	-	-	at 3*l.* 3*s.*		445	10	0
									Discount 2½ per cent.			11	2	9
														434	7	3
					Charges.					L.	s.	d.		
	To Sea insurance on 400*l.* at 2*l.* per cent					-	-	-	-	8	0	0		
	Policy 5*s.* 6*d.* per cent.					-	-	-	-	1	2	0		
	Commission ½ per cent.					-	-	-	-	2	0	0		
												11	2	0
	Dock rates on 143 cwt. 0 qr. 24 lbs. at 1*s.* 2*d.**					-			-	8	7	1		
	Lotting 1*d.* per bag					-	-	-	-	0	8	4		
												8	15	5
	Insurance against fire					-	-	-	-	-		0	12	5
	Freight on 143 cwt. 0 qr. 24 lbs. at 3*s.*					-	-		-	21	9	8		
	Primage 5 per cent. 1*l.* 1*s.* 6*d.* Pierage 2*s.* 1*d.*					-			-	1	3	7		
												22	13	3
	Public sale charges 17*s.* 6*d.* Petty expenses 8*s.* 6*d.*					-			-	-		1	6	0
	Brokerage 1 per cent.					-	-	-	-	-	-	4	9	1
	Commission 2½ per cent.					-	-	-	-	-	-	11	2	9
														60	0	11
					Errors excepted.						Nett proceeds			L. 374	6	4
	London, 2d of November, 1833.											(Cash, 30th of November, 1833.)		

PRO FORMA ACCOUNT SALE of G. H. 10 Tierces Coffee per "Kingston," from Jamaica, on Account of I. K. and Co.

1833.											L.	s.	d.	L.	s.	d.
Oct. 30.	By L. M. for 10 tierces. Prompt 1 month.															
	Casks.	*Cwt.*	*qrs.*	*lbs.*		*Cwts.*	*qrs.*	*lbs.*								
	Lot 4. 5 weighing	45	0	0	Tare	3	2	18								
		3	0	15	Draft	0	0	25								
		31	0	13	nett	-	-	-	-	at 5*l.* 10*s.*		171	2	9		
	2. 5 —	35	0	0	Tare	3	2	18								
		3	3	15	Draft	0	0	25								
		31	0	13	nett	-	-	-	-	at 4*l.* 5*s.*		132	4	10		
												303	7	7		
										Discount 1 per cent.		3	0	0		
															300	6 11
					Charges.						L.	s.	d.			
	To Sea insurance on 300*l.* at 2*l.* per cent.					-	-	-	-		6	0	0			
	Policy 5*s.* 6*d.* per cent.					-	-	-	-	-	0	16	6			
	Commission ½ per cent.					-	-	-	-	-	1	10	0			
												8	6	6		
	Dock rates on 62 cwt. 2 qrs. 20 lbs. at 1*s.* 6*d.**					-			-	-	4	14	0			
	Lotting at 9*d.* per tierce					-	-	-	-	-	0	7	6			
												5	1	6		
	Insurance against fire					-	-	-	-	-	-	0	8	3		
	Freight on 62 cwt. 2 qrs. 20 lbs. at 6*s.*					-	-		-	-	18	16	1			
	Primage 5*s.* and pierage 3*s.* 9*d.*					-	-	-	-	-	0	8	9			
												19	4	10		
	Public sale charges 7*s.* Petty expenses 7*s.* 6*d.*					-			-	-	-	0	14	6		
	Brokerage 1 per cent.					-	-	-	-	-	-	3	0	8		
	Commission 2½ per cent.					-	-	-	-	-	-	7	11	8		
															44	7 11
					Errors excepted						Nett proceeds			L. 255	19	9
	London, 2d of November, 1833.											(Cash, 30th of November, 1833.)				

* Coffee in bags pays 1*s.* 2*d.*, and in casks 1*s.* 6*d.* of dock dues.

COINS, pieces of metal, most commonly gold, silver, or copper, impressed with a public stamp, and frequently made legal tender in payment of debts, either to a limited or an unlimited extent.

1. *Circumstances which led to the Introduction and Use of Coins.* — When the precious metals first began to be used as money, or as standards by which to measure the value of different articles, and the equivalents for which they were most commonly exchanged, they were in an unfashioned state, in bars or ingots. The parties having agreed upon the quantity of metal to be given for a commodity, the exact amount was then ascertained by weight. But it is obvious that a practice of this sort must have been attended with a great deal of trouble and inconvenience. There can, however, be little doubt that the greatest obstacle to the use of unfashioned metals as money would be found in the difficulty of determining their quality, or the degree of their purity, with sufficient precision. The operation of assaying is one of great nicety and difficulty; and could not be performed in the early ages otherwise than in a clumsy, tedious, and inaccurate manner. It is, indeed, most probable, that when the precious metals were first used as money, their quality would be appreciated only by their weight and colour. A very short experience would, however, be sufficient to show the extreme inexactness of conclusions derived from such loose and unsatisfactory criteria; and the devising of some method, by which the fineness of the metal might be easily and correctly ascertained, would very soon be felt as indispensable to the general use of gold and silver as money. Such a method was not long in presenting itself: it was early discovered, that, to ascertain the purity of the metal, and also to avoid the trouble and expense of weighing it, no more was necessary than to mark each piece with a *stamp*, declaring its weight and fineness. This invention was made at a very early period. According to Herodotus, the Lydians were the first who coined money. — (Lib. i. c. 94.) Other ancient authors say that the art of coining was invented during the period when Saturn and Janus reigned in Italy; that is, in a period antecedent to authentic history. — (*Goguet, de l' Origine des Loix, &c.* tom. i. p. 267.)

2. *Metal used in the Manufacture of Coins.* — Before the art of metallurgy was well understood, the baser metals were frequently used as money. Iron was the primitive money of the Lacedæmonians, and copper of the Romans. But both iron and copper deteriorate by being kept; and besides this defect, the rapid improvement of the arts, by lowering their price, rendered their bulk too great in proportion to their value to permit of their continuing to be used as money. Copper, indeed, is still used in the form of tokens, convertible into silver in very small payments. In this country, copper pence and halfpence are rated at about 72 per cent. above their real value; but as their issue is exclusively in the hands of government, and as they are only legal tender to the extent of *one shilling* in any one payment, this over-valuation is not productive of any bad effect. The use of copper in other countries is limited in much the same way; gold and silver being every where the only metals made use of in the manufacture of the coins used in considerable payments.

3. *Standard of Coins.* — By the standard of a coin, is meant the degree of its purity, and its weight; that is, the fineness of the metal of which it is made, and the quantity of metal contained in it.

(1.) *Silver Coins.* — A pound Troy, or 12 ounces, of the metal of which English silver coins are made, contains 11 oz. 2 dwts. pure silver, and 18 dwts. alloy. This pound is coined into 66 shillings; so that each shilling contains 80·727 grains fine silver, and 87·27 grains standard silver; and the *money pound*, consisting of 20 shillings, contains 1614·545 grains pure silver, and 1745·454 grains standard silver. From 1600 down to 1816, the pound weight of standard silver bullion was coined into 62 shillings. All the English silver coins have been coined out of silver of 11 oz. 2 dwts. fine, from the Conquest to this moment, except for the short period of 16 years, from the 34th Henry VIII. to the 2d Elizabeth.

(2.) *Gold Coins.* — The purity of gold is not estimated by the weights commonly in use, but by an Abyssinian weight called a *carat*. The carats are subdivided into four parts, called grains, and these again into quarters; so that a *carat grain*, with respect to the common divisions of a pound Troy, is equivalent to $2\frac{1}{2}$ dwts. Gold of the highest degree of fineness, or pure, is said to be 24 carats fine. When gold coins were first made at the English mint, the standard of the gold put in them was of 23 carats $3\frac{1}{2}$ grains fine and $\frac{1}{2}$ grain alloy; and so it continued, without any variation, to the 18th of Henry VIII., who, in that year, first introduced a new standard of gold of 22 carats fine, and 2 carats alloy. The first of these standards was called the old; and the second the new standard, or crown gold; because crowns, or pieces of the value of 5*s.*, were first coined of this new standard. Henry VIII. made his gold coins of both these standards under different denominations; and this practice was continued by his successors until 1633. From that period to the present, the gold of which the coins of this kingdom have been made has been invariably of the *new* standard, or

crown gold; though some of the coins made of the old standard, previously to 1633, continued to circulate till 1732, when they were forbidden to be any longer current. — (*Liverpool on Coins*, p. 27.)

The purity of our present gold coins is, therefore, 11 parts fine gold and 1 part alloy. The sovereign, or 20 shilling piece, contains 113·001 grains fine gold, and 123·274 grains standard gold. The pound Troy of standard gold is coined into 46 $\frac{89}{129}$ sovereigns, or into 46*l.* 14*s.* 6*d.* The mint or standard price of gold is, therefore, said to be 46*l.* 14*s.* 6*d.* per lb. Troy, or 3*l.* 17*s.* 10$\frac{1}{2}$*d.* an ounce.

The alloy in coins is reckoned of no value. It is allowed, in order to save the trouble and expense that would be incurred in refining the metals, so as to bring them to the highest degree of purity; and because, when its quantity is small, it has a tendency to render the coins harder, and less liable to be worn or rubbed. If the quantity of alloy were considerable, it would lessen the splendour and ductility of the metals, and would add too much to the weight of the coins.

The standard of the coins of foreign countries may be learned at a glance, by inspecting the *Table of Coins* subjoined to this article.

4. *Variations of the Standard.* — The value of all sorts of property being estimated, and the stipulations in almost all contracts for its purchase, sale, or hire, being made in money or coins, it is plain that no change can take place in the value of such money or coins, without virtually subverting these estimates and contracts, and enriching the debtor portion of society at the expense of the creditor portion, or *vice versâ*. As the cost of producing all commodities is liable to vary from improvements in the arts, the exhaustion of the present or the discovery of new sources of supply, none can be selected to serve as money or coin, that may not vary in its real value. It is believed, however, that the precious metals vary less than any material that could be suggested. And with the exception of the extraordinary fall in their value caused by the discovery of the American mines, it seems to have been remarkably constant at other periods.

But in addition to the fluctuations naturally inherent in the value of coins, arising from variations in the cost of the metal of which they are made, their standard has been repeatedly changed. Notwithstanding that money or coin, from its being universally used as a scale by which to compute the value of all commodities, and as the equivalent for which they are commonly exchanged, is by far the most important of all the measures used in society; and should, consequently, be preserved as invariable as possible; there is none that has been so frequently altered. The necessities or extravagance of governments have forced them to borrow; and to relieve themselves of the incumbrances thus contracted, they have almost universally had recourse to the disgraceful expedient of degrading the coin; that is, of *cheating* those who lent them money, to the extent of the degradation, and of enabling every other debtor in their dominions to do the same.

The ignorance of the public in remote ages facilitated this species of fraud. Had the names of the coins been changed when the quantity of metal contained in them was diminished, there would have been no room for misapprehension. But, although the weight of the coins was undergoing perpetual, and their purity occasional, reductions, their ancient denominations were almost uniformly preserved: and the people who saw the same names still remaining after the substance was diminished; who saw coins of a certain weight and fineness circulate under the names of florins, livres, dollars, and pounds; and who saw them continue to circulate as such, after both their weight and the degree of their fineness had been lessened; began to think that they derived their value more from the *stamp* affixed to them by authority of government, than from the quantity of the precious metals they contained. This was long a very prevalent opinion. But the rise of prices which invariably followed every reduction of the standard, and the derangement that was thereby occasioned in every pecuniary transaction, undeceived the public, and taught them, and their rulers, the expediency of preserving the standard of money inviolate.

The standard may be reduced by simply raising the denomination of the coin; by ordering, for example, that a half-sovereign should pass for a sovereign, and the latter for a double sovereign, &c. If injustice be resolved upon, this is the least mischievous way in which it can be perpetrated, inasmuch as it saves all the trouble and expense of a recoinage. But as it renders the fraud obvious and glaring, it has rarely been resorted to; and most reductions have been effected either by diminishing the weight of the coins, or by increasing the proportion of alloy in the metal of which they are made, or both.

Originally the coins of all countries seem to have had the same denomination as the weights commonly used in them; and contained the exact quantity of the precious metals indicated by their name. Thus, the *talent* was a weight used in the earliest period by the Greeks, the *as* or *pondo* by the Romans, the *livre* by the French, and the *pound* by the English and Scotch; and the coins originally in use in Greece, Italy,

France, and England, bore the same names, and weighed precisely a talent, a pondo, a livre, and a pound. The standard has not, however, been preserved inviolate, either in modern or ancient times. It has been less degraded in England than any where else; but even here the quantity of silver in a pound sterling is less than the *third* part of a pound weight, — the quantity it contained in 1300. In France, the livre current in 1789 contained less than *one sixty-sixth* part of the silver implied in its name, and which it had actually contained previously to 1103. In Spain, and some other countries, the degradation has been carried still further.*

From 1296 to 1355, the coins of England and Scotland were of the same weight and purity; but at the last mentioned epoch the standard of Scotch money was, for the first time, sunk below that of England; and by successive degradations, the value of Scotch money, at the union of the crowns in 1600, was only a *twelfth* part of the value of the English money of the same denomination. It remained at this point till the union of the kingdoms cancelled the separate coinage of Scotland.

The gold and silver coins of Ireland have been for a considerable period the same as those of Great Britain; but, until 1825, they were nominally rated $8\frac{1}{3}$ per cent. higher. This difference of valuation, which was attended with considerable inconveniences, was put an end to by the act 6 Geo. 4. c. 79., which assimilated the currency throughout the empire.

The Tables annexed to this article contain all the information that can be desired by mercantile men with respect to the weight, fineness, &c. of English and Scotch gold and silver coins, from the earliest periods to the present moment.

5. *Mint, or Government Valuation of Gold and Silver Coins.* — If both gold and silver coins be made legal tenders, it is obviously indispensable that their value with respect to each other should be fixed by authority; or that it should be declared, that individuals shall be entitled to discharge the claims upon them by payments, either of gold or silver coins, according to some regulated proportion. The practice of making both metals legal tenders was long adopted in England. From 1257 till 1664, the value of gold coins was regulated by proclamation; or, which is the same thing, it was ordered that the gold coins, then current, should be taken as equivalent to certain specified sums of silver. — (*Liverpool on Coins*, p. 128.) From 1664, down to 1717, the relation of gold to silver was not fixed by authority; and silver being then the only legal tender, the value of gold coins fluctuated, according to the fluctuations in the relative worth of the metals in the market. But, in 1717, the ancient practice was again reverted to; and it was fixed that the guinea should be taken as the equivalent of 21 shillings, and conversely.

But the value of each of the precious metals is liable to perpetual changes. And hence, how accurately soever their proportional value, as fixed by the mint regulations, may correspond with the proportion which they actually bear to each other in the market when the regulation is made, the chances are 10 to 1 that it will speedily cease to express their relation to each other. But the moment that such a change takes place, it becomes the obvious interest of every one who has a payment to make, to make it in the *overvalued* metal; which, consequently, becomes the sole, or nearly the sole, currency of the country. Hence the reason why the coins of some countries are almost wholly of silver, and others almost wholly of gold. It is estimated, for example, that when it was fixed, in 1717, that the guinea should exchange for 21 shillings, gold was overvalued as compared with silver to the extent of $1\frac{19}{31}$ per cent. — (*Liverpool on Coins*, p. 85.); and as the real value of silver with respect to gold continued to increase during the greater part of last century, the advantage of paying in gold in preference to silver became more decided, and ultimately led to the universal use of gold in all large payments, and to the fusion or exportation of all silver coins of full weight. — (*Liverpool, loco cit.*)

In France, a different valuation of the metals has had a different effect. Previously to the recoinage in 1785, the *Louis d'or* was rated in the mint proportion at only 24 livres, when it was really worth 25 livres 10 sols. Those, therefore, who should have discharged the obligations they had contracted by payments of gold coin instead of silver, would plainly have lost 1 livre 10 sols on every sum of 24 livres. In consequence, very few such payments were made; gold was almost entirely banished from circulation, and silver became almost the only species of metallic money used in France. — (*Say, Traité d'Economie Politique*, tom. i. p. 393.)

In 1816, however, a new system was adopted in this country; it being then enacted (56 Geo. 3. c. 68.), *that gold coins only should be legal tender in all payments of more than 40 shillings.* The pound of silver bullion, that had previously been coined into 62 shillings, was then also coined into 66 shillings, the additional *four* shillings being

* For an account of the degradation of the coins of the ancient and modern Continental nations, see the article *Money*, in the Supplement to the old, or in the new edition of the *Encyclopædia Britannica*.

retained by government as a *seignorage* or duty (amounting to $6\frac{14}{31}$ per cent.) upon the coinage. To prevent the silver coins from becoming redundant, government has retained the power to issue them in its own hands. Under these regulations, silver has ceased to be a standard of value, and forms merely a subordinate or subsidiary species of currency, or change, occupying the same place in relation to gold that copper occupies in relation to itself. This system has been found to answer exceedingly well.

A good deal of difference of opinion has existed as to whether gold or silver coins are best fitted for being made a legal tender. It does not seem that the one possesses any very striking advantage over the other; none, certainly, that would justify a change, after a selection has been made, and acted upon for any considerable period.

Down to 1626, a seignorage or duty upon the coinage was usually charged upon the gold and silver coins issued by the mint; and it may be easily shown that the imposition of such a duty, when it is not carried to an undue height, is advantageous. A coin is more useful than a piece of uncoined bullion of the same weight and purity; the coinage fitting it for being used as money, while it does not unfit it for being used for any other purpose. When, therefore, a duty or seignorage is laid upon coin equal to the expense of coinage, it circulates at its real value; but when this charge is defrayed by the public, it circulates at *less* than its real value, and is consequently either melted down or exported whenever there is any demand for bullion in the arts, or any fall in the exchange. It is, indeed, true, that were a seignorage to be laid on gold coins, it would be necessary, to prevent an enhancement of the value of the currency, that their weight should be proportionally reduced; and it is on this account better, perhaps, to let them remain on the present footing. But when a seignorage was laid on the silver coins, in 1816, it was not necessary to take the circumstance now alluded to into consideration; for as they were made subordinate to gold, and were intended to serve as change merely, its imposition had no tendency to raise the value of the currency, at the same time that it was calculated effectually to prevent the fusion of the coins, and to yield a small revenue to government.

6. *Coinage since* 1790. *Amount of Coin in Circulation.* — No. V. of the subjoined Tables shows the amount of the gold and silver coinage at the British mint, each year, from 1790 downwards.

It will be seen from this account, that gold coin to the amount of about 47,000,000*l.* has been coined at the mint between 1817 and 1831, both inclusive. It is not easy to form any very precise estimate of the portion of this immense sum now in circulation. In consequence of the exemption of our gold coin from any seignorage, large quantities of the coins carried abroad during an unfavourable exchange find their way to the foreign mints, where they are melted and recoined. We are not, however, wholly destitute of the means of approximating to the quantity of coin in circulation. The mint works wholly, or almost wholly, for the Bank of England, so that, by comparing the issues of coin by the Bank with the coin paid to her, and allowing for the export, we are able to get at a tolerably accurate result. We are indebted to Mr. Horsley Palmer for the following estimate, made up on this principle, of the gold coin in circulation in February, 1833. It may not be quite accurate, but we are sure that it is as accurate as it is possible to make any estimate of the sort. — (*See opposite page.*)

7. *The Exportation and Importation of Gold and Silver Coins* was formerly prohibited; but in 1819 it was enacted (59 Geo. 3. c. 49.), that they might be freely exported and imported, without being liable to any charge or duty whatever; and they may be imported without being either reported or entered at the Custom-house. This regulation has rendered it next to impossible to ascertain the value of the bullion imported.

8. *Forgery of Coin. Issue of forged or spurious Coins.* — The forgery of coin is an offence that is practised more or less at all periods. The most effectual means of preventing it is to improve the fabric of the genuine coins, to cut the dies with great delicacy, and occasionally to vary the form of the coins. During the lengthened period from 1770 down to 1816, the genuine silver coins in circulation were so much worn and defaced, that it was very difficult to distinguish between them and counterfeits, which, in despite of the severest penalties, were thrown into circulation in immense quantities. But since the issue of the new coins, in 1816, forgery has been comparatively rare. There has, however, been a considerable increase of forgery during the last 7 years, as compared with the previous 7. Sufficient time has not yet been afforded for determining the influence of the law exempting the offence of counterfeiting from the punishment of death.

Estimate of Gold Coin in Circulation in February, 1833.

Issued by the Bank.	£	Observations.
From January, 1821, to July, 1824, inclusive	17,370,000	The exchanges during this period were in favour of the country, and gold was imported.
From August, 1824, to December, 1825, inclusive	8,660,000	The exchanges during the major part of this period were against the country, and gold was exported. Of the total issue of 8,660,000*l.*, about 2,500,000*l.* were issued from October to the end of December, 1825, to supply the place of the country notes then discredited, leaving 6,000,000*l.* as the estimated export of coin, in addition to the bar and other uncoined gold sold by the Bank during this period.
From January, 1826, to April, 1828, inclusive	2,370,000	The exchanges during this period were in favour of the country, and gold was imported.
From May, 1828, to 15th of February, 1832	9,600,000	1st. The exchanges were against the country from November, 1823, to February, 1829, during which period the issue amounted to 1,500,000*l.*, of which 1,000,000*l.* is estimated to have been applied in the withdrawal of the country 1*l.* notes, leaving 500,000*l.* as the amount of estimated export during that period.
	38,000,000	2d. From August, 1830, to February, 1832, the exchanges were also against the country, during which period the issue was 4,000,000*l.*: 1,000,000*l.* of this sum was issued in November, 1831, upon the rejection of the Reform Bill, and 1,000,000*l.* more may fairly be estimated as the further amount applied within the whole period, from August, 1830, in the withdrawal of the country small notes; leaving 2,000,000*l.* as the estimated amount of coin exported from 1830 to 1832.
Deduct for export. 1824-25 £6,000,000; 1828-29 500,000; 1830-32 2,000,000	8,500,000	
	29,500,000	
From 15th of February, 1832, to 15th of February, 1833	1,800,000	This sum was taken out during the political discredit of May, 1832, and has not yet returned to the Bank.
	31,300,000	
Deduct the stock at the branch banks, which has been taken as part of the issue from the Bank in London	1,300,000	
Leaving in circulation in the hands of the public on the 15th of February, 1833	30,000,000	

9. *Law as to the counterfeiting, &c. of Coin.* — The acts as to this were consolidated and amended by the 2 & 3 Will. 4. c. 34., of which the following is a brief abstract: —

Counterfeiting the gold or silver coin of the realm, transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years; and every such offence shall be deemed to be complete, although the counterfeiting be not finished. — § 3.

Colouring counterfeit coin, or any pieces of metal, with intent to make them pass for gold or silver coin; colouring or altering genuine coin, with intent to make it pass for higher coin; transportation for life, or for any term not less than 7 years, or imprisonment for any term not exceeding 4 years. — § 4.

Impairing the gold or silver coin, with intent to make the coin so impaired pass for gold or silver coin of full weight, transportation for not exceeding 14, nor less than 7 years, or imprisonment for not exceeding 3 years. — § 5.

Buying or selling, &c. counterfeit gold or silver coin for lower value than its denomination, importing counterfeit coin from beyond seas, transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years. — § 6.

Uttering counterfeit gold or silver coin, imprisonment for not exceeding 1 year; and uttering, accompanied by possession of other counterfeit coin, or followed by a second uttering within 10 days, imprisonment for not exceeding 2 years; every second offence of uttering after a previous conviction, shall be felony, transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years. — § 7.

Having 3 or more pieces of counterfeit gold or silver coin in possession, with intent to utter the same, imprisonment for not exceeding 3 years; second offence, transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years. — § 8.

Making, mending, having possession of, or selling any mould, &c., or coining tools, or any press or engine, conveying tools or monies out of the mint without authority, felony; transportation for life, or for not less than 7 years, or imprisonment for not exceeding 4 years. — §§ 10, 11.

Counterfeiting any current copper coin, or making, mending, or having in his possession any coining tool, or buying, selling, &c. any counterfeit copper coin for lower value than its denomination, transportation for not exceeding 7 years, or imprisonment for not exceeding 2 years; and uttering any counterfeit copper coin, or having in his possession 3 or more pieces of counterfeit copper coin, imprisonment for not exceeding 1 year. — § 12.

Gold or silver coin tendered to any person suspecting any piece to be counterfeit, may be broken by such person; and if it shall appear to be counterfeit, the person tendering shall bear the loss; but if it shall be of due weight, and appear to be of lawful coin, the person breaking it is to receive it at the rate it was coined for, and any dispute shall be finally determined by any justice; and the tellers of the Exchequer and the receivers-general of the revenue are to break or deface every piece of counterfeit coin tendered for payment. — § 13.

Any person discovering any counterfeit coin, gold, silver, or copper, or any coining tool, is to carry the same forthwith before some justice, and on reasonable cause to suspect any person of counterfeiting, or having such coin, or any tool, &c., such justice may cause any place under the control of such suspected person to be searched, either in the day or night, and if any such coin or tool shall be found, to cause the same to be seized forthwith, and carried before a justice, who is to secure the same for the purpose of being produced in evidence, and afterwards of being delivered up to the mint. — § 14.

The necessity of the evidence of any officer of the mint to prove counterfeit coin dispensed with. — § 17.
The court may order hard labour or solitary confinement. — § 19.
The words "king's coin" include all coin lawfully current in the United Kingdom; and wilfully having, in any dwelling-house or other building, lodging, apartment, field, or other place, open or inclosed, whether belonging to or occupied by himself or not, and whether for his own use or benefit, or for that of another, shall be deemed having in his possession within this act. — § 21.
Persons acting in the execution of this act, protected in the usual manner, by requiring notice of action, &c., and allowing tender of amends, &c. — § 22.

10. *Convictions for Coining and Uttering.* — In the 7 years ending with 1818, 63 persons were convicted in England and Wales of the offence of counterfeiting the coin of the realm, of whom 1 was executed. In the next 7 years the convictions for coining were reduced to 14, but of these 5 were executed. In the last septennial period, ending with 1832, the convictions were 34, and the executions 7. The convictions for issuing forged coins in the first of the above periods were 21, in the second 9, and in the third, 32.

Tables relative to the Coins of Great Britain and other Countries.

No. I. English Coins. — Account of the English Silver and Gold Coins; showing their Value, the Seignorage or Profit upon the Coinage, and the Price of the Pound Troy of Standard Gold and Silver, from the Conquest to the present Time.—(This and the next Table, No. II., are taken from Part II. of *Essays on Money, Exchanges, and Political Economy*, by Henry James.)

A. D.	Anno Regni.	Silver. 1. Fineness of the Silver in the Coins.	Silver. 2. Pound Weight of such Silver coined into	Silver. 3. Profit or Seignorage on the Coinage.	Silver. 4. Equal to the Mint Price for Standard Silver of 11oz. 2dwts. fine Troy weight.	Gold. 5. Fineness of the Gold in the Coins.	Gold. 6. Pound Weight of such Gold coined into	Gold. 7. Profit or Seignorage on the Coinage.	Gold. 8. Equal to the Mint Price for Standard Gold of 22 Carats fine Troy weight.
		Oz. dts.	£ s. d.	£ s. d.	£ s. d.	*Crts. grs.*	£ s. d.	£ s. d.	£ s. d.
1066	Conquest	11 2	1 0 0						
1280	8 Edward I.	— —	1 0 0	0 1 0	1 0 3¼				
1300	28 ———	— —	1 0 3	0 1 2½					
1344	18 Edward III.	— —	1 0 3	0 1 3	1 0 3¼	23 3½	13 3 4	0 8 4	12 10 8
1349	23 ———	— —	1 2 6	0 1 3	1 2 8	— —	14 0 0	0 11 8	13 3 9
1356	30 ———	— —	1 5 0	0 0 10	1 5 9⅓	— —	15 0 0	0 6 8	14 8 4
1394	18 Richard II.	— —	1 5 0	0 0 10	1 5 9⅓	— —	15 0 0	0 5 0	14 9 11
1401	3 Henry IV.	— —	1 5 0	0 0 10	1 5 9⅓	— —	15 0 0	0 5 0	14 9 11
1421	9 Henry V.	— —	1 10 0	0 1 0	1 10 11¼	— —	16 13 4	0 5 0	16 2 9
1425	4 Henry VI.	— —	1 10 0	0 1 0	1 10 11¼	— —	16 13 4	0 5 10	16 1 11
1464	4 Edward IV.	— —	1 17 6	0 4 6	1 15 2¼	— —	20 16 8	2 10 0	18 0 5
1465	5 ———	— —	1 17 6	0 4 6	1 15 2¼	— —	22 10 0	1 0 10	21 1 10
1470	49 Henry VI.	— —	1 17 6	0 2 0	1 17 10½	— —	22 10 0	0 13 0	21 9 7
1482	22 Edward IV.	— —	1 17 6	0 1 6	1 18 4¾	— —	22 10 0	0 7 6	21 15 0
1483	1 Richard III.	— —	1 17 6	0 1 6	1 18 4¾	— —	22 10 0	0 7 6	21 15 0
1485	1 Henry VII.	— —	1 17 6	0 1 6	1 18 4¾	— —	22 10 0	0 7 6	21 15 0
1509	1 Henry VIII.	— —	1 17 6	0 1 0	1 18 11¼	— —	22 10 0	0 2 6	22 0 0
*1527	18 ———	— —	2 0 0	0 1 0⅝	1 18 11¼	— —	24 0 0	0 2 8	22 0 0
——	———	— —	2 5 0	0 1 0	2 4 0	— —	27 0 0	0 2 9	
——	———	- -	- -	- -	- -	22 0	25 2 6	0 3 0	24 19 6
——	———	- -	2 8 0	0 8 0	2 4 4¾	23 0	28 16 0	1 4 0	26 8 0
1543	34 ———	10 0	2 8 0	2 0 0	2 11 9¼	22 0	30 0 0	2 10 0	27 10 0
1545	36 ———	6 0	2 8 0	4 4 0	2 15 6	20 0	30 0 0	5 0 0	27 10 0
1546	37 ———	4 0	2 8 0	4 4 0	2 15 6	20 0	30 0 0	1 10 0	31 7 0
1547	1 Edward VI.	4 0	3 12 0	4 0 0	2 19 2½	22 0	34 0 0	1 0 0	33 0 0
1549	3 ———	6 0	3 12 0						
1551	5 ———	3 0	3 0 0	- -	-	23 3½	36 0 0		
——	———	11 0	- -	- -	-	22 0	33 0 0		
——	———	- -	- -	- -	-	23 3½	36 0 0	0 2 9	
1552	6 ———	11 1	3 0 0	0 1 0	2 19 3¼	22 0	33 0 0	0 3 0	32 17 8
——	———	- -	- -	- -	- -	23 3½	36 0 0	0 3 0	33 0 8
1553	1 Mary	11 0	3 0 0	0 1 0	2 19 6⅓	23 3½	36 0 0	0 5 0	
1560	2 Elizabeth	11 .2	3 0 0	0 1 6	2 18 6	22 0	33 0 0	0 4 0	32 16 0
——	———	- -	- -	- -	- -	23 3½	36 10 0	0 10 0	
1600	43 ———	— —	3 2 0	0 2 0	3 0 0	22 0	33 10 0	0 10 0	33 0 0
——	———	- -	-	- -	- -	22 0	37 4 0	1 10 0	35 14 0
1604	2 James I.	— —	3 2 0	0 2 6	2 19 6	— —	41 0 0	1 1 5	39 18 7
1626	2 Charles I.	— —	3 2 0	0 2 0	3 0 0	— —	44 10 0	- -	44 10 0
†1666	18 Charles II.	— —	3 2 0	0 0 0	3 2 0	— —	46 14 6	- -	46 14 6
1717	3 George I.	— —	3 2 0	0 0 0	3 2 0	— —	46 14 6	- -	46 14 6
1816	56 George III.	— —	3 6 0	0 4 0	- -	— —	46 14 6	- -	46 14 6

* 1527 — Henry VIII.] The Saxon or Tower pound was used at the mint up to this time, when the pound Troy was substituted in its stead. The Tower pound was but 11 oz. 5 dwts. Troy; so that, from the Conquest to the 28th of Edward I., 20 shillings in tale were exactly a pound in weight.

† 1666—18 Charles II.] The seignorage on the coinage was at this time given up, and the gold bullion brought to the mint has ever since been coined free of expense. A seignorage of $6\frac{14}{31}$ per cent. was imposed on the coinage of silver by 56 Geo. 3.

No. II. English Coins. — Account of the Quantity of *Fine* Silver coined into 20*s.* or the Pound Sterling; the Quantity of *Standard* Silver, of 11 oz. 2 dwts. Fine and 18 dwts. Alloy, contained in 20*s.* or the Pound Sterling, in the different Reigns, from the Time of Edward I. to the Reign of William IV. — A similar Account with respect to Gold. — And an Account of the proportional Value of Fine Gold to Fine Silver, according to the Number of Grains contained in the Coins. — *Calculated in Grains and 1000th Parts Troy Weight.*

A. D.	Anno Regni.	Silver. 1. Number of Grains of Fine Silver in 20 Shillings, or the Pound Sterling, as coined by the Mint Indentures.	Silver. 2. Number of Grains of Standard Silver, 11 oz. 2 dwts. Fine in 20 Shillings, or the Pound Sterling, as coined by the Mint Indentures.	Gold. 3. Number of Grains of Fine Gold in 20 Shillings, or the Pound Sterling, as coined by the Mint Indentures.	Gold. 4. Number of Grains of Standard Gold, 22 Carats fine, in 20 Shillings, or the Pound Sterling, as coined by the Mint Indentures.	5. Proportionate Value of Fine Gold to Fine Silver, according to the Quantity of each Metal contained in the Coins.
		Grains.	*Grains.*	*Grains.*	*Grains.*	*Gold to Silver.*
1066	Conquest	4,995·000	5,400·000			
1280	8 Edward I.	4,995·000	5,400·000			
1344	18 Edward III.	4,933·333	5,333·333	407·990	445·080	1 to 12·091
1349	23 ———	4,440·000	4,800·000	383·705	418·588	1 — 11·571
1356	30 ———	3,996·000	4,320·000	358·125	390·682	1 — 11·158
1401	3 Henry IV.	3,996·000	4,320·000	358·125	390·682	1 — 11·158
1421	9 Henry V.	3,330·000	3,600·000	322·312	351·613	1 — 10·331
1464	4 Edward IV.	2,664·000	2,880·000	257·850	281·291	1 — 10·331
1465	5 ———	2,664·000	2,880·000	238·750	260·454	1 — 11·158
1470	49 Henry VI.	2,664·000	2,880·000	238·750	260·454	1 — 11·158
1482	22 Edward IV.	2,664·000	2,880·000	238·750	260·454	1 — 11·158
1509	1 Henry VIII.	2,664·000	2,880·000	238·750	260·454	1 — 11·158
1527	18 ———	2,368·000	2,560·000	210·149	229·253	1 — 11·268
1543	34 ———	2,000·000	2,162·162	191·666	209·090	1 — 10·434
1545	36 ———	1,200·000	1,297·297	176·000	192·000	1 — 6·818
1546	37 ———	800·000	864·864	160·000	174·545	1 — 5·000
1547	1 Edward VI.	800·000	864·864	160·000	174·545	1 — 5·000
1549	3 ———	800·000	864·864	155·294	169·412	1 — 5·151
*1551	5 ———	400·000				
———	———	1,760·000	1,902·702	160·000	174·545	1 — 11·000
1552	6 ———	1,768·000	1,911·351	160·000	174·545	1 — 11·050
1553	1 Mary	1,760·000	1,902·702	159·166	173·636	1 — 11·057
1560	2 Elizabeth	1,776·000	1,920·000	160·000	174·545	1 — 11·100
1600	43 ———	1,718·709	1,858·064	157·612	171·940	1 — 10·904
1604	2 James I.	1,718·709	1,858·064	141·935	154·838	1 — 12·109
1626	2 Charles I.	1,718·709	1,858·064	128·780	140·487	1 — 13·346
1688	18 Charles II.	1,718·709	1,858·064	118·651	129·438	1 — 14·485
1717	3 George I.	1,718·709	1,858·064	113·001	123·274	1 — 15·209
†1816	56 George III.	1,614·545	1,745·454	113·001	123·274	1 — 14·287

No. III. Scotch Coins. — Account of the Number of Pounds, Shillings, and Pennies Scotch, which have been coined out of One Pound Weight of Silver, at different Times; with the Degree of Purity of such Silver, or its Fineness, from the Year 1107 to the Year 1601. — (From *Cardonnel's Numismata Scotiæ* p. 24.)

A.D.	Anno Regni.	Purity.	Alloy.	Value of the Money coined out of a Lb. Weight of Silver.
		Oz. pw.	*Oz. pw.*	*£ s. d.*
From 1107 to 1286	Alexander I. David I. William Alexander II. Alexander III. John Baliol	11 2	0 18	1 0 0
From 1306 to 1329	Robert I.	11 2	0 18	1 1 0
1266	David II. 38	11 2	0 18	1 5 0
1367	——— 39	11 2	0 18	1 9 4
From 1371 to 1390	Robert II.	11 2	0 18	1 9 4
1393	Robert III. 4	11 2	0 18	1 12 0
1424	James I. 19	11 2	0 18	1 17 6
1451	James II. 15	11 2	0 18	3 4 0
1456	——— 20	11 2	0 18	4 16 0
1475	James III. 16	11 2	0 18	7 4 0
1484	——— 24	11 2	0 18	7 0 0
1488 1489	James IV. 1 2	11 2	0 18	7 0 0
1529	James V. 16	11 0	1 0	9 12 0
1544	Mary 3	11 0	1 0	9 12 0
1556	——— 14	11 0	1 0	13 0 0
1565	——— 23	11 0	1 0	18 0 0
1567	James VI. 1	11 0	1 0	18 0 0
1571	——— 5	9 0	3 0	16 14 0
1576	——— 10	8 0	4 0	16 14 0
1579	——— 13	11 0	1 0	22 0 0
1581	——— 15	11 0	1 0	24 0 0
1597	——— 31	11 0	1 0	30 0 0
1601	——— 35	11 0	1 0	36 0 0

* 1551 — 5 Edward VI.] The coinage of debased silver money in the 5th year of Edward VI. of 3 oz. fine, ought more properly to be considered as Tokens. The sum of 120,000*l.* only was so coined. — (See *James's Essays*, chap. iv.)

† 1816 — 56 George III.] The government having taken the coinage of silver into its own hands, there is at present no fixed price paid to the public, by the mint, for standard silver. And supposing the government to continue the present mint regulations, and to keep gold at 77*s.* 10½*d.* an ounce, as the price of silver varies, the relative value of gold to silver will vary in like proportion.

No. IV. Scotch Coins. — Account of the Number of Pounds, Shillings, and Pennies Scotch, which have been coined out of One Pound Weight of Gold; with the Degree of their Purity, and the Proportion that the Gold bore to the Silver. — (*Cardonnel*, p. 25.)

A. D.	Anno Regni.		Fineness.			Alloy.			Value of the Coin coined out of One Pound of Gold.			Pound of Pure Gold weighed of Pure Silver.			
			Oz.	pw.	gr.	Oz.	pw.	gr.	£	s.	d.	Lbs.	oz.	pw.	gr.
1371, &c.	Robert II.	-	11	18	18	0	1	6	17	12	0	11	1	17	22
1390, &c.	Robert II.	-	11	18	18	0	1	6	19	4	0	11	1	17	22
1424	James I.	19	11	18	18	0	1	6	22	10	0	11	1	17	22
1451	James II.	15	11	18	18	0	1	6	33	6	0	9	8	4	14
1456	———	20	11	18	18	0	1	6	50	0	0	9	8	4	14
1475	James III.	16	11	18	18	0	1	6	78	15	0	10	2	0	20
1484	———	24	11	18	18	0	1	6	78	15	0	10	5	7	9
1488	James IV.	1	11	18	18	0	1	6	78	15	0	10	5	7	9
1529	James V.	16	11	18	18	0	1	6	108	0	0	10	5	7	9
1556	Mary	14	11	0	0	1	0	0	144	0	0	10	5	8	6
1567	James VI.	10	11	0	0	1	0	0	240	0	0	10	5	8	6
1579	———	13	10	10	0	1	10	0	240	0	0	11	5	2	20
1597	———	31	11	0	0	1	0	0	360	0	0	12	0	0	0
1601	———	35	11	0	0	1	0	0	432	0	0	12	0	0	0
1633	Charles I.	9	11	0	0	1	0	0	492	0	0	13	2	7	11

No. V. — Account of the Value of the Gold and Silver Coins, specifying each, coined at the Mint, each Year since 1790. — (*Parl. Paper*, No. 138. Sess. 1833; and papers published by the Board of Trade.)

Years.	Gold coined.			Silver coined.			Years.	Gold coined.			Silver coined.		
	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
1790	2,660,521	10	0	Nil.			1812	Nil.			52	14	0
1791	2,456,566	17	6	Nil.			1813	519,722	3	6	89	18	0
1792	1,171,863	0	0	251	17	6	1814	Nil.			161	4	0
1793	2,747,430	0	0	Nil.			1815	Nil.			Nil.		
1794	2,558,894	12	6	Nil.			1816	Nil.			1,805,251	16	0
1795	493,416	0	0	293	11	11	1817	4,275,337	10	0	2,436,297	12	0
1796	464,680	2	6	Nil.			1818	2,862,373	10	0	576,279	0	0
1797	2,000,297	5	0	Nil.			1819	3,574	10	8	1,267,272	12	0
1798	2,967,504	15	0	Nil.			1820	949,516	0	10	847,717	4	0
1799	449,961	15	0	Nil.			1821	9,520,758	13	10	433,686	0	0
1800	189,937	2	6	Nil.			1822	5,356,787	12	6	31,430	7	1
1801	450,242	2	0	53	7	1	1823	759,748	10	0	285,271	16	0
1802	437,018	18	6	62	0	0	1824	4,065,075	0	0	282,070	16	0
1803	596,444	12	6	72	6	8	1825	4,580,919	0	0	417,535	16	0
1804	718,396	17	6	77	10	0	1826	5,896,461	7	6	608,605	16	0
1805	54,668	5	0	182	18	0	1827	2,512,636	17	6	33,019	16	0
1806	405,105	15	0	Nil.			1828	1,008,559	2	6	16,288	3	0
1807	Nil.			108	10	0	1829	2,446,754	12	6	108,259	16	0
1808	371,744	2	0	Nil.			1830	2,387,881	2	6	151	16	0
1809	298,946	11	0	114	14	0	1831	587,949	14	5	33,696	5	8
1810	316,935	13	6	120	18	0							
1811	312,263	3	6	Nil.			Total -	£69,856,894	8	9	9,183,259	5	9

No VI. Gold Coins of different Countries. — A Table containing the Assays, Weights, and Values of the principal Gold Coins of all Countries, computed according to the Mint Price of Gold in England, and from Assays made both at London and Paris, which have been found to verify each other.*

*** The publishers of this work have purchased the right to publish this Table from Dr. Kelly, in the second edition of whose *Cambist* it originally appeared.

COINS.		Assay.		Weight.		Standard Weight.			Contents in pure Gold.	Value in Sterling.	
		Car.	gr.	Dwt.	gr.	Dwt.	gr.	mi.	Grains.	s.	d.
Austrian Dominions	Souverain - - -	W. 0	$0\frac{1}{8}$	3	14	3	13	15	78·6	13	10·92
	Double ducat - - -	B. 1	$2\frac{3}{4}$	4	12	4	20	5	106·4	18	9·97
	Ducat Kremnitz, or Hungarian -	B. 1	3	2	$5\frac{3}{4}$	2	10	3	53·3	9	5·91
Bavaria -	Carolin - - - -	W. 3	2	6	$5\frac{1}{4}$	5	5	10	115·	20	4·33
	Max d'or, or Maximilian -	W. 3	$2\frac{1}{4}$	4	4	3	14	0	77·	13	7·44
	Ducat - - -	B. 1	$2\frac{1}{4}$	2	$5\frac{3}{4}$	2	19	11	52·8	9	4·12
Bern - -	Ducat (double, &c. in proportion) -	B. 1	$1\frac{3}{4}$	1	23	2	2	1	45·9	8	1·48
	Pistole - - - -	W. 0	$1\frac{1}{2}$	4	21	4	19	0	105·5	18	7·86
Brunswick -	Pistole (double in proportion) -	W. 0	$1\frac{1}{2}$	4	$21\frac{1}{4}$	4	19	5	105·7	18	8·48
	Ducat - - - -	B. 1	$0\frac{1}{2}$	2	$5\frac{3}{4}$	2	8	9	51·8	9	2·
Cologne -	Ducat - - - -	B. 1	2	2	$5\frac{3}{4}$	2	9	8	52·6	9	3·70
Denmark -	Ducat current - - -	W. 0	$3\frac{3}{4}$	2	0	1	21	19	42·2	7	5·62
	Ducat specie - - -	B. 1	2	2	$5\frac{3}{4}$	2	9	8	52·6	9	3·70
	Christian d'or - - -	W. 0	1	4	7	4	5	16	93·3	16	6·14

* The London assays in this Table were made by Robert Bingley, Esq. F.R.S. the King's Assay Master of the Mint, and those at Paris by Pierre Frédéric Bonneville, Essayeur du Commerce, as published in his elaborate work on the coins of all nations.

Specimens of all the foreign coins brought to London for commercial purposes have been supplied for this Table from the Bullion-office, Bank of England, by order of the Bank Directors, and have been selected by John Humble, Esq., the chief clerk of that office, who also examined the Tables in their progress. It may likewise be added, that the Mint Reports of these commercial coins are chiefly from average assays; and that all the computations have been carefully verified by different calculators. — (Note by Dr. Kelly, to second edition of the *Cambist*, published in 1821.)

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Gold.	Value in Sterling.
		Car. gr.	*Dwt. gr.*	*Dwt. gr. mi.*	*Grains.*	*s. d.*
England -	Guinea	Stand.	5 9½	5 9 10	118·7	21 0·
	Half-guinea	Stand.	2 16¾	2 16 15	59·3	10 6·
	Seven shilling piece	Stand.	1 19	1 19 0	39·6	7 0·
	Sovereign	Stand.	5 3¼	5 3 5	113·1	20 0·
France -	Double Louis (coined before 1786)	W. 0 2	10 11	10 5 6	224·9	39 9·64
	Louis	W. 0 2	5 5½	5 2 12	112·4	10 10·71
	Double Louis (coined since 1786)	W. 0 1½	9 20	9 15 19	212·6	37 7·53
	Louis	W. 0 1½	4 22	4 19 19	106·3	18 9·75
	Double Napoleon, or piece of 40 francs	W. 0 1¾	8 7	8 3 0	179·	31 8·36
	Napoleon, or piece of 20 francs	W. 0 1¾	4 3½	4 1 10	89·7	15 10·5
	New Louis (double, &c.) the same as the Napoleon.					
Frankfort on the Maine	Ducat	B. 1 2½	2 5¾	2 9 14	52·9	9 4·34
Geneva -	Pistole, old	W. 0 2	4 7¼	4 4 18	92·5	16 4·45
	Pistole, new	W. 0 0½	3 15¾	3 15 4	80·	14 1·9
Genoa - -	Sequin	B. 1 3½	2 5¾	2 10 6	53·4	9 5·41
Hamburgh -	Ducat (double in proportion)	B. 1 2½	2 5¾	2 9 14	52·9	9 4·35
Hanover -	George d'or	W. 0 1¼	4 6½	4 5 3	92·6	16 4·66
	Ducat	B. 1 3½	2 5¾	2 10 3	53·3	9 5·19
	Gold florin (double in proportion)	W. 3 0½	2 2	1 18 6	39·	6 10·83
Holland -	Double ryder	Stand.	12 21	12 21 0	285·2	50 1·46
	Ryder	Stand.	6 9	6 9 0	140·2	24 9·75
	Ducat	B. 1 2½	2 5¾	2 9 12	52·8	9 4·13
Malta -	Double Louis	W. 1 3¼	10 16	9 18 18	215·3	38 1·25
	Louis	W. 1 3	5 8	4 21 16	108·	19 1·37
	Demi Louis	W. 1 2¼	2 16	2 11 3	54·5	9 7·75
Milan -	Sequin	B. 1 3	2 5¾	2 10 0	53·2	9 4·98
	Doppia or pistole	W. 0 1	4 1½	4 0 8	88·4	15 7·74
	40 Lire piece of 1808	W. 0 1⅝	8 8	8 4 0	179·7	31 9·64
Naples - -	Six ducat piece of 1783	W. 0 2½	5 16	5 12 18	121·9	21 6·89
	Two ducat piece, or sequin, of 1762	W. 1 2¾	1 20¼	1 16 6	37·4	6 7·42
	Three ducat piece, or oncetta, of 1818	B. 1 3½	2 10¼	2 15 1	58·1	10 3·40
Netherlands	Gold Lion, or 14 florin piece	Stand.	5 7¾	5 7 16	117·1	20 8·69
	Ten florin piece (1820)	W. 0 1⅝	4 7¾	4 5 15	93·2	16 5·93
Parma - -	Quadruple pistole (double in proportion)	W. 1 0	18 9	17 12 18	386·	68 3·78
	Pistole or doppia of 1787	W. 0 3	4 14	4 10 4	97·4	17 2·85
	Ditto of 1796	W. 1 0½	4 14	4 8 14	95·9	16 11·67
	Maria Theresa (1818)	W. 0 1¾	4 3½	4 1 10	89·7	15 10·5
Piedmont -	Pistole coined since 1785 (½, &c. in proportion)	W. 0 1¼	5 20	5 17 0	125·6	22 2·75
	Sequin (½ in proportion)	B. 1 2½	2 5¾	2 9 12	52·9	9 4·34
	Carlino, coined since 1785 (½, &c. in proportion)	W. 0 1¼	29 6	28 20 0	634·4	112 3·3
	Piece of 20 francs, called *Marengo*	W. 2 0	4 3½	3 18 4	82·7	14 7·63
Poland - -	Ducat	B. 1 2½	2 5¾	2 9 12	52·9	9 4·34
Portugal -	Dobraon of 24,000 rees	Stand.	34 12	34 12 0	759·	134 3·96
	Dobra of 12,800 rees	Stand.	18 6	18 6 0	401·5	71 0·70
	Moidore or Lisbonnine (½,&c in prop.)	Stand.	6 22	6 22 0	152·2	26 11·24
	Piece of 16 testoons, or 1,600 rees	W. 0 0⅔	2 6	2 5 14	49·3	8 8·70
	Old crusado of 400 rees	W. 0 0⅔	0 15	0 14 18	13·6	2 4·88
	New crusado of 480 rees	W. 0 0⅔	0 16¼	0 16 2	14·8	2 7·43
	Milree (coined for the African colonies 1755)	Stand.	0 19¾	0 19 15	18·1	3 2·44
Prussia - -	Ducat of 1748	B. 1 2½	2 5¾	2 9 14	52·9	9 4·04
	Ducat of 1787	B. 1 2	2 5¾	2 9 6	52·6	9 3·71
	Frederick (double) of 1769	W. 0 1¾	8 14	8 9 18	185·	32 8·90
	Frederick (single) of 1778	W. 0 1⅞	4 7	4 5 4	92·8	16 5·08
	Frederick (double) of 1800	W. 0 2	8 14	8 9 6	184·5	32 7·84
	Frederick (single) of 1800	W. 0 2	4 7	4 4 13	92·2	16 3·42
Rome - -	Sequin (coined since 1760)	B. 1 3½	2 4½	2 9 0	52·2	9 2·86
	Scudo of the Republic	W. 0 1¾	17 0¼	16 16 6	367·	64 11·43
Russia -	Ducat of 1796	B. 1 2½	2 6	2 10 0	53·2	9 4·98
	Ducat of 1763	B. 1 2	2 5¾	2 9 8	52·6	9 3·71
	Gold ruble of 1756	Stand.	1 0½	1 0 10	22·5	3 11·78
	Ditto of 1799	W. 0 0¼	0 18¾	0 18 14	17·1	3 0·31
	Gold poltin of 1777	Stand.	0 9	0 9 0	8·2	1 5·41
	Imperial of 1801	B. 1 2½	7 17¼	8 6 8	181·9	32 2·31
	Half Imperial of 1801	B. 1 2½	3 20½	4 3 4	90·9	16 1·05
	Ditto of 1818	B. 0 0½	4 3½	4 3 12	91·3	16 1·98
Sardinia -	Carlino (½ in proportion)	W. 0 2¼	10 7½	9 23 16	219·8	30 8·10
Saxony -	Ducat of 1784	B. 1 2	2 5¾	2 9 8	52·6	9 3·71
	Ducat of 1797	B. 1 2½	2 5¾	2 9 14	52·9	9 4·34
	Augustus of 1754	W. 0 2⅝	4 6½	4 3 8	91·2	16 1·69
	Augustus of 1784	W. 0 1¾	4 6½	4 4 12	92·2	16 3·81
Sicily * -	Ounce of 1751	W. 1 2⅝	2 20½	2 15 8	58·2	10 3·60
	Double ounce of 1758	W. 1 2	5 17	5 7 14	117·	20 8·48
Spain -	Doubloon of 1772 (double and single in proportion)	W. 0 2¼	17 8½	61 21 16	372·	65 10·05
	Quadruple pistole of 1801	W. 1 1	17 9	16 9 6	360·5	63 9·62
	Pistole of 1801	W. 1 1	4 8¼	4 2 6	90·1	15 11·35
	Coronilla, gold dollar, or vintem of 1801	W. 1 2⅓	1 3	1 0 18	22·8	4 0·42
Sweden -	Ducat	B. 1 2	2 5	2 8 12	51·9	9 2·22

* Much variation is found in the fineness of the Sicilian gold coins.

COINS.		Assay.	Weight.	Standard Weight.	Contents in pure Gold.	Value in Sterling.
		Car. gr.	*Dwt. gr.*	*Dwt. gr. mi.*	*Grains.*	*s. d.*
SWITZERLAND	Pistole of the Helvetic Republic of 1800	W. 0 1⅓	4 21⅓	4 19 9	105·9	18 8·91
TREVES	Ducat	B. 1 2	2 5¾	2 9 8	52·6	9 3·71
TURKEY	Sequin fonducli of Constantinople of 1773	W. 2 2⅔	2 5¾	1 23 6	43·3	7 7·94
	Sequin fonducli of 1789	W. 2 3⅓	2 5¾	1 22 16	42·9	7 7·11
	Half missier (1818)	W. 5 3⅓	0 18¼	0 13 5	12·16	2 1·82
	Sequin fonducli	W. 2 3	2 5	1 22 7	42·5	7 6·26
	Yermeebeshlek	B. 0 3⅔	2 1¾	3 4 13	79·3	12 5·30
TUSCANY	Zecchino or sequin	B. 1 3¾	3 5¾	2 10 14	53·6	9 5·83
	Ruspone of the kingdom of Etruria	B. 1 3⅞	6 17¼	7 7 13	161·	28 5·95
UNITED STATES	* Eagle (⅓ and ¼ in proportion)	W. 0 0½	11 6	11 4 8	246·1	43 6·66
VENICE	Zecchino or sequin (⅓ and ¼ in proportion)	B. 1 3¼	2 6	2 10 10	53·6	9 5·83
WIRTEMBERG	Carolin	W. 3 2	6 3½	5 4 0	113·7	20 1·47
	Ducat	B. 1 2	2 5	2 8 12	51·9	9 2·22
	Ducat (double and ½ ducat in proportion)	B. 1 2	2 5¾	2 9 8	52·6	9 3·71
EAST INDIES.						
	Mohur of 1770	B. 1 2¼	7 22¼	8 11 15	186·8	33 0·72
	Mohur, Half (1787), ¼ in proportion	B. 1 2⅓	3 23⅓	4 16 10	94·	16 7·64
	Mohur Sicca of Bengal	B. 1 3⅝	7 23	8 15 0	189·8	30 1·04
	Mohur of the Dutch East India Company (1783)	W. 3 3¼	10 2	8 8 0	183·4	32 5·50
	Mohur, Half Ditto (1801)	W. 3 1¼	5 3⅓	4 18 18	96·2	17 0·20
	Rupee, Bombay (1818)	B. 0 0½	7 11	7 11 13	164·7	29 1·78
	Rupee of Madras (1818)	Stand.	7 12	7 12 0	165·	29 2·42
	Pagoda, star	W. 3 0	2 4¾	1 21 11	41·8	7 4·77

No. VII. SILVER COINS OF DIFFERENT COUNTRIES.—A Table containing the Assays, Weights, and Values of the principal Silver Coins of all Countries, computed at the rate of 5*s.* 2*d.* per Ounce Standard, from Assays made both at the London and Paris Mints.

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Silver.	Value in Sterling.
		Oz. dwt.	*Dwt. gr.*	*Dwt. gr. mi.*	*Grains.*	*s. d.*
AUSTRIA	Rixdollar of Francis II., 1800	W. 1 5	18 1	16 0 4	355·5	4 1·64
	Rixdollar of the kingdom of Hungary	W. 1 2	18 1	16 6 1	360·9	4 2·39
	Half rixdollar, or florin, *Convention*	W. 1 3	9 0½	8 2 1	179·6	2 1·07
	Copftsuck, or 20 creutzer piece	W. 4 3	4 6½	2 16 3	59·4	0 8·29
	17 Creutzer piece	W. 4 8	4 0	2 9 18	55·5	0 7·47
	Halbe copf, or 10 creutzer piece	W. 5 5	2 11	1 7 1	28·8	0 4·01
BADEN	Rixdollar	W. 1 4	18 2	16 3 1	358·1	4 2·
BAVARIA	Rixdollar of 1800 (⅓ in proportion)	W. 1 4½	17 12	15 13 13	345·6	4 0·25
	Copftsuck	W. 4 3	4 6½	2 16 3	59·4	0 8·29
BERN	Patagon or crown (½ in proportion)	W. 0 7	18 22	18 7 14	406·7	4 8·79
	Piece of 10 batzen	W. 1 2	5 3	4 14 17	102·5	1 2·81
BREMEN	Piece of 48 grotes	W. 2 2	11 0	8 22 1	198·	2 3·64
BRUNSWICK	Rixdollar, *Convention*	W. 1 3	18 1	16 4 4	359·2	4 2·15
	Half rixdollar	W. 1 3	9 0½	8 2 2	179·6	2 1·07
	Gulden, or piece of ⅔, fine, of 1764	B. 0 16	8 10⅔	9 1 1	200·8	2 4·16
	Gulden, common, of 1764	W. 1 2	9 0	8 2 10	180·	2 1·23
	Gulden, ditto, of 1795	W. 2 2	11 1½	8 23 7	199·1	2 3·80
	Half gulden, or piece of ⅓, of 1764	W. 1 2	4 12	4 1 5	90·	1 0·96
DENMARK	Ryksdaler, specie, of 1798	W. 0 13	18 14	17 11 17	388·4	4 8·23
	New piece of 4 marks	W. 0 12	12 9	11 16 14	259·8	3 0·53
	Half ryksdaler	W. 0 13	9 7	8 17 8	194·2	2 3·11
	Mark, specie, or ⅙ ryksdaler	W. 3 1	4 0	2 21 12	64·4	0 7·39
	Rixdollar, specie, of Sleswig and Holstein (pieces of ⅔ and ⅓ in prop.)	W. 0 12	18 13	17 12 6	389·4	4 6·57
	Piece of 24 skillings	W. 4 7	5 2½	3 2 10	68·9	0 9·62
ENGLAND	Crown (*old*)	Stand.	19 8½	19 8 10	429·7	5 0·
	Half-crown	Stand.	9 16¼	9 16 5	214·8	2 6·
	Shilling	Stand.	3 21	3 21 0	85·9	1 0·
	Sixpence	Stand.	1 22½	1 22 10	42·9	0 6·
	Crown (*new*)	Stand.	18 4¼	18 4 7	403·6	4 8·56
	Half-crown	Stand.	9 2	9 2 4	201·8	2 4·18
	Shilling	Stand.	3 15¼	3 15 6	80·7	0 11·67
	Sixpence	Stand.	1 19¾	1 19 14	40·3	0 5·63
FRANCE	Ecu of 6 livres	W. 0 7	18 18	18 7 16	403·1	4 8·28
	Demi ecu	W. 0 7	9 9	9 1 18	201·5	2 4·13
	Piece of 24 sous (divisions in prop.)	W. 0 7	3 20	3 16 19	83·4	0 11·48
	Piece of 30 sous (½ in proportion)	W. 3 8	6 12	4 12 4	100·2	1 1·99
	Piece of 5 francs of the Convention	W. 0 10⅓	16 0	15 5 14	338·3	3 11·24
	Piece of 5 francs (Napoleon) of 1808	W. 0 7	16 1	15 12 4	344·9	4 0·16
	Piece of 2 francs of 1808	W. 0 7	6 11	6 6 2	138·8	1 7·68
	Franc of 1809	W. 0 7	3 5½	3 3 1	69·4	0 9·63
	Demi franc	W. 0 8½	1 15	4 13 6	34·7	0 4·84
	Franc (Louis) of 1818, same as franc of 1809.					
GENEVA	Patagon	W. 1 0	17 9	15 19 8	351·	4 1·46
	Piece of 15 sous of 1794	W. 2 6	2 1¼	1 15 1	36·1	0 5·04

* This value of the American eagle is taken from average assays of the coins of twelve years

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Silver.	Value in Sterling.
		Oz. dwt.	*Dwt. gr.*	*Dwt. gr. mi.*	*Grains.*	*s. d.*
GENOA	*Scudo, of 8 lire, of 1796 (½, ¼, &c. in proportion)*	W. 0 8	21 9	20 14 10	457·4	5 3·87
	Scudo of the Ligurian Republic	W. 0 9½	21 9	20 11 2	454·3	5 3·43
HAMBURGH	Rixdollar, specie	W. 0 10	18 18	17 21 12	397·5	4 7·49
	Double mark, or 32 schilling piece (single in proportion)	W. 2 3	11 18	9 11 8	210·3	2 5·36
	Piece of 8 schillings	W. 3 12	3 8¼	2 6 4	50·1	0 6·99
	Piece of 4 schillings	W. 4 6	2 2	1 6 12	28·3	0 3·95
HANOVER	Rixdollar, *Constitution*	W. 0 9	18 19	18 0 14	400·3	4 7·89
	Florin, or piece of ⅓, fine	B. 0 16	8 10	9 0 10	200·3	2 3·96
	Half florin, or piece of ⅙, ditto	B. 0 16	4 4	4 11 4	99·2	1 1·85
	Quarter, or piece of 6 good groschen, ditto	B. 0 16	2 1	2 4 10	48·6	0 6·78
	Florin, or piece of ⅓, base	W. 2 1	11 0¾	8 23 15	199·6	2 3·87
HESSE CASSEL	Rixdollar, *Convention*	W. 1 6	18 1	15 22 6	353·	4 1·39
	Florin, or piece of ⅓ (⅛ in proportion)	W. 1 6	9 0½	7 23 3	176·8	2 0·68
	Thaler of 1789	W. 0 10½	12 7¼	11 17 5	259·7	3 0·26
	Ecu, *Convention* (1815)	W. 1 6	17 23¾	15 21 2	349·3	4 0·77
	Bon gros	W. 6 14	1 4	0 11 5	10·3	0 1·43
HOLLAND	Ducatoon	B. 0 3	20 22	21 4 15	471·6	5 5·85
	Piece of 3 florins	W. 0 2	20 7	20 2 12	446·4	5 2·33
	Rixdollar (the assay varies)	W. 0 16	18 6	16 20 8	375·9	4 4·99
	Half rixdollar	W. 0 16	9 0	8 8 8	185·4	2 1·88
	Florin or guilder (⅛ in proportion)	W. 0 4½	6 18	6 14 14	146·8	1 8·49
	12 Stiver piece	W. 0 16½	4 12	4 3 18	92·4	1 0·90
	Florin of Batavia	W. 0 5½	6 13	6 9 2	141·6	1 7·77
	Rixdollar, or 50 stiver piece, of the kingdom of Holland	W. 0 5½	17 0	16 13 18	367·9	4 3·37
LUBEC	Rixdollar, specie	W. 0 13	18 8	17 15 12	391·9	4 6·72
	Double mark	W. 2 3	11 18	9 11 8	210·3	2 5·36
	Mark	W. 2 3	5 21	4 17 14	105·1	1 2·67
LUCCA	Scudo	W. 0 3	17 0	16 18 10	372·3	4 3·98
	Barbone	W. 3 3	1 20¼	1 7 14	29·3	0 4·09
MALTA	Ounce of 30 tari of Emmanuel Pinto	W. 2 5	19 1½	15 4 14	337·4	3 11·11
	2 Tari piece	W. 2 19	1 2	0 19 2	17·7	0 2·41
MILAN	Scudo of 6 lire (⅛ in proportion)	W. 0 7	14 20¾	14 9 10	319·6	3 8·62
	Lira, new	W. 4 10	4 0	2 9 0	52·8	0 7·37
	Lira, old	W. 0 3	2 10	2 9 4	52·9	0 7·38
	Scudo of the Cisalpine Republic	W. 0 7	14 21½	14 10 4	320·2	3 8·71
	Piece of 30 soldi of ditto	W. 2 18	4 17	3 11 8	77·2	0 10·78
MODENA	Scudo of 15 lire, 1739 (double, &c. in proportion)	W. 0 14	18 12½	17 8 9	385·2	4 5·78
	Scudo of 5 lire, of 1782	W. 0 3	5 19	5 17 2	126·8	1 5·70
	Scudo of 1796	W. 3 3	18 1¾	12 22 12	287·4	3 4·13
NAPLES	Ducat, new (⅛ in proportion)	W. 1 0	14 15	13 7 8	295·4	3 5·24
	Piece of 12 Carlini of 1791	W. 1 0	17 15	16 0 18	356·	4 1·71
	Ditto of 1796	W. 1 2	17 16¾	15 22 12	353·9	4 1·41
	Ditto of 1805 (⅛ in proportion)	W. 1 2	17 18¼	15 23 18	355·2	4 1·60
	Ditto of 10 Carlini (1818)	W. 1 2	14 18	13 7 0	295·1	3 5·20
NETHERLANDS	Ducatoon, old	B. 0 4	21 0	21 9 0	474·6	5 6·27
	Ducatoon of Maria Theresa	W. 0 14	21 10	20 1 12	445·5	5 2·20
	Crown (½, &c. in proportion)	W. 0 14	19 0	17 19 4	395·2	4 7·18
	5 Stiver piece	W. 6 3	3 4	1 9 18	31·3	0 4·37
	Florin of 1790	W. 0 14	5 23½	5 14 9	124·3	1 5·35
	Florin of 1816	W. 0 7½	6 22	6 16 6	148·4	1 8·72
	Half florin (with divisions in prop.)	W. 4 5½	5 11	3 9 2	75·	0 10·46
PARMA	Ducat of 1784	W. 0 9	16 11	15 18 18	350·6	4 0·95
	Ducat of 1796 (⅛ in proportion)	W. 0 5½	16 12¾	16 2 18	357·9	4 1·97
	Piece of 3 lire	W. 1 4	4 14	4 2 2	90·7	1 0·66
PIEDMONT	Scudo, 1755 (½, &c. in proportion)	W. 0 5½	22 14	22 0 10	488·9	5 8·26
	Scudo, 1770 (⅛ and ¼ in proportion)	W. 0 5	22 14	22 1 16	490·	5 8·42
	Piece of 2 lire (1714)	W. 0 4½	7 20½	7 16 13	170·8	1 11·85
	5 Franc piece (1801)	W. 0 8	16 1½	15 11 12	343·7	3 11·99
POLAND	Rixdollar, old	W. 1 2	18 1	16 6 0	360·8	4 2·38
	Rixdollar, new (1794)	W. 2 17	15 10½	11 11 6	254·3	2 11·51
	Florin, or gulden	W. 4 2	6 0	3 18 16	84·	0 11·72
PORTUGAL	New crusado (1690)	W. 0 4	11 0	10 19 0	239·2	2 9·40
	Ditto (1718)	W. 0 6½	9 8	9 1 0	200·2	2 3·95
	Ditto (1795)	W. 0 7	9 9	9 1 18	201·6	2 4·15
	Doze vintems, or piece of 240 rees (1799)	W. 0 7	4 16	4 12 10	100·4	1 2·01
	Testoon (1799)	W. 0 7	2 0½	1 22 18	43·4	0 6·06
	New crusado (1809)	W. 0 4	9 3	8 23 0	198·2	2 4·67
	Seis vintems, or piece of 120 rees (1802)	W. 0 9	2 4½	2 2 8	46·6	0 6·50
	Testoon (1802)	W. 0 9	2 0	1 22 0	42·5	0 5·93
	Tres vintems, or piece of 60 rees (1802)	W. 0 9	1 2¼	1 1 4	23·3	0 3·25
	Half testoon (1802)	W. 0 9	0 23	0 22 0	20·4	0 2·84
PORTUGUESE COLONIES	Piece of 8 macutes, of Portuguese Africa	W. 0 9	7 12	7 4 14	159·8	1 10·31
	Ditto of 6 ditto	W. 0 9	5 13	5 7 12	118·	1 4·47
	Ditto of 4 ditto	W. 0 9	3 16	3 12 8	78·1	0 10·90
PRUSSIA	*Rixdollar, Prussian currency, (⅓ in proportion)	W. 2 5	14 6½	11 9 0	252·6	2 11·27
	Rixdollar, *Convention*	W. 1 3	18 1	16 4 2	359·	4 2·13
	Florin, or piece of ⅓	W. 2 3	11 2	8 22 8	198·4	2 3·70

* The Prussian coins, having been debased at different periods, vary in their reports.

COINS.		Assay.	Weight.	Standard Weight.	Contents in Pure Silver.	Value in Sterling.
		Oz. dwt.	*Dwt. gr.*	*Dwt. gr. mi.*	*Grains.*	*s. d.*
	Florin of Silesia	W. 2 2	9 11	7 16 0	170·8	1 11·78
	Drittel, or piece of 8 good groschen	W. 3 3	5 8¾	3 20 4	85·3	0 11·91
	Piece of 6 groschen	W. 2 8	3 14	2 19 6	62·3	0 8·62
ROME	Scudo, or crown (coined since 1753)	W. 0 4	17 1	16 17 13	371·5	4 3·87
	Mezzo scudo, or half-crown	W. 0 4	8 12½	8 8 16	185·7	2 1·93
	Testone (1785)	W. 0 5	5 2	4 23 4	110·3	1 3·40
	Paolo (1785)	W. 0 4	1 17	1 16 4	37·2	0 5·19
	Grosso, or half Paolo (1785)	W. 0 5	0 20½	0 20 0	18·5	0 2·58
	Scudo of the Roman Republic (1799)	W. 0 6	17 1	16 13 18	368·1	4 3·40
RUSSIA	Ruble of Peter the Great	W. 2 7	18 1	14 1 8	312·1	3 7·58
	Ditto of Catherine I. (1725)	W. 2 4½	17 11	13 23 0	309·9	3 7·47
	Ditto of Peter II. (1727)	W. 2 12	18 5¾	13 23 4	310·	3 7·28
	Ditto of Anne (1734)	W. 1 11	16 14½	14 6 16	317·2	3 8·29
	Ditto of Elizabeth (1750)	W. 1 7	16 12	14 11 16	321·8	3 8·93
	Ditto of Peter III. (1762)	W. 2 2	15 10	12 12 0	277·5	3 2·75
	Ditto of Catherine II. (1780)	W. 2 4	15 12	12 10 6	275·9	3 2·52
	Ditto of Paul (1799)	W. 0 14	13 12	12 15 10	280·8	3 3·21
	Ditto of Alexander (1802)	W. 0 13	13 1½	17 7 2	273·	3 2·12
	Ditto of ditto (1805)	W. 0 16	13 12	12 12 12	278·1	3 2·83
	20 Copeck piece (1767)	W. 2 2	3 10¾	2 19 0	62·6	0 8·74
	Ditto (1784)	W. 2 2	3 3	2 12 18	56·2	0 7·84
	15 Copeck piece (1778)	W. 2 2	2 6	1 19 18	40·5	0 5·65
	10 Copeck piece	W. 2 6	2 1	1 14 16	35·9	0 5·11
	Ditto (1798)	W. 0 14½	1 9	1 6 16	28·5	0 3·97
	Ditto (1802)	W. 0 13	1 8⅛	1 6 11	28·3	0 3·95
	5 Copeck piece (1801)	W. 0 13½	0 16⅛	0 15 10	15·3	0 2·13
SARDINIA	Scudo, or crown (⅓ and ¼ in prop.)	W. 0 7	15 2½	14 15 0	324·7	3 9·34
SAXONY	Rix-dollar, *Convention* (⅓ and ¼ in proportion)	W. 1 3	18 0	16 3 4	358·2	4 2·01
	Piece of 16 groschen of Leipsic	W. 2 2	9 9½	7 14 16	169·1	1 11·61
	Rixdollar current of Saxe Gotha	W. 4 4½	18 1	11 4 2	248·1	2 10·64
	⅛ Thaler of 1804	W. 4 11	3 11	2 0 19	45·3	0 6·32
	Ditto of 1808	W. 4 11½	3 5½	1 21 8	42·1	0 5·87
	Ditto of Jerome Bonaparte of 1809	W. 5 4	3 17	1 23 6	43·7	0 6·10
SICILY	Scudo (½ in proportion)	W. 1 4	17 14	15 16 6	348·2	4 0·62
	Piece of 40 grains	W. 1 2	5 21	5 7 2	117·5	1 4·40
SPAIN	*Dollar, of late coinage	W. 0 8	17 8	16 17 0	370·9	4 3·79
	Half dollar, ditto	W. 0 8	8 16	8 8 10	185·4	2 1·89
	Mexican peceta (1774)	W. 0 8	4 7½	4 3 16	92·3	1 0·88
	Real of Mexican plate (1775)	W. 0 8	2 3¾	2 1 20	46·1	0 6·43
	Peceta provincial of 2 reals of new plate (1775)	W. 1 9⅓	3 18	3 6 0	72·2	0 10·08
	Real of new plate (1795)	W. 1 9⅓	1 21	1 15 0	36·1	0 5·04
SWEDEN	Rixdollar (1762)	W. 0 12	18 20	17 19 10	395·5	4 7·22
	Rixdollar of late coinage	W. 0 14⅕	18 17	17 12 0	388·5	4 6·25
SWITZERLAND	Ecu, or rixdollar of Lucerne, ½, &c. in proportion (1715)	W. 0 14½	17 8½	16 5 8	360·1	4 2·28
	Old gulden, or florin of Lucerne (1714)	W. 1 19	8 14½	7 2 8	157·5	1 9·29
	Ecu of 40 batzen of Lucerne (1796)	W. 0 5	19 0	18 13 14	412·3	4 9·57
	Half ditto	W. 1 2	9 20	8 20 12	196·7	2 3·46
	Florin, or piece of 40 schillings of Lucerne (1793)	W. 1 5	4 22	4 8 14	96·8	1 1·51
	Ecu of 40 batzen of the Helvetic Republic, 1798 (½ in proportion)	W. 0 6	18 23	18 10 14	409·5	4 9·18
	Ecu of 4 franken (1801)	W. 0 7	18 23	18 8 12	407·6	4 9·18
TURKEY	Piastre of Selim of 1801	W. 5 6	8 6	4 7 8	95·7	1 1·22
	Piastre of Crim Tartary (1778)	W. 6 13	10 5	4 2 4	90·9	1 0·62
	Piastre of Tunis (1787)	W. 6 5½	10 0	4 8 6	96·5	1 1·47
	Piastre (1818)	W. 5 14	6 6½	3 1 4	67·7	0 9·43
TUSCANY	Piece of 10 Paoli of the Kingdom of Etruria (1801)	W. 0 4	17 13⅓	17 5 18	382·9	4 3·46
	Scudo Pisa of ditto (1803)	W. 0 2	17 12	17 8 4	385·0	4 3·71
	Piece of 10 lire ditto (1803)	B. 0 7	25 6	26 1 12	578·7	6 8·60
	Lira (1803)	B. 0 7	2 8	2 9 16	53·4	0 7·46
UNITED STATES	†Dollar, 1795 (½, &c. in proportion)	W. 0 6⅓	17 8	16 19 16	373·5	4 4·15
	Dollar (1798)	W. 0 7	17 10½	16 21 6	374·9	4 4·32
	Dollar (1802)	W. 0 10⅓	17 10	16 14 0	368·3	4 3·68
	Dollar, an average of 8 years	W. 0 8⅔	17 8	16 16 0	370·1	4 3·71
	Dime, or one-tenth dollar (1796)	W. 0 4	1 19⅓	1 18 14	39·5	0 3·71
	Half dime (1796)	W. 0 7	0 21¾	0 21 0	19·5	0 4·36
VENICE	Piece of 2 lire, or 24 creutzers (1800)	W. 8 4½	5 19⅓	1 12 2	33·4	
	Ditto of 2 lire, called moneta provinciale (1808)	W. 8 3	5 13⅓	1 11 8	32·8	0 4·38
	Ditto of 2 lire, 1802 (½ and ¼ in prop.)	W. 8 4	5 6¼	1 8 19	30·5	0 4·15
WIRTEMBERG	Rixdollar, specie	W. 1 3	18 1	16 14 2	359·1	4 2·14
	Copftsuck	W. 4 2	4 16⅓	2 16 12	59·8	0 8·25
EAST INDIES.						
	Rupee Sicca, coined by the East India Company at Calcutta	B. 0 13	7 11⅓	7 22 0	175·8	2 0·54
	Calcutta (1818)	Stand.	8 0	8 0 0	175·9	2 0·56
	Bombay, new, or Surat (1818)	W. 0 0¼	7 11	7 10 4	164·7	1 11·01
	Fanam, Cananore	W. 0 1¼	1 11¾	1 11 10	32·9	0 4·5
	Bombay, old	B. 0 13	1 11¾	1 13 16	35·	0 4·8
	Pondicherry	B. 0 5⅓	1 0⅔	1 1 2	22·8	0 3·18
	Ditto, double	W. 0 3	1 18¾	1 18 2	39·	0 5·44
	Gulden of the Dutch E. I. Co. (1820)	W. 0 7⅓	6 22	6 16 6	148·4	1 8·71

* This is the coin which is universally circulated under the name of the Spanish dollar.

† The American dollars, and inferior silver pieces of late coinage, vary in fineness from W. 4 dwts. to W. 9⅓ dwts.

The sterling value of the foreign coins, in the foregoing tables, has been computed from the assays as follows: — Let it be required to assign the value in sterling, of a French double Louis d'or coined since 1786, the assay master's report being as follows: — "Weight, 9 dwts. 20 grs.; assay W. $1\frac{1}{2}$ grs.," that is, 0 car. $1\frac{1}{2}$ grs. worse than the English standard. We proceed as under: —

From	22 car.	0 gr. the fineness of English standard gold,
Take	0	$1\frac{1}{2}$ gr.
Remains	21	$2\frac{1}{2}$

Then, as 22 car. : 21 car. $2\frac{1}{2}$ grs. :: 9 dwts. 20 grs. : 9 dwts. 16 grs., the standard gold contained in the Louis d'or; and hence, as 1 oz. : 3*l.* 17*s.* $10\frac{1}{2}$*d.* :: 9 dwts. 16 grs. : 1*l.* 17*s.* $7\frac{1}{2}$*d.*, the value of the Louis in sterling money, and so for any of the other coins.

Ancient Coins. — We subjoin, for the convenience of such of our readers as may at any time have occasion to consult works in which reference is made to ancient coins, the following tables of those that were principally current among the Jews, Greeks, and Romans. They were calculated by Dr. Arbuthnot (*Tables of Ancient Coins, Weights, &c.* 4to ed. Lond. 1754.), and do not differ materially from the tables of Paucton, whose *Métrologie* (4to. Paris, 1780.) is the most complete and elaborate work that has ever been published with respect to ancient monies, weights, and measures. At the same time we confess we should not be disposed to place much reliance on these tables, and we have elsewhere stated our reasons for holding this opinion. — (Art. *Money, Supp. to Encyc. Britannica.*)

Jewish Coins.

Names and Proportions.	Value in Sterling. £	s.	d.
Gerah	0	0	$1\frac{59}{160}$
10 Bekah	0	1	$1\frac{1}{16}$
20 — 2 Shekel	0	2	$3\frac{3}{8}$
1,200 — 120 — 50 Maneh or Mina Hebraica	5	14	$0\frac{3}{4}$
60,000 — 6,000 — 3,000 — 60 Talent	342	3	9
Solidus aureus, or sextula, worth	0	12	$0\frac{1}{2}$
Siclus aureus, worth	1	16	6
A talent of gold, worth	5,475	0	0

Grecian Coins.

	Sterling. s.	d.	grs.
Lepton	0	0	$0\frac{31}{336}$
7 Chalcus	0	0	$0\frac{31}{48}$
14 — 2 Dichalcus	0	0	$1\frac{7}{24}$
28 — 4 — 2 Hemiobolum	0	0	$2\frac{7}{12}$
56 — 8 — 4 — 2 Obolus	0	1	$1\frac{1}{6}$
112 — 16 — 8 — 4 — 2 Diobolum	0	2	$2\frac{1}{3}$
224 — 32 — 16 — 8 — 4 — 2 Tetrobolum	0	5	$0\frac{2}{3}$
336 — 48 — 24 — 12 — 6 — 3 — $1\frac{1}{2}$ Drachma	0	7	3
662 — 96 — 48 — 24 — 12 — 6 — 3 — 2 Didrachma	1	3	2
1,324 — 112 — 96 — 48 — 24 — 12 — 6 — 4 — 2 Tetradrachma	2	7	0
1,660 — 384 — 120 — 60 — 30 — 15 — $7\frac{1}{2}$ — 5 — $2\frac{1}{2}$ — $1\frac{1}{4}$ Pentadrachma	3	2	3

Of these, the drachma and didrachma were of silver; the rest, for the most part, of brass.

The drachma is here, with the generality of authors, supposed equal to the denarius: though there is reason to believe that the drachma was somewhat the weightier.

	Value in Sterling. £	s.	d.
The Grecian gold coin was the stater aureus, weighing 2 Attic drachms, or half of the stater argenteus; and exchanging usually for 25 Attic drachmas of silver	0	16	$1\frac{3}{4}$
But according to our proportion of gold to silver it was worth	1	0	9
There were likewise the stater Cyzicenus, exchanging for 28 Attic drachmas, or	0	18	1
The stater Philippicus, and stater Alexandrinus, were of the same value.			
Stater Daricus, according to Josephus, worth 50 Attic drachmas, or	1	12	$3\frac{1}{2}$
Stater Crœsius, of the same value.			

Value and Proportion of the Roman Coins.

	Sterling. s.	d.	grs.
Teruncius	0	0	$0\frac{775}{1000}$
2 Sembella	0	0	$1\frac{55}{100}$
4 — 2 Libella or As	0	0	$3\frac{1}{10}$
10 — 5 — $2\frac{1}{2}$ Sestertius	0	1	$3\frac{3}{4}$
20 — 10 — 5 — 2 Quinarius or Victoriatus	0	3	$3\frac{1}{2}$
40 — 20 — 10 — 4 — 2 Denarius	0	7	3

	£	s.	d.
The Roman gold coin, or aureus, weighed generally double the denarius; its value, according to the proportion of gold to silver, mentioned by Pliny, was	1	4	3¾
According to the proportion that now obtains amongst us	1	0	9
According to the decuple proportion mentioned by Livy and Julius Pollux	0	12	11
According to the proportion mentioned by Tacitus, by which the aureus exchanged for 25 denarii, its value	0	16	1¾

COIR, a species of yarn manufactured out of the husk of cocoa nuts. The husks being steeped in water, the dry dusty substance mixed with the fibres is separated. These are afterwards spun into yarn, and manufactured into cordage, that is deemed by some superior to that made of hemp. The goodness of coir depends on the fineness of the filaments, and on their being of a bright yellow colour. About 3,000,000 lbs. weight are annually exported from Ceylon, principally to Calcutta, and other ports in the East Indies. It is also prepared in the Maldive Islands, and many other places; and is very extensively used throughout the East. — (*Bertolacci's Ceylon; Bell's Commerce of Bengal, &c.*)

COLOCYNTHIS, COLOQUINTIDA, OR BITTER CUCUMBER (Ger. *Koloquinten*; Du. *Bitter-appelen*; Fr. *Coloquintes*; It. *Coloquintida*; Sp. *Coloquintidas*; Arab. and Pers. *Hunzil*), the produce of an annual plant (*Cucumis colocynthis* Lin.) growing in Turkey, Nubia, India, and other places, much resembling the cucumber in herbage. When ripe, the fruit is peeled and dried in a stove; and in this state is brought to England. It is inodorous, but has an extremely bitter, nauseous taste. It is an exceedingly powerful drastic cathartic. When it is larger than a St. Michael's orange, and has black acute pointed ends, it is not good. — (*Ainslie's Materia Indica.*)

COLONIES. — COLONY TRADE. — *Colonies* are establishments founded in foreign countries by individuals who either voluntarily emigrate from, or are forcibly sent abroad by, their mother country. The *colony trade* is the trade carried on between colonies and their parent states.

I. ESTABLISHMENT OF COLONIES.
II. INFLUENCE OF THE MONOPOLY OF THE COLONY TRADE. — SLAVERY.
III. MAGNITUDE, POPULATION, TRADE, &c. OF BRITISH COLONIES.
IV. REGULATIONS UNDER WHICH COLONY TRADE IS CONDUCTED. — DISPOSAL OF LAND IN THE COLONIES, &c.
V. FOREIGN COLONIES.

I. ESTABLISHMENT OF COLONIES.

(1.) *Greek Colonies.* — Various motives have, in different countries and ages, led to the formation of colonies. * The Greek colonies of antiquity seem to have been chiefly founded by citizens whom the violence and fury of contending factions forced to leave their native land; but they were sometimes formed for the purpose of relieving the mother country of a redundant population, and sometimes also for the purpose of extending the sphere of commercial transactions, or of providing for their security. The relations between the mother country and the colony depended, in a great measure, on the motives which led to the establishment of the latter. When a colony was founded by fugitives, forcibly expelled from their ancient homes; or when it was founded, as was frequently the case, by bodies of voluntary emigrants, who received no assistance from, and were in no respect controlled by, the parent state, it was from the first independent: and even in those rarer cases in which the emigration was conducted under the superintendence of the parent city, and when the colony was protected by her power and influence, the dependence was, mostly, far from being absolute and complete. The great bulk of the Greek colonies were really independent states; and though they commonly regarded the land of their forefathers with filial respect, though they yielded to its citizens the place of distinction at public games and religious solemnities, and were expected to assist them in time of war, they did so as allies only, on fair and equal terms, and never as subjects. Owing to the freedom of their institutions, and their superiority in the arts of civilised life to the native inhabitants of the countries among whom they were generally placed, these colonies rose, in a comparatively short period, to a high pitch of opulence and refinement; and many among them, as Miletus and Ephesus in Asia Minor, Syracuse and Agrigentum in Sicily, and Tarentum and Locri in Italy, not only equalled, but greatly surpassed, their mother cities in wealth and power.

* Seneca has given, in a few words, a very clear and accurate statement of the different motives that induced the ancients to found colonies. — "*Nec omnibus eadem causa relinquendi quærendique patriam fuit. Alios excidia urbium suarum, hostilibus armis elapsos, in aliena, spoliatos suis, expulerunt: Alios domestica seditio submovit: Alios nimia superfluentis populi frequentia, ad exonerandas vires, emisit: Alios pestilentia, aut frequens terrarum hiatus, aut aliqua intoleranda infelicis soli ejecerunt: Quosdam fertilis oræ, et in majus laudatæ, fama corrupit: Alios alia causa excivit domibus suis.*" — (Consol. ad Helviam, c. 6.)

(2.) *Roman Colonies.* — The Roman colonies were, for the most part, founded by and under the authority of government; being intended to serve both as outlets for poor and discontented citizens, and as military stations, or garrisons, to secure the subjection of the conquered provinces over which they were scattered. The most intimate political union was always maintained between them and the mother city. Their internal government was modelled on that of Rome; and, while their superior officers were mostly sent from the capital, they were made to contribute their full quota of troops and taxes, to assist in carrying on the contests in which the Republic was almost constantly engaged.

(3.) *Spanish Colonies.* — The early colonies of most modern nations were founded by private adventurers, influenced either by the hope of gain, or by a desire to escape from religious persecution, without any wish to relieve the mother country of a surplus population, or to bridle subjugated provinces. On their first institution, therefore, the modern colonies approached, though with some essential variations, more nearly to the Grecian than the Roman model — but the period of their freedom was of very limited duration. They were very soon subjected to laws and regulations framed in the metropolis, and calculated, as was to be supposed, rather to promote its interests than those of the colony. At a somewhat later period the foundation of colonial establishments was eagerly patronised by most European governments, in the view of extending commerce, and of enriching the mother country, by securing to her the exclusive possession of the market of distant countries; and where, from the thinness of the aboriginal population, or their inferiority in the arts of civilised life, the colonists were enabled to amass fortunes with comparative rapidity.

The Spaniards who first resorted to America after its discovery, had no intention of settling in the country, or of colonising it. The idea that gold and silver alone constituted wealth was then universally prevalent; and the bold and enterprising companions and followers of Columbus, instead of engaging in industrious undertakings, which they neither understood nor relished, sought only to enrich themselves by plundering the feeble and defenceless natives of the gold and silver in their possession, and of the abundance of which the most exaggerated accounts were immediately spread throughout Europe. When new adventurers arrived on an unknown coast, their single inquiry was, whether it abounded in gold. If it did, they remained, for some time at least, in the country; if not, they immediately set sail for some other quarter. *Auri rabida sitis a cultura Hispanos divertit*, is the expressive statement of a contemporary writer (Petrus Martyrus, in the *Novus Orbis* of Grynæus, p. 511.). The slow progress of the Spanish colonies, after their first discovery, must principally be ascribed to this cause. The gold and silver accumulated by the natives were very soon exhausted; and the skill and energy of the successive swarms of adventurers, who continued to pour into the country, were principally directed to the unproductive and generally ruinous trade of mining. The few large fortunes that were made in this way, like the large prizes in a lottery, inflamed the cupidity of the multitude, and gave an appearance of credibility to the fabulous accounts of the excessive productiveness of the mines. After the gambling spirit which had exclusively actuated the early adventurers had begun to subside, the colonists gradually betook themselves to agricultural and commercial pursuits: and the vast variety of valuable productions with which Mexico and the other Spanish colonies abound, the extreme richness of their soil, and their advantageous situation, would, had they been only tolerably well governed, have occasioned their rapid increase in wealth and civilisation. But a blind and intolerant despotism paralysed their energies, and fettered and retarded their progress. All the abuses and defects of the government of Old Spain were transferred to, and multiplied in, the colonies. The whole property of those vast regions was considered as vested in the crown of Spain; and every law or regulation, whether of a local or general nature, affecting their government, emanated from the council of the Indies, in which it was supposed the king was always present. We cannot stop to describe the sort of regulations to which the colonists were subjected with any degree of minuteness; but we may notice a few of them, to furnish the means of judging of their general spirit and probable effect. It was, for example, made a *capital* offence to carry on any intercourse with foreigners; and the inhabitants of the different colonies were even forbidden any intercourse with each other, unless under the strictest and most vexatious regulations. There were several articles, such as flax, hemp, and wine, which they were not permitted to cultivate; at the same time that the crown reserved to itself the monopoly of salt, tobacco, gunpowder, and some other less important articles. The alcavala, and other oppressive imposts, which had proved destructive of industry in Old Spain, were rigorously levied as well on the exports as on the imports of the colonies. No situation of power or emolument could be filled except by a native of Old Spain. The Catholic religion was established, to the exclusion of every other; and bishops, tithes, and the inquisition, followed in its train: while, in order still better to consolidate and strengthen the foundations of this monstrous despotism, the government

endeavoured to make the colonists insensible of their degradation, by proscribing every species of instruction, and watchfully opposing the introduction and progress of all useful knowledge!

Under such circumstances, we cannot be surprised that the Continental colonists, among whom the monopoly system was maintained in its greatest purity, should have languished for above two centuries in a state of sluggish inactivity. Though surrounded by all the means of producing wealth, they were not generally wealthy. Oppression rendered them indolent; and went far to deprive them not only of the power, but also of the wish, to emerge from poverty. The progress of the colonists who occupied the West India islands was not quite so slow. It is certain, however, that down to the middle of last century, Spain reaped no greater advantage from the possession of Cuba, Hispaniola, and Porto Rico, than England or France from the smallest of its dependencies. In proof of this we may mention, that the noble island of Cuba, which could without difficulty supply all Europe with sugar, did not, in 1750, produce a sufficient quantity even for the consumption of Old Spain. But the combined influence of an arbitrary and intolerant government, and of a degrading superstition, could not balance the means of improvement, which the fertility of the soil, and the command thence arising over most of the necessaries and many of the conveniences of life, gave to the colonists. Owing also to the total incapacity of Old Spain to furnish her transatlantic provinces with a sufficient supply of the articles she had forced them to import from Europe, and the consequent extension of the contraband trade carried on with them by the other European nations, she had been compelled gradually to relax the severity of her commercial monopoly. A new impulse was thus given to the spirit of industry. The colonists began to be more sensible of the natural advantages of their situation, and less inclined to submit to the blind and bigoted policy of the Spanish court. In 1781, a rebellion broke out in Peru, in consequence of an attempt made by the government to establish a new monopoly in that province, which threatened to end in the total dissolution of the connection between Spain and South America, and was not quelled without great difficulty and much bloodshed. But the spirit of liberty, when once excited, could not be suppressed. It continued to gain ground progressively, until the commencement of the late contest between France and Spain interrupted the communication with the mother country, and gave the colonists an opportunity of proclaiming that independence which, after a lengthened and bloody struggle, they happily succeeded in achieving.

(4.) *British Colonies.* — The English, who, like all the other nations of Europe, had been impressed with mingled feelings of admiration and envy by the extent and importance of the acquisitions made by the Spaniards in the New World, speedily entered with enthusiasm and ardour into the career of discovery. Owing, however, to the bull which Ferdinand and Isabella had obtained from the Pope, conveying to them the ample donation of all the countries inhabited by infidels that the Spaniards had discovered, or might discover, the English, to avoid encroaching on the dominions of their rivals, directed their efforts further to the north. Several attempts to found colonies on the coast of America were made in the reign of Elizabeth by Sir Humphrey Gilbert, Sir Richard Grenville, Sir Walter Raleigh, and others. But in consequence of their ignorance of the country, the deficiency of their supplies of provisions, the loss of time in fruitless searches after gold, and the various difficulties incident to the first settlement of a colony, none of these attempts proved successful: and it was not until 1607, that a small body of adventurers founded the first permanent establishment of the English in America, at James Town in Virginia. Letters patent were granted in 1609, by King James, to the principal persons resident in London, by whom the expense attending the formation of the colony was to be defrayed, incorporating them into a company, and establishing a council in England for the direction of their proceedings, the members of which were to be chosen by, and removeable at the pleasure of, the majority of the partners of the company; permitting whatever was necessary for the support and sustenance of the colony for the first 7 years to be exported free of duty; declaring that the colonists and their descendants were to be secured in all the rights and privileges of Englishmen, the same as if they had remained at home, or been born in England; and reserving only, as the stipulated price of these concessions, and in imitation of the policy of the Spaniards, *one fifth* part of the gold and silver ore to be found in the colonies, which was to be paid to his Majesty and his successors in all time to come. In virtue of these powers, the company issued, in 1621, a charter or ordinance, which gave a legal and permanent form to the constitution of the colony. By this charter the supreme legislative authority was lodged, partly in the governor, who held the place of the sovereign, partly in a council of state named by the company, and partly in a general council, or assembly composed of the representatives of the people, in which were vested powers and privileges similar to those of the House of Commons. It was not long, however, before the king and the company quarrelled. The latter were in consequence divested of all their rights, partly by open violence, and

partly under colour of law, without compensation, after having expended upwards of 150,000*l.* in founding the colony; and a governor and council of state appointed by the king succeeded to the powers of those appointed by the committee. — (*Robertson's History of America*, book ix. *passim*; *Jefferson's Notes on Virginia*, p. 179.)

The founders of the colony in Virginia had been actuated solely by the hopes of gain: but the colonies that were soon after established in New England, were chiefly planted by men who fled from religious and political persecution. The form of government in the New England colonies, though at first modified a good deal by the peculiar religious opinions entertained by the colonists, was in its leading principles essentially free. For a considerable period, the colonists elected their own governors, coined money, and exercised most of the rights of sovereignty; while the English, wholly engrossed with the contest between freedom and prerogative at home, had no leisure to attend to their proceedings. Subsequently to the Restoration, however, the governments of most of the New England states were established nearly on the same footing as that of Virginia; which, indeed, became the favourite model, not only for the constitution of the colonies established on the Continent, with the exception of the proprietary governments of Pennsylvania and Maryland, but also for those that were established in the West India islands. But under every vicissitude of government and fortune, the New England colonists were distinguished by the same ardent and enthusiastic love of liberty that had first induced them to quit their native land. Every thing relating to the internal regulation and administration of the different colonies was determined, in the colonial assemblies, by representatives freely chosen by the settlers. The personal liberty of the citizens was well secured and vigilantly protected. And if we except the restraints on their commerce, the monopoly of which was jealously guarded by the mother country, the inhabitants of Virginia, Pennsylvania, and New England, enjoyed nearly the same degree of freedom, when colonists of England, that they now enjoy as citizens of the powerful republic of North America. Their progress in wealth and population was in consequence quite unprecedented in the history of the world. The white population of the colonies had increased in 1776, at the commencement of the revolutionary war, to above 2,000,000, and the value of the exports from Great Britain to them amounted to about 1,300,000*l.* a year!

It is not difficult to discover the causes of the unexampled prosperity and rapid growth of our North American colonies, and generally of all colonies placed under similar circumstances. The North American colonists carried with them a knowledge of the arts and sciences practised by a civilised and polished people. They had been trained from their infancy to habits of industry and subordination. They were practically acquainted with the best and wisest form of civil polity that had been established in Europe; and they were placed in a situation that enabled them, without difficulty, to remedy its defects, and to try every institution by the test of utility. But the thinness of the aboriginal population, and the consequent facility of obtaining inexhaustible supplies of fertile and unoccupied land, must certainly be placed at the head of all the causes which have promoted the rapid increase of wealth and population in the United States, and in all the other colonies both of North and South America. On the first foundation of a colony, and for long after, each colonist gets an ample supply of land of the *best quality*; and having no rent, and scarcely any taxes, to pay, his industry necessarily becomes exceedingly productive, and he has every means, and every motive, to amass capital. In consequence, he is eager to collect labourers from all quarters, and is both willing and able to reward them with high wages. But these high wages afford the means of accumulation, and, joined to the plenty and cheapness of the land, speedily change the more industrious labourers into proprietors, and enable them, in their turn, to become the employers of fresh labourers; so that every class participates in the general improvement, and capital and population advance with a rapidity hardly conceivable in old settled and fully peopled countries.

It has been frequently said, that the establishment of our American and West India colonies was a device of the supporters of the exclusive or mercantile system — that they founded them in the view of raising up a vast agricultural population, whose commerce should be confined entirely to an exchange of their raw products for our manufactured goods. There is, however, no truth in these assertions. On the contrary, the charters granted to the founders of the settlement in Virginia distinctly *empower the colonists to carry on a direct intercourse with foreign states.* Nor were they slow to avail themselves of this permission; for they had, so early as 1620, established tobacco warehouses in Middleburgh and Flushing — (*Robertson's America*, book ix. p. 104.); and the subsequent proceedings of the British government, depriving them of this freedom of commerce, were the chief cause of those disputes, which broke out, in 1676, in an open rebellion of ominous and threatening import. — (*Robertson's America*, p. 147.) It was not until the colonists had surmounted the difficulties and hardships incident to their first establishment, and had begun to increase rapidly in wealth, that their commerce

became an object of importance, and that regulations were framed in the view of restricting its freedom, and of rendering it peculiarly advantageous to the mother country. The act of 1650, passed by the republican parliament, laid the first foundations of the monopoly system, by confining the import and export trade of the colonies exclusively to British or colony built ships. But the famous Navigation Act of 1660 (12 Charles 2. c. 18.) went much further. It enacted, that certain specified articles, the produce of the colonies, and since well known in commerce by the name of *enumerated* articles, should not be exported directly from the colonies to any foreign country; but that they should first be sent to Britain, and there unladen (the words of the act are, *laid upon the shore*), before they could be forwarded to their final destination. Sugar, molasses, ginger, fustic, tobacco, cotton, and indigo, were originally enumerated; and the list was subsequently enlarged by the addition of coffee, hides and skins, iron, corn, lumber, &c. In 1739, the monopoly system was so far relaxed, that sugars were permitted to be carried directly from the British plantations to any port or place southward of Cape Finisterre; but the conditions under which this indulgence was granted, continued so strict and numerous down to 1803, when they were a good deal simplified, as to render it in a great degree nugatory — (*Edwards's West Indies*, vol. ii. p. 452. ed. 1819.); and with this exception, the oppressive and vexatious restrictions on their direct exportation to foreign countries were maintained on most of the other *enumerated* commodities of any importance, down to the recent alterations.

But besides compelling the colonists to *sell* their produce exclusively in the English markets, it was next thought advisable to oblige them to *buy* such foreign articles as they might stand in need of entirely from the merchants and manufacturers of England. For this purpose it was enacted, in 1663, that "no commodity of the growth, production, or manufacture of Europe, shall be imported into the British plantations, but such as are laden and put on board in England, Wales, or Berwick-upon-Tweed, and in English built shipping, whereof the master and three fourths of the crew are English." The preamble to this statute, which effectually excluded the colonists from every market for European produce, except that of England, assigns the motive for this restriction to be, "the maintaining a greater correspondence and kindness between the subjects at home and those in the plantations; keeping the colonies in a firmer dependence on the mother country; making them yet more beneficial to it, in the further employment and increase of English shipping, and the vent of English manufactures and commodities; rendering the navigation to and from them more safe and cheap; and making this kingdom a staple, not only of the commodities of the plantations, but also of the commodities of other countries and places for their supply; it being the usage of other nations to keep their plantation trade exclusively to themselves."

It was also a leading principle in the system of colonial policy, adopted as well by England as by the other European nations, to discourage all attempts to manufacture such articles in the colonies as could be provided for them by the mother country. The history of our colonial system is full of efforts of this sort; and so essential was this principle deemed to the idea of a colony, that Lord Chatham did not hesitate to declare, in his place in parliament, that "the British colonists of North America had *no* RIGHT *to manufacture even a nail for a horseshoe!*" — (*Edwards's West Indies*, vol. ii. p. 566.) And when such were the enactments made by the legislature, and such the avowed sentiments of a great parliamentary leader and a friend to the colonies, we need not be surprised at a declaration of the late Lord Sheffield, who did no more, indeed, than express the opinion of almost all the merchants and politicians of his time, when he affirmed that "THE ONLY *use of American colonies or West India islands is* THE MONOPOLY *of their consumption, and the carriage of their produce!*"

II. INFLUENCE OF THE MONOPOLY OF THE COLONY TRADE. — SLAVERY.

It is not necessary to enter into any lengthened disquisitions with respect to this part of our subject. The rules by which we are to form our judgment upon it, are unfolded in the article COMMERCE. Here it is sufficient to observe, in the first place, that, though it could be shown that restrictions on the colony trade were really advantageous to the mother country, that is not enough to prove that they should be adopted. In dealing with a colony, we are not dealing with a foreign country, but with an integral part of our own empire. And hence, in order to show that restrictions on the colony trade are advantageous, it must not merely be shown that they are beneficial to the mother country, but it must further be shown that they are beneficial, or, at all events, not injurious, to the colony. The advantage of one part of the empire is not to be purchased by the depression of some other part. The duty of government is to promote the prosperity, and to maintain the equal rights and privileges of all; not to enrich one class, or one province, at the expense of others.

This principle is decisive of the whole question. Owing to the identity of language, manners, and religion, the merchants of the mother country must always have very great

advantages in the colony markets; and if the commodities which they have to sell be about as suitable for them, and as low priced, as those of others, none else will be imported into them; but if they be not, it would plainly be to the injury of the colony to compel her to buy from the mother country what she might procure cheaper from others. It will immediately be seen that such forced sale could be of no real advantage to the mother country; but whether that were so or not, its mischievous influence upon the colony is manifest. Were Jamaica, for example, obliged to import any article from England which cost her 100,000*l.* a year more than she could procure a similar article for elsewhere, she would manifestly lose this amount; and though it were true that every shilling of this sum found its way as *extra profit* into the pockets of the merchants or manufacturers of England, that would be no sufficient justification of the policy of such a system. The protection due by a government to its subjects does not depend on the varying degrees of latitude and longitude under which they happen to live. It would not be more glaringly unjust to lay peculiar burdens on the Lothians for the sake of Middlesex, than it is to lay them on Jamaica for the sake of England.

In point of fact, however, the monopoly of the colony trade is of no real use, but the reverse, to the mother country. If, as has been already observed, she can supply her colonists with goods as cheaply as they can be supplied by others, she will have no competitors in their markets; and if she cannot do this, the monopoly is really hostile to her interests. Each country has some natural or acquired capabilities that enable her to carry on certain branches of industry more advantageously than any one else. But the fact of a country being liable to be undersold in the markets of her colonies, shows conclusively, that instead, of having any superiority, she labours under a disadvantage, as compared with others, in the production of the peculiar articles in demand in them. And hence, in providing a forced market in the colonies for articles that we should not otherwise be able to dispose of, we really engage a portion of the capital and labour of the country in a less advantageous channel than that into which it would naturally have flowed. We impress upon it an artificial direction; and withdraw it from those secure and really beneficial businesses in which it would have been employed, to engage it in businesses the existence of which depends only on the continuance of oppressive regulations, and in which we are surpassed by foreigners.

Even were it conceded that the possession of an outlet in the colonies for goods that could not otherwise be disposed of, was an advantage, it is one that can exist in theory only. Practically it can never be realised. The interests of the colonists, and the dexterity and devices of the smuggler, are too much for Custom-house regulations. Cheap goods never fail of making their way through every obstacle. All the tyrannical laws and *guarda costas* of Old Spain did not hinder her colonies from being glutted with prohibited commodities. And we may be assured that the moment a competitor appears in the field capable of supplying the Canadians and people of Jamaica with cottons, woollens, hardware, &c. cheaper than we can supply them, that moment will they cease to be our customers. All the revenue officers, and all the ships of England, supposing them to be employed for that purpose, would be unable to avert this result.

The consequences of the American war ought to have led to sounder opinions than those that are still current as to the value of the monopoly of the colony trade. Has the independence of the United States been in any respect injurious to us? So far from this, it is certain that it has redounded materially to our advantage. We have been relieved from the expense and trouble of governing extensive countries at a great distance from our shores, at the same time that we have continued to reap all the advantage that we previously reaped from our intercourse with them. It is visionary to imagine that we could have succeeded either in preventing them from establishing manufactories at home, or from importing products from abroad, had any one been able to undersell us. Our command of the American market depends, at this moment, on the very same principle —the comparative cheapness of our goods—on which it depended when we had a governor in every state. So long as we preserve this advantage, we preserve the only means by which the monopoly of any distant market can be maintained, and the only means by which such monopoly is rendered of the least advantage.

But it is not to be supposed that, because restrictions on the trade of colonies can be of no real advantage to their mother countries, they are not often very injurious to them and to the colonies. We could not, however anxious, exclude manufactured articles, and such foreign goods as are valuable without being very bulky, from our West India islands, provided they were offered cheaper by others. But such is not the case with lumber, provisions, &c. They are too bulky to be easily smuggled; and may be, and indeed are, very much raised in price by restrictions on their importation. For many years past, all direct intercourse between our West India colonies and the United States was interdicted; and, in consequence, the planters were compelled either to supply themselves with lumber, staves, &c. by a distant voyage from Canada, or, which was by far the most common practice, from the United States, through the circuitous and expensive channel

of St. Thomas and other neutral islands! In papers laid by the West India merchants and planters before the House of Commons (No. 120. Session 1831), they estimate the increased expense they thus incurred on lumber, staves, flour, shingles, fish, &c. at 15 per cent. of the entire value of these articles, or at 187,576*l.* a year. And it will be observed, that no part of this sum went into the pockets of any British merchant. It went wholly to indemnify the Americans and others for being obliged to bring their products round about by St. Thomas, instead of direct from the States.

This system grew out of the American war; but it is due to Mr. Pitt to state that it received no countenance from him. On the contrary, he introduced a bill, in 1785, for reviving the beneficial intercourse that existed previously to the war, between the United States and the West India islands. But being opposed by a powerful party in parliament, and by the ship owners and Canada merchants, he was obliged reluctantly to withdraw the bill. The following remarks of Mr. Bryan Edwards on this subject are as applicable at this moment, as they were at the period (1794) when they were written.

"This," says he, "is not a business of selfishness or faction; nor (like many of those questions which are daily moved in parliament merely to agitate and perplex government) can it be dismissed by a vote. It will come forward again and again, and haunt administration in a thousand hideous shapes, until a more liberal policy shall take place; for no folly can possibly exceed the notion that any measures pursued by Great Britain will prevent the American states from having, some time or other, *a commercial intercourse with our West Indian territories on their own terms.* With a chain of coast of 20° of latitude, possessing the finest harbours for the purpose in the world, all lying so near the sugar colonies and the track to Europe, with a country abounding in every thing the islands have occasion for, and which they can obtain no where else; all these circumstances necessarily and naturally lead to a commercial intercourse between our islands and the United States. It is true we may ruin our sugar colonies, and ourselves also, in the attempt to prevent it; but it is an experiment which God and nature have marked out as impossible to succeed. *The present restraining system is forbidding men to help each other; men who, by their necessities, their climate, and their productions, are standing in perpetual need of mutual assistance, and able to supply it.*"—(*Hist. West Indies*, Preface to 2d ed.)

We have also thought fit to interdict the West Indians from the refining, or, as it is technically termed, the *claying* of sugars. This is one of the few manufactures that might be advantageously set up in the islands. The process adds considerably to the value of sugar; and it might be carried on in the buildings, and by the hands, that are required to boil the cane, or to prepare the raw or muscovado sugar. Instead, however, of being allowed to refine their sugars on the spot, and where it might be done for a third of the expense that is required in England, the planters have been prohibited from engaging in this branch of industry; and have been obliged to export all their sugars, either raw or crushed, to England. Nothing can exceed the oppressiveness of such a regulation; and what is most singular, it has not been enforced, like most regulations of the sort, in order to bolster up any of the leading interests of the country, but merely to give a factitious employment to a very small class, — that of the sugar refiners, whose natural residence is in the West Indies. The planters and merchants estimate the loss caused by this preposterous regulation at 75,550*l.* a year.

The distillation of spirits from sugar has only been occasionally allowed; but provided the duties were so adjusted as to give no advantage to the planters over the growers of barley, or to the latter over the former, we think the distillers should be, at all times, allowed to distil indiscriminately from sugar, molasses, or grain. It is the duty of government to take care that the duties be so arranged as to give no unfair advantage to any party over another; but, having done this, it should do nothing more. To prohibit distillation from sugar, that a forced market may be opened for grain; or distillation from grain, that a forced market may be opened for sugar; are interferences with the freedom of industry, for which no good reason has been, nor we believe can be, assigned.

The interests of the planters have been sacrificed in many other ways besides those now pointed out, in the view of securing some illusory advantage to our merchants and ship-owners. Perseverance in this line of policy is the less excusable, as it is in direct opposition to the *principle* of the measures introduced by Mr. Robinson (now Lord Goderich) in 1822, and Mr. Huskisson in 1825; and sanctioned by the legislature. The avowed object of these measures was the subversion of the old colonial system, and the repeal of the vexatious restrictions laid on the trade of the colonies. "If we look," said Mr. Robinson, "to the dominions of England in the Eastern hemisphere, we shall find the restrictive system has been entirely and systematically abandoned. The whole of the East India Company's territories have never been shackled with the peculiar restrictions of the navigation laws; and who will say that the interests of commerce and

navigation have suffered? or rather, *who will deny that they have been materially benefited by the freedom they have enjoyed?*"—"I propose," said Mr. Huskisson, in 1825, "to admit a free intercourse between all our colonies and other countries, either in British ships, or in the ships of those countries, allowing the latter to import all articles, the growth, produce, or manufacture of the country to which the ship belongs; and to export from such colonies all articles whatever of their growth, produce, or manufacture, either to the country from which such ship came, or to any other part of the world; the United Kingdom and all its dependencies only excepted."

Unluckily, however, the conditions and regulations introduced into the bills were, for the most part, in direct contradiction to the principle laid down in the speeches now quoted; nor is it easy, indeed, to conceive for what purpose the latter were made, unless it were to exhibit the impolicy of the former. Among others which will subsequently be specified, the act of 1825 imposed the following duties for the express purpose of securing to Canada and to British ships the supply of the West India islands with food and lumber.

Table of Duties imposed by 6 Geo. 4. c. 114. on certain Articles of Provision, and of Wood and Lumber, not being the Growth, Production, or Manufacture of the United Kingdom, nor of any British Possession, imported or brought into the British Possessions on the Continent of South America, or in the West Indies, the Bahama and Bermuda Islands aforesaid.

	L.	*s.*	*d.*
Provisions, viz.			
Wheat, the bushel	0	1	0
Wheat flour, the barrel	0	5	0
Bread or biscuit, the cwt.	0	1	6
Flour or meal, not of wheat, the barrel	0	2	6
Peas, beans, rye, calavances, oats, barley, Indian corn, the bushel	0	0	7
Rice, the 1,000 lbs. nett weight	0	2	6
Live stock, 10 per cent.			
Lumber, viz.			
Shingles, not being more than 12 inches in length, the 1,000	0	7	0
Shingles, being more than 12 inches in length, the 1,000	0	14	0
Staves and headings, viz.			
Red oak, the 1,000	0	15	0
White oak, the 1,000	0	12	6
Wood hoops, the 1,000	0	5	3
White, yellow, and pitch pine lumber, the 1,000 feet of 1 inch thick	1	1	0
Other wood and lumber, the 1,000 feet of 1 inch thick	1	8	0
Fish, beef, pork, prohibited.			

The revenue derived from these and the other duties imposed by the act of 1825, amounted to about 75,000*l.* a year, and the charges of collection to about 68,000*l.*!

The effect of these duties in adding to the prices of the food and lumber imported by the planters, is exhibited in the following statement of the prices of some of the principal of these articles in the United States and the Continent, and in Canada and the United Kingdom:—

	L.	*s.*	*d.*
Herrings (Danish) at the Island of St. Thomas, the barrel	1	0	0
Ditto (British) in the colonies, the barrel	1	11	0
Mess beef, in Hamburgh, the barrel	3	0	0
Ditto, in the United Kingdom, ditto	4	0	0
Pork, in Hamburgh, the barrel	2	6	0
Ditto, in the United Kingdom, ditto	3	5	0
Red oak staves, in the United States, per 1,000	4	0	0
Ditto, at Quebec, per ditto	7	8	4
White oak staves, in the United States, per ditto	6	10	2
Ditto, at Quebec, per ditto	10	6	2
Flour, in the United States, the barrel	1	1	0
Ditto, at Quebec, ditto	1	5	5
Shingles, in the United States, per 1,000	0	14	0
Ditto, in Canada, per ditto	0	18	0

The United States, who felt themselves aggrieved by the imposition of such oppressive duties on flour, wheat, and lumber, refused to accede to those conditions of reciprocity under which the colonial ports were to be opened to their ships; and, owing to this circumstance, it was not till the end of 1830, when fresh negotiations were entered into with the United States, and it was agreed to modify some of the duties, that the West India colonies derived any sensible advantage from the changes, such as they were, that were made in 1825.

But, notwithstanding the modifications introduced by the act 1 Will. 4. c. 24., and now embodied in the act 3 & 4 Will. 4. c. 59. — (see *post*),— the regulations under which the colony trade is at present conducted, are in the highest degree objectionable. There is, for example, a duty of 5*s.* a barrel on all flour brought from a foreign country into our possessions in the West Indies and South America, and also into Nova Scotia, New Brunswick, and Prince Edward Island. At first sight there seems nothing to object to in this regulation, except the imposition of the duty; in point of fact, however, this is its least objectionable feature, and is used merely as a pretext to conceal its real object. The necessity of raising a revenue might, in some degree, excuse even the imposition of a duty on the food of the colonists; but there cannot be so much as the shadow of an apology for taxing it for the *benefit of another class*. Such, however, is the sole end and purpose of this ingeniously contrived regulation. It will be observed, that though no wheat flour can be carried duty free direct from a foreign country to our possessions in the West Indies, or to our possessions to the north of the United States on the Atlantic, it may be imported duty free into Canada, where it is not needed! The consequence is, that a large proportion of the United States' flour intended for the West Indies, instead of being shipped direct from New York, Philadelphia, &c. for the islands, is carried, in the first instance, to Montreal and Quebec, and is thence conveyed in British ships to its final destination. The duty is imposed to force this trade; that *is*, to make the food of the colonists be carried to them by a roundabout course of more than 2,000 miles, in order that a few hundred pounds may be forced into the pockets of the ship-owners, at an expense of many thousand pounds to the colonists. Such, indeed, is the influence of the system, that there have been instances of wheat having been carried from Archangel to Quebec, landed there, and again shipped for Jamaica! Shingles, lumber, &c. are subjected to the same regulations, with this difference merely, that they may be imported duty free into Nova Scotia, New Brunswick, &c., being thence carried to the West Indies; whereas, by confining the importation of duty free flour to Canada, it must pass, before it can reach the consumers, through the lengthened, difficult, and dangerous navigation of the St. Lawrence.

It is unnecessary to make any commentary on such regulations. None more objectionable in principle, or mischievous in practice, are to be met with in the worst parts of the old Spanish colonial régime.

All duties on and regulations with respect to the importation of articles of provision, lumber, &c. into the colonies, ought to be wholly abolished. Jamaica, and our other West India colonies, may be viewed as immense sugar, rum, and coffee manufactories, which, though situated at a distance from England, belong to English men, and are carried on by English capital. But to promote the prosperity of any manufacture without injuring that of others, there are no means at once so obvious and effectual, as to give those engaged in it every facility for supplying themselves with the materials necessary to carry it on at the lowest price, and to keep the duties on its produce as low as possible. This is the sound and obvious principle that ought to have been kept steadily in view in legislating for the colonies; though, as already seen, it has been totally lost sight of. That the system of forcing importation from Canada may be advantageous to that province, we do not presume to deny; but we are not to impoverish one part of our dominions that we may enrich another, more especially when it is certain, as in the present case, that the advantage conferred is trifling indeed compared with the injury inflicted. In other respects, the operation of the present system is most pernicious. Sugar is an important necessary of life, and enters largely into the consumption of every individual in Great Britain. Surely, then, it is highly important that every means should be resorted to for reducing its cost; and as we have excluded foreign sugars from our markets, the only way in which any such reduction can be effected is by abolishing the existing restrictions, and allowing the planters to furnish themselves with the materials necessary for their manufacture at the lowest rate, and to dispose of their produce in the state and at the places they prefer.

The vexatious regulations now alluded to, have been, for the most part, imposed to benefit the mother country at the expense of the colonies. There has, however, been, in this respect, a reciprocity of injuries. Being obliged to buy whatever they wanted in the markets of the mother country, the colonists early succeeded in obtaining, what, indeed, could not, under the circumstances of the case, be denied to them, the monopoly of these markets for the sale of their peculiar productions. And hence the high discriminating duties on foreign sugars, coffee, timber, &c. Owing to the very great fertility of the colonies of Demerara, Berbice, &c., acquired during the late war, the exclusion of foreign sugar has not latterly been so great a burden as it used to be, though it still occasions an enhancement of its price. But there are no palliating circumstances about the discriminating duty on foreign timber. Not satisfied with giving the Canadians an unfair advantage in the markets of the West Indies, we give them a still more unjustifiable advantage in those of England. It was proved in evidence taken before a committee of the House of Lords, that timber from Canada is not half so durable as that from the Baltic, and is, besides, peculiarly liable to dry rot. It is not allowed to be used in the building of ships for the navy, and is rejected by all the more respectable house-builders: and yet, under the miserable pretext of giving employment to saw mills in Canada, and to a few thousand tons of additional shipping, we actually force the use of this worthless article, by imposing a discriminating duty of no less than 45*s.* a load on all timber from the north of Europe. It has been shown, by papers laid before parliament, that were the same duty laid on timber from Canada that is laid on timber from the Baltic, the revenue would gain 1,500,000*l.* a year, while the durability of our ships and houses would be doubled. — (For a further discussion of this subject, see TIMBER.)

These restrictions tend to render the colony trade a source of loss, and of irritation and disgust to all parties. In other respects, too, their influence is most pernicious. So long as the colonists are prevented from purchasing lumber, provisions, &c. in the cheapest markets, and as their trade continues subjected to regulations injurious to their interests, they are justified in resisting all efforts to make them contribute any thing considerable to the expenses of the armaments required for their protection. "Attempts," said Lord Palmerston, "have been made in all the West India islands to induce them to contribute to the expenses of the establishments; and they have always represented that *their means of doing so were crippled by the commercial arrangements of the mother country:* they have said, '*If you will let us trade as we like, and collect our own custom duties, and so on, we will do it.*'" And no proposal could be fairer. — (*Finance Committee, Evidence*, p. 146.)

The expense of the colonies is a very heavy item in the national expenditure — far more so than is generally supposed. Not only are we subjected, as in the case of timber, to oppressive discriminating duties on foreign articles, that similar articles from the colonies may enjoy the monopoly of our markets, but we have to defray a very large sum on account of their military and naval expenditure. There are no means by which to estimate the precise amount of this expense; but it is, notwithstanding, abundantly

certain, that Canada and the islands in the West Indies cost us annually, in military and naval outlays, upwards of a *million and a half in time of peace, exclusive of the revenue collected in them.* And if to this heavy expense were added the vast additional sums their defence costs during war, the debtor side of a fairly drawn up colonial budget would attain to a very formidable magnitude; and one which we apprehend could not possibly be balanced.

In entertaining this opinion we are not singular. "If," said Lord Sheffield, "we have not purchased our experience sufficiently dear, let us derive a lesson of wisdom from the misfortunes of other nations, who, like us, pursued the phantom of foreign conquest and distant colonisation; and who, in the end, found themselves less populous, opulent, and powerful. By the war of 1739, which may be truly called an American contest, we incurred a debt of upwards of 31,000,000*l.*; by the war of 1755 we incurred a further debt of 71,500,000*l.*; and by the war of the revolt we have added to both these debts nearly 100,000,000*l.* more! And thus we have expended a far larger sum in defending and retaining our colonies, than the value of all the merchandise we have ever sent them. So egregious has our impolicy been, in rearing colonists for the sake of their custom!"—(*On the Commerce of the American States*, p. 240.)

But our object is not to excite unavailing regrets for bygone follies, but to induce the return to a better system. The repeal of the restrictions on the colony trade seems indispensable, as a preliminary to other reforms. We have already seen that the legislature has recognised the principle of this repeal; and until it has taken place, or the existing restrictions been materially modified, we shall neither be able to rid ourselves of the discriminating duties in favour of colonial products, nor to make the colonies defray any considerable part of the expenditure incurred on their account.

If there be no room for surprise at the complaints so constantly put forth by the West Indians, there is very great room for surprise that so few attempts should have been made to redress the grievances of which they complain. Met in every quarter by the keen and active competition of the Brazilians and Cubans, who have been emancipated from the trammels of monopoly, and permitted freely to resort, whether as buyers or sellers, to every market, the planters in the British colonies could not be otherwise than depressed. They have been made the victims of an erroneous system of policy; for there is nothing in the circumstances under which they are naturally placed, to lead to a belief that their distresses are incurable. Were they permitted freely to supply themselves with such articles as they require, to refine their sugar in the islands, and were the exorbitant duties that are now laid on some of their staple products adequately reduced, can any one doubt that their condition would be materially improved? or that these measures would not equally redound to the general advantage of the public?

The colonies being integral parts of the empire, the trade with them should, as far as circumstances will permit, be conducted on the footing of a coasting trade. The state of the revenue requires that moderate duties should be laid on sugar, coffee, and rum, when imported into Great Britain or Ireland; but the duties on cotton, cacao, and most other colonial products, might be repealed without injury to the revenue, and with advantage to all parties. The system we have hitherto pursued has been a radically different one, and in most respects the reverse of what it ought to have been. By excluding the colonists from the cheapest markets for their food and lumber, we have artificially raised the cost of their produce; and then, to protect them from the consequences of such short-sighted policy, we give them a monopoly of the British market! It is thus that one unjust and vicious regulation is sure to give birth to others; and that those who depart from sound principle have nothing left but to endeavour to bolster up one absurdity by another. It is time, surely, that an end were put to so ruinous a system. It is as much for the interest as it is the *duty* of England, to remove all restrictions from the colonists, not essential for the sake of revenue; for this is the only means by which she can provide for their real prosperity, and rid herself of those monopolies that form the heaviest clog upon her industry.

We hope it will not be supposed, from any thing now stated, that we consider the foundation of colonial establishments as, generally speaking, inexpedient. We entertain no such opinion. It is not to the establishment of colonies, provided they be placed in advantageous situations, but to the trammels that have been laid on their industry, and the interference exercised by the mother countries in their domestic concerns, that we object. Every individual ought to have full liberty to leave his native country; and occasions very frequently occur, when governments may advantageously interfere to settle emigrants in foreign countries, and when the soundest policy dictates the propriety of their supporting and protecting them until they are in a situation to support and protect themselves. There can be no question whatever that Europe has been prodigiously benefited by the colonisation of America. The colonists carried the arts, the sciences, the language, and the religion of the most civilised communities of the Old World to

regions of vast extent and great natural fertility, occupied only by a few miserable savages. The empire of civilisation has in consequence been immeasurably extended: and while the experience afforded by the rise and progress of communities placed under such novel circumstances, has served to elucidate and establish many most important and fundamental principles in government and legislation, Europe has been enriched by the vast variety of new products America has afforded to stimulate the inventive powers of genius, and to reward the patient hand of industry.

But whatever may have been the advantages hitherto derived from the colonisation of America, they are trifling compared to what they would have been, had the European powers left the colonists at liberty to avail themselves of all the advantages of their situation, and avoided encumbering themselves with the government of extensive territories 3,000 miles distant. Fortunately, however, a new era is, at length, begun—*Novus sæclorum nascitur ordo!* The monopoly of the trade of America is destroyed, and her independence achieved. From Canada to Cape Horn, every port is ready to receive adventurers from Europe; and a boundless field has, in consequence, been opened for the reception of our surplus population, and for the advantageous employment of European arts, capital, and skill. The few remains of the old colonial system which still exist, and which are principally to be found in the mercantile policy of this country and France, cannot be of long duration. Their mischievous operation is no longer doubtful; and they will disappear according as the knowledge of sound commercial principles is more generally diffused.

Slavery. — Since the publication of the former edition of this work, a law has been made which will effect a radical change in the condition of society in the British West Indies. The abolition of the slave trade has been consummated by the act for the freedom of the unhappy persons now in a state of bondage. The statute 3 & 4 Will. 4. c. 73. enacts, that on the 1st of August, 1834, slavery is to cease throughout the British dominions, and that the then existing slaves are to become apprenticed labourers; the term of their apprenticeship partly ceasing on the 1st of August, 1838, and partly on the 1st of August, 1840; when the black and coloured population will become altogether free. A sum of 20,000,000*l.* is to be distributed in certain proportions, and according to certain conditions, to the planters, as a compensation for the loss of their slaves. — (See article Slaves and Slave Trade.)

Such are the prominent features of this famous statute, by which the British parliament has endeavoured at once to once to meet and satisfy the claims of humanity and justice. The payment of 20,000,000*l.* to the colonists, though not more than they were fairly entitled to, is, perhaps, the most striking instance to be met with in history, of a resolution to vindicate and maintain the right of property; and reflects as much credit on the wisdom as on the liberality of the British nation.

Nothing but vague conjectures can, of course, be indulged in as to the future working of this measure in the colonies. We believe, however, that those who have contended that it will not be productive of any falling off in the industry of the blacks will be found to have taken a very erroneous view of the matter. Field labour in the West Indies has hitherto been always associated with slavery and degradation, and been enforced by the lash. The fair inference, consequently, is, that when the fetters are struck off the slave, and he is left to follow his own inclinations, he will be desirous of escaping from what he cannot fail to consider an ignominious occupation. Necessity, no doubt, will prevent him from becoming altogether indolent; but the effect will in this, as in other instances, be proportioned to its cause: and necessity in the West Indies is very different from necessity in Europe. Most articles that are here deemed indispensable, would there be positive incumbrances; and those essential to subsistence may be procured with less certainly than half the labour hitherto exacted from the slaves. At some future period, perhaps, when the recollection of their degradation has begun to fade, and a taste for conveniences and gratifications has been introduced amongst them, they may become more industrious; but this is a distant and a very uncertain prospect. We, therefore, look, at first, for a very considerable decline in the industry of the slaves, and a proportional falling off in the exports from the islands. It will give us pleasure should our anticipations be disappointed; and assuredly we do not state them by way of objection to, or deduction from, the great measure of emancipation. It would be monstrous to suppose that we might retain above 750,000 of our fellow-creatures in a state of bondage, for no better reason than that sugar might be sent to England from Jamaica or Barbadoes, rather than from India, Java, or Cuba.

For further information on this subject, we beg to refer our readers to an article on *Colonial Policy*, in No. 84. of the Edinburgh Review, to the chapter on *Colonies*, in Sir Henry Parnell's invaluable work on "Financial Reform," and to the Parliamentary Paper No. 120. Sess. 1831. This paper, being prepared by a committee of West India merchants and planters, occasionally, probably, exaggerates the injury they sustain from the existing regulations; it is, however, a very instructive and valuable document. Some

of the previous statements are taken from the article in the *Edinburgh Review*; but we are not, on that account, liable to the charge of appropriating the labours of others.

III. Magnitude, Population, Trade, etc. of the British Colonies.

Notwithstanding the loss of the United States, the colonies of Great Britain, exclusive of India, exceed in number, extent, and value, those of every other country. Previously, indeed, to the breaking out of the late contests, the colonial dominions of Spain far exceeded in extent and importance those of any other power. But Cuba, Porto Rico, and the Philippine Islands, are now all that remain to her. These, indeed, are very valuable possessions, though inferior to those of England.

(1.) *North American Colonies.* — In North America we possess the provinces of Lower and Upper Canada, Nova Scotia, and New Brunswick, with their dependencies. The situation and boundaries of these provinces will be more easily learned from the inspection of the accompanying map, than they could be from any description. The shores of Nova Scotia and New Brunswick are washed by the Atlantic Ocean; and the noble river St. Lawrence, by its communication with the great American lakes, gives to Canada all the benefits of a most extensive inland navigation, and forms a natural outlet for her surplus produce, as well as for the surplus produce of that part of the United States which is washed by the lakes. There is every variety in the soil and climate of these regions. In Lower Canada, the winter is very severe. The surface of the country is covered with snow for nearly half the year. From the beginning of December to the middle of April, the St. Lawrence is frozen over, and affords a smooth and convenient passage for the sledges by which it is then covered. But though severe, the climate is far from being unhealthy or disagreeable. The weather is generally clear and bracing; and the labour of artisans, at their out-door employments, is rarely suspended for many days in succession. On the breaking up of the ice in the latter end of April, or the beginning of May, the powers of vegetation almost immediately resume their activity, and bring on the fine season with a rapidity that is astonishing to a stranger. The highest temperature in Lower Canada varies from 96° to 102° of Fahrenheit; but the purity of the atmosphere abates the oppressive heat that is felt in most countries where the mercury ranges so high; and the weather is, on the whole, decidedly pleasant. In 1814, it was ascertained that the province of Lower Canada contained about 335,000 inhabitants; at present the number may amount to about 580,000. The population is chiefly confined to the banks of the St. Lawrence.

That part of the province of Upper Canada, which stretches from Lake Simcoe and the rivers Trent and Severn, westward to Lake Huron and the St. Clair River, and southward to Lake Erie, and part of Lake Ontario, has a soil of extraordinary fertility, capable of producing the most luxuriant crops of wheat, and every sort of grain. "The climate," says Mr. Bouchette, surveyor-general of Lower Canada, "is so particularly salubrious, that epidemic diseases, either among men or cattle, are almost entirely unknown. Its influence on the fertility of the soil is more generally perceptible than it is in Lower Canada, and is supposed to be congenial to vegetation in a much superior degree. The winters are shorter, and not always marked with such rigour as in the latter. The duration of frost is always accompanied with a fine clear sky and a dry atmosphere. The spring opens, and the resumption of agricultural labours takes place, from 6 weeks to 2 months earlier than in the neighbourhood of Quebec. The summer heats rarely prevail to excess, and the autumns are usually very friendly to the harvests, and favourable for securing all the late crops." — (*Bouchette's Topographical Description of Canada*, p. 595.) The ground on the shores of Lake Ontario and Lake Erie, as far west as the junction of the Thames with the St. Clair Lake, is laid out in townships, and partly settled. But the population is so very thin as not, on an average, to amount to more than *twenty* persons to a square mile, in settled townships; while the fertility of the soil is such, that 120 persons to a square mile would not be a dense population. To the north of the River Thames, along the banks of the St. Clair, and the shores of Lake Huron, round to the River Severn, and thence to the river that joins Lake Nippissing and Lake Huron, is a boundless extent of country that is almost entirely unoccupied. The interior of this space has hitherto been but imperfectly explored; but the banks of the St. Clair and the shores of Lake Huron afford the finest situations for settlements. The soil is in many places of the greatest fertility, the river and lake teem with fish, and every variety of the best timber is found in the greatest profusion. In 1783, the settlers in Upper Canada were estimated at only 10,000: in 1825 they amounted to upwards of 157,000; and now amount, according to Mr. M'Gregor, to above 300,000: a miserably small population for a country that could easily support *many millions* of inhabitants in a state of the greatest comfort.

The winters in the provinces of Nova Scotia and New Brunswick are more severe than in Upper Canada, and they are a good deal infested with fogs and mists. But

their proximity to England, and their favourable situation for the fishing business, give them considerable advantages.

In addition to the above, we possess the Hudson's Bay territory, — a tract of vast extent, but situated in an inhospitable climate, and worth very little except as hunting grounds. We also possess the large islands of Newfoundland and Cape Breton; but the soil is barren, and the climate severe and foggy; so that they are valuable principally as fishing stations.

We extract from the valuable work of Mr. M'Gregor on British North America (2d ed. vol. ii. p. 589.), the following statistical Table, representing the population, stock of cattle, cultivated land, &c. in the different provinces in 1832: —

	Inhabitants.	Horses.	Horned Cattle.	Hogs.	Sheep.	Acres cultivated land.
Upper Canada - - -	310,000	34,380	214,692	[illegible]	[illegible]	[illegible]
Canada - - - -	580,000	126,000	440,000	350,000	610,000	[illegible]
New Brunswick - - -	110,000	12,000	87,000	65,000	105,000	[illegible]
Nova Scotia - - -	196,000	19,000	144,796	98,214	234,658	[illegible]
Prince Edward Island - -	35,000	4,500	32,000	30,000	48,000	[illegible]
Newfoundland and Labrador -	76,000	600	8,000	16,000	10,000	[illegible]
Total - -	1,307,000	196,480	926,488	779,214	1,247,658	4,[illegible]

Number of Emigrants. — There emigrated to the British colonies in North America in

	Individuals.		Individuals.		Individuals.
1825	8,741	1828	12,084	1831	58,067
1826	12,818	1829	13,307	1832	66,339
1827	12,648	1830	30,574	(*Parl. Paper*, No. 696. Sess. 1833.)	

Of these, the great majority have been destined for Upper Canada. — (For the total emigration from the United Kingdom, see PASSENGERS.)

Information for Emigrants to British North America. — In the latter part of 1831, a set of commissioners were appointed by government for the purpose of digesting plans of emigration, procuring information useful for emigrants, &c. On the 9th of February, 1832, they issued the following paper, the statements in which may be, consequently, regarded as quite authentic.

Colonial Office, 9th of February, 1832

The object of the present notice is to afford such information as is likely to be useful to persons who desire either to emigrate, or to assist others to emigrate, to the British possessions in North America.

In the first place, it seems desirable to define the nature of the assistance to be expected from government by persons proceeding to these colonies. No pecuniary aid will be allowed by government to emigrants to the North American colonies; nor after their arrival will they receive grants of land, or gifts of tools, or a supply of provisions. Hopes of all these things have been sometimes held out to emigrants by speculators in this country, desirous of making a profit by their conveyance to North America, and willing for that purpose to delude them with unfounded expectations, regardless of their subsequent disappointment. But the wish of government is to furnish those who emigrate with a real knowledge of the circumstances they will find in the countries to which they are going.

No assistance of the extraordinary extent above described is allowed, because, in colonies, where those who desire to work cannot fail to do well for themselves, none such is needed. Land, indeed, used formerly to be granted gratuitously; but when it was taken by poor people, they found that they had not the means of living during the interval necessary to raise their crops; and further, that they knew not enough of the manner of farming in the colonies, to make any progress. After all, therefore, they were obliged to work for wages, until they could make a few savings, and could learn a little of the way of farming in Canada. But now, land is not disposed of except by sale. The produce of sales, although the price is very moderate, is likely to become a considerable fund, which can be turned to the benefit of the colony and therefore of the emigrants; while yet no hardship is inflicted on the poor emigrant, who will work for wages just as he did before, and may after a while acquire land, if land be his object, by the savings which the high wages in these colonies enable him speedily to make.

These are the reasons why government does not think it necessary to give away land in a country where, by the lowness of its price, the plentifulness of work, and the high rate of wages, an industrious man can earn enough in a few seasons to become a freeholder by means of his own acquisitions.

The land which is for sale will be open to public competition, and of course, therefore, its price must depend upon the offers that may be made; but it will generally not be sold for less than from 4*s.* to 5*s.* per acre; and in situations where roads have been made, or the ground has been partially cleared, the common prices lately have been 7*s.* 6*d.*, 10*s.*, and 15*s.* Further particulars will be best learned upon the spot, where every endeavour will be made to meet the different circumstances and views of different purchasers.

Although government will not make any gifts at the public expense to emigrants to North America, agents will be maintained at the principal colonial ports, whose duty it will be, without fee or reward from private individuals, to protect emigrants against imposition upon their first landing, to acquaint them with the demand for labour in different districts, to point out the most advantageous routes, and furnish them generally with all useful advice upon the objects which they have had in view in emigrating; and when a private engagement cannot be immediately obtained, employment will be afforded on some of the public works in progress in the colonies. Persons newly arrived should not omit to consult the government agent for emigrants, and as much as possible should avoid detention in the ports, where they are exposed to all kinds of impositions, and of pretexts for keeping them at taverns till any money they may possess has been expended. — For the same purpose of guarding against the frauds practised on newcomers, and of preventing an improvident expenditure at the first moment of arrival, it seems very desirable that individuals who may wish to furnish emigrants with money for their use in the colony should have the means of making the money payable there, instead of giving it into the hands of the emigrant in this country. The commissioners for emigration are engaged in effecting general arrangements for this purpose, and due notice will be given to the public when they shall be completed. Agents for emigration have been appointed at St. John's, St. Andrew's, and Miramichi in New Brunswick, and Quebec and York in Canada. On the whole subject of the manner of proceeding upon landing, it may be observed, in conclusion, that no effort will be spared to exempt emigrants from any necessity for delay at the place of disembarkation, and from uncertainty as to the opportunities of at once turning their labour to account.

COLONY TRADE.

After this explanation of the extent of the aid to be expected from government, the following statements are subjoined of the ordinary charges for passage to the North American colonies, as well as of the usual rates of wages and usual prices in them, in order that every individual may have the means of judging for himself of the inducements to emigrate to these parts of the British dominions.

Passage. — Passages to Quebec or New Brunswick may either be engaged *inclusive* of provisions, or *exclusive* of provisions, in which case the ship owner finds nothing but water, fuel, and bed places, without bedding. Children under 14 years of age are charged one half, and under 7 years of age one third, of the full price; and for children under 12 months of age no charge is made. Upon these conditions the price of passage from London, or from places on the east coast of Great Britain, has generally been 6*l.* with provisions, or 5*l.* without. From Liverpool, Greenock, and the principal ports of Ireland, as the chances of delay are fewer, the charge is somewhat lower; this year it will probably be from 2*l.* to 2*l.* 10*s.* without provisions, or from 4*l.* to 5*l.* including provisions. It is possible that in March and April passages may be obtained from Dublin for 35*s.* or even 30*s.*; but the prices always grow higher as the season advances. In ships sailing from Scotland or Ireland, it has mostly been the custom for passengers to find their own provisions; but this practice has not been so general in London; and some ship owners, sensible of the dangerous mistakes which may be made in this matter through ignorance, are very averse to receive passengers who will not agree to be victualled by the ship. Those who do resolve to supply their own provisions, should at least be careful not to lay in an insufficient stock; 50 days is the shortest period for which it is safe to provide; and from London the passage is sometimes prolonged to 75 days.

The best months for leaving England are certainly March and April; the later emigrants do not find employment so abundant, and have less time in the colony before the commencement of winter.

Various frauds are attempted upon emigrants, which can only be effectually defeated by the good sense of the parties against whom they are contrived. Sometimes agents take payment from the emigrant for his passage, and then recommend him to some tavern, where he is detained from day to day under false pretences for delay, until, before the departure of the ship, the whole of his money is extracted from him. This of course cannot happen with agents connected with respectable houses; but the best security is to name in the bargain for passage a particular day, after which, whether or not the ship sails, the passenger is to be received on board and victualled by the owners. In this manner the emigrant cannot be intentionally brought to the place of embarkation too soon, and be compelled to spend his money at public houses, by false accounts of the time of sailing; for from the very day of his arrival at the port, being the day previously agreed upon, the ship becomes his home.

The conveyance of passengers to the British possessions in North America is regulated by an act of parliament (9 Geo. 4. c. 21.), of which the following are the principal provisions: — Ships are not allowed to carry passengers to these colonies unless they be of the height of 5½ feet between decks; and they must not carry more than 3 passengers for every 4 tons of the registered burden; there must be on board at least 50 gallons of pure water, and 50 lbs. of bread, biscuit, oatmeal, or bread stuff, for each passenger. When the ship carries the full number of passengers allowed by law, no part of the cargo, and no stores or provisions, may be carried between decks; but if there be less than the complete number of passengers, goods may be stowed between decks in a proportion not exceeding 3 cubical feet for each passenger wanting of the highest number. Masters of vessels who land passengers, unless with their own consent, at a place different from that originally agreed upon, are subject to a penalty of 20*l.*, recoverable by summary process before 2 justices of the peace in any of the North American colonies.

The enforcement of this law rests chiefly with the officers of his Majesty's customs; and persons having complaints to make of its infraction, should address themselves to the nearest Custom-house.

Besides the sea voyage from England, persons proceeding to Canada should be provided with the means of paying for the journey which they may have to make after their arrival at Quebec. The cost of this journey must, of course, depend upon the situation of the place where the individual may find employment, or where he may have previously formed a wish to settle; but to all it will probably be useful to possess the following report of the prices of conveyance, during the last season, on the route from Quebec to York, the capital of Upper Canada. From Quebec to Montreal (180 miles), by steam-boat, the charge for an adult was 6*s.* 6*d.*; from Montreal to Prescott (120 miles), by boats or barges, 7*s.*; from Prescott to York (220 miles), by steam-boat, 7*s.* The journey, performed in this manner, usually occupies 10 or 12 days; adding, therefore, 11*s.* for provisions, the total cost from Quebec to York (a distance of 520 miles) may be stated, according to the charges of last year, at 1*l.* 11*s.* 6*d.* Persons who are possessed of sufficient means prefer to travel by land that part of the route where the River St. Lawrence is not navigable by steam boats, and the journey is then usually performed in 6 days, at a cost of 6*l.* It must be observed, that the prices of conveyance are necessarily fluctuating, and that the foregoing account is only presented as sufficiently accurate for purposes of information in this country, leaving it to the government agent at Quebec to supply emigrants with more exact particulars, according to the circumstances of the time at which they may arrive.

Rates of Wages and Market Prices. — The colonies in North America, to which emigrants can with advantage proceed, are Lower Canada, Upper Canada, and New Brunswick. From the reports received from the other British colonies in North America, namely, Prince Edward's Island, Newfoundland, Nova Scotia, and Cape Breton, it appears that they do not contain the means either of affording employment at wages to a considerable number of emigrants, or of settling them upon land.

Lower Canada. — From Lower Canada the commissioners for emigration have not received the official reports which were required from the North American colonies, for the purpose of compiling the present statement. They believe, however, that the following account of the prices of grain and of wages may be relied upon for its general correctness: —

			s.	*d.*
Wheat	per bushel		4	6
Rye	—		3	0
Maize	—		2	6
Oats	—		1	3
Wages of labourers	per day		2	6
Ship-builders, carpenters, joiners, coopers, masons, and tailors			5	0

Upper Canada. — From a comparison of all the documents before the commissioners for emigration, it appears that the yearly wages of labourers in Upper Canada, hired by the year, are from 27*l.* to 30*l.*; that their monthly wages, in different situations and at different seasons, range from 1*l.* 10*s.* to 2*l.* 10*s.* per month; and that daily wages range from 2*s.* to 3*s.* 9*d.* In all these rates of wages, board and lodging are found by the employer. Without board, daily wages vary from 3*s.* 6*d.* out of harvest to 5*s.* during harvest; 6*s.* 8*d.*, besides provisions, is sometimes given to harvest men. The wages of mechanics may be stated universally at from 5*s.* to 7*s.* 6*d.* per day.

The following Table exhibits the lowest and the highest price which the several articles therein named bore, during the year 1831, in each of the principal districts of Upper Canada: —

their proximity to England, and their favourable situation for the fishing business, give them considerable advantages.

In addition to the above, we possess the Hudson's Bay territory, — a tract of vast extent, but situated in an inhospitable climate, and worth very little except as hunting grounds. We also possess the large islands of Newfoundland and Cape Breton; but the soil is barren, and the climate severe and foggy; so that they are valuable principally as fishing stations.

We extract from the valuable work of Mr. M'Gregor on British North America (2d ed. vol. ii. p. 589.), the following statistical Table, representing the population, stock of cattle, cultivated land, &c. in the different provinces in 1832: —

	Inhabitants.	Horses.	Horned Cattle.	Hogs.	Sheep.	Acres cultivated.
Upper Canada - - -	310,000	34,380	214,692	220,000	240,000	1,800,000
Canada - - - -	580,000	126,000	440,000	350,000	610,000	2,125,000
New Brunswick - - -	110,000	12,000	87,000	65,000	105,000	365,000
Nova Scotia - - -	196,000	19,000	144,796	98,214	234,658	398,964
Prince Edward Island -	35,000	4,500	32,000	30,000	48,000	180,000
Newfoundland and Labrador -	76,000	600	8,000	16,000	10,000	45,000
Total - -	1,307,000	196,480	926,488	779,214	1,247,658	4,913,964

Number of Emigrants. — There emigrated to the British colonies in North America in

	Individuals.		Individuals.		Individuals.
1825	8,741	1828	12,084	1831	58,067
1826	12,818	1829	13,307	1832	66,339
1827	12,648	1830	30,574	(*Parl. Paper*, No. 696. Sess. 1833.)	

Of these, the great majority have been destined for Upper Canada. — (For the total emigration from the United Kingdom, see PASSENGERS.)

Information for Emigrants to British North America. — In the latter part of 1831, a set of commissioners were appointed by government for the purpose of digesting plans of emigration, procuring information useful for emigrants, &c. On the 9th of February, 1832, they issued the following paper, the statements in which may be, consequently, regarded as quite authentic.

Colonial Office, 9th of February, 1832.

The object of the present notice is to afford such information as is likely to be useful to persons who desire either to emigrate, or to assist others to emigrate, to the British possessions in North America.

In the first place, it seems desirable to define the nature of the assistance to be expected from government by persons proceeding to these colonies. No pecuniary aid will be allowed by government to emigrants to the North American colonies; nor after their arrival will they receive grants of land, or gifts of tools, or a supply of provisions. Hopes of all these things have been sometimes held out to emigrants by speculators in this country, desirous of making a profit by their conveyance to North America, and willing for that purpose to delude them with unfounded expectations, regardless of their subsequent disappointment. But the wish of government is to furnish those who emigrate with a real knowledge of the circumstances they will find in the countries to which they are going.

No assistance of the extraordinary extent above described is allowed, because, in colonies, where those who desire to work cannot fail to do well for themselves, none such is needed. Land, indeed, used formerly to be granted gratuitously; but when it was taken by poor people, they found that they had not the means of living during the interval necessary to raise their crops; and further, that they knew not enough of the manner of farming in the colonies, to make any progress. After all, therefore, they were obliged to work for wages, until they could make a few savings, and could learn a little of the way of farming in Canada. But now, land is not disposed of except by sale. The produce of sales, although the price is very moderate, is likely to become a considerable fund, which can be turned to the benefit of the colonies, and therefore of the emigrants; while yet no hardship is inflicted on the poor emigrant, who will work for wages just as he did before, and may after a while acquire land, if land be his object, by the savings which the high wages in these colonies enable him speedily to make.

These are the reasons why government does not think it necessary to give away land in a country, where, by the lowness of its price, the plentifulness of work, and the high rate of wages, an industrious man can earn enough in a few seasons to become a freeholder by means of his own acquisitions.

The land which is for sale will be open to public competition, and of course, therefore, its price must depend upon the offers that may be made; but it will generally not be sold for less than from 4*s.* to 5*s.* per acre; and in situations where roads have been made, or the ground has been partially cleared, the common prices lately have been 7*s.* 6*d.*, 10*s.*, and 15*s.* Further particulars will be best learned upon the spot, where every endeavour will be made to meet the different circumstances and views of different purchasers.

Although government will not make any gifts at the public expense to emigrants to North America, agents will be maintained at the principal colonial ports, whose duty it will be, without fee or reward from private individuals, to protect emigrants against imposition upon their first landing, to acquaint them with the demand for labour in different districts, to point out the most advantageous routes, and to furnish them generally with all useful advice upon the objects which they have had in view in emigrating: and when a private engagement cannot be immediately obtained, employment will be afforded on some of the public works in progress in the colonies. Persons newly arrived should not omit to consult the government agent for emigrants, and as much as possible should avoid detention in the ports, where they are exposed to all kinds of impositions, and of pretexts for keeping them at taverns till any money they may possess has been expended. — For the same purpose of guarding against the frauds practised on new comers, and of preventing an improvident expenditure at the first moment of arrival, it seems very desirable that individuals who may wish to furnish emigrants with money for their use in the colony should have the means of making the money payable there, instead of giving it into the hands of the emigrants in this country. The commissioners for emigration are engaged in effecting general arrangements for this purpose, and due notice will be given to the public when they shall be completed. Agents for emigration have been appointed at St. John's, St. Andrew's, and Miramichi in New Brunswick, and at Quebec and York in Canada. On the whole subject of the manner of proceeding upon landing, it may be observed, in conclusion, that no effort will be spared to exempt emigrants from any necessity for delay at the place of disembarkation, and from uncertainty as to the opportunities of at once turning their labour to account.

After this explanation of the extent of the aid to be expected from government, the following statements are subjoined of the ordinary charges for passage to the North American colonies, as well as of the usual rates of wages and usual prices in them, in order that every individual may have the means of judging for himself of the inducements to emigrate to these parts of the British dominions

Passage. — Passages to Quebec or New Brunswick may either be engaged *inclusive* of provisions, or *exclusive* of provisions, in which case the ship owner finds nothing but water, fuel, and bed places, without bedding. Children under 14 years of age are charged one half, and under 7 years of age one third, of the full price; and for children under 12 months of age no charge is made. Upon these conditions the price of passage from London, or from places on the east coast of Great Britain, has generally been 6*l.* with provisions, or 3*l.* without. From Liverpool, Greenock, and the principal ports of Ireland, as the chances of delay are fewer, the charge is somewhat lower; this year it will probably be from 2*l.* to 2*l.* 10*s.* without provisions, or from 4*l.* to 5*l.* including provisions. It is possible that in March and April passages may be obtained from Dublin for 35*s.* or even 30*s.*; but the prices always grow higher as the season advances. In ships sailing from Scotland or Ireland, it has mostly been the custom for passengers to find their own provisions: but this practice has not been so general in London; and some ship owners, sensible of the dangerous mistakes which may be made in this matter through ignorance, are very averse to receive passengers who will not agree to be victualled by the ship. Those who do resolve to supply their own provisions, should at least be careful not to lay in an insufficient stock; 50 days is the shortest period for which it is safe to provide; and from London the passage is sometimes prolonged to 75 days.

The best months for leaving England are certainly March and April; the later emigrants do not find employment so abundant, and have less time in the colony before the commencement of winter.

Various frauds are attempted upon emigrants, which can only be effectually defeated by the good sense of the parties against whom they are contrived. Sometimes agents take payment from the emigrant for his passage, and then recommend him to some tavern, where he is detained from day to day under false pretences for delay, until, before the departure of the ship, the whole of his money is extracted from him. This of course cannot happen with agents connected with respectable houses; but the best security is to name in the bargain for passage a particular day, after which, whether or not the ship sails, the passenger is to be received on board and victualled by the owners. In this manner the emigrant cannot be intentionally brought to the place of embarkation too soon, and be compelled to spend his money at public houses, by false accounts of the time of sailing; for from the very day of his arrival at the port, being the day previously agreed upon, the ship becomes his home.

The conveyance of passengers to the British possessions in North America is regulated by an act of parliament (9 Geo. 4. c. 21.), of which the following are the principal provisions: — Ships are not allowed to carry passengers to these colonies unless they be of the height of 5½ feet between decks; and they must not carry more than 3 passengers for every 4 tons of the registered burden; there must be on board at least 50 gallons of pure water, and 50 lbs. of bread, biscuit, oatmeal, or bread stuff, for each passenger. When the ship carries the full number of passengers allowed by law, no part of the cargo, and no stores or provisions, may be carried between decks; but if there be less than the complete number of passengers, goods may be stowed between decks in a proportion not exceeding 3 cubical feet for each passenger wanting of the highest number. Masters of vessels who land passengers, unless with their own consent, at a place different from that originally agreed upon, are subject to a penalty of 20*l.*, recoverable by summary process before 2 justices of the peace in any of the North American colonies.

The enforcement of this law rests chiefly with the officers of his Majesty's customs; and persons having complaints to make of its infraction, should address themselves to the nearest Custom-house.

Besides the sea voyage from England, persons proceeding to Canada should be provided with the means of paying for the journey which they may have to make after their arrival at Quebec. The cost of this journey must, of course, depend upon the situation of the place where the individual may find employment, or where he may have previously formed a wish to settle; but to all it will probably be useful to possess the following report of the prices of conveyance, during the last season, on the route from Quebec to York, the capital of Upper Canada. From Quebec to Montreal (180 miles), by steam-boat, the charge for an adult was 6*s.* 6*d.*; from Montreal to Prescott (120 miles), by boats or barges, 7*s.*; from Prescott to York (250 miles), by steam-boat, 7*s.* The journey, performed in this manner, usually occupies 10 or 12 days: adding, therefore, 11*s.* for provisions, the total cost from Quebec to York (a distance of 550 miles) may be stated, according to the charges of last year, at 1*l.* 11*s.* 6*d.* Persons who are possessed of sufficient means prefer to travel by land that part of the route where the River St. Lawrence is not navigable by steam-boats, and the journey is then usually performed in 6 days, at a cost of 6*l.* It must be observed, that the prices of conveyance are necessarily fluctuating, and that the foregoing account is only presented as sufficiently accurate for purposes of information in this country, leaving it to the government agent at Quebec to supply emigrants with more exact particulars, according to the circumstances of the time at which they may arrive.

Rates of Wages and Market Prices. — The colonies in North America, to which emigrants can with advantage proceed, are Lower Canada, Upper Canada, and New Brunswick. From the reports received from the other British colonies in North America, namely, Prince Edward's Island, Newfoundland, Nova Scotia, and Cape Breton, it appears that they do not contain the means either of affording employment at wages to a considerable number of emigrants, or of settling them upon land.

Lower Canada. — From Lower Canada the commissioners for emigration have not received the official reports which were required from the North American colonies, for the purpose of compiling the present statement. They believe, however, that the following account of the prices of grain and of wages may be relied upon for its general correctness: —

		s.	*d.*
Wheat	per bushel	4	6
Rye	—	3	0
Maize	—	2	6
Oats	—	1	3
Wages of labourers	per day	2	6
Ship-builders, carpenters, joiners, coopers, masons, and tailors		5	0

Upper Canada. — From a comparison of all the documents before the commissioners for emigration, it appears that the yearly wages of labourers in Upper Canada, hired by the year, are from 27*l.* to 30*l.*; that their monthly wages, in different situations and at different seasons, range from 1*l.* 10*s.* to 3*l.* 10*s.* per month; and that daily wages range from 2*s.* to 3*s.* 9*d.* In all these rates of wages, board and lodging are found by the employer. Without board, daily wages vary from 3*s.* 6*d.* out of harvest to 5*s.* during harvest; 6*s.* 3*d.*, besides provisions, is sometimes given to harvest men. The wages of mechanics may be stated universally at from 5*s.* to 7*s.* 6*d.* per day.

The following Table exhibits the lowest and the highest price which the several articles therein named bore, during the year 1831, in each of the principal districts of Upper Canada: —

	Eastern District.		Johnstown ditto.		Bathurst ditto.		Newcastle ditto.		Home ditto.		Niagara ditto.		London ditto (Huron tract)	
	Lowest Price in 1851.	Highest Ditto.	Lowest	Highest	Lowest.	Highest	Lowest.	Highest	Lowest.	Highest	Lowest.	Highest	Low.	High.
	L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*s. d.*	*s. d.*
Wheat, per bu.	0 5 0	0 5 6	0 5 3	0 6 9	0 5 3	0 5 6	0 5 6	0 6 3	0 3 9	0 5 3	0 3 9	0 5 0	4 0	5 0
Maize —	0 2 6	0 3 0	0 1 9	0 2 3	0 2 6	0 3 0	0 2 0	0 3 0	0 2 0	0 2 9	0 2 6	0 2 6	3 9	3 9
Oats —	0 1 3	0 1 8	0 1 3	0 1 6	0 1 6	0 2 0	0 1 3	0 2 0	0 0 10	0 1 10½	0 1 3	0 1 6	3 1½	3 1½
Barley —	0 2 6	0 2 6	0 1 9	0 4 0	0 3 6	0 3 6	0 2 6	0 3 1	0 2 3	0 3 9	0 2 6	0 2 6	3 9	3 9
Potatoes, cwt	0 1 3 per bushel.	0 1 6 per bushel.	0 1 3	0 1 9	0 1 3									
Butter (fr.) lb.	0 0 7½	0 0 9	0 0 6	0 0 8	0 0 6	0 0 8	0 0 7½	0 0 9	0 0 7½	0 1 0	0 0 7½	0 0 7½	0 7½	1 0
Ditto (salt) —	0 0 7½	0 0 7½	0 0 7½	0 0 10	0 0 7½	0 0 7½	0 0 7½	0 0 9	0 0 9	0 0 10	0 0 6½	0 0 7½	0 7½	1 0
Cheese —	0 0 6	0 0 6	0 0 4	0 0 6	0 0 5	0 0 6	0 0 5	0 0 7½	0 0 6	0 0 6	0 0 4	0 0 6	0 7½	0 7½
Eggs, per doz.	0 0 5	0 0 9	0 0 6	0 0 10	0 0 4	0 0 8	0 0 6	0 0 7½	0 0 7½	0 1 10½	0 0 6	0 1 6	0 7½	0 7½
Ducks, per pair	0 1 8	0 1 8	0 1 6	0 2 6	0 3 0	0 4 0	0 2 6	0 3 9	0 3 3	0 5 0	0 3 9	0 3 9	2 6	2 6
Fowls —	0 1 4	0 1 6	0 1 0	0 2 0	0 2 0	0 3 0	0 2 0	0 2 6	0 5 0	0 10 0	0 5 0	0 7 6	2 6	2 6
Geese —	0 4 0	0 5 0	0 2 4	0 3 6	0 3 0	0 4 0	0 2 6	0 3 9	0 3 3	0 5 0	0 3 9	0 3 9	2 6	2 6
Turkeys —	0 5 0	0 6 0	0 3 6	0 4 0	0 4 0	0 4 0	0 2 3	0 3 9	0 5 0	0 10 0	0 5 0	0 7 6	2 6	2 6
Hay, per ton	1 15 0	2 5 0	1 10 0	2 10 0	2 10 0	3 10 0	1 10 0	3 10 0	1 10 0	2 10 0	1 15 0	2 10 0		
Straw, per load	0 16 8	0 16 8	0 5 0	0 10 0	0 7 6	0 5 0	0 5 0	0 15 0	0 15 0	0 15 0	0 5 0	0 5 0		
Bread, 4 lb. lf.	0 0 9	0 0 10	0 0 6	0 0 8	0 0 7	0 0 10	0 0 7½	0 0 7½	0 0 4½	0 0 7	0 0 7	0 0 8		
Meat, per lb.														
Beef - -	0 0 2½	0 0 3½	0 0 2½	0 0 4	0 0 4	0 0 4	0 0 2½	0 0 3	0 0 3	0 0 5	0 0 2	0 0 3½	0 3⅜	0 3⅜
Mutton -	0 0 3	0 0 4	0 0 2½	0 0 4	0 0 4	0 0 4	0 0 2½	0 0 3	0 0 5	0 0 7½	0 0 2	0 0 3½	0 3⅜	0 3⅜
Pork - -	0 0 4	0 0 5	0 0 4	0 0 6	0 0 3	0 0 5	0 0 3	0 0 4	0 0 3	0 0 6	0 0 3½	0 0 3½	0 7½	0 7½
Veal - -	0 0 3	0 0 3	0 0 2½	0 0 3	0 0 3	0 0 4	0 0 3	0 0 5	0 0 3	0 0 5	0 0 2½	0 0 3½	0 4½	0 4½
Flour 100 lbs.														
Fine - -	0 15 0	0 17 6	0 15 0	0 17 6	0 12 6	0 16 0	0 12 6	0 17 6	0 12 6	0 15 0	0 12 6	0 15 0	15 0	15 0
Seconds -	0 12 6	0 12 6	0 12 6	0 15 0	0 10 6	0 12 6	0 10 0	0 15 0	0 11 3	0 12 6	0 12 6	0 15 0		

New Brunswick. — The following is a list of prices compiled from documents sent in from various parts of New Brunswick: —

		L. s. d.		*L. s. d.*
Wheat	per bushel	0 5 0 to	0 10 0	Bread — per 4 lb. loaf	0 0 10 to	0 1 0
Maize	—	0 3 6 —	0 5 0	Beef — per stone	0 3 3 —	0 4 0
Oats	—	0 1 6 —	0 2 6	Mutton — —	0 2 4 —	0 4 0
Barley	—	0 4 0 —	0 5 0	Pork — —	0 2 0½ —	0 4 0
Potatoes	per cwt.	0 1 3 —	0 3 6	Veal — —	0 2 4 —	0 4 8
Butter (fresh)	per lb.	0 0 9 —	0 1 0	Flour — per 100 lbs.	0 16 0 —	0 17 6
Ditto (salt)	—	0 0 8 —	0 0 10	Salt pork — per barrel	4 15 0 —	5 5 0
Cheese	—	0 0 4 —	0 0 7	Ditto beef — —	3 0 0 —	3 10 0
Eggs	per dozen	0 0 7½ —	0 1 0	Malt — per bushel	0 6 2 —	0 6 4
Ducks	per pair	0 2 0 —	0 3 6	Rye flour — per barrel	1 2 6	
Fowls	—	0 1 6 —	0 2 6	Indian ditto — —	1 2 6	
Geese	—	0 3 0 —	0 5 0	Oatmeal — per cwt.	0 16 0 —	0 18 0
Turkeys	—	0 7 6 —	0 10 0	Salt cod — per 112 lbs.	0 10 0 —	0 12 0
Hay	per ton	1 10 0 —	2 10 0	Ditto mackarel — per barrel	0 17 0 —	1 0 0
Straw	—	1 0 0 —	1 5 0	Ditto alewives — —	0 10 0 —	0 12 0

Coals are sold at 30*s.* per chaldron. House rent is from 5*l.* to 6*l.* per annum for families occupying one room; and for families occupying two rooms, from 6*l.* to 10*l.* Common labourers receive from 3*s.* to 4*s.* a day, finding their own subsistence; but when employed at the ports in loading vessels, their subsistence is found for them. Mechanics receive from 5*s.* to 7*s.* 6*d.* per day, and superior workmen from 7*s.* 6*d.* to 10*s.*

Upon the foregoing statements, it must be observed that emigrants, especially such of them as are agricultural labourers, should not expect the highest wages named until they have become accustomed to the work of the colony. The mechanics most in demand are those connected with the business of house-building. Shoemakers and tailors, and ship-builders, also find abundant employment.

Mr. Buchanan, his Majesty's chief agent for the superintendence of emigrants in Upper and Lower Canada has issued the following information, dated Quebec, 16th of July, 1833.

There is nothing of more importance to emigrants on arrival at Quebec, than correct information on the leading points connected with their future pursuits. Many have suffered much by a want of caution, and by listening to the opinions of interested designing characters, who frequently offer their advice unsolicited, and who are met generally about wharfs and landing places frequented by strangers. To guard emigrants from falling into such errors, they should, immediately on arrival at Quebec, proceed to the office of the chief agent for emigrants in Sault-au-Matelot Street, Lower Town, where every information requisite for their future guidance, in either getting settlement on lands, or obtaining employment in Upper or Lower Canada, will be obtained *gratis*. On your route from Quebec to your destination you will find many plans and schemes offered to your consideration, but turn away from them unless you are well satisfied of the purity of the statements. On all occasions when you stand in need of advice, apply to the government agents.

Emigrants are informed that they may remain on board ship 48 hours after arrival; nor can they be deprived of any of their usual accommodations for cooking or berthing during that period; and the master of the ship is bound to land the emigrants and their baggage, *free of expense*, at the usual landing places, and at seasonable hours.

Should you require to change your English money, go to some respectable merchant or to the banks. The currency in the Canadas is at the rate of 5*s.* the dollar, and is called Halifax currency; at present the gold sovereign is worth 24*s.* currency in Montreal; in New York, 8*s.* is calculated for the dollar; hence many are deceived when hearing of the rates of labour, &c.: 5*s.* in Canada is equal to 8*s.* New York; thus, 8*s.* New York currency is equivalent to 5*s.* Halifax currency.

Emigrants who wish to settle in Lower Canada, or to obtain employment, are informed that many desirable situations are to be met with. Wild lands of superior quality may be obtained by purchase on very easy terms from the commissioners of Crown lands in various townships in the province, and good farm labourers and mechanics are much in request, particularly in the eastern townships, where also many excellent situations and improved farms may be purchased from private proprietors. At the Chambly Canal many labourers will find immediate employment. In every part of Upper Canada the demand for labourers and mechanics is also very great. All labouring emigrants who reach York, and who may be in want of immediate employment, will be provided with it by the government. The principal situations in Upper Canada where arrangements are made for locating emigrants are in the Bathurst, Midland, Newcastle, Home, London, and Western districts. Settlers with means will have opportunities of purchasing Crown lands in several parts of the province at the monthly sales, information of which may be obtained on application at the Crown Land Office, York, or to A. B. Hawke, Esq. the government agent for emigrants there, to whom they will apply, on arrival, for such further advice as they may require.

Emigrants proceeding to Upper Canada, above Kingston, either by the Ottawa or St. Lawrence route, are advised to supply themselves with provisions at Montreal, such as bread, tea, sugar, and butter, which

Portland Pt.

West from Greenwich

100

they will purchase cheaper and of *better quality* than along the route. They are also particularly cautioned against the use of ardent spirits, or drinking cold river water, or lying on the banks of the river exposed to the night dews; they should proceed at once from the steam-boat at Montreal for Lachine, 8 miles above, from whence the Durham and steam-boats start for Prescott and Bytown daily.

Emigrants will obtain from Mr. John Hays, the government agent at Lachine, such advice and assistance as they may require; and they will find there a convenient barrack log house, where those wishing may remain for the night, and avoid exposure and expense of lodgings. Mr. John Patton, the government agent at Prescott, will render every advice and assistance to emigrants.

Labourers or mechanics dependent on immediate employment are requested to proceed immediately on arrival into the country. The chief agent will consider such persons as may loiter about the ports of landing beyond *one week* after arrival to have no further claims on the protection of his Majesty's agents for assistance or employment, unless they have been detained by sickness or some other satisfactory cause.

The following information with respect to Upper Canada has been circulated by the Canada Company: —

" Persons desirous of obtaining employment, and having the means of emigrating to Upper Canada, may get work at high prices compared with what they have been accustomed to receive in this country as agricultural labourers. The wages given in Upper Canada are from 2*l.* to 3*l.* per month, with board and lodging. At these wages there is a constant demand for labour in all parts of Upper Canada; and there is no doubt that a very great number, beyond those now there, would find employment. Working artisans, particularly blacksmiths, carpenters, bricklayers, masons, coopers, millwrights, wheelwrights, shoemakers, and tailors, get high wages, and are much wanted. Industrious men may look forward with confidence to an improvement in their situation, as they may save enough out of one season's work to buy land themselves in settled townships.

" Freehold land of excellent quality is to be sold at 8*s.* 9*d.* to 20*s.* currency per acre, payable as follows: — One fifth of the purchase money to be paid down at the time of making choice of the land in Canada, and the remainder in 5 annual payments with interest, which an industrious settler would be able to pay out of the crops.

" Upper Canada is a British province, within a few weeks' sail of this country. The climate is good; all the fruits and vegetables common to the English kitchen garden thrive well; sugar, for domestic purposes, is made from the maple tree, on the land. The soil and country possess every requisite for farming purposes and comfortable settlement, which is proved by the experience of the numerous industrious emigrants now settled there. The samples of Upper Canada wheat have not been exceeded in quality by any in the British market during the past year. The population of the province, which is rapidly increasing, consists almost exclusively of persons from Great Britain and Ireland, who have gone there to settle. The taxes are very trifling, and there are no tithes. The expense of clearing the land ready for seed is about 4*l.* per acre if paid for in money; but if done by the purchasers themselves, they must employ part of their time at wages, or possess some means of their own.

" The expense of removing from this country to Quebec or Montreal, including provisions for the voyage, is, for grown persons, men or women, from 6*l.* to 7*l.*, and half price for children under 14 years of age: if the parties find their own provisions, the passage money is 3*l.* or 3*l.* 10*s.* for an adult, and in proportion for children. From Ireland and Scotland the expense is considerably less. The expense of the transport of an adult emigrant from Quebec to York and the head of Lake Ontario will not exceed from 1*l.* to 1*l.* 2*s.* 6*d.* currency, or 18*s.* or 19*s.* sterling, exclusive of provisions.

" The Canada Company, to encourage settlement in the Huron tract, have determined for this year (1833) to allow all families, *settlers* in that district, purchasing 160 acres or more, of the Company, the expenses of *conveyance*, at a stipulated rate, from Quebec or Montreal to the head of Lake Ontario, allowing each family to consist of 2 adults and 3 children, by deducting those expenses from the second instalment of the purchase money of their farm. The present prices of land in the Huron tract, which is of the finest quality in America, are from 8*s.* 9*d.* to 10*s.* provincial currency, that is, from $1\frac{3}{4}$ to 2 dollars per acre.

" The Canada Company, to facilitate the transmission of money to the Upper and Lower Provinces, will receive from intending emigrants any deposits in London, for which they will issue letters of credit on their agents, allowing the parties the full benefit of the rate of exchange, which usually ranges from 8 to 10 per cent. Persons resident in this country, desirous of making remittances to their friends in the Canadas, are afforded the same facilities and advantages.

" Further information, and the papers distributed by the Canada Company, may be obtained on application to the secretary, John Perry, Esq.

" London, October, 1833."

The following extract from the *Montreal Daily Advertiser* of the 4th of September, 1833, gives the prices of the principal articles of Canadian produce as under: —

	£	s.	d.		£	s.	d.
Ashes, pot, 1st sort, per cwt.	1	3	6	to	1	4	6
pearl - -	1	5	0	—	1	5	6
Flour and meal —							
Superfine, per 196 lbs. (Canada)	1	10	9	—	1	11	3
Fine ditto ditto	1	9	6	—	1	10	0
Middling ditto ditto	1	7	6	—	1	8	0
Pollards ditto ditto	1	2	0	—	1	2	6
Indian meal, per 168 lbs. -	1	2	6				
Oatmeal per cwt. -	0	13	6	—	0	14	0

	£	s.	d.		£	s.	d.
Grain and seed —							
Wheat, W. Canada, per 60 lbs.	0	6	3	—	0	6	6
mixed -	0	6	0	—	0	6	2
red -	0	5	10	—	0	6	0
Barley, per bushel - -	0	3	4	—	0	3	6
Indian corn - -	0	4	0	—	0	4	6
Oats - -	0	1	6	—	0	1	8
Peas (boiling) - -	0	4	9	—	0	5	0
Flax seed, per bushel -	0	5	0	—	0	5	3

(2.) *West India Colonies.* — In the West Indies we possess Jamaica, Barbadoes, St. Lucia, Antigua, Grenada, Trinidad, and some other islands, exclusive of Demerara and Berbice in South America. Jamaica, by far the largest and most valuable of our insular possessions, is about 120 miles in length and 40 in mean breadth, containing about 2,800,000 acres, of which from 1,100,000 to 1,200,000 are supposed to be in cultivation. Being situated within the tropic of Cancer, the heat in the West Indies is intense, but is moderated by the sea breeze which blows regularly during the greater part of the day. The rains make the only distinction of seasons. They sometimes fall with prodigious impetuosity, giving birth to innumerable torrents, and laying all the low country under water: the trees are green the whole year round: they have no snow, no frost, and but rarely some hail. The climate is very humid; iron rusts and corrodes in a very short time; and it is this, perhaps, that renders the West Indies so unfriendly to European constitutions, and produces those malignant fevers that are so very fatal. The vegetable productions are numerous and valuable; but the sugar cane and the coffee

plant are incomparably more important than the others, and constitute the natural riches of the islands.

The West Indies are occasionally assailed by the most dreadful hurricanes, which destroy in a moment the hopes and labours of the planters, and devastate entire islands. Whole fields of sugar canes are sometimes torn up by the roots, houses are either thrown down or unroofed, and even the heavy copper boilers and stills in the works have, in numerous instances, been wrenched from the ground and battered to pieces. The rain pours down in torrents, sweeping before it every thing that comes in its way. The destruction caused by such dreadful scourges seldom fails to produce a very great scarcity, and not unfrequently famine; and we are ashamed to have to add, that the severity of the distress has on several occasions been materially aggravated by a refusal on the part of the authorities to allow importation direct from the United States!* This was the case at Dominica so late as 1817.

Jamaica was discovered by Columbus in 1494, and continued in possession of the Spaniards till 1655, when it was wrested from them by the English. Although it had thus been for more than a century and a half under the power of Spain, such was the deadening influence of her colonial system, that it did not, when we conquered it, contain 1,500 white inhabitants, and these were immersed in sloth and poverty. Of the many valuable articles which Jamaica soon after produced in such profusion, many were then altogether unknown; and of those that were known, such a supply only was cultivated as was required for the consumption of the inhabitants. "The Spanish settlers," it is said by Mr. Bryan Edwards, "possessed none of the elegancies of life; nor were they acquainted even with many of those gratifications which, in civilised states, are considered necessary to its comfort and convenience. They were neither polished by social intercourse, nor improved by education; but passed their days in gloomy languor, enfeebled by sloth, and depressed by poverty. They had been for many years in a state of progressive degeneracy, and would probably in a short time have expiated the guilt of their ancestors, by falling victims themselves to the vengeance of their slaves."—(*Hist. West Indies*, vol. i. p. 297. 8vo ed.)

For a considerable number of years after we obtained possession of Jamaica, the chief exports were cacao, hides, and indigo. Even so late as 1772, the exports of sugar amounted to only 11,000 hogsheads. In 1774, they had increased to 78,000 hogsheads of sugar, 26,000 puncheons of rum, and 6,547 bags of coffee. The American war was very injurious to the West India settlements; and they may, indeed, be said to be still suffering from its effects, as the independence of America led to the enactment of those restrictions on the importation of food, lumber, &c. that have been so very hurtful to the planters. In 1780, Jamaica was visited by a most destructive hurricane, the devastation occasioned by which produced a dreadful famine; and other hurricanes followed in the immediately succeeding years. But in 1787, a new era of improvement began. The devastation of St. Domingo by the negro insurrection, which broke out in 1792, first diminished, and in a few years almost entirely annihilated, the annual supply of 115,000 hogsheads of sugar, which France and the Continent had previously been accustomed to receive from that island. This diminution of supply, by causing a greatly increased demand for, and a consequent rise in the price of, the sugar raised in the other islands, occasioned an extraordinary extension of cultivation. So powerful in this respect was its influence, that Jamaica, which, at an average of the 6 years preceding 1799, had produced only 83,000 hogsheads, exported, in 1801 and 1802, upwards of 286,000 hogsheads, or 143,000 a year!

The same rise of price, which had operated so powerfully in Jamaica, occasioned a similar though less rapid extension of cultivation in our other islands, and in Cuba, Porto Rico, and the foreign colonies generally. The vacuum caused by the cessation of the supplies from St. Domingo being thus more than filled up, a reaction commenced. The price of sugar rapidly declined; and notwithstanding a forced market was for a while opened to it, by substituting it for malt in the distillery, prices did not attain to their former elevation. On the opening of the Continental ports, in 1813 and 1814, they, indeed, rose, for a short time, to an extravagant height; but they very soon fell again, involving in ruin many of the speculators upon an advance. And notwithstanding a recent rally, they are, and have been for the last 10 years, comparatively low. The fall seems to be entirely owing to the vast extension of the sugar cultivation in Cuba, Brazil, Java, Louisiana, &c., and in Demerara, Berbice, and the Mauritius. From the facility, too, with which sugar may be raised in most of these countries, and their vast extent, there seems little prospect of prices ever again attaining to their

* It is stated in a report by a committee of the Assembly of Jamaica, that 15,000 negroes perished between the latter end of 1780 and the beginning of 1787, through famine occasioned by hurricanes and the prohibition of importation from the United States!—(*Edwards's West Indies*, vol. ii. p. 515.) Those who are so very fond of vituperating "hard-hearted economists," as they are pleased to term those who advocate the repeal of oppressive restrictions, must, we presume, look upon occurrences of this sort as merciful dispensations.

old level. It is to no purpose, therefore, to attempt to relieve the distresses of the planters of Jamaica and our other islands by temporary expedients. The present low prices have not been brought about by accidental or contingent circumstances. And to enable the planters to contend successfully with the active competitors that surround them on all sides, we must place them, at least in so far as we have the means, in a similar situation, by allowing them to resort for supplies to the cheapest markets, and to send their produce into Europe in such a shape as they may think best.

The devastation of St. Domingo gave the same powerful stimulus to the growth of coffee in the other West Indian colonies, that it did to the growth of sugar; and owing to the extraordinary increase in the demand for coffee in this and other European countries during the last 10 years, the impulse has been, in a great measure, kept up.—(See COFFEE.) In 1752, the export of coffee from Jamaica amounted to only 60,000 lbs., in 1775, it amounted to 440,000 lbs.; in 1797, it had increased to 7,931,621 lbs.; in 1832, the exports to England amounted to 19,011,000 lbs.; and they have been stationary at about this quantity for some time.

We have already seen, that when Jamaica was taken from the Spaniards, it only contained 1,500 white inhabitants. In 1673, the population amounted to 7,768 whites and 9,504 slaves. It would have been well for the island had the races continued to preserve this relation to each other; but, unfortunately, the black population has increased more than *five* times as rapidly as the white; the latter having increased only from 7,768 to about 30,000, while the former has increased from 9,504 to 322,421, exclusive of persons of colour. The immense preponderance of the slave population has rendered the question of emancipation so very difficult.

The correspondence of the slaves in Jamaica with their emancipated brethren in Hayti or St. Domingo has been prohibited by a provision in the act 3 & 4 Will. 4. c. 59. § 55.—(see *post*).

The real value of the exports to Jamaica amounts to about 1,600,000*l.* a year, being more than half the amount of the exports to the West Indian colonies. It should, however, be observed, that a considerable portion of the articles sent to Jamaica, and some of the other colonies, are only sent there as to an *entrepôt*, being subsequently exported to the Spanish main. During the ascendancy of the Spanish dominion in Mexico and South America, this trade, which was then contraband, was carried on to a very great extent. It is now much fallen off; but the central situation of Jamaica will always secure to her a considerable share of this sort of transit trade.

Barbadoes was the earliest of our possessions in the West Indies. It is the most easterly of the Caribbee islands; Bridge Town, the capital, being in lon. 59° 41′ W. Barbadoes is by far the best cultivated of all the West India islands. It contains about 105,000 acres, having a population of about 16,000 whites, 2,700 free people of colour, and 68,000 slaves. It exports about 21,000 hogsheads of sugar, of 16 cwt. each. Barbadoes had attained the acmé of its prosperity in the latter part of the seventeenth century, when the white population is said to have amounted to about 50,000, though this is probably an exaggeration. But it is only as compared with itself that it can be considered as having fallen off; for, compared with the other West India islands, its superiority is manifest. It raises nearly as much food as is adequate for its supply.

The islands next in importance are St. Vincent, Grenada, Trinidad, Antigua, &c. It is unnecessary to enter into any special details with respect to them; their population and trade being exhibited in the Tables annexed to this section.

During the late war, we took from the Dutch the settlements of Demerara, Berbice, and Essequibo, in Guiana, which were definitively ceded to us in 1814. The soil of these settlements is naturally very rich; and they have, in this respect, a decided advantage over most of the West India islands. Their advance, since they came into our possession, was for a while very great; but recently their progress seems to have been checked, and their exports, particularly those of rum and coffee, have declined considerably. The imports of sugar from them amount to about *a third* of the imports from Jamaica. The rum of Demerara enjoys a high reputation; and of the total quantity imported from the British colonies and plantations in 1832, amounting to 4,741,649 gallons, Demerara and Berbice furnished 1,415,449 gallons. The best samples of Berbice coffee are of very superior quality; but the planters finding the cultivation of sugar more profitable, the imports have materially declined of late years. In 1832, they amounted, from both colonies, to 3,449,400 lbs. Considerable quantities of cotton were formerly exported from Guiana; but the Americans having superior facilities for its production, the planters have in a great measure ceased to cultivate it. Cacao, annotto, &c. are produced, but not abundantly.

These statements are sufficient to show the importance of Demerara and Berbice. Considering, indeed, their great natural fertility, and the indefinite extent to which every sort of tropical culture may be carried in them, they certainly rank among the most valuable of the colonial possessions we have acquired for many years.

Exclusive of the above, we possess the settlement of Balize on the Bay of Honduras. This is of importance, as affording a means of obtaining abundant supplies of mahogany; but it is of more importance as an *entrepôt* for the supply of Guatemala with English manufactured goods. — (For accounts of the colonies in Australasia, &c., see COLUMBO, CAPE OF GOOD HOPE, PORT LOUIS, SYDNEY, &c.)

The following is an account of the quantities of the three great articles of sugar, coffee, and rum, imported from the British West Indies into the United Kingdom in the year 1832: —

British Colonies in the West Indies.	Sugar.	Coffee.	Rum.
	Cwt. qrs. lbs.	*Lbs.*	*Proof Gallons.*
Antigua	143,336 0 0	49,888	29,173
Barbadoes	266,464 2 27	158,191	5,740
Dominica	58,270 0 25	1,350,401	34,599
Grenada	188,231 1 14	8,749	103,654
Jamaica	1,431,689 1 18	19,405,843	2,757,053
Montserrat	20,855 2 20	164	11,504
Nevis	39,843 1 19	112	11,189
St. Kitt's	80,602 0 20	1,074	29,951
St. Lucia	47,965 3 14	84,512	6,544
St. Vincent	186,812 1 15	- - -	29,732
Tobago	108,100 3 10	- - -	281,651
Tortola	14,999 0 24	- - -	108
Trinidad	312,265 3 10	91,532	5,556
Bermudas	0 2 0	33	30
Demerara	736,561 1 26	1,200,791	1,293,255
Berbice	137,457 0 20	2,291,497	122,194
Total imports in 1832	3,773,456 1 4	24,642,787	4,721,933
Ditto in 1830	3,912,628 2 12	27,428,877	6,751,797
Decrease in 1832, as compared with 1830	139,172 1 8	2,786,090	2,029,864

The duties on West India produce entered for home consumption during the year 1832, yielded about 7,000,000*l.* nett.

The exports from this country to our West Indian colonies consist of coarse cottons, linens, checks, hats, and other articles of negro clothing; hardware and earthenware; staves, hoops, coal, lime, paint, lead; Irish provisions, herrings and other salt fish; along with furniture, wine, beer, medicines, and, indeed, almost every article which a great manufacturing country can supply to one, situated in a tropical climate, which has very few mechanics, and hardly any manufactures. Since the depression of West Indian property, and the opening of the ports on the Spanish main to ships from England, the exports to the West Indies have decreased both in quantity and value. Their declared or real value amounted, as appears from the following account, in 1831, to 2,581,949*l.*

Statement of the Total Amount of Trade between the United Kingdom and the British West India Colonies, in each Year, from 1814 to 1831, both inclusive.

Years.	Official Value.				Declared Value of British and Irish Products exported to the British West Indies.
	Imports from the British West Indies.	Exports to the British West Indies.			
		British and Irish Produce and Manufactures.	Foreign and Colonial Merchandise.	Total of Exports.	
	£	£	£	£	£
1814	9,022,309	6,282,226	339,912	6,622,138	7,019,938
1815	9,903,260	6,742,451	453,630	7,196,081	7,218,057
1816	7,847,895	4,584,509	268,719	4,853,228	4,537,056
1817	8,326,926	6,632,708	382,883	7,015,591	5,890,199
1818	8,608,790	5,717,216	272,491	5,989,707	6,021,627
1819	8,188,539	4,395,215	297,199	4,692,414	4,841,253
1820	8,353,706	4,246,783	314,567	4,561,350	4,197,761
1821	8,367,477	4,940,609	370,738	5,311,347	4,320,581
1822	8,019,765	4,127,052	243,126	4,370,178	3,439,818
1823	8,425,276	4,621,589	285,247	5,906,836	3,676,780
1824	9,065,546	4,843,556	324,375	5,167,931	3,827,489
1825	7,932,829	4,702,249	295,021	4,997,270	3,866,834
1826	8,420,454	3,792,453	255 241	4,047,694	3,199,265
1827	8,380,833	4,685,789	331,586	5,017,375	3,683,222
1828	9,496,950	4,134,744	326,298	4,461,042	3,289,704
1829	9,087,923	5,162,197	359,059	5,521,256	3,612,085
1830	8,599,100	3,749,799	290,878	4,040,677	2,838,448
1831	8,448,839	3,729,522	258,764	3,988,286	2,581,949

The following are the *quantities* of some of the principal articles exported to the West Indian colonies in 1831: — Cottons, 21,975,459 yards; linens, 11,029,191 yards; woollens, 149,952 yards; hats, 26,694 dozens; leather, wrought and unwrought, 349,842 lbs.; earthenware, 1,331,799 pieces; glass, 23,544 cwt.; hardware and cutlery, 13,535 cwt.; coals and culm, 48,536 tons; beef and pork, 24,472 barrels; soap and candles, 4,389,968 lbs., &c. — (*Parl. Paper*, No. 550. Sess. 1833.)

The articles exported from Canada and the British possessions in North America principally consist of timber and lumber of all sorts; grain, flour, and biscuit; furs, dried fish, fish oil, turpentine, &c. The imports principally consist of woollens, cottons, and linens, earthenware, hardware, leather, salt, haberdashery of all sorts; tea, sugar, and coffee; spices, wine, brandy, and rum, furniture, stationery, &c.

The following are the quantities of some of the principal articles exported from Great Britain to Canada, Nova Scotia, &c. in 1831: — Cottons, 15,618,106 yards; woollens, 900,124 yards; linens, 3,309,165 yards; earthenware, 2,253,851 pieces; iron and steel, wrought and unwrought, 12,400 tons; hardware and cutlery, 29,482 cwt.; coals and culm, 31,134 tons; salt, 1,559,684 bushels; beef and pork, 8,534 barrels, &c. — (*Parl. Paper*, No. 550. Sess. 1833.)

We are indebted to Mr. Mayer, of the Colonial Office, for much valuable information, and in particular for the Tables given in the next two pages, the most complete that have ever been published, of the population and trade of our colonial possessions.

Money. — What is called West India currency is an imaginary money, and has a different value in different colonies. The value it bears, as compared with sterling money, was supposed to represent the corresponding value of the coins in circulation in the different islands at the time the proportion was fixed: these coins being for the most part mutilated, and otherwise worn and defaced, currency is in all cases less valuable than sterling. The following are the values of 100*l.* sterling, and of a dollar, in the currencies of the different islands: —

	Sterling.		Currency.	Dollar.		Currency.
Jamaica	100*l.*	=	140*l.*	1	=	6*s.* 8*d.*
Barbadoes	100*l.*	=	135*l.*	1	=	6*s.* 3*d.*
Windward Islands (except Barbadoes)	100*l.*	=	175*l.*	1	=	8*s.* 3*d.*
Leeward Islands	100*l.*	=	200*l.*	1	=	9*s.* 0*d.*

But these proportions are seldom acted upon; the exchange being generally from 10 to 20 per cent. above the fixed par.

By an order in council of the 23d of March, 1825, British silver money is made legal tender throughout all British colonial possessions, at the nominal value as in England; and bills for the same are given on the Treasury of London, of 100*l.* each bill for 103*l.* such silver money. By this order, also, the value of the Spanish dollar is fixed at 4*s.* 4*d.* British silver money throughout all the colonies where it is current.

The following are the gold coins circulating at Jamaica, with their legal weight and fineness: —

	Dwts.	*grs. Tr.*	Value in Currency. £	*s.*	*d.*
Spanish doubloon	17	8	5	0	0
Two pistole piece	8	16	2	10	0
Pistole	4	8	1	5	0
Half pistole	2	4	0	12	6
Portuguese Johannes (called Joe)	18	12	5	10	0
Half Joe	9	6	2	15	0
Quarter Joe	4	15	1	7	6
Moidore	6	22	2	0	0
Half moidore	3	11	1	0	0
English guinea	5	8	1	12	6
Half guinea	2	16	0	16	3
Sovereign	5	2	1	12	0

IV. Regulations under which Colony Trade is conducted. — Disposal of Land in the Colonies, &c.

These are embodied in the act 3 & 4 Will. 4. c. 59., which came into operation on the 1st of September, 1833. It is as follows: —

Importation and Exportation of Goods confined to free Ports. — No goods shall be imported into, nor shall any goods, except the produce of the fisheries in British ships, be exported from, any of the British possessions in America by sea, from or to any place other than the United Kingdom, or some other of such possessions, except into or from the several ports in such possessions, called "Free Ports," enumerated or described in the table following; (that is to say,)

Table of free Ports. — Kingston, Savannah Le Mar, Montego Bay, Santa Lucia, Antonio, Saint Ann, Falmouth, Maria, Morant Bay, Annotto Bay, Black River, Rio Bueno, Port Morant, Jamaica; Saint George, Grenada; Roseau, Dominica; Saint John's, Antigua; San Josef, Trinidad: Scarborough, Tobago; Road Harbour, Tortola; Nassau, New Providence; Pitt's Town, Crooked Island; Kingston, Saint Vincent; Port Saint George and Port Hamilton, Bermuda; any port where there is a Custom-house, Bahamas; Bridgetown, Barbadoes; Saint John's, Saint Andrew's, New Brunswick; Halifax, Pictou, Nova Scotia; Quebec, Canada; Saint John's, Newfoundland; George Town, Demerara; New Amsterdam, Berbice; Castries, Saint Lucia; Basseterre, Saint Kitt's; Charles Town, Nevis; Plymouth, Montserrat; Sydney, Cape Breton; Charlotte Town, Prince Edward's Island; Anguilla, Anguilla; and if any goods shall be imported into any port or place in any of the said possessions contrary hereto, such goods shall be forfeited. — § 2.

His Majesty may appoint other Ports to be free Ports. — Provided always, that if his Majesty shall deem it expedient to extend the provisions of this act to any port or ports not enumerated in the said table, it shall be lawful for his Majesty, by order in council, to do so; and from the day mentioned in such order in council, all the privileges and advantages of this act, and all the provisions, penalties, and forfeitures therein contained, shall extend, and be deemed and construed to extend, to any such port or ports, as fully as if the same had been inserted and enumerated in the above table: provided also, that nothing hereinbefore contained shall extend to prohibit the importation or exportation of goods into or from any ports or places in Newfoundland or Labrador in British ships. — § 3.

His Majesty may appoint Ports for limited Purposes. — And whereas there are in the said possessions many places situated in rivers and in bays at which it may be necessary to establish ports for particular and limited purposes only; be it therefore enacted, that it shall be lawful for his Majesty, in any order in council made for the appointment of any free port, to limit and confine such appointments respectively to any and such purposes only as shall be expressed in such order. — § 4.

Privileges granted to Foreign Ships limited to the Ships of those Countries granting the like Privileges to British Ships, &c. — And whereas by the law of navigation foreign ships are permitted to import into

POPULATION OF THE BRITISH NORTH AMERICAN AND WEST INDIAN COLONIES.

British North American Colonies.	1806.	1825.	1832, or latest Census.
Lower Canada	[illegible]	423,630	539,822
Upper Canada	[illegible]	157,541	211,567
New Brunswick	[illegible]	72,932	72,943
Nova Scotia	[illegible]	101,000	142,548
Cape Breton	[illegible]	16,000	
Prince Edward's Island	[illegible]	29,000	32,292
Newfoundland	[illegible]	52,497	60,088
Totals	423,412	846,600	1,059,260

British West Indian Colonies.	1824.							1832, or latest Census.						
	Whites.		Free Coloured.		Slaves.		Total.	Whites.		Free Coloured.		Slaves.		Total.
	Male.	Female.	Male.	Female.	Male.	Female.	Male and Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male and Female.
Antigua	1,140	840	1,549	2,346	14,454	16,531	36,860	1,370		3,020		13,992	15,545	33,927
Barbadoes	6,827	7,803	2,258	2,666	36,169	42,657	97,970	15,029		4,326		37,762	45,738	100,855
Dominica	487	417	1,406	1,758	7,919	8,633	20,622	412	379	1,782	2,295	7,362	8,030	20,260
Grenada	628	219	1,587	2,101	12,358	13,052	29,648	2,154			2,450	11,432	12,172	28,208
Jamaica	no census taken.	37,152	no census taken.		166,525	153,658	373,405	no census taken.				158,254	164,167	322,121
Montserrat	175	215	234	320	3,032	3,473	7,447	157	173	310	504	2,867	3,395	7,406
Nevis		1,140			4,383	4,678	10,401	700		2,000		4,526	4,616	11,842
St. Kitt's	1,612		1,996		9,305	10,312	23,425	1,612		3,000		9,141	9,944	25,697
St. Lucia	676	518	1,576	2,083	6,297	7,497	18,647	435	433	1,297	1,531	6,119	7,229	17,042
St. Vincent	1,053		1,482		12,917	12,245	26,787	849	452	1,091	1,733	11,216	11,781	27,122
Tobago	200	44	225	360	6,558	7,098	14,485	235	50	493	702	5,603	6,488	13,571
Tortola and Virgin Islands	207	201	283	328	2,975	3,483	7,479	477		1,296		2,510	2,889	7,172
Anguilla	162	203	150	177	1,279	1,695	3,666	365		327		2,388		3,080
Trinidad	2,243	1,853	6,681	7,514	15,052	10,336	41,479	2,030	1,653	7,642	8,660	12,591	11,185	45,761
Bahamas	2,282	2,278	867	1,332	5,520	5,479	17,567	2,042	2,198	1,326	1,665	4,777	4,928	16,936
Bermudas	1,897	2,751	312	410	2,630	2,612	10,612	1,607	2,574	458	610	2,107	2,264	9,620
British Guiana — Demerara and Essequibo	2,609	250	1,356	1,773	41,224	33,753	80,945	2,100	906	2,530	3,830	34,368	31,188	74,922
Berbice	453	108	525	510	13,007	10,349	24,752	419	104	454	707	11,020	9,625	22,329
Honduras	156	61	685	737	1,654	811	4,107	141	82	832	956	1,122	661	3,794
					Total		850,304					Total		787,965

TRADE OF ASIATIC, AFRICAN, AND EUROPEAN COLONIES IN 1831.

African and European Colonies.	Imports into the United Kingdom, Official Value.	Exports from the United Kingdom, Official Value.			Declared or real Value of British and Irish Produce and Manufactures exported from the U. K.	Number and Tonnage of Vessels to and from the United Kingdom and the Colonies.			
		British and Irish Produce and Manufactures.	Foreign and Colonial Merchandise.	Total Exports.		Inwards.		Outwards.	
	L.	*L.*	*L.*	*L.*	*L.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*
Mauritius	724,285	268,963	11,984	280,948	148,475	55	17,189	33	8,056
Ceylon	148,620	30,544	2,580	33,124	28,647				
New South Wales	123,403	295,254	118,704	413,958	269,901				
Van Diemen's Land	68,204	127,097	28,822	155,919	122,450	26	8,668	67	23,551
Swan River	233	5,026	2,208	7,235	6,119				
Cape of Good Hope	183,481	351,107	28,940	380,047	257,245	23	4,276	38	7,757
Sierra Leone, and settlements on the coast of Africa —									
River Gambia, Sierra Leone, and coast to Mesurada	53,988	118,685	79,847	198,452	85,192				
Windward coast from Mesurada to Cape Apollonia	1,664	- -	- -	- -	- -				
Cape Coast Castle and Gold Coast from Cape Apollonia to Rio Volta	39,558	89,167	40,467	129,635	59,214	126	34,763	137	38,661
Coast from Rio Volta to Cape of Good Hope (including Fernando Po)	203,700	144,410	34,961	179,371	90,361				
Heligoland	- -	46	187	233	70	2	100	3	195
Gibraltar	19,668	879,582	121,340	1,000,723	367,284	30	4,196	91	11,645
Malta	63,550	257,537	20,485	278,022	134,519	18	2,387	59	9,466
United States of the Ionian Islands	187,185	71,592	13,383	84,976	50,882	32	4,304	38	5,513

TRADE OF AMERICAN AND WEST INDIAN COLONIES IN 1806, 1825, AND 1831.

Colonies.	Imports into the United Kingdom, Official Value.			Exports from the United Kingdom, Official Value.									Declared Value of British and Irish Produce and Manufactures exported from the United Kingdom to the British Colonies and Dependencies.			Number and Tonnage of Vessels to and from the United Kingdom and the Colonies.											
				British and Irish Produce and Manufactures.			Foreign and Colonial Merchandise.			Total Exports.						Inwards.						Outwards.					
British North American Colonies.	1806.	1825.	1831.	1806.	1825.	1831.	1806.	1825.	1831.	1806.	1825.	1831.	1806.	1825.	1831.	1806.		1825.		1831.		1806.		1825.		1831.	
	L.	L.	L.	L.	L.	L.	L.	L.	L.	L.	L.	L.		L.	L.	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.	Ships.	on .	Ships.	Tons.
Lower Canada }	158160	731855	902914	319832	916058	1749846	81868	229405	172242	401700	1145461	1922088	The real or declared value of British and Irish goods exported was not obtained until after the passing of the act 55 Geo. 3. c. 98., anno 1815.	866258	1136819	90	21095	732	203886	763	219030	97	22532	662	178785	747	214027
Upper Canada }														458694	266800	23	6818	842	235097	611	179848	20	5637	705	210071	532	159590
New Brunswick	19568	319559	220523	48666	402051	312784	5189	71993	25549	53855	474044	338333		234226		57	12260	109	25570			70	15471	101	24092		
Nova Scotia - }		44548			227355			31345			258696			10622	311601			15	3201	126	28391	1	366	15	3266	155	38 40
Cape Breton - }	29720	6864	86586	194714	11014	427978	35881	1105	29794	230595	12119	457772		38626				32	6897			6	1572	16	3351		
Prince Edward Island - }		9244		1206	32458		222	6185		1428	38638			351961	314832	147	16069	126	14447	208	24806	276	55894	316	43590	277	58261
Newfoundland	178064	200841	256086	211224	270282	318253	77256	46983	38182	288480	317265	356435															
Totals L.	385812	1312911	1465909	775642	1859211	2808861	200416	387014	265767	976658	2246223	3074628		1960300	2050052	317	56242	1856	489098	1708	452075	470	81472	1815	463155	1711	450218
Settlements of the Hudson's Bay Company }	18879	35902	66672	12206	11295	49653	904	2416	6207	13110	13711	55860		20153	59272			2	746	1	322			2	751	3	769
British West India Colonies.	1806.	1823.	1831.	1806.	1823.	1831.	1806.	1823.	1831.	1806.	1823.	1831.		1823.	1831.	1806.		1823.		1831.		1806.		1823.		1831.	
Antigua -	236847	243921	332808	187902	125479	134466	13624	13054	11633	201526	138533	146099		114650	101552			33	7595	46	10369			40	8949	39	8833
Barbadoes - -	406421	558410	598394	497650	304792	404895	62555	17530	13894	560205	322322	418789		301482	289560			72	19048	68	18104			82	21268	87	22267
Dominica -	425685	175269	123137	207265	38037	33188	30710	6240	2011	237975	44277	35200		42207	27686			11	2603	14	3434			11	2623	10	2506
Grenada - -	509010	387546	303906	157557	65473	72215	30560	4086	5314	188117	69559	77559		67792	68377			36	11206	37	11093			33	10189	37	10766
Jamaica - -	4613975	3736935	3469177	2081883	2594296	1720374	178117	145258	101219	2 00000	2739554	1821594		1906670	1139218			279	86823	284	86600			284	88055	259	78415
Montserrat -	49314	37588	39694	23085	8791	6813	360	519	589	23445	9310	7403		10648	7364			4	1039	5	1239			6	1441		1264
Nevis - -	92971	63358	82120	18510	12098	7870	1031	826	927	19541	12924	8797		14225	11505			8	2069	9	2530			10	2324	6	1828
St. Kitt's -	248320	118109	162253	94644	55657	41521	11795	4215	2579	106439	59872	44100		54923	37919			15	4314	20	5514			13	3644	18	4766
St. Lucia - -	128641	117063	129352	64993	36041	17226	5602	5105	2667	70595	41146	19893		31539	14918			17	3491	20	4527			13	2670	15	3518
St. Vincent -	387802	358992	340005	86665	100229	73500	4656	5319	4416	91321	105578	77917		97372	65142			45	11640	41	11772			39	10425	41	12433
Tobago - -	253675	187874	210489	90342	39708	37931	3442	2983	3688	93784	42691	41625		44007	37048			27	6278	28	7569			22	5816	28	7334
Tortola & Virgin Islands -	113579	36550	22332	131309	628	1786	1742	37	67	136051	665	1853		775	2016			6	1258	4	966			2	504	2	526
Trinidad - -	268547	463365	574131	335747	300862	250439	35011	22215	20834	370758	323077	271274		230557	162809			65	14411	68	16568			57	12958	60	14295
Bahamas - -	41184	23520	26283	191070	105242	23717	18433	2649	2091	209503	107891	25808		70670	16799			13	2203	8	1638			10	1985	9	1904
Bermudas -	2222	12945	3693	32289	24777	37732	2056	5875	5466	34345	30652	43199		32182	36048			3	529	1	208			6	1647	23	4910
Demerara - }	1260208	1492250	1598575	294759	362138	366275	35694	26970	35993	330453	389108	402269		385418	351641			153	41749	185	52737			145	41137	172	50398
Berbice - }		268060	306747		85477	39664		7413	4822		90920	44487		81583	40724			28	6053	30	8037			25	5413	29	7589
Honduras -	76245	143522	124676	27010	342940	459898	2723	14893	40514	29733	357833	500413		191420	171814			46	11731	43	11167			41	11689	28	7114
Totals L.	9101647	8425277	8447752	4525680	4600665	3729515	458111	285247	258754	4963791	4835912	3988277		3678120	2581940			861	253840	911	253872			842	232717	868	240664

any of the British possessions abroad, from the countries to which they belong, goods the produce of those countries, and to export goods from such possessions to be carried to any foreign country whatever; be it therefore enacted, that the privileges thereby granted to foreign ships shall be limited to the ships of those countries which, having colonial possessions, shall grant the like privileges of trading with those possessions to British ships, or which, not having colonial possessions, shall place the commerce and navigation of this country, and of its possessions abroad, upon the footing of the most favoured nation, unless his Majesty by order in council shall in any case deem it expedient to grant the whole or any of such privileges to the ships of any foreign country, although these conditions be not in all respects fulfilled by such foreign country: provided, that no foreign country shall be deemed to have fulfilled the before-mentioned conditions, or to be entitled to these privileges, unless his Majesty shall, by his order or orders, have declared that such foreign country hath so fulfilled the said conditions, and is entitled to the said privileges: provided also, that every order in council in force at the time of the commencement of this act, whereby declaration is made of the countries entitled in whole or in part to the privileges of the law of navigation, shall continue in force as effectually as if the same had been made under the authority of this act. — § 5.

This Act not to affect certain Acts. — Nothing contained in this act, or any other act passed in the present session of parliament, shall extend to repeal or in any way alter or affect an act (4 Geo. 4. c. 77.), intituled "An Act to authorize his Majesty, under certain Circumstances, to regulate the Duties and Drawbacks on Goods imported or exported in foreign Vessels, and to exempt certain foreign Vessels from Pilotage," nor to repeal or in any way alter or affect an act (5 Geo 4. c. 50.) to amend the last-mentioned act; and that all trade and intercourse between the British possessions and all foreign countries shall be subject to the powers granted to his Majesty by those acts. — § 6.

Goods prohibited or restricted to be imported into Colonies. — The several sorts of goods enumerated or described in the table following, denominated "A Table of Prohibitions and Restrictions," are hereby prohibited to be imported or brought, either by sea or by inland carriage or navigation, into the British possessions in America, or shall be so imported or brought only under the restrictions mentioned in such table, according as the several sorts of such goods are set forth therein; (that is to say,)

A Table of Prohibitions and Restrictions.

Gunpowder, arms, ammunitions or utensils of war, prohibited to be imported, except from the United Kingdom, or from some other British possession.

Tea, prohibited to be imported, except from the United Kingdom, or from some other British possession in America, unless by the East India Company, or with their licence during the continuance of their exclusive right of trade.

Fish, dried or salted, oil, blubber, fins, or skins, the produce of creatures living in the sea, prohibited to be imported, except from the United Kingdom, or from some other British possession, or unless taken by British ships fitted out from the United Kingdom or from some British possession, and brought in from the fishery, and except herrings from the Isle of Man, taken and cured by the inhabitants thereof.

Coffee, sugar, melasses, and rum, being of foreign production, or the production of any place within the limits of the East India Company's charter, prohibited to be imported into any of the British possessions on the continent of South America or in the West Indies (the Bahama and Bermuda islands not included), except to be warehoused for exportation only; and may also be prohibited to be imported into the Bahama or the Bermuda islands by his Majesty's order in council.

Base or counterfeit coin, and books, such as are prohibited to be imported into the United Kingdom, prohibited to be imported.

And if any goods shall be imported or brought into any of the British possessions in America contrary to any of the prohibitions or restrictions mentioned in such table in respect of such goods, the same shall be forfeited; and if the ship or vessel in which such goods shall be imported be of less burden than 70 tons, such ship or vessel shall also be forfeited. — § 7.

Coffee, &c., though British, deemed Foreign in certain Cases. — All coffee, sugar, melasses, and rum (although the same may be of the British plantations), exported from any of the British possessions in America, into which the like goods of foreign production can be legally imported, shall, upon subsequent importation from thence into any of the British possessions in America, into which such goods, being of foreign production, cannot be legally imported, or into the United Kingdom, be deemed to be of foreign production, and shall be liable, on such importation respectively, to the same duties or the same forfeitures as articles of the like description, being of foreign production, would be liable to, unless the same shall have been warehoused under the provisions of this act, and exported from the warehouse direct to such other British possession, or to the United Kingdom, as the case may be. — § 8.

Duties of Importation in America. — There shall be raised, levied, collected, and paid unto his Majesty the several duties of customs, as the same are respectively set forth in figures in the table of duties herein-after contained, upon goods, wares, and merchandise imported or brought into any of his Majesty's possessions in America; (that is to say,)

Table of Duties.

Duties payable upon spirits, being of the growth, production, or manufacture of the United Kingdom, or of any of the British possessions in America or the West Indies, imported into Newfoundland or Canada.

Spirits imported into Newfoundland; viz.	L.	s.	d.
the produce of any of the British possessions in South America or the West Indies; viz.			
imported from any British possession in America, or from the United Kingdom, the gallon	0	0	6
Imported from any other place, to be deemed foreign, and to be charged with duty as such.			
the produce of any British possession in North America, or of the United Kingdom, and imported from the United Kingdom, or from any British possession in America, the gallon	0	1	6
Imported from any other place, to be deemed foreign, and to be charged with duty as such.			
Spirits imported into Canada; viz.			
the produce of any British possession in South America or the West Indies, and imported from any British possession in America, or from the United Kingdom, the gallon	0	0	6
Imported from an other place, to be deemed foreign, and to be charged with duty as such.			

Note. — When imported from the United Kingdom, this duty is not to be abated upon the ground of any duty under any colonial law.

Duties payable upon goods, wares, and merchandise, not being of the growth, production, or manufacture of the United Kingdom, or o any of the British possessions in America, imported or brought into any of the British possessions in America, by sea or by inland carriage or navigation.

Imported into the British possessions in the West Indies or on the continent of South America, or into the Bahama or Bermuda islands; viz.	L.	s.	d.
Wheat flour, the barrel	0	5	0
imported from any British possession in North America, or from the warehouse in the United Kingdom	Free.		
Shingles, not more than 12 inches in length, the 1,000	0	7	0
more than 12 inches in length, the 1,000	0	14	0
imported from any British possession in North America, or from the warehouse in the United Kingdom	Free.		
Red oak staves and headings; viz.			
until the 1st of January, 1834, the 1,000	1	6	3
on and from the 1st of January, 1834, until the 1st of January, 1836, the 1,000	1	2	3
on and from the 1st of January, 1836, the 1,000	0	15	0
imported from any British possession in North America, or from the warehouse in the United Kingdom	Free.		
White oak staves and headings; viz.			
until the 1st of January, 1834, the 1,000	1	3	9
on and from the 1st of January, 1834, until the 1st of January, 1836, the 1,000	0	19	9
on and from the 1st of January, 1836, the 1,000	0	12	6
imported from any British possession in North America, or from the warehouse in the United Kingdom	Free.		
Pitch pine lumber, 1 inch thick, the 1,000	1	1	0
imported from any British possession in North America, or from the warehouse in the United Kingdom	Free.		
White and yellow pine lumber, 1 inch thick, the 1,000 feet; viz.			
until the 1st of January, 1834	1	8	0
on and from the 1st of January, 1834, until the 1st of January, 1836	1	6	0
on and from the 1st of January, 1836	1	1	0
imported from any British possession in North America, or from the warehouse in the United Kingdom	Free.		

	L.	s.	d.
Dye wood and cabinet-makers' wood	Free.		
Other kinds of wood and lumber, 1 inch thick, the 1,000 feet	1	8	0
Wood hoops, the 1,000	0	5	3
imported from any British possession in North America, or from the warehouse in the United Kingdom	Free.		
Beef and pork, salted, of all sorts, the cwt.	0	12	0
imported from any British possession in North America	Free.		
Imported into New Brunswick, Nova Scotia, or Prince Edward's Island; viz.			
Wheat flour, the barrel	0	5	0
Beef and pork, salted, of all sorts, the cwt.	0	12	0
fresh, brought by land or inland navigation	Free.		
Imported into any of the British possessions in America; viz.			
Spirits; viz.			
Brandy, geneva, or cordials, and other spirits, except rum, the gallon	0	1	0
and further, the amount of any duty payable for the time being on spirits the manufacture of the United Kingdom.			
Rum, the gallon	0	0	6
and further, the amount of any duty payable for the time being on rum of the British possessions in South America or the West Indies.			
N.B. — Rum, although British, if imported from any British possession in which foreign rum is not prohibited, is treated as foreign, unless it had been warehoused, and exported from the warehouse.			
Wine in bottles, the tun	7	7	0
and further, for every 100*l.* of the value	7	10	0
and on the bottles, the dozen	0	1	0
bottled in and imported from the United Kingdom, for every 100*l.* of the value	7	10	0
the bottles	Free.		
Wine not in bottles, for every 100*l.* of the value imported into the British possessions in North America from Gibraltar or Malta, subject to no higher duty than if imported from the United Kingdom; viz. 1-10th of the duty remitted.	7	10	0
Coffee, the cwt.	0	5	0
Cocoa, the cwt.	0	5	0
Sugar, the cwt.	0	5	0
Melasses, the cwt.	0	3	0
and further, the amount of any duty payable for the time being on coffee, cocoa, sugar, and melasses respectively, being the produce of the British possessions in South America or the West Indies.			
Clocks and watches, leather manufactures, linen, musical instruments, wires of all sorts, books and papers, silk manufactures, for every 100*l.* of the value	30	0	0
Glass manufactures, soap, refined sugar, sugar candy, tobacco manufactured, cotton manufactures, for every 100*l.* of the value	20	0	0

	L.	s.	d.
Alabaster, anchovies, argol, aniseed, amber, almonds, brimstone, botargo, box wood, currants, capers, cascacoo, cummin seed, coral, cork, cinnabar, dates; essence of bergamot, of lemon, of roses, of citron, of oranges, of lavender, of rosemary; emery stone; fruit, preserved in sugar or brandy; figs; honey; iron in bars, unwrought, and pig iron; juniper berries, incense of frankincense, lava and Malta stone for building, lentils; marble, rough and worked; mosaic work, medals, musk, maccaroni, nuts of all kinds; oil of olives, oil of almonds; orris root, ostrich feathers, ochres, orange buds and peel, olives, pitch, pickles in jars and bottles, paintings, pozzolana, pumice stone, punk, Parmesan cheese, pickles, prints, pearls, precious stones (except diamonds), quicksilver, raisins, sausages, sponges, tar, turpentine, vermilion, vermicelli, whetstones; for every 100*l.* of the value	7	10	0
Goods, wares, and merchandise, not otherwise charged with duty, and not herein declared to be free of duty, for every 100*l.* of the value	15	0	0
Coin, bullion, and diamonds; horses, mules, asses, neat cattle, and all other live stock; tallow and raw hides; rice; corn and grain, unground; biscuit or bread; meal or flour (except wheat flour); fresh meat, fresh fish, carriages of travellers	Free		
Wheat flour, beef and pork, hams and bacon, wood and lumber, imported into Canada; wood and lumber, imported into New Brunswick, Nova Scotia, or Prince Edward's Island; hay and straw, fruit and vegetables, fresh; salt, cotton wool; goods, the produce of places within the limits of the East India Company's charter, imported from those places, or from the United Kingdom, or from some place in the British dominions; herrings taken and cured by the inhabitants of the Isle of Man, and imported from thence; lumber, the produce of and imported from any British possession on the west coast of Africa; any sort of craft; food and victuals, except spirits; and any sort of clothing, and implements and materials, fit and necessary for the British fisheries in America, imported into the place at or from whence such fishery is carried on; drugs, gums or resins, dye wood and hard wood, cabinet-makers' wood, tortoiseshell, hemp, flax, and tow	Free.		
Seeds, wheat flour, fruits, pickles, woods of all sorts, oakum, pitch, tar, turpentine, ochres, brimstone, sulphur, vegetable oils, burr stones, dog stones, hops, cork, sago, tapioca, sponge, sausages, cheese, cider, wax, spices, tallow, imported direct from the warehouse in the United Kingdom	Free.		
All goods imported from the United Kingdom, after having there paid the duties of consumption, and being exported from thence without drawback	Free.		

And if any of the goods herein-before mentioned shall be imported through the United Kingdom (having been warehoused therein, and exported from the warehouse, or the duties thereon, if there paid, having been drawn back), one tenth part of the duties herein imposed shall be remitted in respect of such goods. — § 9.

Acts not repealed. — Nothing in this act or in any other passed in the present session of parliament shall extend to repeal or abrogate, or in any way to alter or affect an act (18 Geo. 3. c. 12.), intituled "An Act for removing all Doubts and Apprehensions concerning Taxation by the Parliament of Great Britain in any of the Colonies, Provinces, and Plantations of North America and the West Indies, and for repealing so much of an Act made in the 7th Year of the Reign of his present Majesty as imposes a Duty on Tea imported from Great Britain into any Colony or Plantation in America, as relates thereto;" nor to repeal or in any way alter or affect any act now in force which was passed prior to the last-mentioned act, and by which any duties in any of the British possessions in America were granted and still continue payable to the Crown; nor to repeal or in any way alter or affect an act (31 Geo. 3. c. 31.) intituled "An Act to repeal certain Parts of an Act passed in the 14th Year of his Majesty's Reign, intituled 'An Act for making more effectual Provisions for the Government of the Province of Quebec in North America, and to make further Provisions for the Government of the said Province.'" — § 10.

Duties imposed by prior Acts to be applied to Purposes of those Acts. — The duties imposed by any of the acts herein-before mentioned or referred to, passed prior to the said act (18 Geo. 3. c. 12.) shall be received, accounted for, and applied for the purposes of those acts: provided always, that no greater proportion of the duties imposed by this act, except as herein-before excepted, shall be charged upon any article which is subject also to duty under any of the said acts, or subject also to duty under any colonial law, than the amount, if any, by which the duty charged by this act shall exceed such other duty or duties: provided, that the full amount of the duties mentioned in this act, whether on account of such former acts, or on account of such colonial law, or on account of this act, shall be levied and received under the regulations and powers of this act. — § 11.

Currency, Weights, and Measures. — All sums of money granted or imposed by this act, either as duties, penalties, or forfeitures, in the British possessions in America, are hereby declared to be sterling money of Great Britain, and shall be collected, and paid to the amount of the value which such nominal sums bear in Great Britain; and that such monies may be received and taken at the rate of 5*s.* 6*d.* the ounce in silver; and all duties shall be paid and received in every part of the British possessions in America according to British weights and measures in use on the 6th day of July, 1825; and in all cases where such duties are imposed according to any specific quantity or any specific value, the same shall be deemed to apply in the same proportion to any greater or less quantity or value; and all such duties shall be under the management of the commissioners of the customs. — § 12.

Duties paid by Collector to Treasurer of Colony in which levied. — The produce of the duties so received under this act, except such duties as are payable under any act passed prior to the 18 Geo. 3. as aforesaid, shall be paid by the collector of the customs into the hands of the treasurer or receiver-general of the colony, or other proper officer authorised to receive the same, to be applied to such uses as shall be directed by the local legislatures of such colonies; and that the produce of such duties so received in colonies which have no local legislature may be applied in such manner as shall be directed by the commissioners of his Majesty's treasury. — § 13.

All British Vessels shall be subject to equal Duties, except coasting Vessels. — Whereas in some of his Majesty's possessions abroad, certain duties of tonnage are, by acts of the local legislatures of such possessions, levied upon British vessels, to which duties the like vessels built within such possessions, or owned by persons resident there, are not subject; be it further enacted, that there shall be levied and paid at the several British possessions abroad, upon all vessels built in any such possessions, or owned by any person or persons there resident, other than coasting or drogueing vessels employed in coasting or drogueing, all such and the like duties of tonnage and shipping dues as are or shall be payable in any such possessions upon the like British vessels built in other parts of his Majesty's dominions, or owned by persons not resident in such possessions. — § 14.

Drawback on Rum, &c. — There shall be allowed upon the exportation from Newfoundland to Canada of rum or other spirits, the produce of the British possessions in South America or the West Indies, a drawback of the full duties of customs paid upon the importation thereof from any of the said places into Newfoundland, provided proof on oath be made to the satisfaction of the collector and comptroller of the customs at the port whence such rum or other spirits is exported, that the full duties on the importation of such rum or other spirits at the said port had been paid, and that a certificate be produced under the hands and seals of the collector and comptroller of the customs at Quebec, that such rum or other spirits had been duly landed in Canada: provided that no drawback shall be allowed upon any such rum or other spirits unless the same shall be shipped within 1 year from the day of the importation of the same, nor unless such drawback shall be duly claimed within 1 year from the day of such shipment.— § 15.

Ship and Cargo to be reported on Arrival. — The master of every ship arriving in any of the British possessions in America, or the islands of Guernsey, Jersey, Alderney, or Sark, whether laden or in ballast, shall come directly, and before bulk be broken, to the Custom-house for the port or district where he arrives, and there make a report in writing to the collector or comptroller, or other proper officer, of the arrival and voyage of such ship, stating her name, country, and tonnage, and if British the port of registry, the name and country of the master, the country of the owners, the number of the crew, and how many are of the country of such ship, and whether she be laden or in ballast, and if laden the marks, numbers, and contents of every package and parcel of goods on board, and where the same was laden, and where and to whom consigned, and where any and what goods, if any, had been unladen during the voyage, as far as any of such particulars can be known to him; and the master shall further answer all such questions concerning the ship, and the cargo, and the crew, and the voyage, as shall be demanded of him by such officer; and if any goods be unladen from any ship before such report be made, or if the master fail to make such report, or make an untrue report, or do not truly answer the questions demanded of him, he shall forfeit the sum of 100*l.*; and if any goods be not reported, they shall be forfeited. — § 16.

Entry outwards of Ship for Cargo. — The master of every ship bound from any British possession in America, or the islands of Guernsey, Jersey, Alderney, or Sark, shall, before any goods be laden therein, deliver to the collector or comptroller, or other proper officer, an entry outwards under his hand of the destination of such ship, stating her name, country, and tonnage, and if British the port of registry, the name and country of the master, the country of the owners, the number of the crew, and how many are of the country of such ship; and if any goods be laden on board any ship before such entry be made, the master of such ship shall forfeit the sum of 50*l.*; and before such ship depart the master shall bring and deliver to the collector or comptroller, or other officer, a content in writing under his hand of the goods laden, and the names of the respective shippers and consignees of the goods, with the marks and numbers of the packages or parcels of the same, and shall make and subscribe a declaration to the truth of such content as far as any of such particulars can be known to him; and the master of every ship bound from any British possession in America, or from the islands of Guernsey, Jersey, Alderney, or Sark, whether in ballast or laden, shall before departure come before the collector or comptroller, or other proper officer, and answer upon oath all such questions concerning the ship, and the cargo, if any, and the crew and the voyage, as shall be demanded of him by such officer; and thereupon the collector and comptroller, or other proper officer, if such ship be laden, shall make out and give to the master a certificate of the clearance of such ship for her intended voyage, containing an account of the total quantities of the several sorts of goods laden therein, or a certificate of her clearance in ballast, as the case may be; and if the ship depart without such clearance, or if the master deliver a false content, or shall not truly answer the questions demanded of him, he shall forfeit the sum of 100*l.* — § 17.

Goods not stated in Certificate to be Produce of British Possessions to be deemed of Foreign Production. — No goods shall be stated in such certificate of clearance to be the produce of British possessions in America, unless such goods have been expressly stated so to be in the entry outwards of the same; and all goods not expressly stated in such certificate of clearance to be the produce of the British possessions in America shall, at the place of importation in any other such possessions, or in the United Kingdom, be deemed to be of foreign production.—§ 18.

Newfoundland Fishing Certificates in lieu of Clearance. — Whenever any ship shall be cleared out from Newfoundland, or any other part of his Majesty's dominions, for the fisheries on the banks or coasts of Newfoundland or Labrador, or their dependencies, without having on board any article of traffic, (except only the provisions, nets, tackle, and other things usually employed in and about the said fishery,) the master of such ship shall be entitled to demand from the collector or other principal officer of the customs at such port a certificate under his hand that such ship hath been specially cleared out for the Newfoundland fishery; and such certificate shall be in force for the fishing season for the year in which the same may be granted, and no longer; and upon the first arrival in any port in Newfoundland, &c. of any ship having on board such certificate, a report thereof shall be made by the master of such ship to the principal officer of the customs; and all ships having such certificate so reported, and being actually engaged in the said fishery, or in carrying coastwise to be landed or put on board any other ships engaged in the said fishery any fish, oil, salt, provisions, or other necessaries for the use and purposes thereof, shall be exempt from all obligation to make an entry at or obtain any clearance from any Custom-house at Newfoundland upon arrival at or departure from any of the ports or harbours of the said colony, &c. during the fishing season for which such certificate may be granted; and previously to obtaining a clearance at the end of such season for any other voyage at any of such ports, the master of such ship shall deliver up the before-mentioned certificate to the officer of the customs: provided always, that in case any such ship shall have on board, during the time the same may be engaged in the said fishery, any goods or merchandises whatsoever other than fish, seals, oil made of fish or seals, salt, provisions, and other things, being the produce of or usually employed in the said fishery, such ship shall forfeit the said fishing certificate, and shall thenceforth be subject and liable to the same rules, regulations, &c. as ships in general are subject or liable to.—§ 19.

Entry of Goods to be laden or unladen. — No goods shall be laden, or water-borne to be laden, on board any ship, or unladen from any ship, in any of the British possessions in America, or the islands of Guernsey, Jersey, Alderney, or Sark, until due entry be made of such goods, and warrant granted for the lading or unlading of the same; and no goods shall be so laden or water-borne, or so unladen, except at some place at which an officer of the customs is appointed to attend the lading and unlading of goods, or at some place for which a sufferance shall be granted by the collector and comptroller; and no goods shall be so laden or unladen except in the presence or with the permission in writing of the proper officer: provided always, that it shall be lawful for the commissioners of customs to make and appoint such other regulations for the carrying coastwise, or for the removing of any goods for shipment, as shall appear expedient; and that all goods laden, water-borne, or unladen contrary to the regulations of this act, or contrary to any regulations so made, be forfeited.—§ 20.

Particulars of Entry of Goods inwards and outwards. — The person entering any such goods shall deliver to the collector or comptroller, or other proper officer, a bill of the entry thereof, fairly written in words at length, containing the name of the exporter or importer, and of the ship, and of the master, and of the place to or from which bound, and of the place within the port where the goods are to be laden or unladen, and the particulars of the quality and quantity of the goods, and the packages containing the same, and the marks and numbers on the packages, and setting forth whether such goods be the produce of the British possessions in America or not; and such person shall at the same time pay down all duties due upon the goods; and the collector and comptroller, or other proper officer, shall thereupon grant their warrant for the lading or unlading of such goods.—§ 21.

Entry inwards by Bill of Sight. — If the importer of any goods make and subscribe a declaration before the collector or comptroller, or other proper officer, that he cannot, for want of full information, make perfect entry thereof, it shall be lawful for the collector and comptroller to receive an entry by bill of sight for the packages or parcels of such goods by the best description which can be given, and to grant a warrant thereupon, in order that the same may be landed and secured to the satisfaction of the officer of the customs, and at the expense of the importer, and may be seen and examined by such importer in the presence of the proper officers; and within 3 days after the goods shall have been so landed, the importer shall make a perfect entry thereof, and pay down all duties due thereon; and in default of such entry such goods shall be taken to the King's warehouse, and if the importer shall not, within 1 month after such landing, make perfect entry of such goods and pay the duties due thereon, together with charges of removal and warehouse rent, such goods shall be sold for the payment thereof, and the overplus, if any, shall be paid to the proprietor of the goods.—§ 22.

Goods subject to ad Valorem Duty. — In all cases where the duties imposed by this act upon the importation of articles into his Majesty's possessions in America are charged, not according to the weight, tale, gauge, or measure, but according to the value thereof, such value shall be ascertained by the declaration of the importer of such articles, or his known agent, in manner and form following; (that is to say,)

'I *A. B.* do hereby declare, that the articles mentioned in the entry, and contained in the packages '[*here specifying the several packages, and describing the several marks and numbers, as the case may* '*be*,] are of the value of . Witness my hand the day of . *A. B.*

'The above declaration, signed the day of in the presence of *C. D.* collector [*or* '*other principal officer*].'

Which declaration shall be written on the bill of entry of such articles, and shall be subscribed by the importer thereof, or his known agent, in the presence of the collector or other principal officer of the customs at the port of importation: provided, that if upon view and examination of such articles by the proper officer of the customs it shall appear to him that the said articles are not valued according to the true price or value thereof, and according to the true intent and meaning of this act, in such case the importer or his known agent shall be required to declare on oath before the collector or comptroller what is the invoice price of such articles, and that he verily believes such invoice price is the current value of the articles at the place from whence the said articles were imported; and such invoice price, with the addition of 10*l. per centum* thereon, shall be deemed to be the value of the articles in lieu of the value so declared by the importer or his known agent, and upon which the duties imposed by this act shall be charged and paid: provided also, that if it shall appear to the collector and comptroller, or other proper officer, that such articles have been invoiced below the real and true value thereof, at the place from whence the same were imported, or if the invoice price is not known, the articles shall in such case be examined by two competent persons, to be nominated and appointed by the governor or commander-in-chief of the colony, plantation, or island into which the said articles are imported, and such persons shall declare on oath before the collector or comptroller, or other proper officer, what is the true and real value of such articles in such colony, plantation, or island; and the value so declared on the oaths of such persons shall be deemed to be the true and real value of such articles, and upon which the duties imposed by this act shall be charged and paid. — § 23.

If Importer refuse to pay such Duty, the Goods may be sold. — If the importer of such articles shall refuse to pay the duties hereby imposed thereon, it shall be lawful for the collector or other chief officer of the customs where such articles shall be imported, to take and secure the same, with the casks or other package thereof, and to cause the same to be publicly sold within the space of 20 days at the most after such refusal made, and at such time and place as such officer shall, by 4 or more days' public notice, appoint for that purpose; which articles shall be sold to the best bidder; and the money arising from the sale thereof shall be applied in the first place in payment of the said duties, together with the charges that shall have been occasioned by the said sale, and the overplus, if any, shall be paid to such importer or proprietor, or any other person authorised to receive the same. — § 24.

If Goods be not entered in 20 Days, the Officer may land and secure them. — Every importer of any goods shall, within 20 days after the arrival of the importing ship, make due entry inwards of such goods, and land the same; and in default of such entry and landing it shall be lawful for the officers of the customs to convey such goods to the king's warehouse; and if the duties due upon such goods be not paid within 3 months after such 20 days shall have expired, together with all charges of removal and warehouse rent, the same shall be sold, and the produce thereof applied first to the payment of freight and charges, next of duties, and the overplus, if any, shall be paid to the proprietor of the goods. — § 25.

Goods imported from United Kingdom or British Possessions must appear in Cocket, &c. — No goods shall be imported into any British possession as being imported from the United Kingdom, or from any other British possession (if any advantage attach to such distinction), unless such goods appear upon the cockets or other proper documents for the same to have been duly cleared outwards at the port of exportation in the United Kingdom, or in such other British possession, nor unless the ground upon which such advantage be claimed be stated in such cocket or document. — § 26.

Goods imported from, to be deemed of the Growth of, United Kingdom. — No goods shall, upon importation into any of the British possessions in America, be deemed to be of the growth, production, or manufacture of the United Kingdom, or of any British possession in America, unless imported from the United Kingdom, or from some British possession in America. — § 27.

Entry not to be valid, if Goods be not properly described in it. — No entry, nor any warrant for the landing of any goods, or for the taking of any goods out of any warehouse, shall be deemed valid, unless the particulars of the goods and packages in such entry correspond with the particulars of the goods and packages in the report of the ship, or in the certificate or other document, where any is required, by which the importation or entry of such goods is authorised, nor unless the goods shall have been properly described in such entry by the denominations and with the characters and circumstances according to which such goods are charged with duty or may be imported; and any goods taken or delivered out of any ship or out of any warehouse by virtue of any entry or warrant not corresponding or agreeing in all such respects, or not properly describing the same, shall be deemed to be goods landed or taken without due entry thereof, and shall be forfeited. — § 28.

Certificate of Production for Sugar, Coffee, Cocoa, or Spirits. — Before any sugar, coffee, cocoa, or spirits shall be shipped for exportation in any British possession in America or in the island of Mauritius, as being the produce of such possession or of such island, the proprietor of the estate on which such goods were produced, or his known agent, shall make and sign an affidavit in writing before the collector or comptroller at the port of exportation, or before a justice of the peace, or other officer duly authorised

to administer such oath, declaring that such goods are the produce of such estate; and such affidavit shall set forth the name of the estate, and the description and quantity of the goods, and the packages containing the same, with the marks and numbers thereon, and the name of the person to whose charge at the place of shipment they are to be sent; and if any justice or other officer shall subscribe his name to any writing purporting to be such affidavit, unless the person making it shall actually appear before him and be sworn to the truth of the same, such justice of the peace or officer shall forfeit and pay for any such offence the sum of 50*l.*; and the person entering and shipping such goods shall deliver such affidavit to the collector or comptroller, or other proper officer, and shall make and subscribe a declaration before him that the goods which are to be shipped by virtue of such entry are those mentioned in such affidavit; and the master of the ship in which such goods shall be laden shall, before clearance, make and subscribe a declaration before the collector or comptroller that the goods shipped by virtue of such entry are the same as are mentioned and intended in such affidavit, to the best of his knowledge and belief; and thereupon the collector and comptroller, or other proper officer, shall sign and give to the master a certificate of production, stating that proof has been made, in manner required by law, that such goods (describing the same) are the produce of such British possession or of such island, and setting forth in such certificate the name of the exporter and of the exporting ship, and of the master thereof, and the destination of the goods; and if any sugar, coffee, cocoa, or spirits be imported into any British possession in America, as being the produce of some other such possession or of such island, without such certificate of production, the same shall be forfeited. — § 29.

Certificate of Production on Re-exportation from another Colony. — Before any sugar, coffee, cocoa, or spirits shall be shipped for exportation in any British possession in America, as being the produce of some other such possession, the person exporting the same shall in the entry outwards state the place of the production, and refer to the entry inwards and landing of such goods, and shall make and subscribe a declaration before the collector or comptroller to the identity of the same; and thereupon, if such goods shall have been duly imported with a certificate of production within 12 months prior to the shipping for exportation, the collector and comptroller shall sign and give to the master a certificate of production, referring to the certificate of production under which such goods had been so imported, and containing the like particulars, with the date of such importation. — § 30.

Goods brought over Land, or by Inland Navigation. — It shall be lawful to bring or import by land or by inland navigation into any of the British possessions in America from any adjoining foreign country any goods which might be lawfully imported by sea into such possession from such country, and so to bring or import such goods in the vessels, boats, or carriages of such country, as well as in British vessels, boats, or carriages. — § 31.

What Vessels shall be deemed British on the Lakes in America. — No vessel or boat shall be admitted to be a British vessel or boat on any of the inland waters or lakes in America, except such as have been built within the British dominions, and shall be wholly owned by British subjects, and shall not have been repaired at any foreign place to a greater extent than in the proportion of 10*s.* for every ton of such vessel or boat at any one time: provided always, that nothing herein-before contained shall extend to prevent the employment of any vessel or boat as a British vessel or boat on such inland waters or lakes, which shall have wholly belonged to British subjects before the 5th day of July, 1825, and which shall not have been since that day repaired as aforesaid in any foreign place. — § 32.

Goods must be brought to a Place where there is a Custom-house. — It shall not be lawful so to bring or import any goods except into some port or place of entry at which a Custom-house now is or hereafter may be lawfully established: provided also, that it shall be lawful for the governor, lieutenant-governor, or person administering the government of any of the said possessions respectively, by and with the advice of the executive council thereof, from time to time to diminish or increase, by proclamation, the number of ports or places of entry. — § 33.

Duties to be collected in same Manner as on Goods imported by Sea. — The duties imposed by this act shall be ascertained, levied, and recovered upon all goods so brought or imported in the same manner, and by the same means, rules, regulations, penalties, &c. as the duties on the like goods imported by sea; and if any goods shall be brought or imported contrary hereto, or if any goods so brought or imported shall be removed from the station or place appointed for the examination of such goods before all duties payable thereon shall have been paid or satisfied, such goods shall be forfeited, together with the vessel, boat, or carriage, and the horses or other cattle, in or by which such goods shall have been so imported or brought, or so removed. — § 34.

Duties in Canada on American Boats, as in America on British Boats. — The same tonnage duties shall be paid upon all vessels or boats of the United States of America importing any goods into Canada as are or may be payable in the United States of America on British vessels or boats entering the harbours whence such goods have been imported. — § 35.

Conditions with respect to Warehousing in the Colonies.

Ports herein mentioned to be free warehousing Ports. — The several ports herein-after mentioned, (that is to say,) Bridgetown in Barbadoes, Quebec in Canada, Sydney in Cape Breton, Roseau in Dominica, St. George in Grenada, Kingston and Montego Bay in Jamaica, Charlestown in Nevis, Saint John's and Saint Andrew's in New Brunswick, Saint John's in Newfoundland, Nassau in New Providence, Halifax and Pictou in Nova Scotia, Basseterre in Saint Kitt's, Kingston in Saint Vincent, Road Harbour in Tortola, San Joseph in Trinidad, shall be *free warehousing ports* for all the purposes of this act; and Kingston and Montreal in the Canadas, and Liverpool and Yarmouth in Nova Scotia, shall be *warehousing ports* for the warehousing of goods brought by land or by inland navigation, or imported in British ships; and it shall be lawful for the several collectors and comptrollers of the said ports respectively, by notice in writing under their hands, to appoint from time to time such warehouses at such ports as shall be approved of by them for the free warehousing and securing of goods, and also in such notice to declare what sorts of goods may be so warehoused, and also by like notice to revoke or alter any such appointment or declaration: provided always, that every such notice shall be transmitted to the governor of the place, and shall be published in such manner as he shall direct. — § 36.

Goods may be warehoused without Payment of Duty. — It shall be lawful for the importer of any such goods into the said ports to warehouse them in the warehouses so appointed, without payment of any duty on the first entry thereof, subject nevertheless to the rules, regulations, &c. herein-after contained. — § 37.

Regulation as to warehousing of Goods on Arrival in Canada. — Upon the arrival of any goods at any frontier port in the Canadas, such goods may be entered with the proper officer of the customs at such port, to be warehoused at some warehousing port in the Canadas, and may be delivered by such officer to be passed on to such warehousing port, under bond, to the satisfaction of such officer, for the due arrival and warehousing of such goods at such port. — § 38.

Stowage of Goods in Warehouse. — All goods so warehoused shall be stowed in such parts or divisions of the warehouse and in such manner as the collector and comptroller shall direct; and the warehouse shall be locked and secured in such manner, and shall be opened and visited only at such times, and in the presence of such officers, and under such rules and regulations, as the collector and comptroller shall direct; and all such goods shall, after being landed upon importation, be carried to the warehouse, or shall, after being taken out of the warehouse for exportation, be carried to be shipped, under such rules and regulations as the collector and comptroller shall direct. — § 39.

Bond upon Entry of Goods to be warehoused. — Upon the entry of any goods to be warehoused, the importer of such goods, instead of paying down the duties due thereon, shall give bond with two sufficient

sureties, to be approved of by the collector or comptroller, in treble the duties payable on such goods, with condition for the safe depositing of such goods in the warehouse mentioned in such entry, and for the payment of all duties due upon such goods, or for the exportation thereof, according to the first account taken of such goods upon the landing of the same; and with further condition, that no part thereof shall be taken out of such warehouse until cleared from thence upon due entry and payment of duty, or upon due entry for exportation; and with further condition, that the whole of such goods shall be so cleared from such warehouse, and the duties, upon any deficiency of the quantity according to such first account, shall be paid, within 2 years from the date of the first entry thereof; and if after such bond shall have been given, the goods or any part thereof shall be sold or disposed of, so that the original bonder shall be no longer interested in or have any control over the same, it shall be lawful for the collector and comptroller to admit fresh security to be given by the bond of the new proprietor or other person having control over such goods, with his sufficient sureties, and to cancel the bond given by the original bonder of such goods, or to exonerate him to the extent of the fresh security so given. — § 40.

Goods not duly warehoused, &c. to be forfeited. — If any goods which have been entered to be warehoused shall not be duly carried and deposited in the warehouse, or shall afterwards be taken out of it without due entry and clearance, or having been entered and cleared for exportation shall not be duly carried and shipped, or shall afterwards be relanded except with permission of the customs, such goods shall be forfeited. — § 41.

Account of Goods to be taken on landing. — Upon the entry and landing of any goods to be warehoused, the proper officer shall take a particular account of the same, and shall mark the contents on each package, and shall enter the same in a book to be kept for that purpose; and no goods which have been so warehoused shall be taken or delivered from the warehouse except upon due entry, and under care of the proper officers for exportation, or upon due entry and payment of duty for home use; and whenever the whole of the goods warehoused under any entry shall be cleared from the warehouse, or whenever further time shall be granted for any such goods to remain warehoused, an account shall be made out of the quantity upon which the duties have been paid, and of the quantity exported, and of the quantity (to be then ascertained) of the goods still remaining in the warehouse, as the case may be, deducting from the whole the quantity contained in any whole packages (if any) which may have been abandoned for the duties; and if upon such account there shall in either case appear to be any deficiency of the original quantity, the duty payable upon the amount of such deficiency shall then be paid. — § 42.

Samples may be taken. — It shall be lawful for the collector and comptroller, under such regulations as they shall see fit, to permit moderate samples to be taken of any goods so warehoused, without entry, and without payment of duty, except as the same shall eventually become payable, as on a deficiency of the original quantity. — § 43.

Goods may be sorted and repacked. — It shall be lawful for the collector and comptroller, under such regulations as they shall see fit, to permit the proprietor or other person having control over any warehoused goods to sort, separate, and pack and repack any such goods, and to make such lawful alterations therein, or arrangements and assortments thereof, as may be necessary for the preservation of such goods, or in order to the sale, shipment, or legal disposal of the same; and also to permit any parts of such goods so separated to be destroyed, but without prejudice to the claim for duty upon the whole original quantity of such goods: provided always, that it shall be lawful for any person to abandon any whole packages to the officers of the customs for the duties, without being liable to any duty upon the same. — § 44.

Goods warehoused may be delivered for Removal without Payment of Duty. — Goods warehoused at any warehousing port in any of the British possessions in America, being first duly entered, may be delivered, under the authority of the proper officer of the customs, without payment of duty, except for any deficiency thereof, for the purpose of removal to another warehousing port in the same possession, under bond, to the satisfaction of such officer, for the due arrival and rewarehousing of such goods at such other port. — § 45.

All Goods to be cleared within 2 Years, or sold. — All goods which have been so warehoused or rewarehoused shall be duly cleared, either for exportation or for home consumption, within 2 years from the day of first entry for warehousing; and if any such goods be not so cleared, it shall be lawful for the collector and comptroller to cause the same to be sold, and the produce shall be applied, first to the payment of the duties, next of warehouse rent and other charges, and the overplus (if any) shall be paid to the proprietor: provided always, that it shall be lawful for the collector and comptroller to grant further time for any such goods to remain warehoused, if they shall see fit. — § 46.

Bond on Entry for Exportation. — Upon the entry outwards of any goods to be exported from the warehouse, the person entering the same shall give security by bond in treble the duties of importation on such goods, with two sufficient sureties, to be approved by the collector or comptroller, that the same shall be landed at the place for which they be entered outwards, or be otherwise accounted for. — § 47.

Power to appoint other Ports. — It shall be lawful for his Majesty, by order in council, from time to time to appoint any port in his Majesty's possessions in America to be a free warehousing port for all or any of the purposes of this act; and every such port so appointed by his Majesty shall be, for all the purposes expressed in such order, a free warehousing port under this act, as if appointed by the same. — § 48.

Goods from Mauritius liable to same Duties and Regulations as West India Goods. — § 49. — (See PORT LOUIS.)

Cape of Hope within Limits of the Company's Charter. — In all trade with the British possessions in America, the Cape of Good Hope, and the territories and dependencies thereof, shall be deemed to be within the limits of the East India Company's charter. — § 50.

DUTCH PROPRIETORS, &c.

Dutch Proprietors in Demerara, Essequibo, and Berbice, may supply their Estates from Holland. — It shall be lawful for any of the subjects of the King of the Netherlands, being Dutch proprietors in the colonies of Demerara, Essequibo, and Berbice, to import in Dutch ships from the Netherlands into the said colonies all the usual articles of supply for their estates therein, and also wine imported for the purposes of medicine only, and which shall be liable to a duty of 10*s.* per ton, and no more; and in case seizure be made of any articles so imported, upon the ground that they are not such supplies, or are for the purpose of trade, the proof to the contrary shall lie on the Dutch proprietor importing the same, and not on the seizing officer: provided always, that if sufficient security by bond be given in court to abide the decision of the commissioners of customs upon such seizure, the goods so seized shall be admitted to entry and released. — § 51.

Dutch Proprietors may not export to United Kingdom. — It shall not be lawful for such Dutch proprietors to export the produce of their estates to the United Kingdom, or to any of his Majesty's sugar colonies in America, except under the conditions herein-after provided. — § 52.

What Persons shall be deemed Dutch Proprietors. — All subjects of his Majesty the King of the Netherlands resident in his said Majesty's European dominions, who were at the date of the convention between his Majesty George III. and the King of the Netherlands, dated the 12th day of August, 1815, proprietors of estates in the said colonies, and all subjects of his said Majesty who may hereafter become possessed of estates then belonging to Dutch proprietors therein, and all such proprietors as being then resident in the said colonies, and being natives of his said Majesty's dominions in the Netherlands, may have declared, within 3 months after the publication of the aforesaid convention in the said colonies, that they wish to continue to be considered as such, and all subjects of his said Majesty the King of the Netherlands who may be the holders of mortgages of estates in the said colonies made prior to the date of the convention, and who may under their mortgage deeds have the right of exporting from the said colonies to the

Netherlands the produce of such estates, shall be deemed Dutch proprietors under the provisions of this act: provided, that where both Dutch and British subjects have mortgages upon the same property in the said colonies, the produce to be consigned to the different mortgagees shall be in proportion to the debts respectively due to them. — § 53.

Persons not wishing to be considered Dutch Proprietors to sign a Declaration to that Effect. — Whereas it is expedient to permit any of such persons, at their option, to relinquish such character of Dutch proprietor; be it therefore enacted, that if any such person shall make and sign a declaration in writing, attested by two credible witnesses, setting forth that he is desirous and has elected not to be deemed to be a Dutch proprietor within the meaning of the said act in respect of any such estate or mortgage to be mentioned and named in such declaration, and shall cause such declaration to be delivered to the commissioners of his Majesty's customs, such person shall thenceforth be no longer deemed a Dutch proprietor within the meaning of the said act in respect of the estate or mortgage so mentioned in such declaration as aforesaid, and such delaration shall have effect in respect of any goods the produce of any such estate of which such person so far as relates to those goods was a Dutch proprietor, although such goods may have been exported from the colony before the delivering of such declaration as aforesaid. — § 54.

No Ship to sail from Jamaica to St. Domingo, or from St. Domingo to Jamaica. — No British merchant ship or vessel shall sail from Jamaica to St. Domingo, nor from St. Domingo to Jamaica, under the penalty of forfeiture of such ship or vessel, together with her cargo; and no foreign ship or vessel which shall have come from, or shall in the course of her voyage have touched at St. Domingo, shall come into any port or harbour in the island of Jamaica; and if any such ship or vessel, having come into any such port or harbour, shall continue there for 48 hours after notice shall have been given by the officer of the customs to depart, such ship or vessel shall be forfeited; and if any person shall be landed in Jamaica from any ship or vessel which shall have come from or touched at St. Domingo, except in case of urgent necessity, or unless licence shall have been given by the governor of Jamaica to land such person, such ship shall be forfeited, together with her cargo. — § 55.

Colonial Laws repugnant to any Act of Parliament to be null and void. — All laws, by-laws, usages, or customs at this time or which hereafter shall be in practice, or pretended to be in practice, in any of the British possessions in America, in anywise repugnant to this act, or to any other act of parliament, so far as such act relates to the said possessions, shall be null and void to all intents and purposes. — § 56.

Exemption from Duties to extend only to Duties by Act of Parliament. — Provided always, that no exemption from duty in any of the British possessions abroad, contained in any act of parliament, extends to any duty not imposed by act of parliament, unless and so far only as any duty not so imposed is expressly mentioned in such exemption. — § 57.

Officers may board Ships hovering on the Coasts. — It shall be lawful for the officers of customs to go on board any ship in any British possession in America, and to rummage and search all parts of such ship for prohibited and uncustomed goods, and also to go on board any ship hovering within 1 league of the coasts thereof, and in either case freely to stay on board such ship so long as she shall remain in such port or within such distance; and if any such ship be bound elsewhere, and shall continue so hovering for the space of 24 hours after the master shall have been required to depart, it shall be lawful for the officer of the customs to bring such ship into port, and to examine her cargo, and to examine the master upon oath touching the cargo and voyage; and if there be any goods on board prohibited to be imported, such ship and cargo shall be forfeited; and if the master shall not truly answer the questions demanded of him, he shall forfeit 100*l.* — § 58.

Forfeiture of Vessels, Carriages, &c. removing Goods liable to Forfeiture. — All vessels, boats, carriages, and cattle made use of in the removal of any goods liable to forfeiture under this act shall be forfeited, and every person who shall assist or be otherwise concerned in the unshipping, landing, or removal, harbouring, &c. of such goods, or into whose possession the same shall knowingly come, shall forfeit the treble value thereof, or the penalty of 100*l.*, at the election of the officers of the customs. — § 59.

Goods, Vessels, &c. liable to Forfeiture may be seized by Officers. — All goods, ships, vessels, boats, carriages, and cattle, liable to forfeiture under this act, may be seized and secured by any officer of the customs or navy, or by any person employed for that purpose with the concurrence of the commissioners of his Majesty's customs; and every person who shall in any way hinder or obstruct such officers or persons employed as aforesaid, or any person aiding him, shall for every such offence forfeit the sum of 200*l.* — § 60.

Writ of Assistance to search for and seize Goods liable to Forfeiture. — Under authority of a writ of assistance granted by the supreme court of justice or court of vice admiralty having jurisdiction in the place, it shall be lawful for any officer of the customs, taking with him a peace officer, to enter any building or other place in the daytime, and to search for, seize, and secure any goods liable to forfeiture under this act, and, in case of necessity, to break open any doors and any chests or other packages for that purpose; and such writ of assistance, when issued, shall be deemed to be in force during the whole of the reign in which the same shall have been granted, and for 12 months from the conclusion of such reign. — § 61.

Obstruction of Officers by Force. — If any person shall by force or violence assault, molest, hinder, or obstruct any officer of the customs or navy, or other person employed as aforesaid, or any person acting in his aid, such person upon conviction shall be adjudged a felon, and punished at the discretion of the court. — § 62.

Goods seized to be secured at the next Custom-house, and sold by Auction. — All things seized as liable to forfeiture under this act, or under any act made for the prevention of smuggling, or relating to the customs, or to trade or navigation, shall be delivered to the collector and comptroller of the customs next to the place where the same were seized; and after condemnation they shall cause the same to be sold by public auction to the best bidder: provided always, that it shall be lawful for the commissioners of the customs to direct in what manner the produce of such sale shall be applied, or, in lieu of such sale, to direct what things shall be destroyed, or be reserved for the public service. — § 63.

The next 17 clauses relate to the mode of proceeding in actions as to seizures before the courts, the application and recovery of penalties, &c. It seems unnecessary to insert these in this place.

The King may regulate the Trade of certain Colonies. — It shall be lawful for his Majesty, by any order or orders in council to be issued from time to time, to give such directions and make such regulations touching the trade and commerce to and from any British possessions on or near the continent of Europe, or within the Mediterranean Sea, or in Africa, or within the limits of the East India Company's charter (excepting the possessions of the said Company), as to his Majesty in council shall appear expedient; and if any goods shall be imported or exported in any manner contrary to any such order, the same shall be forfeited, together with the ship importing or exporting the same. — § 81.

East India Company may carry Goods from India to Colonies. — It shall be lawful for the East India Company, during the continuance of their exclusive privileges of trade, to export from any place within the limits of their charter any goods for the purpose of being carried to some of his Majesty's possessions in America, and so to carry and to import the same into any of such possessions, and also to carry return cargoes from such possessions to any place within the limits of their charter, or to the United Kingdom; and it shall be lawful for any of his Majesty's subjects, with the licence or under the authority of the said Company, to lade in and export from any of the dominions of the Emperor of China any goods, and to lade in and export from any place within the limits of the said Company's charter any tea, for the purpose of being carried to some of his Majesty's possessions in America, and also so to carry and to import the same into any of such possessions. — § 82.

Certificate of Production of East India Sugar. — It shall be lawful for any shipper of sugar the produce of some British possession within the limits of the East India Company's charter, to be exported from such possession, to go before the collector, comptroller, &c. of the customs at such place, or, if there be none such, to go before the principal officer of such place, or the judge or commercial resident, and make an affidavit that such sugar was really and *bonâ fide* the produce of such British possession, to the best of his knowledge and belief; and such officer, &c. is to grant a certificate thereof, setting forth the name of the ship in which the sugar is to be exported, and her destination. — § 83.

Ships built prior to the 1st of January, 1816, deemed British Ships within certain Limits. — All ships built within the limits of the East India Company's charter prior to the 1st day of January, 1816, and which were then, and have continued since, to be solely the property of his Majesty's subjects, shall be deemed to be British ships for all the purposes of trade within the said limits, including the Cape of Good Hope. — § 84.

Certificate of Production of Cape Wine. — It shall be lawful for the shipper of wine the produce of the Cape of Good Hope, or of its dependencies, which is to be exported from thence, to go before the chief officer of the customs, and make an affidavit that such wine was really and *bonâ fide* the produce of the Cape or its dependencies; and such officer is required to administer such affidavit, and to grant a certificate thereof, stating the name of the ship in which the wine is exported, and her destination. — § 85.

Certificate of Production of Goods in Guernsey, &c. — It shall be lawful for any person who is about to export from Guernsey, Jersey, Alderney, or Sark, to the United Kingdom, or any British possession in America, any goods the growth or produce of any of those islands, or any goods manufactured from materials the growth or produce thereof, or of the United Kingdom, to go before a magistrate of the island from which the goods are to be exported, and sign a declaration that such goods are of such growth, produce, or manufacture, and such magistrate shall administer and sign such declaration; and thereupon the governor, lieutenant-governor, &c. of the island shall, upon the delivery to him of such declaration, grant a certificate under his hand of the proof contained in such declaration, stating the ship by, and the port in the United Kingdom, or in such possession, to, which the goods are to be exported; and such certificate shall be produced at such ports, in proof that the goods mentioned therein are of the growth, produce, &c. of such islands. — § 86.

The next section relates to the importation of tea into Guernsey, &c. during the exclusive trading privileges enjoyed by the East India Company.

Guernsey, &c. Tonnage of Ships and Size of Packages for Spirits. — No brandy, geneva, or other spirits (except rum of the British plantations), shall be imported into, or exported from, the islands of Jersey, Guernsey, Alderney, or Sark, or removed from any one to any other of the said islands, or coastwise from any one part to any other part of either of the said islands, or be shipped to be so removed or carried, or be waterborne for the purpose of being so shipped in any ship, vessel, or boat of less burden than 100 tons (except when imported from the United Kingdom in ships of the burden of 70 tons at least), nor in any cask or package of less size or content than 40 gallons, (except when in bottles, and carried in a square-rigged ship,) nor any tobacco or snuff in any ship, vessel, or boat of less burden than 100 tons (except when imported from the United Kingdom in ships of the burden of 70 tons at least), nor in any cask or package containing less than 450 lbs. weight, (save and except any such spirits or loose tobacco as shall be for the use of the seamen belonging to and on board any such ship, vessel, or boat, not exceeding 2 gallons of the former, and 5 lbs. weight of the latter, for each seaman, and also except such manufactured tobacco or snuff as shall have been duly exported as merchandise from Great Britain or Ireland,) on pain of forfeiture of all such foreign brandy, geneva, or other spirits, tobacco or snuff respectively, together with the casks or packages containing the same, and also of every such ship, vessel, or boat, together with all her guns, furniture, &c. — § 88.

Not to extend to Vessels of 10 Tons supplying Island of Sark, having Licence so to do. — Nothing herein contained shall extend, or be construed to extend, to any boat not exceeding the burden of 10 tons, for having on board at any one time any foreign spirits of the quantity of 10 gallons or under, in casks or packages of less size or content than 40 gallons, or any tobacco, snuff, or tea, not exceeding 50 lbs. weight of each, for the supply of the said island of Sark, such boat having a licence from the officer of customs at either of the islands of Guernsey or Jersey, for the purpose of being employed in carrying commodities for the supply of the said island of Sark: provided that every such boat having on board at any one time any greater quantity of spirits than 10 gallons, or any greater quantity of tobacco or snuff than 50 lbs. weight of each of the said articles, unless such greater quantity of spirits, tobacco, or snuff shall be in casks or packages of the size, content, or weight herein-before required, or having on board at any one time any greater quantity of tea than 50 lbs. weight, shall be forfeited. — § 89.

Penalty on Persons found on board Vessels liable to Forfeiture within 1 League of Guernsey, &c.—Every person found or discovered to have been on board any vessel or boat liable to forfeiture, for being found within 1 league of the islands of Guernsey, Jersey, Alderney, or Sark, having on board or in any manner attached or affixed thereto, or conveying or having conveyed, in any manner, such goods or other things as subject such vessel or boat to forfeiture, or who shall be found or discovered to have been on board any vessel or boat from which any part of the cargo shall have been thrown overboard during chace, or staved or destroyed, shall forfeit the sum of 100*l.* — § 90.

British Coals not to be re-exported from British Possessions without Duty. — It shall not be lawful to re-export from any of his Majesty's possessions abroad to any foreign place any coals the produce of the United Kingdom, except upon payment of the duty to which such coals would be liable upon exportation from the United Kingdom to such foreign place; and no such coals shall be shipped at any of such possessions, to be exported to any British place, until the exporter or the master of the exporting vessel shall have given bond, with one sufficient surety, in double the value of the coals, that such coals shall not be landed at any foreign place. — § 91.

Penalty for using Documents counterfeited or falsified. — If any person shall, in any of his Majesty's possessions abroad, counterfeit or falsify, or wilfully use when counterfeited or falsified, any entry, warrant, cocket, &c. for the unlading, lading, entering, reporting, or clearing any ship or vessel, or for the landing, shipping, or removing of any goods, stores, baggage, or article whatever, or shall by any false statement procure any writing or document to be made for any such purposes, or shall falsely make any oath or affirmation required by any act for regulating the trade of the British possessions abroad, or shall forge or counterfeit a certificate of the said oath or affirmation, or shall knowingly publish such certificate, he shall for every such offence forfeit the sum of 200*l.* — § 92.

The American government having declined complying with those conditions of reciprocity under which the trade between the United States and the British colonies was to be opened by the act 6 Geo. 4. c. 114., it was directed by an order in council, dated the 27th of July, 1826, that a duty of 4*s.* 3*d.* per ton should be charged upon all American vessels entering his Majesty's possessions in the West Indies, as well as an addition of 10 per cent. upon the duties imposed by the above-mentioned act on all and each of the articles named in it, when imported into the West Indies in American ships.

In the course of 1830, however, the negotiations that had been entered into with the United States relative to this subject were happily terminated by the Americans agreeing to the conditions of reciprocity above mentioned; so that the discriminating duties

imposed upon the ships and goods under authority of the above-mentioned order in council are wholly repealed.

Subjoined is the circular letter of the American government, and an extract from the British order in council, dated the 5th of November, 1830, relative to this new arrangement.

Circular to the Collectors of Customs.

Treasury Department, Oct. 6. 1830.

Sir, — You will perceive by the proclamation of the president herewith transmitted, that from and after the date thereof, the act entituled "An Act concerning Navigation," passed on the 13th of April, 1818; an act supplementary therein, passed the 15th of May, 1820; and an act entituled "An Act to regulate the commercial Intercourse between the United States and certain British Ports," passed on the 1st of March, 1823, are absolutely *repealed; and the ports of the United States are open to British vessels and their cargoes, coming from the British colonial possessions in the West Indies, on the continent of South America, the Bahama Islands, the Caicos, and the Bermuda or Somer Islands; also from the islands, provinces, or colonies of Great Britain on or near the North American continent, and north or east of the United States.* By virtue of the authority of this proclamation, and in conformity with the arrangement made between the United States and Great Britain, and under the sanction of the president, you are instructed to admit to entry such vessels being laden with the productions of Great Britain or her said colonies, subject to the same duties of tonnage and impost, and other charges, as are levied on the vessels of the United States, or their cargoes arriving from the said British colonies: you will also grant clearances to British vessels for the several ports of the aforesaid colonial possessions of Great Britain, such vessels being laden with such articles as may be exported from the United States in vessels of the United States; and British vessels coming from the said colonial possessions may also be cleared for foreign ports and places other than those in the said British colonial possessions, being laden with such articles as may be exported from the United States in vessels of the United States. I am, &c.

(Signed) S. D. INGHAM, Secretary to the Treasury.

Extract from the British Order in Council, dated the 5th of November, 1830, *relative to the Trade between the United States and the British West Indies.*

"Whereas it hath been made to appear to his Majesty in council, that the restrictions heretofore imposed by the laws of the United States upon British vessels navigated between the said States and his Majesty's possessions in the West Indies and America, have been repealed; and that the discriminating duties of tonnage and of customs heretofore imposed by the laws of the said United States upon British vessels and their cargoes entering the ports of the said States from his Majesty's said possessions, have also been repealed, and that the ports of the United States are now open to British vessels and their cargoes coming from his Majesty's possessions aforesaid. His Majesty doth, therefore, with the advice of his privy council, and in pursuance and exercise of the powers so vested in him by the act passed in the sixth year of the reign of his said late Majesty, or by any other act or acts of parliament, declare that the said recited orders in council of the 21st of July, 1823, and of the 27th of July, 1826, and the said order in council of the 16th of July, 1827 (so far as such last-mentioned order relates to the said United States), shall be, and the same are hereby respectively revoked.

"And his Majesty doth further, by the advice aforesaid, and in pursuance of the powers aforesaid, declare that the ships of and belonging to the said United States of America may import from the United States aforesaid into the British possessions abroad, goods the produce of those States, and may export goods from the British possessions abroad, to be carried to any country whatever."

Connection of the Planter and Home Merchant. Mode of transacting Business in England. — The mode of transacting West India business is as follows: — A sugar planter forms a connection with a mercantile house in London, Bristol, Liverpool, or Glasgow; stipulates for an advance of money on their part; grants them a mortgage on his estate; and binds himself to send them annually his crop, allowing them the full rate of mercantile commissions. These commissions are $2\frac{1}{2}$ per cent. on the amount of sugar sold, and of plantation stores sent out; along with $\frac{1}{2}$ per cent. on all insurances effected. During the war, when prices were high, the amount of those commissions was large; but, like other high charges, the result has, in nine cases in ten, been to the injury of those who received them: they led the merchants to undertake too much, and to make too large advances to the planters, for the sake of obtaining their business. At that time it was usual to allow a permanent loan at the rate of 3,000*l.* for the assured consignment of 100 hogsheads of sugar; but that *ratio* was very often exceeded by the planter, the 3,000*l.* becoming 4,000*l.*, 5,000*l.*, 6,000*l.*, and, in very many cases, still more, in consequence of unforeseen wants and too sanguine calculations on his part.

Persons resident in the West Indies are almost always bare of capital, and for obvious reasons. A climate of such extreme heat, and a state of society possessing so few attractions to persons of education, offer no inducements to men of substance in Europe to go thither. Those who do go, must trust to their personal exertion and the support of others; and when, after a continued residence in the West Indies, they have made some progress in acquiring a competency, and have become accustomed to the climate, they hardly ever consider themselves as settled there for life; their wish and hope is to carry their acquisitions so far as to be enabled to pass the remainder of their days comfortably at home. The readiest means, in the view of the planter, of accomplishing this, is the extension of his undertakings; which he can do only by borrowing money. Hence a continued demand on his mercantile correspondents at home for fresh advances: the consuming effect of heavy commissions, and of the interest on borrowed money, is, or rather was, overlooked in his ardent speculations. But when prices unfortunately fall, he finds himself 10,000*l.* or 20,000*l.* in debt, with a reduced income. The merchants at home become equally embarrassed, because the case of one is the case of three fourths of their correspondents; and the capital of the merchants, large as it may be, is absorbed and placed beyond their control. The mortgages they hold

are of value only in an ultimate sense: to foreclose them, and to take possession of the estates, is, in general, a very hazardous course.

Such has been for a number of years the state of our West India trade. Perhaps it is impossible to point out any means of effectual relief: our planters must not build expectations on such doubtful, or rather improbable, events as the stoppage of distillation from malt, or an insurrection of the negroes in rival countries, such as Cuba or Brazil. Of a bounty on exportation it is idle to speak: so that their only rational and substantial ground of hope seems to be in a further reduction of the duties on sugar, coffee, and rum; and an abolition of the duties on imports, and of the restrictions laid on their trade with America and other countries.

The sale of West India articles takes place through the medium of produce brokers, who in London reside chiefly in Mincing Lane and Tower Street. Samples of sugar and rum are on show in their respective sale rooms during four days of the week, viz. Tuesday, Wednesday, Thursday, and Friday, from 11 to 1 o'clock; during which time the sugar refiners, wholesale grocers, and other dealers in produce, call in, observe the state of the market, and buy what they require. The term of credit is short; only 1 month for coffee and rum, and 2 months for sugar. Coffee is generally sold by public auction, sugar and rum by private contract. The broker's commission is usually $\frac{1}{2}$ per cent. on the amount; but in the case of coffee, as they guarantee the buyers, their charge amounts to 1 per cent. The brokers have no correspondence or connection with the planters; they are employed by the merchants; and their sales, though for large amounts, being very simple, a brokerage house of consequence generally does the business of a number of merchants. Neither merchant nor broker see, or are in the least under the necessity of seeing, the bulky packages containing the different articles of produce of which they effect the sales: all is done by sample; the packages remaining in the bonded warehouse from the time of landing till they are sold; after which they pass to the premises of the refiner, wholesale grocer, or whoever may be the purchaser.

The allowances made to the buyer in respect of weight, consist, first of the tare, which is the exact weight of the cask; and, in the second place, of a fixed allowance of 5 lbs. per cask in the case of coffee, called trett, and of 2 lbs. per cask on sugar, under the name of draft. — (See *Account Sales* of both, in pp. 150, 151.)

The shipping of stores from England to the plantations is also a very simple transaction. West India merchants in London, Liverpool, or Bristol, receive from the planters, in the autumn of each year, a list of the articles required for the respective estates: these lists they divide, arrange, and distribute among different wholesale dealers in the course of September and October, with instructions to get them ready to ship in a few weeks. November and December are the chief months for the despatch of outward-bound West Indiamen, as the plantation stores ought, by rights, to arrive about the end of December, or in the course of January. That is a season of activity, and generally of health, in the West Indies; the comparatively cool months of November and December having cleared the air, and the produce of the fields having become ripe and ready to carry. Crop time lasts from January to the end of July, after which the heavy rains put a stop to field work in the islands. Demerara, being so near the line, experiences less difference in the seasons, and it is customary there to continue making sugar all the year round.

The arrivals of West Indiamen in England with homeward cargoes begin in April and continue till October; after which, with the exception of occasional vessels from Demerara and Berbice, they cease till the succeeding April. This corresponds with the time of carrying and loading the crops: for it would be quite unadvisable, on the score of health, as well as of the interruptions to work from the heavy rains, to attempt loading vessels in the sugar islands during the autumnal months.

The unloading of West Indiamen in London usually takes place at the West India docks; and did so uniformly from the autumn of 1802, when the docks were first opened, till August, 1823, when the dock monopoly expired. The delays in discharging, occasionally complained of during the war, arose from two causes; from the vessels arriving in fleets (in consequence of sailing with convoy), and from the imperfections inseparable from a new establishment. The latter have been long remedied; and as to the former, though at particular seasons, and after a change of wind, the vessels still come close on each other, the crowding in the docks is by no means to be compared to that arising from the arrival of a convoy. Cargoes are discharged very speedily, the time seldom exceeding 3 days. The dock dues have also been materially reduced since the peace: and the whole exhibits a striking example of the advantage attendant on transacting a mass of business on one spot; an advantage which can be enjoyed only in great sea-ports, such as London, Liverpool, or Amsterdam. — (See Docks.)

The rates of freight during the war were, on sugar from 7*s.* to 8*s.* per cwt., and on coffee from 10*s.* to 11*s.*; whereas they now amount, the former to 4*s.* and 4*s.* 6*d.*, and

the latter to 6*s*. The ship owners complain that these freights leave them very little profit; but in consequence of the speed with which vessels may now be unloaded and cleared at London, it is probable that the practice of making *two* voyages in the season will become general.

Disposal of Land in the Colonies. — The chief cause of the rapid advancement of all colonies placed in rude and thinly peopled countries, has been the facility with which they have obtained supplies of fertile and unoccupied land. Were the inhabitants of a colony so situated, that instead of resorting to new land to obtain increased supplies of food, they were obliged to improve the land already in cultivation, their progress would be comparatively slow, and they would approach to the condition of an old country; and the greater the concentration of the inhabitants, the nearer, of course, would be their approach to that state. On the other hand, several inconveniences result from allowing the colonists to spread themselves at pleasure over unoccupied districts. The inhabitants become too much dispersed to be able to lend efficient assistance to each other; a large extent of roads is necessary, and their construction is a task too great for so thin a population. But the greatest injury that can be done to a colony is the making of gratuitous grants of large tracts of land to corporations or individuals, without laying upon them any obligation as to their occupation, or obliging them to contribute their share of the expenses necessary on account of public improvements. Wherever such an unwise policy has been pursued, as in Lower Canada for example, the consequences have been most injurious. The occurrence of the unoccupied districts obliges the settlers to establish themselves at inconvenient distances from each other; it prevents, by the want of roads, their easy communication; and retards, in a degree not easy to be imagined, the advancement of the district. The inconveniences resulting from these grants are, indeed, obvious. They have been loudly complained of by the colonists, and are now almost universally admitted.

It is not difficult to discover the *principle* of the measures that ought to be adopted with respect to the disposal of unoccupied colonial land. They should be so contrived as to prevent too great a diffusion of the colonists, without, however, occasioning their too great concentration. And it is plain, that these advantages may be realised by selling all lands at a moderate price, or by imposing upon them a moderate quit-rent. If the price or quit-rent were very high, it would, of course, occasion too great a concentration, and be an insuperable obstacle to the rapid progress of the colony; while, if it were too low, it would not obviate the inconvenience of too great dispersion. The fixing of the price at which land should be sold is, therefore, the only really difficult point to be decided upon. The Americans sell their public lands at 2 dollars an acre; and this is, perhaps, all things considered, as proper a sum as could be selected.

Until very recently we did not follow any fixed plan in the disposal of colonial lands, which have in many instances been bestowed in the most improvident manner. But a different system has been adopted, and lands in the colonies are no longer obtainable except by purchase. We, however, are not without apprehensions that considerable inconvenience will result from the proposed plan of selling land by *auction*. It is easy, no doubt, to fix a minimum upset price; but the market price must entirely depend on the *quantity put up for sale*, compared with the number and means of the buyers. And, as the regulation of this quantity must necessarily be left to the local authorities, they will, in fact, have the power of fixing the price. A system of this sort can hardly fail of leading to very great abuses; and will give rise to perpetual complaints, even when they are not deserved, of partiality and preference. The best way, as it appears to us, would be to order competent persons to fix certain prices upon all the lands to be located, according to the various circumstances for and against them; and to grant specified portions of such lands to all who claimed them, according to the amount of capital they proposed to employ in their cultivation. We do not, however, think that the maximum price ought in any case to exceed 12*s*. or 15*s*. an acre: a price of this magnitude would secure a sufficient degree of concentration, without carrying the principle so far as to make it injurious.*

Disposal of Land in Canada. — The following advertisement, dated at the office of the Commissioner of Crown Lands, York, Upper Canada, 27th of May, 1833, explains the terms on which lands are in future to be granted in that province: —

In conformity to instructions recently received from his Majesty's secretary of state for the colonies, the following arrangements for disposing of the waste lands of the crown in Upper Canada, are made known for the information of emigrants and others.

Except in the case of U. E. Loyalists, and other persons entitled by the existing regulations of the government to free grants, no person can obtain any of the waste lands of the crown otherwise than by purchasing at the public sales, made from time to time under the direction of the commissioner of crown lands.

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* The injurious consequences resulting from the late system of granting lands in the colonies have been very forcibly pointed out by Mr. Gouger, Mr. Tennant, and others; but the *degree* of concentration they recommend would be ten times more injurious.

These sales will be made on the 1st and 3d Tuesday of each month, and will either be continued through the following day, or not, as circumstances may appear to the agent to require.

Besides these general periodical sales, there may be occasional sales by auction in other districts, of such town lots, or other lots of land, as may remain to be disposed of; and of these sales ample notice will be given.

The conditions of every sale by public auction will be as follows: — One fourth of the purchase money to be paid down; and the remainder in 3 equal annual instalments, with interest at 6 per cent. on each instalment, payable with the instalment.

The lands will be put up at an upset price, of which notice will be given at the time of sale, and in the previous advertisements which will be published of the lands intended to be put up at each sale: and in case no offer shall be made at the upset price, the land will be reserved for future sale, in a similar manner, by auction.

A patent for the lands will be issued free of charge, upon the payment in full of the purchase money and interest.

The commissioner for crown lands, acting also as agent for the sale of clergy reserves, requests it to be noticed, that such clergy reserves as have not been hitherto occupied by authority, or leased by the government, will be disposed of, by public auction only, either at the periodical sales of crown lands, or at occasional sales, to be duly advertised, and that the terms of payment for clergy reserves will continue to be as follows: — 10 per cent. to be paid at the time of sale, and the remainder in 9 annual instalments of 10 per cent. each, with interest on each instalment, to be paid with the instalment.

Such clergy reserves as have been leased, or occupied by the authority of the government, must be applied for by letter to the commissioner of crown lands, and when disposed of, will be sold by private sale on the same terms of payment as those disposed of by public auction.

Terms upon which the Crown Lands will be disposed of in New South Wales and Van Diemen's Land.

It has been determined by his Majesty's government that no land shall, in future, be disposed of in New South Wales or Van Diemen's Land otherwise than by public sale, and it has therefore been deemed expedient to prepare for the information of settlers the following summary of the rules which it has been thought fit to lay down for regulating the sales of land in those colonies: —

1. A division of the whole territory into counties, hundreds, and parishes, is in progress. When that division shall be completed, each parish will comprise an area of about 25 square miles.

2. All the lands in the colony, not hitherto granted, and not appropriated for public purposes, will be put up to sale. The price will of course depend upon the quality of the land, and its local situation; but no land will be sold below the rate of 5*s*. per acre.

3. All persons proposing to purchase lands not advertised for sale, must transmit a written application to the governor, in a certain prescribed form, which will be delivered at the Surveyor General's Office to all persons applying, on payment of the requisite fee of 2*s*. 6*d*.

4. Those persons who are desirous of purchasing, will be allowed to select, within certain defined limits, such portions of land as they may wish to acquire in that manner. These portions of land will be advertised for sale for 3 calendar months, and will then be sold to the highest bidder, provided that such bidding shall at least amount to the price fixed by Article 2.

5. A deposit of 10 per cent. upon the whole value of the purchase must be paid down at the time of sale, and the remainder must be paid within 1 calendar month from the day of sale, previous to which the purchaser will not be put in possession of the land: and in case of payment not being made within the prescribed period, the sale will be considered void, and the deposit forfeited.

6. On payment of the money, a grant will be made in fee-simple to the purchaser at the nominal quit-rent of a pepper-corn. Previous to the delivery of such grant, a fee of 40*s*. will be payable to the colonial secretary, for preparing the grant, and another fee of 5*s*. to the registrar of the Supreme Court, for enrolling it.

7. The land will generally be put up to sale in lots of 1 square mile, or 640 acres; but smaller lots than 640 acres may, under particular circumstances, be purchased, on making application to the governor in writing, with full explanations of the reasons for which the parties wish to purchase a smaller quantity.

8. The crown reserves to itself the right of making and constructing such roads and bridges as may be necessary for public purposes in all land purchased as above; and also to such indigenous timber, stone, and other materials, the produce of the land, as may be required for making and keeping the said roads and bridges in repair, and for any other public works. The crown further reserves to itself all mines of precious metals.

Colonial Office, 20th of January, 1831.

Selection of Sites for Colonial Establishments. — Nothing can be more unwise than the plan, if so we may call it, hitherto followed in the selection of places at which to found colonies. The captain of a ship, without any knowledge whatever of the nature of soils, or the capacities of a country in an agricultural point of view, falls in after a long cruise with a river or bay, abounding with fish and fresh water, and surrounded with land that *looks* fertile, and is covered with herbage. He forthwith reports all these circumstances, duly embellished, to the Admiralty, strongly recommending the situation as an admirable one at which to found a colony; and in nine cases out of ten *this* is all the information that is required in taking a step of such infinite importance! No wonder, therefore, that many fine schemes of colonisation should have ended only in loss and disappointment; and that situations which the colonists were taught to look upon as a species of paradise, have proved to be any thing but what they were represented. Botany Bay, though described by Captain Cook as one of the finest places in the world, had to be abandoned by the colonists that were sent out to it; as the country round it, instead of being favourable for cultivation, is a mere sandy swamp. Is it possible to suppose, had the proper inquiries been entered into, that any attempt would have been made to establish a colony in so pestilential a climate as that of Sierra Leone? The colony in the district of Albany, in the Cape of Good Hope, was founded upon the representations of an individual, who, whatever might be his information in other respects, had not the slightest knowledge of agriculture; and the distresses the settlers have had to encounter, were the natural consequences of their relying on such authority. The late establishment at Swan River may be adduced as another instance of misplaced or premature confidence in the reports of those who were really without the means of forming a correct estimate of the various circumstances necessary to be attended to in forming a colony.

We do, therefore, hope that an end will be put to this system, — a system which is in no common degree injurious to the public interests, and is highly criminal towards those who embark as colonists. The founding of a colony ought to be looked upon in its true point of view — as a great national enterprise. It is not an adventure to be intrusted to presumptuous ignorance; but should be maturely weighed, and every circumstance connected with it carefully investigated. Above all, the situation in which it is proposed to found the colony should be minutely surveyed: and its climate, soil, and capacities of production, deliberately inquired into by competent persons employed for the purpose. Were this done, government and the public would have the best attainable grounds upon which to proceed; and neither party would have much reason to fear those disappointments, which have hitherto so often followed the exaggerated representations of those to whom the important and difficult task of selecting situations for colonies has been delegated.

V. Foreign Colonies.

1. *Spanish Colonies.* — Spain, whose colonial possessions extended a few years ago from the frontiers of the United States to the Straits of Magellan, is not, at present, possessed of a foot of ground in the whole American continent. Still, however, her colonial possessions are of great value and importance. In the West Indies, she is mistress of Cuba and Porto Rico; — the former by far the largest and finest of the West India islands; and the latter also a very valuable possession. In the East, Spain is mistress of the Philippine Islands, which, were they in the hands of an enterprising people, would speedily become of very great commercial importance. — (See the articles Havannah, Manilla, Porto Rico.)

2. *Dutch Colonies.* — Java forms the most important and valuable of the Dutch colonial possessions. — (See Batavia.) In the East they also possess the Moluccas, Bencoolen on the coast of Sumatra, Macassar, and the eastern coast of Celebes, Banda, &c. They have several forts on the Gold Coast in Africa; and in the West Indies, they possess the islands of Curaçoa and St. Eustatius, Saba, and part of St. Martin; and on the continent of South America, they are masters of Dutch Surinam. Curaçoa and St. Eustatius are naturally barren, but they have been both highly improved. From its being very conveniently situated for maintaining a contraband traffic with the Caraccas and other districts in South America, Curaçoa was formerly a place of great trade, particularly during war. But since the independence of South America, Curaçoa has ceased in a great measure to be an *entrepôt*; the goods destined for the Continent being now, for the most part, forwarded direct to the places of their destination.

That district of Surinam ceded to the British in 1814, comprising the settlements of Demerara, Berbice, and Essequibo (see *antè*, p. 343.), formed the most valuable portion of Surinam, or Dutch Guiana. The district which still belongs to the Dutch lies to the south of Berbice. It contains about 25,000 square miles, and a population of about 60,000. It is daily becoming of more value and importance.

3. *French Colonies.* — Previously to the negro insurrection that broke out in 1792, St. Domingo was by far the most valuable colony in the West Indies. But this disastrous event, having first devastated the island, terminated in the establishment of the independent black republic of Hayti. — (See Port au Prince.) Having also sold Louisiana to the Americans, and ceded the Mauritius to the English, without making any new acquisitions, the colonial dominions of France are, at this moment, of very limited extent. They consist of Guadeloupe and Martinique, and the small islands of Marie-Galante and Deseada, in the West Indies; Cayenne, in South America; Senegal and Goree, in Africa; the Isle de Bourbon, in the Eastern Ocean; St. Marie, in Madagascar; and Pondicherry and Chandernagor, with a very small surrounding territory, in the East Indies. The tabular statements in the opposite page show the population, trade, &c. of the French colonies.

4. *Danish Colonies.* — In the West Indies, these consist of the islands of St. Croix, St. Thomas, and St. John: of these, St. Croix only is valuable. It is about 81 square miles in extent, and contains about 37,000 inhabitants, of whom 3,000 are whites, 1,200 free blacks and mulattoes, and the remainder slaves. The soil is fertile, and it is well cultivated. The principal productions are sugar, rum, and coffee. In India, the Danes possess Tranquebar, near Madras; and Serampoor, near Calcutta. The former contained, in 1809, about 19,000 inhabitants; but it has greatly improved since the peace, both in commerce and population. Serampoor is a neat but not very considerable place. It serves as an asylum for the debtors of Calcutta, and is the capital station of the missionaries. The Danes have a few forts on the coast of Guinea.

5. *Swedish Colonies.* — The Swedes only possess one colony — the small island of St. Bartholomew, in the West Indies. It is only about 25 square miles in extent, but is very fertile. It has no springs, nor fresh water of any sort, except such as is supplied by the rain. Population between 8,000 and 9,000.

Table of the Population of the French Colonies, and of their Commerce with France. — (*Montvéran, Essai de Statistique sur les Colonies, Pièces Justificatives*, No. 5.)

Colonies.	Population in 1829 or according to the last Census.				Commerce with France.		Navigation.				Cod of the French Fisheries.	
					Real Value, 1831.		Entered.		Cleared out.			
	Whites.	People of Colour.		Total.	Imports into France.	Exports from France.	Ships.	Tonnage.	Ships.	Tonnage.	Imported in 1831.	Official Value.
		Free.	Slaves.									
North America.	*No.*	*No.*	*No.*	*No.*	*Francs.*	*Francs.*	*No.*	*No.*	*No.*	*No.*	*Kilogr.*	*Francs.*
Saint Pierre and Miquelon, 1831	861	-	-	861	6,700,916	476,117	3	353				
The Antilles.												
Martinique (Jan. 1. 1832)	9,410	18,832	80,753	109,995	20,123,584	12,633,530	154	40,996	136	35,037	1,744,618	436,155
Guadeloupe (Jan. 1. 1831)	10,596	10,772	90,743	112,111	26,642,222	12,146,853	195	47,623	194	47,772	2,820,075	705,019
South America.												
Cayenne (Jan. 1. 1832)	1,291	2,220	19,173	22,684	2,442,158	1,736,792	29	4,458	23	4,056	131,157	32,789
Africa.												
Bourbon (Jan. 1. 1830)	20,000	11,500	66,000	97,500	15,057,276	5,732,908	50	15,122	62	18,315	210,345	58,584
Senegal (1825)	240	3,573	12,297	16,110	3,445,087	3,095,818	29	3,058	25	2,706		
Asia.												
French factories in India (1825)	1,021	107,986	1,194	110,201	3,723,270	753,235	4	1,145	5	1,241		
Total - -	43,419	156,073	270,160	469,615	79,133,603	33,888,240	464	110,755	445	109,127	4,906,193	1,226,549

Able-bodied blacks of both sexes - 194,141 individuals.
Old men, children, and sick - 75,989 —

Colonies for colonial produce: — Importations 64,265,250 francs.
Ditto - Exportations 30,250,083 —

Statement of the Products of the French Colonies imported into France, and entered for Consumption, and of the Duties charged on their Introduction, in 1831. — (*Montvéran*, No. 6.)

Colonies and Establishments.	Sugars of all Qualities.	Coffee.	Cacao.	Cotton.	Cloves and Spices.	Annotto	Indigo.	Gum.	Wax.	Wood of all Kinds.	Custom Duties.
	Kilogr.	*Kilogr.*	*Kilogr.*	*Kilogr.*	*Kilogr.*	*Kilogr.*	*Kilogr.*	*Kilogr.*	*Kilogr.*	*Kilogr.*	*Francs.*
Guadeloupe -	36,579,836	968,480	9,042	28,892	61	-	-	-	-	241,012	18,813,357
Martinique - -	27,049,000	379,044	157,110	5,117	24,518	-	-	-	-	949,840	13,845,765
Bourbon - -	16,229,003	761,814	191	3,174	729	-	282	-	-	31,995	7,092,305
Cayenne - -	1,432,075	42,426	22	169,520	18,112	82,122	-	-	-	68,729	851,408
Senegal - -	- -	- -	-	-	- -	-	12,754	677,040	12,898	93,285	114,752
Factories in India -	43,023	47,282	-	81,232	193,747	-	-	-	-	- -	424,608
St. Pierre and Fisheries of Miquelon	- -	- -	-	-	- -	-	-	-	-	- -	6,789
Total - -	81,332,937	2,199,646	168,345	268,935	236,967	82,122	13,036	677,040	12,898	1,384,889	41,148,984
Produce of the French colonies imported, but not entered for consumption, in 1831	6,582,833	-	-	-	- -	-	-	-	-	- -	938,317
Total - -	87,915,770	2,199,646	168,345	268,935	236,967	82,122	13,036	677,040	12,898	1,384,889	42,087,301
Value in francs -	52,749,462	1,649,286	116,442	175,148	2,369,670	164,244	130,360	947,856	25,796	346,222	58674486*

N. B. — The kilogramme = 2·2 lbs. avoirdupois.

COLUMBO, the modern capital of Ceylon, situated on the south-west coast of the island; lat. 6° 55′ N., lon. 79° 45′ E.† It is defended by a very strong fort, nearly surrounded by the sea, in which is a light-house 97 feet high. In 1816, the population of the town and fort was 24,664; and in 1831, 26,357. — (*Columbo Journal*, 17th of October, 1832.) The houses are generally only one story high; they are of stone, clay, and lime; and the town has more of a European appearance than any other in India. The inhabitants are principally Cingalese. In 1821, there were only 32 Europeans in the place qualified to serve on juries. The temperature of the air is remarkable for its equality; and though very humid, the climate may, on the whole, be esteemed salubrious and temperate. There is no harbour at Columbo for large vessels, but only an open roadstead. A projecting rock, on which two batteries are erected, affords shelter to a small semicircular bay on the north side of the fort, having a wooden quay to facilitate the loading and unloading of boats. The depth of water is not sufficient to allow sloops or large dhonies to come alongside the quay; those exceeding 100 tons burden lying at about a cable's length from it. A bar of sand, on some parts of which the water is not more than 7 feet deep, extends from the projecting rock across this bay. The channel where it may be crossed by the larger class of ships is liable to shift; and it is only in the fine weather of the safe season that they venture to go within the bar. The outer road affords secure anchorage for half the year, from the beginning of October to the end of March, during the prevalence of the N. E. monsoon, when the wind blows off the land: during the other, or S. W. monsoon, when the wind blows from the sea on shore, the road is very far from safe; and the ships that frequent it are sometimes obliged to slip their cables and stand out to sea. — (*Milburn's Orient. Comm.*;

* Allowing for bounty on exports.

† This is the position as given by Hamilton. According to Mr. Steuart, master attendant of the port, it is in lat. 6° 57′ N., lon. 79° 52′ E.

Hamilton's Gazet., &c.) As respects its harbour, Columbo is, therefore, very inferior to Trincomalee, the harbour of which is accessible at all times, and is one of the best in India: but the country in the vicinity of Columbo is more fertile; and it has the command of an internal navigation, stretching in a lateral direction along the coast, from Putlam, to the north of the city, to Caltura on the south, a distance of about 100 miles, partly obtained by rivers, and partly by canals. Many flat-bottomed boats are employed in this navigation, the families dependent on which reside mostly on board. Nearly all the foreign trade of Ceylon is carried on from Columbo; and it has also a large proportion of the coasting traffic.

Moneys. — The rixdollar = 1*s.* 6*d.*; but accounts are kept in pounds, shillings, and pence, as in England.

Weights, Measures, &c. — The weights are divided into ounces, pounds, &c., and are the same as in Great Britain. The candy or bahar = 500 lbs. avoirdupois, or 461 lbs. Dutch Troy weight. The principal dry measures are *seers* or *parrahs*. The former is a perfect cylinder, of the depth and diameter undermentioned: —

	Depth.	Diameter.
Seer	4·35 inches.	4·35 inches.

The parrah is a perfect cube, its internal dimensions being every way 11·57 inches.

The liquid measure consists of gallons, and their multiples and sub-multiples. 150 gallons = 1 leaguer or legger.

The bale of cinnamon consists of 92½ lbs. very nearly.

Rates of Pilotage payable by all Square-rigged Vessels, Sloops, or Schooners, at the Portr of Columbo, Trincomalee, and Galle.

	For Back Bay. L.	s.	d.	For the Inner Harbour. L.	s.	d.
Columbo				0	15	0
Trincomalee —						
Vessels of 600 tons and upwards	2	0	0	4	0	0
400 and under 600	1	10	0	3	0	0
200 - - 400	1	1	0	2	2	0
100 - - 200	0	10	6	1	1	0
under 100	0	6	0	0	15	0
Galle —						
Vessels of 600 tons				3	0	0
400 and under 600				2	5	0
200 - - 400				1	10	0
100 - - 200				1	2	6
under 100				0	15	0

The above rates of pilotage will be charged to all vessels going into the inner harbour of Trincomalee and the harbour of Galle, whether they make a signal for pilot or not. In Columbo and Back Bay, at Trincomalee, the charge will only be made, if the vessel make signal, and a pilot actually repair on board.

Fees on Port Clearances payable by Merchant Ships and Vessels, from the 1st Day of October, 1825.

	L.	s.	d.
Square-rigged vessels, sloops, or schooners; viz.			
Of 600 tons or upwards	8	0	0
400 and under 600	5	10	0
200 - - 400	4	0	0
100 - - 200	2	15	0
under 100	1	10	0
Dhonies; viz.			
Of 30 garce and upwards	4	0	0
25 garce and under 30	3	0	0
20 - - 25	2	12	6
15 - - 20	2	5	0
10 - - 15	1	17	6
5 - - 10	1	7	0
under 5	0	15	0

Exceptions.—Manar and Jaffna dhonies, when passing from port to port within the districts they belong to, or from Manar to Jaffna Kaits or Point Pedro, or *vice versâ*, to pay half of the above rates.

Boats, vessels, or dhonies, certified to belong to any port of Ceylon, being under the 5 garce or 1,000 parrahs burden, are to pay as follows: —

	L.	s.	d.
Under 50 parrahs	0	0	0
50 and under 200 parrahs, or 1 garce	0	3	0
1 garce and under 2 garce	0	5	0
2 - - 3	0	7	0
3 - - 4	0	10	0
4 - - 5	0	12	0

Sailing Directions and Remarks on the Port of Columbo, by James Steuart, Esq. Master Attendant.

The land about Columbo is low near the sea, with some hills to the eastward at a distance in the country. The high mountain having on it a sharp cone, called Adam's Peak, bears from Columbo E. 7° S., distant 12½ leagues; its height above the level of the sea is estimated at about 7,000 feet, according to a rough trigonometrical measurement by Colonel Willerman. When the atmosphere is clear, it may be seen 30 leagues. During the prevalence of the N.E. monsoon, Adam's Peak is generally visible in the morning, and frequently the whole of the day; but it is rarely seen in the S.W. monsoon, dense vapours generally prevailing over the island at this season.

Ships approaching Columbo in the night have a brilliant light to direct them, which is exhibited every night from a light-house in the fort; the height of the light above the level of the sea is 97 feet, and may be seen in clear weather as far as the light appears above the horizon.

A steep bank of coral, about ½ a mile broad, with 15 fathoms water on it, lies 7 miles W. from Columbo, extending northward towards Negombo (where its surface is sand), and a few miles to the southward of Columbo; outside the bank the water deepens at once to 23 fathoms, and in 2 miles to 28 fathoms, greenish sand, which is not far from the edge of soundings. Within the bank there are 25 fathoms gradually shoaling towards the shore.

A bed of sunken rocks, called the Drunken Sailor, lies S.W. by W. ½ W. from Columbo Light-house, distant 1,000 yards. The length of the ledge may be estimated at 100 yards, and the breadth 20 yards; on its N. end a small spot, about the size of the hull of a 20 ton boat, is said to have only 3 feet water on it at low water; but during several recent visits, when some of the coral from its surface was brought up, there did not appear to be less than 7 feet 6 inches water on the shallowest part: on the other parts of the ledge there is 4, 5, and 6 fathoms. The sea breaks on the shallow part of these rocks almost constantly during the S.W. monsoon, but this is very seldom the case during the N.E. monsoon.

There appears to be no doubt, that the Drunken Sailor is granite, or stone of the same description as the rocks on the shore, with its surface incrustated with coral; if there ever was so little water as 3 feet on it, it may be supposed to be sinking.

The Drunken Sailor should not be approached under 9 fathoms during the night, as there are 8 fathoms very near to it, and in its stream to the southward.

In the N.E. monsoon of 1826, the E.I. Company's brig of war Thetis touched on the Drunken Sailor, having stood too close to the land in beating up to the anchorage from the southward; but with common attention to the depth of water approaching the rock, it may be easily avoided.

The passage within the Drunken Sailor is clear, and some ships have sailed through; but no advantage can be gained by approaching the shore so very near at this point.

The Drunken Sailor lies so near the land, and so far to the southward of the anchorage in Columbo road, as scarcely to form any impediment to ships bound to or from Columbo.

The currents off Columbo are subject to considerable variation; but they are never so strong as to cause inconvenience to ships, which may have to communicate with the shore in either monsoon without coming to anchor.

Columbo road affords good anchorage, free from foul ground; and is frequented at all seasons of the year.

The best anchorage during the prevalence of S.W. winds from April to October, is in from 7 to 8 fathoms, with the light-house bearing S. by E. ½ E., Dutch church E. by S. In the N.E. monsoon from November to April, it is more convenient to anchor in 6½ fathoms, with the light-house bearing S. or S. ½ E., and the Dutch church E.S.E.

Ships requiring pilots to conduct them to the anchorage should make the usual signal; the charge for pilotage is 15*s.*

The bar is a bank of sand with 7 feet water on its shallowest part, the northern extremity being about 400 yards N.W. of the Custom-house Point; small vessels that draw less than 10 feet water, ride within the bar protected from the S.W. wind and sea.

When the sea is high, it breaks with great force on the bar, and renders the passage from the shipping in the outer road dangerous for small boats: the native boats generally pass out and in to the southward of the bar, close to the breakers on the rocky point of the Custom-house; but as the passage is narrow, it should not be attempted by strangers: when the sea breaks on the bar, it is better to proceed round to the northward of the bar, which may be easily distinguished by the breakers.

What is strictly understood by a gale of wind, is a rare occurrence at Columbo: this may be owing to the vicinity of the equator. The strong gales which blow on the Malabar coast are felt in small squalls, and a high sea, but there is scarcely wind to endanger vessels properly found in ground tackling; it is true, ships have sometimes required the aid of a second anchor, but in most cases the cause has been attributable to some defect in the first anchor or cable, a light anchor, an anchor breaking, a short chain, or the chain coming unshackled: an instance occurred in Columbo road, of two ships receiving cargo during the S.W. monsoon, whose chain cables came unshackled twice; twice did it occur to each ship.

On the 2d of June, 1831, the Hector drove in a squall; having about 80 fathoms of chain ahead, they let go the second anchor; but finding the ship did not immediately bring up, they made sail and shipped their cables: this ship stood out of the roads under double-reefed fore and mizen top-sails, and from its size, a single-reefed main top-sail, foresail, fore and main trysails and driver, and returned to anchorage on the 4th. Instances of ships putting to sea are rare, and when it is considered that although the sea is high, the wind is not violent; and as at these times the rain having fallen in the interior, strong freshes escape to the S.W., from the Kalany Ganga; it is by no means surprising that Columbo road proves a safe anchorage.

Trade and Navigation of Ceylon.—The quantity and estimated value of the principal articles exported from Ceylon in 1830, beginning with cinnamon, the most important of all, were as follow: viz. Cinnamon 380,000 lbs., value 142,500*l.*; arrack 739,472 gallons, value 24,600*l.*; coir, and coir ropes and cables, 1,499,453 lbs., value 5,433*l.*; cocoa nuts 2,842,495, value 2,528*l.*; cocoa nut oil 118,511 gallons, value 8,992*l.*; chanks and chank rings 822,833 pieces, value 3,089*l.*; plumbago 50,629 lbs., value 180*l.*; jaggery 292,283 lbs., value 3,600*l.*; coffee 1,669,490 lbs., value 12,232*l.*; areca nuts 3,348,972 lbs., value 12,064*l.*; tobacco and sherroots 1,095,673 lbs., value 4,896*l.* The destination and total value of the exports from Ceylon in 1830, were, to Great Britain, 168,576*l.*; to British colonies, including India, 80,675*l.*; to foreign states, 1,536*l.*; being, in all, 250,787*l.*: but to this has to be added, for the value of the pearl fishery in 1830, 24,023*l.*; making an aggregate sum of 274,810*l.*

Of the imports, the principal are rice and other grain, the estimated value of the quantity imported in 1830 being 141,761*l.*; the next article of importance is cotton cloth, mostly brought from India, estimated at 123,759*l.* The imports from Great Britain are very trifling; their entire value in 1830 being only estimated at 40,777*l.* The total imports during that year amounted to 349,581*l.*; of which 274,576*l.* were from British colonies, including India and China.*

The number and tonnage of the ships entering Ceylon inwards in 1830 were as follow: —

From Great Britain.		From British Colonies and India.		From Foreign States.		Total.	
Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*
11	3,911	878	60,157	169	12,962	1,058	77,030†

Extent, Population, Revenue, &c. of Ceylon. — The area of Ceylon has been computed at 24,664 square miles. Its population has been much exaggerated; having frequently been estimated as high as 2,000,000, and even Mr. Bertolacci reckoned it at 1,500,000. —(*View of Ceylon*, p. 65.) But it was found hy an actual enumeration taken in 1831, that the total population did not exceed 950,000, of which about 6,600 where whites. It appears from the official accounts laid before the Finance Committee in 1825, that during the 14 years ending with 1824, the excess of expenditure over revenue in the island amounted to 1,365,452*l.*, at the same time that various heavy items of expense are not included in this account. But according to a statement in the *Ceylon Almanac for* 1833, which seems to proceed from authority, there was, during the 3 years ending with 1831, an aggregate surplus of revenue over expenditure of 174,828*l.* We may, however, observe that the accounts laid before the Finance Committee differ very widely, for the period to which they apply, from those in the *Ceylon Almanac;* so much so, that while, according to the former, there was, in 1822, an excess of expenditure over revenue of 55,896*l.*, there was, according to the latter, an excess of revenue over expenditure of 15,323*l.*! Of course, we do not presume to say which of these accounts is most to be relied upon. Probably our readers will be inclined to think that neither is entitled to implicit credit.

A part, at least, of the former excess of expenditure may fairly be ascribed to the nature of the establishment kept up in the island; which, in point of magnitude and expensiveness, seems to have been a good deal beyond what was really required. We are, however, disposed to believe that the greater part of the excess is to be ascribed to the poverty and backward state of the colony, arising from the perpetual interference of government with every branch of industry. All the restrictive regulations enacted by the Dutch more than a century ago were kept up till 1832. The cultivation of cinnamon, the fishery of pearls and chanks, the digging for chaya root, the felling of timber, &c. — (see these articles)— have been all monopolised by government, and were carried on exclusively either by its servants or by those whom it had licensed. A country where most of the principal branches of industry were subjected to such restrictions, could not be otherwise than languishing. We believe, too, that most of these monopolies have not been worth the expense attending them. In fact, the whole revenue of the island, including land rent, customs, cinnamon monopoly, &c., very seldom exceeds 360,000*l.* a year; but looking at its extent, its fertility, its favourable situation for commerce, and the advantage it enjoys in the possession of cinnamon, can any one doubt that, were it rightly governed, its trade and revenue would be far greater than they are? Nothing is wanted but the adoption of measures calculated to give freedom and security to industry, and the imposition of moderate duties on imports and exports, to increase them both in a very high degree.

We are glad to have to state that government seems, in part at least, to have at length come round to this way of thinking; and that, under the auspices of the present governor (Sir R. W. Horton), the system of compulsory labour has been relinquished, and most monopolies, including that of cinnamon, been thrown up. This wise and liberal conduct will, no doubt, be productive of the most beneficial effects. These, however, will be materially lessened by the exorbitant duty of 3*s.* per lb. laid on the exportation of cinnamon! It is difficult, indeed, to imagine for what other purpose so oppressive a duty could be imposed, except it were to countervail the advantages that

* Dr. Colquhoun (2d ed. p. 412.) estimated the exports of Ceylon at 1,500,000*l.* a year, and the imports at 1,000,000*l.*! Perhaps a third of the Doctor's estimates are about equally near the mark.

† No accurate returns of the trade of Ceylon for 1831 have as yet (10th of October, 1833) been received in England. Those given in the papers printed by the Board of Trade for 1831, are really for 1830.

would otherwise have resulted from the abolition of the monopoly. It is not, however, possible that so mischievous an impost should be maintained.—(See CINNAMON.) Among other improvements recently introduced into the island, may be mentioned the establishment of a mail coach from Columbo to Candy.

COLUMBO ROOT (Du. *Columbo wortel*; Fr. *Racine de Colombo*; Ger. *Columbowurzel*; It. *Radice di Columbo*; Port. *Raiz de Columba*; Sp. *Raiz de Columbo*; Mosamb. *Kalumb*), the root of the plant of that name. It is a staple export of the Portuguese from Mosambique. It is not cultivated, but grows naturally in great abundance. It is imported in circular pieces, from $\frac{1}{2}$ an inch to 3 inches in diameter, generally from $\frac{1}{4}$ to $\frac{3}{4}$ of an inch thick; the bark is wrinkled and thick, of a brownish colour without, and a brightish yellow within; the pith is spongy, yellowish, and slightly striped: when fresh, its smell is rather aromatic; it is disagreeably bitter, and slightly pungent to the taste, somewhat resembling mustard that has been too long kept. Choose the largest pieces, fresh, and of a good colour, as free from worms as possible, rejecting that which is small and broken. The freight is calculated at 16 cwt. to a ton. —(*Milburn's Orient. Com.*)

COMBS (Ger. *Kamme*; Du. *Kammen*; Fr. *Peignes*; It. *Peltini*; Sp. *Peines*; Rus. *Grebnü*; Lat. *Pectines*), instruments for combing the hair, sometimes made of horns of bullocks, or of elephants' and sea-horses' teeth; sometimes also of tortoiseshell, and sometimes of box or holly wood.

COMMERCE, from *commutatio mercium*, is simply, as its name imports, the exchange of commodities for commodities.

I. ORIGIN OF COMMERCE.—MERCANTILE CLASSES.
II. HOME TRADE.
III. FOREIGN TRADE.
IV. RESTRICTIONS ON COMMERCE.

I. ORIGIN OF COMMERCE.—MERCANTILE CLASSES.

(1.) *The Origin of Commerce* is coëval with the first dawn of civilisation. The moment that individuals ceased to supply themselves directly with the various articles and accommodations they made use of, that moment must a commercial intercourse have begun to grow up amongst them. For it is only by exchanging that portion of the produce raised by ourselves that exceeds our own consumption, for portions of the surplus produce raised by others, that the division of employments can be introduced, or that different individuals can apply themselves in preference to different pursuits.

Not only, however, does commerce enable the inhabitants of the same village or parish to combine their separate efforts to accomplish some common object, but it also enables those of different provinces and kingdoms to apply themselves in an especial manner to those callings, for the successful prosecution of which the district or country which they occupy gives them some peculiar advantage. This *territorial division of labour* has contributed more, perhaps, than any thing else to increase the wealth and accelerate the civilisation of mankind. Were it not for it, we should be destitute of a vast number of the necessaries, comforts, and enjoyments, which we now possess; while the price of the few that would remain would, in most instances, be very greatly increased. But whatever advantages may be derived,—and it is hardly possible to exaggerate either their magnitude or importance,—from availing ourselves of the peculiar capacities of production enjoyed by others, are wholly to be ascribed to commerce as their real source and origin.

We do not mean to say any thing in this article with respect to the practical details connected with the different departments of commerce. These will be found under the various titles to which they refer. Our object, at present, is merely to show the nature and influence of commerce in general, and of the restrictions that have sometimes been imposed upon it. We shall begin by endeavouring, first of all, to give some account of the nature of the services performed by those individuals by whom commercial undertakings are usually carried on. In the second place, we shall consider the influence of the *home* trade, or of the intercourse subsisting amongst individuals of the same country. In the third place, we shall consider the influence of *foreign* trade, or of that intercourse which subsists amongst individuals belonging to different countries. After these topics have been discussed, we shall offer a few remarks on what has been termed the restrictive system; or on the principles involved in the regulations enacted at different times, in this and other countries, for the government and direction of commerce.

(2.) *Mercantile Classes.*—While the exchange of different products is carried on by the producers themselves, they must unavoidably lose a great deal of time, and experience many inconveniences. Were there no merchants, a farmer wishing to sell his crop would be obliged, in the first place, to seek for customers, and to dispose of his

corn as nearly as possible in such quantities as might suit the demands of the various individuals inclined to buy it; and after getting its price, he would next be obliged to send to 10 or 20 different and, perhaps, remote places, for the commodities he wanted to get in its stead. So that besides being exposed to a world of trouble and inconvenience, his attention would be continually diverted from the labours of his farm. Under such a state of things, the work of production, in every different employment, would be meeting with perpetual interruptions, and many branches of industry that are successfully carried on in a commercial country would not be undertaken.

The establishment of a distinct mercantile class effectually obviates these inconveniences. When a set of dealers erect warehouses and shops for the purchase and sale of all descriptions of commodities, every producer, relieved from the necessity of seeking customers, and knowing beforehand where he may at all times be supplied with such products as he requires, devotes his whole time and energies to his proper business. The intervention of merchants gives a continuous and uninterrupted motion to the plough and the loom. Were the class of traders annihilated, all the springs of industry would be paralysed. The numberless difficulties that would then occur in effecting exchanges would lead each particular family to endeavour to produce all the articles they had occasion for: society would thus be thrown back into primæval barbarism and ignorance; the divisions of labour would be relinquished; and the desire to rise in the world and improve our condition would decline, according as it became more difficult to gratify it. What sort of agricultural management could be expected from farmers who had to manufacture their own wool, and make their own shoes? And what sort of manufacturers would those be, who were every now and then obliged to leave the shuttle for the plough, or the needle for the anvil? A society, without that distinction of employments and professions resulting from the division of labour, that is, *without commerce*, would be totally destitute of arts or sciences of any sort. It is by the assistance each individual renders to and receives from his neighbours, by every one applying himself in preference to some peculiar task, and combining, though probably without intending it, his efforts with those of others, that civilised man becomes equal to the most gigantic efforts, and appears endowed with almost omnipotent power.

The mercantile class has generally been divided into two subordinate classes — the wholesale dealers, and the retail dealers. The former purchase the various products of art and industry in the places where they are produced, or are least valuable, and carry them to those where they are more valuable, or where they are more in demand; and the latter, having purchased the commodities of the wholesale dealers, or the producers, collect them in shops, and sell them in such quantities and at such times as may best suit the public demand. These classes of dealers are alike useful; and the separation that has been effected between their employments is one of the most advantageous divisions of labour. The operations of the wholesale merchant are analogous to those of the miner. Neither the one nor the other makes any change on the bodies which he carries from place to place. All the difference between them consists in this, — that the miner carries them from below ground to the surface of the earth, while the merchant carries them from one point to another on its surface. Hence it follows that the value given to commodities by the operations of the wholesale merchant may frequently exceed that given to them by the producers. The labour or expense required to dig a quantity of coal from the mine, does not exceed what is required for its conveyance from Newcastle to London; and it is a far more difficult and costly affair to fetch a piece of timber from Canada to England, than to cut down the tree. In this respect there is no difference between commerce and agriculture and manufactures. The latter give utility to matter, by bestowing on it such a shape as may best fit it for ministering to our wants and comforts; and the former gives additional utility to the products of the agriculturist and manufacturer, by bringing them from where they are of comparatively little use, or are in excess, to where they are of comparatively great use, or are deficient.

If the wholesale merchant were himself to retail the goods he has brought from different places, he would require a proportional increase of capital; and it would be impossible for him to give that exclusive attention to any department of his business, which is indispensable to its being carried on in the best manner. It is for the interest of each dealer, as of each workman, to confine himself to some one business. By this means each trade is better understood, better cultivated, and carried on in the cheapest possible manner. But whether carried on by a separate class of individuals or not, it is obvious that the retailing of commodities is indispensable. It is not enough that a cargo of tea should be imported from China, or a cargo of sugar from Jamaica. Most individuals have some demand for these articles; but there is not, perhaps, a single private person, even in London, requiring so large a supply of them for his own consumption. It is clear, therefore, that they must be *retailed;* that is, they must be sold in such quantities and at such times as may be most suitable for all classes of consumers. And since

it is admitted on all hands, that this necessary business will be best conducted by a class of traders distinct from the wholesale dealers, it is impossible to doubt that their employment is equally conducive as that of the others to the public interest, or that it tends equally to augment national wealth and comfort.

II. Home Trade.

The observations already made serve to show the influence of the home trade in allowing individuals to confine their attention to some one employment, and to prosecute it without interruption. But it is not in this respect only that the establishment of the home trade is advantageous. It is so in a still greater degree, by its allowing the inhabitants of the different districts of the empire to turn their labour into those channels in which it will be most productive. The different soils, different minerals, and different climates of different districts, fit them for being appropriated, in preference, to certain species of industry. A district, like Lancashire, where coal is abundant, which has an easy access to the ocean, and a considerable command of internal navigation, is the natural seat of manufactures. Wheat and other species of grain are the natural products of rich arable soils; and cattle, after being reared in mountainous districts, are most advantageously fattened in meadows and low grounds. Hence it follows, that the inhabitants of different districts, by confining themselves to those branches of industry for the successful prosecution of which they have some peculiar capability, and exchanging their surplus produce for that of others, will obtain an incomparably larger supply of all sorts of useful and desirable products, than they could do, were they to apply themselves indiscriminately to every different business. The territorial division of labour is, if possible, even more advantageous than its division among individuals. A person may be what is commonly termed *Jack of all trades;* and though it is next to certain that he will not be well acquainted with any one of them, he may nevertheless make some sort of rude efforts in them all. But it is not possible to apply the same soil or the same minerals to every different purpose. Hence it is, that the inhabitants of the richest and most extensive country, provided it were divided into small districts without any intercourse with each other, or with foreigners, could not, how well soever labour might be divided among themselves, be otherwise than poor and miserable. Some of them might have a superabundance of corn, at the same time that they were wholly destitute of wine, coal, and iron; while others might have the largest supplies of the latter articles, with but very little grain. But in commercial countries no such anomalies can exist. Opulence and comfort are there universally diffused. The labours of the mercantile classes enable the inhabitants of each district to apply themselves principally to those employments that are naturally best suited to them. This superadding of the division of labour among different provinces to its division among different individuals, renders the productive powers of industry immeasurably greater; and augments the mass of necessaries, conveniences, and enjoyments, in a degree that could not previously have been conceived possible, and which cannot be exceeded except by the introduction of foreign commerce.

"With the benefit of commerce," says an eloquent and philosophical writer, "or a ready exchange of commodities, every individual is enabled to avail himself, to the utmost, of the peculiar advantage of his place; to work on the peculiar materials with which nature has furnished him; to humour his genius or disposition, and betake himself to the task in which he is peculiarly qualified to succeed. The inhabitant of the mountain may betake himself to the culture of his woods and the manufacture of his timber; the owner of pasture lands may betake himself to the care of his herds; the owner of the clay-pit to the manufacture of his pottery; and the husbandman to the culture of his fields, or the rearing of his cattle. And any one commodity, however it may form but a small part in the accommodations of human life, may, under the facility of commerce, find a market in which it may be exchanged for what will procure any other part, or the whole: so that the owner of the clay-pit, or the industrious potter, without producing any one article immediately fit to supply his own necessities, may obtain possession of all that he wants. And commerce, in which it appears that commodities are merely exchanged, and nothing produced, is, nevertheless, in its effects, very productive, because it ministers a facility and an encouragement to every artist in multiplying the productions of his own art; thus adding greatly to the mass of wealth in the world, in being the occasion that much is produced." — (*Ferguson's Principles of Moral Science*, vol. ii. p. 424.)

The roads and canals that intersect a country, and open an easy communication between its remotest extremities, render the greatest service to internal commerce, and also to agriculture and manufactures. A diminution of the expense of carriage has, in fact, the same effect as a diminution of the direct cost of production. If the coals brought into a city sell at 20*s.* a ton, of which the carriage amounts to a half, or 10*s.*, it is plain that in the event of an improved communication, such as a more level or direct road, a

railway, or a canal, being opened for the conveyance of the coals, and that they can, by its means, be imported for half the previous expense, their price will immediately fall to 15*s.* a ton; just as it would have done, had the expense of extracting them from the mine been reduced a half.

Every one acquainted with the merest elements of political science is aware that employments are more and more subdivided, that more powerful machinery is introduced, and the productive powers of labour increased, according as larger masses of the population congregate together. In a great town like London, Glasgow, or Manchester, the same number of hands will perform much more work than in a small village, where each individual has to perform several operations, and where the scale of employment is not sufficiently large to admit of the introduction of extensive and complicated machinery. But the great towns with which England is studded, could not exist without our improved means of communication. These, however, enable their inhabitants to supply themselves with the bulky products of the soil and of the mines almost as cheap as if they lived in country villages; securing to them all the advantages of concentration, with but few of its inconveniences. Roads and canals are thus productive of a double benefit; for while, by affording comparatively cheap raw materials to the manufacturers, they give them the means of perfecting the divisions of labour, and of supplying proportionally cheap manufactured goods; the latter are conveyed by their means, and at an extremely small expense, to the remotest parts of the country. The direct advantages which they confer on agriculture are not less important. Without them it would not be possible to carry to a distance sufficient supplies of lime, marl, shells, and other bulky and heavy articles necessary to give luxuriance to the crops of rich soils, and to render those that are poor productive. Good roads and canals, therefore, by furnishing the agriculturists with cheap and abundant supplies of manure, reduce, at one and the same time, the *cost of producing* the necessaries of life, and the cost of bringing them to market.

In other respects, the advantages resulting from improved communications are probably even more striking. They give the same common interest to every different part of the most widely extended empire; and put down, or rather prevent, any attempt at monopoly on the part of the dealers of particular districts, by bringing them into competition with those of all the others. Nothing in a state enjoying great facilities of communication is separate and unconnected. All is mutual, reciprocal, and dependent. Every man naturally gets into the precise situation that he is best fitted to fill; and each, co-operating with every one else, contributes to the utmost of his power to extend the limits of production and civilisation. — (See Roads.)

Such being the nature and vast extent of the advantages derived from the home trade, it is obviously the duty of the legislature to give it every proper encouragement and protection. It will be found however, on a little consideration, that this duty is rather negative than positive — that it consists less in the framing of regulations, than in the removal of obstacles. The error of governments in matters of trade has not been that they have done too little, but that they have attempted too much. It will be afterwards shown that the encouragement which has been afforded to the producers of certain species of articles in preference to others, has uniformly been productive of disadvantage. In the mean time it is sufficient to observe that the encouragement which a prudent and enlightened government bestows on industry, will equally extend to all its branches; and will be especially directed to the removal of every thing that may in any respect fetter the freedom of commerce, and the power of individuals to engage in different employments. All regulations, whatever be their object, that operate either to prevent the circulation of commodities from one part of the empire to another, or the free circulation of labour, necessarily tend to check the division of employments and the spirit of competition and emulation, and must, in consequence, lessen the amount of produce. The same principle that prompts to open roads, to construct bridges and canals, ought to lead every people to erase from the statute book every regulation which either prevents or fetters the operations of the merchant, and the free disposal of capital and labour. Whether the freedom of internal commerce and industry be interrupted by impassable mountains and swamps, or by oppressive tolls or restrictive regulations, the effect is equally pernicious.

The common law and the ancient statute law of England are decidedly hostile to monopolies, or to the granting of powers to any particular class of individuals to furnish the market with commodities. Lord Coke distinctly states, "that all monopolies concerning trade and traffic are against the liberty and freedom granted by the great charter, and divers other acts of parliament which are good commentaries upon that charter." — (2 *Inst.* 63.) And he affirms, in another place, that "*Commercium jure gentium commune esse debet, et non in monopolium et privatum paululorum questum convertendum. Iniquum est aliis permittere, aliis inhibere mercaturam.*"

But, notwithstanding this concurrence of the common and statute law of the country

in favour of the freedom of industry, during the arbitrary reigns of the princes of the house of Tudor, the notion that the crown was by its prerogative entitled to dispense with any law to the contrary, and to establish monopolies, became fashionable among the court lawyers, and was acted upon to a very great extent. Few things, indeed, occasioned so much dissatisfaction in the reign of Elizabeth as the multiplication of monopolies; and notwithstanding the opposition made by the crown, and the court party in parliament, the grievance became at length so intolerable as to give rise to the famous statute of 1624 (21 James 1. c. 3.), by which all monopolies, grants, letters patent, and licences, for the sole buying, selling, and making of goods and manufactures, not given by an act of the legislature, are declared to be "*altogether contrary to the laws of this realm, void, and of none effect.*" This statute has been productive of the greatest advantage; and has, perhaps, contributed more than any other to the development of industry, and the accumulation of wealth. With the exception of the monopoly of printing Bibles, and the restraints imposed by the charters of bodies legally incorporated, the freedom of internal industry has ever since been vigilantly protected; full scope has been given to the principle of competition; the whole kingdom has been subjected to the same equal law; no obstacles have been thrown in the way of the freest transfer of commodities from one county or place to another; the home trade has been perfectly unfettered; and though the public have not been supplied with commodities at so low a price as they might have obtained them for, had there been no restrictions on foreign commerce, they have obtained them at the lowest price that would suffice to pay the *home producers* the cost of producing and bringing them to market. It is to this freedom that the comparatively flourishing state of industry in Great Britain is mainly to be ascribed.

III. Foreign Trade.

What the home trade is to the different provinces of the same country, foreign trade is to all the countries of the world. Particular countries produce only particular commodities, and, were it not for foreign commerce, would be entirely destitute of all but such as are indigenous to their own soil. It is difficult for those who have not reflected on the subject, to imagine what a vast deduction would be made, not only from the comforts, but even from the necessaries, of every commercial people, were its intercourse with strangers put an end to. It is not, perhaps, too much to say that in Great Britain we owe to our intercourse with others a full half or more of all that we enjoy. We are not only indebted to it for the cotton and silk manufactures, and for supplies of wine, tea, coffee, sugar, the precious metals, &c.; but we are also indebted to it for most of the fruits and vegetables that we now cultivate. At the same time, too, that foreign commerce supplies us with an immense variety of most important articles, of which we must otherwise have been wholly ignorant, it enables us to employ our industry in the mode in which it is sure to be most productive, and reduces the price of almost every article. We do not misemploy our labour in raising sugar from the beet-root, in cultivating tobacco, or in forcing vines; but we employ ourselves in those departments of manufacturing industry in which our command of coal, of capital, and of improved machinery, give us an advantage; and obtain the articles produced more cheaply by foreigners, in exchange for the surplus produce of those branches in which we have a superiority over them. A commercial nation like England avails herself of all the peculiar facilities of production given by Providence to different countries. To produce claret here is perhaps impossible; and at all events it could not be accomplished, unless at more than 100 times the expense required for its production in France. We do not, however, deny ourselves the gratification derivable from its use; and to obtain it, we have only to send to France, or to some country indebted to France, some article in the production of which we have an advantage, and we get claret in exchange at the price which it takes to raise it under the most favourable circumstances. One country has peculiar capacities for raising corn, but is at the same time destitute of wine, silk, and tea; another, again, has peculiar facilities for raising the latter, but is destitute of the former; and it is impossible to point out a single country which is abundantly supplied with any considerable variety of commodities of domestic growth. *Non omnis fert omnia tellus.* Providence, by giving to each particular nation something which the others want, has evidently intended that they should be mutually dependent upon one another. And it is not difficult to see that, *cæteris paribus*, those must be the richest and most abundantly supplied with every sort of useful and desirable accommodation, who cultivate the arts of peace with the greatest success, and deal with all the world on fair and liberal principles.

"The commerce of one country with another is, in fact," to use the words of an able and profound writer, "merely an extension of that division of labour by which so many benefits are conferred upon the human race. As the same country is rendered the richer by the trade of one province with another; as its labour becomes thus infinitely more divided and more productive than it could otherwise have been; and as the mutual

supply to each other of all the accommodations which one province has, and another wants, multiplies the accommodations of the whole, and the country becomes thus in a wonderful degree more opulent and happy; the same beautiful train of consequences is observable in the world at large, — that great empire of which the different kingdoms and tribes of men may be regarded as the provinces. In this magnificent empire, too, one province is favourable to the production of one species of accommodation, and another province to another: by their mutual intercourse they are enabled to sort and distribute their labour as most peculiarly suits the genius of each particular spot. The labour of the human race thus becomes much more productive, and every species of accommodation is afforded in much greater abundance. The same number of labourers, whose efforts might have been expended in producing a very insignificant quantity of home-made luxuries, may thus, in Great Britain, produce a quantity of articles for exportation, accommodated to the wants of other places, and peculiarly suited to the genius of Britain to furnish, which will purchase for her an accumulation of the luxuries of every quarter of the globe. There is not a greater proportion of her population employed in administering to her luxuries, in consequence of her commerce; there is probably a good deal less; but their labour is infinitely more productive: the portion of commodities which the people of Great Britain acquire by means of the same labour, is vastly greater." — (*Mill's Commerce defended*, p. 38.)

What has been already stated is sufficient to expose the utter fallacy of the opinion that has sometimes been maintained, that whatever one nation may gain by her foreign commerce, must be lost by some one else. It is singular, indeed, how such a notion should ever have originated. Commerce *is not directly productive*, nor is the good derived from it to be estimated by its immediate effects. What commercial nations give is uniformly the fair equivalent of what they get. In their dealings they do not prey upon each other, but are benefited alike. The advantage of commerce consists in its enabling labour to be divided, and giving each people the power of supplying themselves with the various articles for which they have a demand, at the lowest price required for their production in those countries and places where they are raised with the greatest facility. We import wine from Portugal, and cotton from America, sending in exchange cloth and other species of manufactured goods. By this means we obtain two very important articles, which it would be all but impossible to produce at home, and which we could not, certainly, produce, except at an infinitely greater cost. But our gain is no loss to the foreigners. They derive precisely the same sort of advantage from the transaction that we do. We have very superior facilities for manufacturing, and they get from us cloth, hardware, and other important articles, at the price at which they can be produced in this country, and consequently for far less than their direct production would have cost them. The benefits resulting from an intercourse of this sort are plainly mutual and reciprocal. Commerce gives no advantage to any one people over any other people; but it increases the wealth and enjoyments of *all* in a degree that could not previously have been conceived possible.

But the influence of foreign commerce in multiplying and cheapening conveniences and enjoyments, vast as it most certainly is, is perhaps inferior to its indirect influence — that is, to its influence on industry, by adding immeasurably to the mass of desirable articles, by inspiring new tastes, and stimulating enterprise and invention by bringing each people into competition with foreigners, and making them acquainted with their arts and institutions.

The apathy and languor that exist in a rude state of society have been universally remarked. But these uniformly give place to activity and enterprise, according as man is rendered familiar with new objects, and is inspired with a desire to obtain them. An individual might, with comparatively little exertion, furnish himself with an abundant supply of the commodities essential to his subsistence; and if he had no desire to obtain others, or if that desire, however strong, could not be gratified, it would be folly to suppose that he should be laborious, inventive, or enterprising. But, when once excited, the wants and desires of man become altogether illimitable; and to excite them, no more is necessary than to bring new products and new modes of enjoyment within his reach. Now, the sure way to do this is to give every facility to the most extensive intercourse with foreigners. The markets of a commercial nation being filled with the various commodities of every country and every climate, the motives and gratifications which stimulate and reward the efforts of the industrious are proportionally augmented. The husbandman and manufacturer exert themselves to increase their supplies of raw and manufactured produce, that they may exchange the surplus for the products imported from abroad. And the merchant, finding a ready demand for such products, is prompted to import a greater variety, to find out cheaper markets, and thus constantly to afford new incentives to the vanity and ambition, and consequently to the enterprise and industry, of his customers. The whole powers of the mind and the body are thus called into action; and the passion for foreign commodities — a passion which has some-

times been ignorantly censured — becomes one of the most efficient causes of wealth and civilisation.

Not only, however, does foreign commerce excite industry, distribute the gifts of nature, and enable them to be turned to the best account, but it also distributes the gifts of science and of art, and gives to each particular country the means of profiting by the inventions and discoveries of others as much as by those of her own citizens. The ingenious machine invented by Mr. Whitney, of the United States, for separating cotton wool from the pod, by reducing the cost of the raw material of one of our principal manufactures, has been quite as advantageous to us as to his own countrymen. And the discoveries and inventions of Watt, Arkwright, and Wedgwood, by reducing the cost of the articles we send abroad, have been as advantageous to our foreign customers as to ourselves. Commerce has caused the blessings of civilisation to be universally diffused, and the treasures of knowledge and science to be conveyed to the remotest corners. Its humanising influence is, in this respect, most important; while, by making each country depend for the means of supplying a considerable portion of its wants on the assistance of others, it has done more than any thing else to remove a host of the most baleful prejudices, and to make mankind regard each other as friends and brothers, and not as enemies. The dread, once so prevalent, of the progress of other nations in wealth and civilisation, is now universally admitted to be as absurd as it is illiberal. While every people ought always to be prepared to resist and avenge any attack upon their independence or their honour, it is not to be doubted that their real prosperity will be best secured by their endeavouring to live at peace. "A commercial war, whether crowned with victory or branded with defeat, can never prevent another nation from becoming more industrious than you are; and if they are more industrious they will sell cheaper; and consequently your customers will forsake your shop and go to theirs. This will happen, though you covered the ocean with fleets, and the land with armies. The soldier may lay waste; the privateer, whether successful or unsuccessful, will make poor; but it is the eternal law of Providence that '*the hand of the diligent can alone make rich.*' " — (*Tucker's Four Tracts*, p. 41. 3d ed.)

Mr. Hume has beautifully illustrated the powerful and salutary influence of that spirit of industry and enterprise resulting from the eager prosecution of commerce and the arts. "Men," says he, "are then kept in perpetual occupation, and enjoy, as their reward, the occupation itself, as well as those pleasures which are the fruits of their labour. The mind acquires new vigour; enlarges its powers and faculties; and, by an assiduity in honest industry, both satisfies its natural appetites, and prevents the growth of unnatural ones, which commonly spring up when nourished with ease and idleness. Banish those arts from society, you deprive men both of action and of pleasure; and, leaving nothing but indolence in their place, you even destroy the relish of indolence, which never is agreeable but when it succeeds to labour, and recruits the spirits, exhausted by too much application and fatigue.

"Another advantage of industry and of refinements in the mechanical arts is, that they commonly produce some refinements in the liberal; nor can the one be carried to perfection, without being accompanied in some degree with the other. The same age which produces great philosophers and politicians, renowned generals and poets, usually abounds with skilful weavers and ship-carpenters. We cannot reasonably expect that a piece of woollen cloth will be wrought to perfection in a nation which is ignorant of astronomy, or where ethics are neglected. The spirit of the age affects all the arts; and the minds of men, being once roused from their lethargy, and put into a fermentation, turn themselves on all sides, and carry improvements into every art and science. Profound ignorance is totally banished; and men enjoy the privilege of rational creatures, to think as well as to act, to cultivate the pleasures of the mind as well as those of the body.

"The more these refined arts advance, the more sociable do men become; nor is it possible that, when enriched with science, and possessed of a fund of conversation, they should be contented to remain in solitude, or live with their fellow citizens in that distant manner which is peculiar to ignorant and barbarous nations. They flock into cities; love to receive and communicate knowledge; to show their wit or their breeding; their taste in conversation or living, in clothes or furniture. Curiosity allures the wise, vanity the foolish, and pleasure both. Particular clubs and societies are every where formed; both sexes meet in an easy and sociable manner; and the tempers of men, as well as their behaviour, refine apace. So that beside the improvements they receive from knowledge and the liberal arts, it is impossible but they must feel an increase of humanity from the very habit of conversing together, and contributing to each other's pleasure and entertainment. Thus *industry*, *knowledge*, and *humanity* are linked together by an indissoluble chain; and are found, from experience as well as reason, to be peculiar to the more polished, and, what are commonly denominated, the more luxurious ages." — (*Essay of Refinement in the Arts.*)

Most commercial treatises, and most books on political economy, contain lengthened statements as to the comparative advantages derived from the home and foreign trade. But these statements are almost always bottomed on the most erroneous principles. The quantity and value of the commodities which the inhabitants of an extensive country exchange with each other, is far greater than the quantity and value of those they exchange with foreigners: but this is not, as is commonly supposed, enough to show that the home trade is proportionally more advantageous. Commerce, it must be borne in mind, is not a direct but an indirect source of wealth. The mere exchange of commodities adds nothing to the riches of society. The influence of commerce on wealth consists in its allowing employments to be separated and prosecuted without interruption. It gives the means of pushing the divisions of labour to the furthest extent; and supplies mankind with an infinitely greater quantity of necessaries and accommodations of all sorts, than could have been produced, had individuals and nations been forced to depend upon their own comparatively feeble efforts for the supply of their wants. And hence, in estimating the comparative advantageousness of the home and foreign trades, the real questions to be decided are, which of them contributes most to the division of labour? and which of them gives the greatest stimulus to invention and industry? These questions do not, perhaps, admit of any very satisfactory answer. The truth is, that both home trade and foreign trade are most prolific sources of wealth. Without the former, no division of labour could be established, and man would for ever remain in a barbarous state. Hence, perhaps, we may say that it is the most indispensable; but the length to which it could carry any particular country in the career of civilisation, would be limited indeed. Had Great Britain been cut off from all intercourse with strangers, there is no reason for thinking that we should have been at this day advanced beyond the point to which our ancestors had attained during the Heptarchy! It is to the products and the arts derived from others, and to the emulation inspired by their competition and example, that we are mainly indebted for the extraordinary progress we have already made, as well as for that we are yet destined to make.

Dr. Smith, though he has satisfactorily demonstrated the impolicy of all restrictions on the freedom of commerce, has, notwithstanding, endeavoured to show that it is more for the public advantage that capital should be employed in the home trade than in foreign trade, on the ground that the capitals employed in the former are more frequently returned, and that they set a greater quantity of labour in motion than those employed in the latter. But we have elsewhere endeavoured to show that the rate of profit which different businesses yield is the only test of their respective advantageousness. — (*Principles of Political Economy*, 2d ed. pp. 160—180.) Now, it is quite evident that capital will not be employed in foreign trade, unless it yield as much profit as could be made by employing it at home. No merchant sends a ship to China, if it be in his power to realise a larger profit by sending her to Dublin or Newcastle; nor would any one build a ship, unless he expected that the capital so laid out would be as productive as if it were employed in agriculture or manufactures. The more or less rapid return of capital is a matter of very little importance. If the average rate of profit be 10 per cent., an individual who turns over his capital 10 times a year, will make *one* per cent. of profit each time; whereas if he turns it only once a year, he will get the whole 10 per cent. at once. Competition reduces the rate of nett profit to about the same level in all businesses; and we may be quite certain that those who employ themselves in the departments in which capital is most rapidly returned, do not, at an average, gain more than those who employ themselves in the departments in which the returns are most distant. No one is a foreign merchant because he would rather deal with foreigners than with his own countrymen, but because he believes he will be able to employ his capital more advantageously in foreign trade than in any other business: and while he does this, he is following that employment which is most beneficial for the public as well as for himself.

IV. Restrictions on Commerce.

The statements already made, by explaining the nature and principles of commercial transactions, are sufficient to evince the inexpediency of subjecting them to any species of restraint. It is obvious, indeed, that restrictions are founded on false principles. When individuals are left to pursue their own interest in their own way, they naturally resort to those branches of industry which they reckon most advantageous for themselves; and, as we have just seen, these are the very branches in which it is most for the public interest that they should be employed. Unless, therefore, it could be shown that a government can judge better as to what sort of transactions are profitable or otherwise than private individuals, its regulations cannot be of the smallest use, and may be exceedingly injurious. But any such pretension on the part of government would be universally scouted. It is undeniably certain that a regard to our own interest is, if not an unerring guide to direct us in such matters, at least incomparably better than any

other. If the trade with a particular country or in a particular commodity be a losing one, or merely a less profitable one than others, it is quite as unnecessary to pass an act to prevent it from being carried on, as it would be to interfere to prevent individuals from selling their labour or their commodities below the market price. It appears, therefore, that all regulations affecting the freedom of commerce, or of any branch of industry, are either useless or pernicious. They are useless, when they are intended to protect the interest of individuals by preventing them from engaging in disadvantageous businesses; and pernicious, when they prevent them from engaging in those that are advantageous. The self interest of the parties concerned is the only safe principle to go by in such matters. When the acts of the legislature are in unison with it, there is nothing to object to in them, save only that they might as well not exist; but whenever they are inconsistent with it — that is, whenever they tend to divert capital and industry into channels, into which individuals, if left to their own discretion, would not have carried them — they are decidedly injurious.

No one denies that it is possible to confer, by means of a restrictive regulation, an advantage on a greater or less number of individuals. This, however, is no proof that it is advantageous in a public point of view; and it is by its influence in this respect that we are to decide concerning it. If the exclusion of an article imported from abroad, in order to encourage its manufacture at home, raise its price in the home market, that circumstance will, for a while at least, be advantageous to those engaged in its production. But is it not clear that all that is thus gained by them, is *lost by those who purchase the article?* To suppose, indeed, that the exclusion of commodities that are comparatively cheap, to make room for those that are comparatively dear, can be a means of enriching a country, is equivalent to supposing that a people's wealth might be increased by destroying their most powerful machines, and throwing their best soils out of cultivation.

But it is contended, that though this might be the case in the instance of commodities produced at home, it is materially different when the commodity excluded came to us from abroad. It is said, that in this case the exclusion of foreign produce increases the demand for that produced at home, and consequently contributes to increase the demand for labour; so that the rise of price it occasions is, in this way, more than balanced by the other advantages which it brings along with it. But the fact is, that though the demand for one species of produce may be increased by a prohibition of importation, the demand for some other species is sure to be at the same time equally diminished. There is no jugglery in commerce. Whether it be carried on between individuals of the same country, or of different countries, it is in all cases bottomed on a fair principle of reciprocity. Those who will not buy need not expect to sell, and conversely. It is impossible to export without making a corresponding importation. We get nothing from the foreigner gratuitously: and hence, when we prevent the importation of produce from abroad, we prevent, by the very same act, the exportation of an equal amount of British produce. All that the exclusion of foreign commodities ever effects, is the substitution of one sort of demand for another. It has been said, that "when we drink beer and porter we consume the produce of English industry, whereas when we drink port or claret we consume the produce of the industry of the Portuguese and French, to the obvious advantage of the latter, and the prejudice of our countrymen!" But, how paradoxical soever the assertion may at first sight appear, there is not at bottom any real distinction between the two cases. What is it that induces foreigners to supply us with port and claret? The answer is obvious: — We either send directly to Portugal and France an *equivalent in British produce*, or we send such equivalent, in the first place to South America for bullion, and then send that bullion to the Continent to pay for the wine. And hence it is as clear as the sun at noon-day, that the Englishman who drinks only French wine, who eats only bread made of Polish wheat, and who wears only Saxon cloth, gives, by occasioning the exportation of a corresponding amount of British cotton, hardware, leather, or other produce, the same encouragement to the industry of his countrymen, that he would give were he to consume nothing not immediately produced at home. A quantity of port wine and a quantity of Birmingham goods are respectively of the same value; so that whether we directly consume the hardware, or, having exchanged it for the wine, consume the latter, must plainly, in so far as the employment of British labour is concerned, be altogether indifferent.

It is absolutely nugatory, therefore, to attempt to encourage industry at home by restraining importation from abroad. We might as well try to promote it by interdicting the exchange of shoes for hats. We only resort to foreign markets, that we may supply ourselves with articles that cannot be produced at home, or that require more labour to produce them here, than is required to produce the equivalent exported to pay for them. It is, if any thing can be, an obvious contradiction and absurdity to attempt to promote wealth or industry by prohibiting an intercourse of this sort. Such prohibition, even when least injurious, is sure to force capital and labour into less pro-

ductive channels; and cannot fail to diminish the foreign demand for one species of produce, quite as much as it extends the home demand for another.

It is but seldom, however, that a restriction on importation from abroad does no more than substitute one sort of employment for another. Its usual effect is both to alter the distribution of capital, and to increase the price of commodities. A country rarely imports any commodity from abroad that may be as cheaply produced at home. In the vast majority of instances, the articles bought of the foreigner could not be directly produced at home, without a much greater outlay of capital. Suppose that we import 1,000,000*l.* worth of any commodity, that its importation is prohibited, and that the same quantity of produce cannot be raised in this country for less than 1,200,000*l.* or 1,500,000*l.*: in a case of this sort, — and this is actually the case in 99 out of every 100 instances in which prohibitions are enacted, — the prohibition has the same effect on the consumers of the commodity, as if, supposing it not to have existed, they had been burdened with a peculiar tax of 200,000*l.* or 500,000*l.* a year. But, had such been the case, what the consumers lost would have gone into the coffers of the treasury, and would have afforded the means of repealing an equal amount of other taxes; whereas, under the prohibitory system, the high price, being occasioned by an increased difficulty of production, is of no advantage to any one. So that, instead of gaining any thing by such a measure, the public incurs a dead loss of 200,000*l.* or 500,000*l.* a year.

We have said that a prohibition of importation may be productive of immediate advantage to the home producers of the prohibited article. It is essential, however, to remark that this advantage cannot continue for any considerable time, and that it *must* be followed by a period of distress. Were the importation of foreign silks put an end to, that circumstance, by narrowing the supply of silk goods, and raising their prices, would, no doubt, be, in the first instance, advantageous to the manufacturers, by elevating their profits above the common level. But the consequence would be, that those already engaged in the trade would immediately set about extending their concerns; at the same time that not a few of those engaged in other employments would enter a business which presented such a favourable prospect: nor would this transference of capital to the silk manufacture be stopped, till such an increased supply of silks had been brought to market as to occasion a glut. This reasoning is not founded upon hypothesis, but upon the widest experience. When a business is carried on under the protection of a restriction on importation, it is limited by the extent of the home market, and is incapable of further extension. It is, in consequence, particularly subject to that fluctuation which is the bane of industry. If, owing to a change of fashion, or any other cause, the demand be increased, then, as no supplies can be brought from abroad, prices suddenly rise, and the manufacture is rapidly extended, until a reaction takes place, and prices sink below their usual level: and if the demand decline, then, as there is no outlet abroad for the superfluous goods, their price is ruinously depressed, and the producers are involved in inextricable difficulties. The businesses deepest entrenched behind ramparts of prohibitions and restrictions, such as the silk trade previously to 1825, the West India trade, and agriculture since 1815, have undergone the most extraordinary vicissitudes; and have been at once more hazardous and less profitable than the businesses carried on under a system of fair and free competition.

A prohibition against buying in the cheapest markets is really, also, a prohibition against selling in the dearest markets. There is no test of high or low price, except the quantity of other produce for which an article exchanges. Suppose that, by sending a certain quantity of cottons or hardware to Brazil, we might get in exchange 150 hhds. of sugar, and that the same quantity, if sent to Jamaica, would only fetch 100 hhds.; is it not obvious, that by preventing the importation of the former, we force our goods to be sold for *two thirds* of the price they would otherwise have brought? To suppose that a system productive of such results can be a means of increasing wealth, is to suppose what is evidently absurd. It is certainly true that a restrictive regulation, which has been long acted upon, and under which a considerable quantity of capital is employed, ought not to be rashly or capriciously repealed. Every change in the public economy of a great nation ought to be gone about cautiously and gradually. Adequate time should be given to those who carry on businesses that have been protected, either to withdraw from them altogether, or to prepare to withstand the fair competition of foreigners. But this is *all* that such persons can justly claim. To persevere in an erroneous and oppressive system, merely because its abandonment might be productive of inconvenience to individuals, would be a proceeding inconsistent with every object for which society is formed, and subversive of all improvement.

It may, perhaps, be supposed that in the event of commodities being imported from abroad, after the abolition of a protecting regulation, that were previously produced at home, the workmen and those engaged in their production would be thrown upon the parish. Such, however, is not the case. We may, by giving freedom to commerce,

change the *species* of labour in demand, but it is not possible that we should thereby change its *quantity*. If, in consequence of the abolition of restrictions, our imports were increased to the amount of 4,000,000*l.* or 5,000,000*l.*, our exports, it is certain, must be augmented to the same extent: so that whatever diminution of the demand for labour might be experienced in certain departments would be balanced by a corresponding increase in others.

The pressure of taxation has often been alleged as an excuse for restrictions on commerce, but it is not more valid than the rest. Taxation may be heavy, and even oppressive; but so long as it is impartially and fairly assessed, it equally affects *all* branches of industry carried on at home, and consequently affords no ground whatever for the enactment of regulations intended to protect any particular business. And to propose to protect *all* branches of industry from foreign competition, is, in effect, to propose to put a total stop to commerce; for if nothing is to be imported, nothing can be exported. The imposition of moderate duties on foreign commodities, for the sake of revenue, is quite another thing. Many of these form among the very best subjects of taxation; and when the duties on them are confined within proper bounds, — that is, when they are not so high as to exert any injurious influence upon trade, or to occasion smuggling and fraud, — they cannot fairly be objected to.

It is sometimes contended, by those who assert, on general grounds, that restrictions are inexpedient, that it would be unwise, on the part of any country, to abolish them until she had obtained a security that those imposed by her neighbours would also be abolished. But the reasons that have been alleged in favour of this statement are not entitled to the least weight. It is our business to buy in the cheapest and sell in the dearest markets, without being, in any degree, influenced by the conduct of others. If they consent to repeal the restrictions they have laid on commerce, so much the better. But whatever others may do, the line of policy *we* ought to follow is clear and well defined. To refuse, for example, to buy claret, brandy, &c. from the French, because they lay absurd restrictions on the importation of British hardware, cottons, &c., would not be to retaliate upon them, but upon ourselves. The fact that we *do* import French wine and brandy shows that we do export to France, or to some other country to which France is indebted, an equivalent, in some sort, of British produce. The fear of being glutted with foreign products, unless we secure beforehand a certain outlet for our own, is the most unfounded that can be imagined. The foreigner who will take nothing of ours, can send us nothing of his. Though our ports were open to the merchants of all the countries of the world, the exports of British produce must always be equal to the imports of foreign produce; and none but those who receive our commodities, either at first or second hand, could continue to send any thing to us.

" Les étrangers ne peuvent demander ni désirer rien mieux, que la liberté de vous acheter et de vous vendre chez vous et dans vos colonies. Il faut la leur accorder, non par foiblesse et par impuissance, mais parcequ'elle est juste en elle-même, et qu'elle vous est utile. Ils ont tort sans doute de la refuser chez eux: mais cette faute d'ignorance dont, sans le savoir, ils sont punis les premiers, n'est pas un raison qui doive vous porter à vous nuire à vous-même en suivant cet exemple, et à vous exposer aux suites et aux dépenses d'une guerre pour avoir la vaine satisfaction d'user des représailles, dont l'effet ne peut manquer de retomber sur vous, et de rendre votre commerce plus désavantageux." — (*Le Trosne de l' Ordre Social*, p. 416.)

There are some, however, who contend, that though restrictions on importation from abroad be unfavourable to opulence, and the advancement of individuals and nations in arts and civilisation, they may, notwithstanding, be vindicated on other grounds, as contributing essentially to independence and security. The short and decisive answer to this is to be found in the reciprocity of commerce. It does not enrich one individual or nation at the expense of others, but confers its favours equally on all. We are under no obligations to the Portuguese, the Russians, or any other people with whom we carry on trade. It is not *our* advantage, but *their own*, that they have in view in dealing with us. We give them the full value of all that we import; and they would suffer quite as much inconvenience as we should do were this intercourse put an end to. The independence at which those aspire who would promote it by laying restrictions on commerce, is the independence of the solitary and unsocial savage; it is not an independence productive of strength, but of weakness. " The most flourishing states, at the moment of their highest elevation, when they were closely connected with every part of the civilised world by the golden chains of successful commercial enterprise, were, according to this doctrine, in the most perfect state of absolute dependence. It was not till all these connections were dissolved, and they had sunk in the scale of nations, that their true independence commenced! Such statements carry with them their own refutation. There is a natural dependence of nations upon each other, as there is a natural dependence of individuals upon each other. Heaven has so ordered it. Some soils, some climates, some situations, are productive exclusively of some peculiar fruits, which cannot else-

where be profitably procured. Let nations follow this as their guide. In a rich and rising community, the opulent capitalists may be as dependent upon the poor labourers, as the poor labourers upon the opulent capitalists. So it is with nations. The mutual dependence of individuals upon each other knits and binds society together, and leads to the most rapid advancement in wealth, in intelligence, and in every kind of improvement. It is the same, but on a far larger scale, with the mutual dependence of nations. To this alone do we owe all the mighty efforts of commerce; and what lights, what generous feelings, and multiplied means of human happiness, has it not every where spread!" — (*North American Review*, No. 57.)

The principles of commercial freedom, and the injurious influence of restrictive regulations, were set in a very striking point of view by Dr. Smith, in his great work; and they have been since repeatedly explained and elucidated. Perhaps, however, the true doctrines upon this subject have no where been better stated than in the petition presented by the merchants of London to the House of Commons on the 8th of May, 1820. This document is one of the most gratifying proofs of the progress of liberal and enlarged views. It was subscribed by all the principal merchants of the metropolis, who have not scrupled to express their conviction, that the repeal of every *protective regulation* would be for the public advantage. Such an address, confirming, as it did, the conclusions of science, by the approval of the best informed and most extensive merchants of the world, had a powerful influence on the legislature. During the last 10 years several most important reforms have been made in our commercial system; so that, besides being the first to promulgate the true theory of commerce, we are now entitled to the praise of being the first to carry it into effect. No doubt our trade is still fettered by many vexatious restraints; but these will gradually disappear, according as experience serves to disclose the benefits resulting from the changes already made, and the pernicious operation of the restrictions that are still allowed to continue.

The petition now referred to, is too important to be omitted in a work of this sort. It is as follows: —

"To the Honourable the Commons, &c., the Petition of the Merchants of the City of London.

"Sheweth,

"That foreign commerce is eminently conducive to the wealth and prosperity of a country, by enabling it to import the commodities for the production of which the soil, climate, capital, and industry of other countries are best calculated, and to export, in payment, those articles for which its own situation is better adapted.

"That freedom from restraint is calculated to give the utmost extension to foreign trade, and the best direction to the capital and industry of the country.

"That the maxim of buying in the cheapest market, and selling in the dearest, which regulates every merchant in his individual dealings, is strictly applicable, as the best rule for the trade of the whole nation.

"That a policy founded on these principles would render the commerce of the world an interchange of mutual advantages, and diffuse an increase of wealth and enjoyments among the inhabitants of each state.

"That, unfortunately, a policy the very reverse of this has been and is more or less adopted and acted upon by the government of this and every other country; each trying to exclude the productions of other countries, with the specious and well-meant design of encouraging its own productions: thus inflicting on the bulk of its subjects, who are consumers, the necessity of submitting to privations in the quantity or quality of commodities; and thus rendering what ought to be the source of mutual benefit and of harmony among states, a constantly recurring occasion of jealousy and hostility.

"That the prevailing prejudices in favour of the protective or restrictive system may be traced to the erroneous supposition that every importation of foreign commodities occasions a diminution or discouragement of our own productions to the same extent: whereas it may be clearly shown, that although the particular description of production which could not stand against unrestrained foreign competition would be discouraged, yet, as no importation could be continued for any length of time without a corresponding exportation, direct or indirect, there would be an encouragement, for the purpose of that exportation, of some other production to which our situation might be better suited; thus affording at least an equal, and probably a greater, and certainly a more beneficial, employment to our own capital and labour.

"That of the numerous protective and prohibitory duties of our commercial code, it may be proved that, while all operate as a very heavy tax on the community at large, very few are of any ultimate benefit to the classes in whose favour they were originally instituted, and none to the extent of the loss occasioned by them to other classes.

"That among the other evils of the restrictive or protective system, not the least is, that the artificial protection of one branch of industry or source of production against foreign competition, is set up as a ground of claim by other branches for similar protection; so that if the reasoning upon which these restrictive or prohibitory regulations are founded were followed out consistently, it would not stop short of excluding us from all foreign commerce whatsoever. And the same train of argument, which, with corresponding prohibitions and protective duties, should exclude us from foreign trade, might be brought forward to justify the re-enactment of restrictions upon the interchange of productions (unconnected with public revenue) among the kingdoms composing the union, or among the counties of the same kingdom.

"That an investigation of the effects of the restrictive system at this time is peculiarly called for, as it may, in the opinion of your petitioners, lead to a strong presumption, that the distress, which now so generally prevails, is considerably aggravated by that system; and that some relief may be obtained by the earliest practicable removal of such of the restraints as may be shown to be most injurious to the capital and industry of the community, and to be attended with no compensating benefit to the public revenue.

"That a declaration against the anti-commercial principles of our restrictive system is of the more importance at the present juncture; inasmuch as, in several instances of recent occurrence, the merchants and manufacturers of foreign countries have assailed their respective governments with applications for further protective or prohibitory duties and regulations, urging the example and authority of this country, against which they are almost exclusively directed, as a sanction for the policy of such measures. And certainly, if the reasoning upon which our restrictions have been defended is worth any thing, it will

apply in behalf of the regulations of foreign states against us. They insist upon our superiority in capital and machinery, as we do upon their comparative exemption from taxation, and with equal foundation.

"That nothing would tend more to counteract the commercial hostility of foreign states, than the adoption of a more enlightened and more conciliatory policy on the part of this country.

"That although, as a matter of mere diplomacy, it may sometimes answer to hold the removal of particular prohibitions, or high duties, as depending upon corresponding concessions by other states in our favour, it does not follow that we should maintain our restrictions in cases where the desired concessions on their part cannot be obtained. Our restrictions would not be the less prejudicial to our own capital and industry, because other governments persisted in preserving impolitic regulations.

"That, upon the whole, the most liberal would prove to be the most politic course on such occasions.

"That independent of the direct benefit to be derived by this country, on every occasion of such concession or relaxation, a great incidental object would be gained, by the recognition of a sound principle or standard, to which all subsequent arrangements might be referred; and by the salutary influence which a promulgation of such just views, by the legislature and by the nation at large, could not fail to have on the policy of other states.

"That in thus declaring, as your petitioners do, their conviction of *the impolicy and injustice of the restrictive system*, and in desiring every practicable relaxation of it, they have in view only such parts of it as are not connected, or are only subordinately so, with the public revenue. As long as the necessity for the present amount of revenue subsists, your petitioners cannot expect so important a branch of it as the customs to be given up, nor to be materially diminished, unless some substitute less objectionable be suggested. But it is *against every restrictive regulation of trade, not essential to the revenue, against all duties merely protective from foreign competition, and against the excess of such duties as are partly for the purpose of revenue, and partly for that of protection*, that the prayer of the present petition is respectfully submitted to the wisdom of parliament.

"May it therefore," &c.

For examples of the practical working and injurious operation of restrictions, see the articles Bordeaux, Cadiz, Cagliari, Colony Trade, Corn Laws and Corn Trade, Naples, Timber, &c., in this Dictionary; the articles on the American Tariff and the French Commercial System in Nos. 96. and 99. of the *Edinburgh Review;* the Report of the Committee of Commerce and Navigation to the House of Representatives of the United States, 8th of February, 1830; and the *Petition* and *Memoire à l'Appui*, addressed, in 1828, by the landowners and merchants of the Gironde to the Chamber of Deputies.

For an account of the doctrines with respect to the *balance of trade*, and the importation and exportation of the precious metals, see the articles Balance of Trade, and Exchange.

For an account of the articles exported from and imported into Great Britain, see Imports and Exports.

COMPANIES. In commerce or the arts, a company is a number of persons associated together for the purpose of carrying on some commercial or industrious undertaking. When there are only a few individuals associated, it is most commonly called a *copartnery;* the term company being usually applied to large associations, like the East India Company, the Bank of England, &c., who conduct their operations by means of agents acting under the orders of a Board of directors.

Companies have generally been divided into two great classes — exclusive or joint stock companies, and open or regulated companies.

1. *Exclusive or Joint Stock Companies.* — By an institution of this sort is meant a company having a certain amount of capital, divided into a greater or smaller number of transferable shares, managed for the common advantage of the shareholders by a body of directors chosen by and responsible to them. After the stock of a company of this sort has been subscribed, no one can enter it without previously purchasing one or more shares belonging to some of the existing members. The partners do nothing individually; all their resolutions are taken in common, and are carried into effect by the directors and those whom they employ.

According to the common law of England, all the partners in a joint stock company are jointly and individually liable, to the whole extent of their fortunes, for the debts of the company. They may make arrangements amongst themselves, limiting their obligations with respect to each other; but unless established by an authority competent to set aside the general rule, they are all indefinitely responsible to the public. Parliament sometimes limits the responsibility of the shareholders in joint stock companies established by statute, to the amount of the shares they respectively hold. Charters of incorporation granted by the Crown were also, until lately, supposed necessarily to have this effect; but by the act 6 Geo. 4. c. 96. the Crown is empowered to grant charters of incorporation by which the members of corporate bodies may be made *individually liable, to such extent, and subject to such regulations and restrictions*, as may be deemed expedient. Hence charters are now frequently granted for the purpose merely of enabling companies to sue and be sued in courts of law, under the names of some of their office-bearers, without in any respect limiting the responsibility of the shareholders to the public. This limitation cannot be implied in a charter any more than in an act of parliament, and will be held not to exist unless it be distinctly set forth.

"In a private copartnery, no partner, without the consent of the company, can transfer his share to another person, or introduce a new member into the company. Each member, however, may, upon proper warning, withdraw from the copartnery, and demand payment from them of his share of the common stock. In a joint stock com-

pany, on the contrary, no member can demand payment of his share from the company; but each member may, without their consent, transfer his share to another person, and thereby introduce a new member. The value of a share in a joint stock is always the price which it will bring in the market; and this may be either greater or less, in any proportion, than the sum which its owner stands credited for in the stock of the company." — (*Wealth of Nations*, vol. iii. p. 238.)

2. *Utility of Joint Stock Companies.* — Whenever the capital required to carry on any undertaking exceeds what may be furnished by an individual, it is indispensable, in order to the prosecution of the undertaking, that an association should be formed. In all those cases, too, in which the chances of success are doubtful, or where a lengthened period must necessarily elapse before an undertaking can be completed, an individual, though ready enough to contribute a small sum in connection with others, would, generally speaking, be very little inclined, even if he had the means, to encounter the whole responsibility of such enterprises. Hence the necessity and advantage of companies or associations. It is to them that we are indebted for those canals by which every part of the country is intersected, for the formation of so many noble docks and warehouses, for the institution of our principal banks and insurance offices, and for many other establishments of great public utility carried on by the combined capital and energies of large bodies of individuals.

3. *Branches of Industry, for the Prosecution of which Joint Stock Companies may be advantageously established.* — In order to ensure a rational prospect of success to a company, the undertaking should admit of being carried on according to a regular systematic plan. The reason of this is sufficiently obvious. The business of a great association must be conducted by factors or agents; and unless it be of such a nature as to admit of their duties being clearly pointed out and defined, the association would cease to have any effectual control over them, and would be, in a great measure, at their mercy. An individual who manages his own affairs reaps all the advantage derivable from superior skill, industry, and economy; but the agents, and even directors, of joint stock companies labour, in most cases, entirely or principally for the advantage of others; and cannot therefore, however conscientious, have the same powerful motives to act with energy, prudence, and economy. "Like," says Dr. Smith, "the stewards of a rich man, they are apt to consider attention to small matters as not for their master's honour, and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail more or less in the management of the affairs of such a company." It also not unfrequently happens that they suffer from the bad faith, as well as the carelessness and extravagance of their servants; the latter having, in many instances, endeavoured to advance their own interests at the expense of their employers. Hence the different success of companies whose business may be conducted according to a nearly uniform system, — such as dock, canal, and insurance companies, rail-road companies, &c. — and those whose business does not admit of being reduced to any regular plan, and where much must always be left to the sagacity and enterprise of those employed. All purely commercial companies, trading upon a joint stock, belong to the latter class. Not one of them has ever been able to withstand the competition of private adventurers; they cannot subject the agents they employ to buy and sell commodities in distant countries to any effectual responsibility; and from this circumstance, and the abuses that usually insinuate themselves into every department of their management, no such company has ever succeeded, unless when it has obtained some exclusive privilege, or been protected from competition.

The circumstances now mentioned would seem to oppose the most formidable obstacles to the success of the companies established in this country for the prosecution of mining in America. This business does not admit of being reduced to a regular routine system. Much must always depend on the skill and probity of the agents employed at the mines; and it must plainly be very difficult, if not quite impossible, for directors resident in London to exercise any effectual *surveillance* over the proceedings of those who are at so great a distance. Hence it is not at all likely that these establishments will ever be so productive to the undertakers, as if they had been managed by the parties themselves.

The Abbé Morellet has given, in a tract published in 1769 (*Examen de la Réponse de M. N.*, pp. 35—38.), a list of 55 joint stock companies, for the prosecution of various branches of foreign trade, established in different parts of Europe since 1600, every one of which had failed, though most of them had exclusive privileges. Most of those that have been established since the publication of the Abbé Morellet's tract have had a similar fate.

But notwithstanding both principle and experience concur in showing how very ill fitted a large association is for the purpose of prosecuting commercial undertakings, there are cases in which they cannot be prosecuted except by associations of this sort, and when it may be expedient to grant them certain peculiar privileges. When, owing either to the disinclination or inability of government to afford protection to those engaged in any

particular department of trade, they are obliged to provide for their own defence and security, it is obviously necessary that they should have the power to exclude such individuals as may refuse to submit to the measures, or to bear their due share of the expense, required for the common protection of all. The Russian Company, the East India Company, the Levant or Turkey Company, and most of the other great trading companies which have existed in this country, seem principally to have grown out of a real or supposed necessity of this sort. It was not believed that any safe or advantageous intercourse could be carried on with barbarous countries without the aid of ships of war, factories, interpreters, &c. And as government was not always able or willing to afford this assistance, the traders were formed into companies or associations, and vested with such peculiar privileges as appeared to be necessary for enabling them to prosecute the trade without any extrinsic support. "When," says Dr. Smith, "a company of merchants undertake, at their own risk and expense, to establish a new trade with some remote and barbarous nation, it may not be unreasonable to incorporate them into a joint stock company, and to grant them, in case of success, a monopoly of the trade for a certain number of years. It is the easiest and most natural way in which the state can recompense them for hazarding a dangerous and expensive experiment, of which the public is afterwards to reap the benefit. A temporary monopoly of this kind may be vindicated upon the same principles upon which a like monopoly of a new machine is granted to its inventor, and that of a new book to its author. But upon the expiration of the term, the monopoly ought certainly to determine; the forts and garrisons, if it was found necessary to establish any, to be taken into the hands of government, their value to be paid to the company, and the trade to be laid open to all the subjects of the state." — (*Wealth of Nations*, vol. iii. p. 258.)

It may be doubted, however, whether it be really necessary, even in such a case as that now mentioned, to establish *a joint stock company* with peculiar privileges, and whether the same thing might not be more advantageously effected by the establishment of an open or regulated company.

4. *Open or Regulated Companies.* — The affairs of such companies or associations are managed by directors appointed by the members. They do not, however, possess a common or joint stock. Each individual pays a fine upon entering into the company, and most commonly an annual contribution: a duty applicable to the business of the company is also sometimes charged upon the goods imported and exported from and to the countries with which they trade. The sums so collected are applied by the directors to fit out ambassadors, consuls, and such public functionaries as may be required to facilitate commercial dealings, or to build factories, maintain cruisers, &c. The members of such companies trade upon their own stock, and at their own risk. So that when the fine, or the sum payable on admission into a regulated company, is moderate, it is impossible for its members to form any combination that would have the effect of raising their profits above the common level; and there is the same keen and close competition amongst them that there is amongst other classes of traders. A regulated company is, in fact, a device for making those engaged in a particular branch of trade bear the public or political expenses incident to it, at the same time that it leaves them to conduct their own business with their own capital, and in their own way.

Should, therefore, government at any time refuse, or be unable to afford, that protection to those engaged in any branch of trade which is necessary to enable them to carry it on, their formation into a regulated company would seem to be the most judicious measure that could be adopted; inasmuch as it would obtain for them that protection which is indispensable, without encroaching on the freedom of individual enterprise.

The African, the Levant, and some other branches of trade, were for a long time conducted by open or regulated companies. These, however, have been recently abolished: the African Company, by the act 1 & 2 Geo. 4. c. 28.; and the Levant Company, by the act 6 Geo. 4. c. 33. The Russia Company still exists. — (See Russia Company.)

In so far as relates to protection, it may perhaps be thought, for the reasons given by Dr. Smith, that a joint stock company is better calculated to afford it than a regulated company. The directors of the latter having, Dr. Smith alleges, no particular interest in the prosperity of the general trade of the company, for behoof of which, ships of war, factories, or forts, have to be maintained, are apt to neglect them, and to apply their whole energies to the care of their own private concerns. But the interest of the directors of a joint stock company are, he contends, in a great measure identified with those of the association. They have no private capital employed in the trade; their profits must depend upon the prudent and profitable management of the common stock; and it may, therefore, it is argued, be fairly presumed that they will be more disposed to attend carefully to all the means by which the prosperity of the association may be best secured. On the other hand, however, it is seldom that the directors of joint stock companies stop at the proper point; having almost invariably attempted to extend their commercial dealings by force, and to become not only merchants but sovereigns. Nor is this any thing but

what might have been expected, seeing that the consideration and extensive patronage accruing from such measures to the directors is generally of far more importance to them than a moderate increase of the dividends on their stock. Whenever they have been able, they have seldom scrupled to employ arms to advance their projects; and instead of contenting themselves with shops and factories, have constructed fortifications, embodied armies, and engaged in war. But such has not been the case with regulated companies. The businesses under their control have uniformly been conducted in a comparatively frugal and parsimonious manner; their establishments have been, for the most part, confined to factories; and they have rarely, if ever, allowed themselves to be seduced by schemes of conquest and dominion.

And hence, considering them as *commercial machines*, it does not really seem that there can be any doubt as to the superiority of a regulated over a joint stock company. The latter has the defect, for which nothing almost can compensate, of *entirely excluding individual enterprise and competition*. When such a company enjoys any peculiar privilege, it naturally, in pursuing its own interest, endeavours to profit by it, how injurious soever it may be to the public. If it have a monopoly of the trade with any particular country, or of any particular commodity, it rarely fails, by understocking the home and foreign markets, to sell the goods which it imports and exports at an artificially enhanced price. It is not its object to employ a comparatively large capital, but to make a large profit on a comparatively small capital. The conduct of the Dutch East India Company in burning spices, that their price might not be lowered by larger importations, is an example of the mode in which such associations uniformly and, indeed, almost necessarily act. All individuals are desirous of obtaining the highest possible price for what they have to sell; and if they are protected by means of a monopoly, or an exclusive privilege, from the risk of being undersold by others, they never hesitate about raising the price of their products to the highest elevation that the competition of the buyers will allow them; and thus frequently realise the most exorbitant profits.

And yet, notwithstanding these advantages, such is the negligence, profusion, and peculation, inseparable from the management of great commercial companies, that even those that have had the monopoly of the most advantageous branches of commerce have rarely been able to keep out of debt. It will be shown in the article East India Company, that that association has lost by its trade; and that, had it not been for the aid derived from the revenues of India, it must long since have ceased to exist. To buy in one market; to sell with profit in another; to watch over the perpetually occurring variations in the prices, and in the supply and demand of commodities; to suit with dexterity and judgment the quantity and quality of goods to the wants of each market; and to conduct each operation in the best and cheapest manner; requires a degree of unremitting vigilance and attention, which it would be visionary to expect from the directors or servants of a great joint stock association. Hence it has happened, over and over again, that branches of commerce which proved ruinous to companies, have become exceedingly profitable when carried on by individuals.

5. *Constitution of Companies.* — When application is made to parliament for an act to incorporate a number of individuals into a joint stock company for the prosecution of any useful undertaking, care ought to be taken not to concede to them any privileges that may be rendered injurious to the public. If a company be formed for the construction of a dock, a road, or a canal, it may be necessary, in order to stimulate individuals to engage in the undertaking, to give them some peculiar privileges for a certain number of years. But if other persons were to be permanently hindered from constructing new docks, or opening new lines of communication, a lasting injury might be done to the public. It may be highly expedient to incorporate a company for the purpose of bringing water into a city; but supposing there were no springs in the vicinity, other than those to which this company has acquired a right, they might, unless restrained by the act incorporating them, raise the price of water to an exorbitant height; and make large profits for themselves at the expense and to the injury of the public. In all cases of this sort; and in the case, indeed, of all joint stock companies established for the formation of canals, railroads, &c.; it would be sound policy to limit the rates charged for their services, or on account of the water, ships, goods, &c. conveyed by their means, and also to limit the dividends, or to fix a *maximum* beyond which they should not be augmented: enacting, that if the rates charged by the company produce more than sufficient to pay the maximum rate of dividend, and to defray the wear and tear of the aqueduct, canal, &c., they shall be allowed to reduce them till they only yield this much; and, in the event of their declining to do so, that the whole surplus above paying the dividend shall be applied to purchase up the stock of the association, so that ultimately the charges on account of dividends may be entirely abolished. Had this principle been acted upon when canals first began to be formed in England, the carriage of goods conveyed by some of the most important lines of communication would now have cost almost nothing; and this desirable result might have been accomplished in the way now suggested, with-

out, we believe, diminishing in any degree the number of those undertakings. There are few who, at the time they engage in such enterprises, suppose that they will yield more than 10 or 12 per cent.; and vast numbers will always be disposed to engage in them, if there be any reasonable prospect of their yielding this much. Now, when such is the case, is it not the duty of government to provide, in the event of the undertaking becoming in an *unexpected* and *unusual degree profitable*, that the public should derive some advantage from it? This is not a case in which competition can reduce profits to the common level. The best, perhaps the only practicable, line for a canal or railroad between any two places will be appropriated by those who are first in the field; who thus, in fact, obtain a natural monopoly of which they cannot be deprived: and hence the advantage of limiting the charges and dividends: without discouraging enterprise, it affords a security that private individuals shall not reap an unusual and unlooked for profit at the expense of the public.

In all those cases in which companies are formed for the prosecution of undertakings that may be carried on, with equal advantage to the public, by individuals; or where there are no very considerable difficulties to overcome, or risks to encounter; they ought to enjoy no privilege whatever, but should be regarded, in every point of view, as if they were mere individuals.

For accounts of the principal joint stock and regulated companies established in this country, see the articles Bank of England, Docks, East India Company, Insurance, Russia Company, &c. &c.

6. *Companies en Commandite.* — In France there is a sort of companies denominated *sociétés en commandite.* A society of this description consists of one or more partners, liable, without limitation, for the debts of the company; and one or more partners, or *commanditaires*, liable only to the extent of the funds they have subscribed. A *commanditaire* must not, however, take any part in the business of the company; if he do this, he loses his inviolability, and makes himself responsible for the debts of the association. The names of the partners in such societies must be published, and the amount of the sums contributed by the *commanditaires.*

It has been proposed to introduce partnerships of this sort into this country; but it seems very doubtful whether any thing would be gained by such a measure. Partnerships *en commandite* may be very easily abused, or rendered a means of defrauding the public. It is quite visionary to imagine that the *commanditaires* can be prevented from indirectly influencing the other partners: and supposing a collusion to exist amongst them, it might be possible for them to divide large sums as profit, when, perhaps, they had really sustained a loss; and to have the books of the association so contrived, that it might be very difficult to detect the fraud. This, it is alleged, is by no means a rare occurrence in France.

7. *Civic Companies, or Corporations.* — Exclusive of the companies previously mentioned, a number of ancient companies or corporations exist in this and most other European countries, the members of which enjoy certain political as well as commercial privileges. When the feudal system began to be subverted by the establishment of good order and regular government in the towns, the inhabitants were divided into certain trades or corporations, by which the magistrates and other functionaries were chosen. The members of these trades, or corporations, partly to enhance the value of their privileges, and partly to provide a resource, in case of adversity, for themselves, acquired or usurped the power of enacting by-laws regulating the admission of new members, and at the same time set about providing a fund for the support of such as accident or misfortune might reduce to a state of indigence. Hence the origin of apprenticeships, the refusal to allow any one not a member of a corporation to carry on any business within the precincts of any town corporate, and the various regulations that had to be submitted to, and the fees that had to be paid by the claimants for inrolment in corporations. For a lengthened period these privileges and regulations were very oppressive. Within the last century, however, their influence has been progressively diminishing. In France, where the abuses inseparable from the system had attained to a very great height, it was entirely swept off by the Revolution: and though corporations still exist in this country, they have been stripped of several of their peculiar franchises; and should now, for the most part, be regarded more, perhaps, in the light of charitable than of political institutions. It would be well, however, were they reduced entirely to the former character; and were the few political and commercial privileges, which they still enjoy, communicated to the rest of the citizens. At their first institution, and for some time after, corporations, considered as political bodies, were probably useful: but such is no longer the case; and in so far as they now possess any special immunities, they tend to obstruct that free competition that is so advantageous.

The following extract from a *Report on the Commerce and Manufactures of the United States*, drawn up by Albert Gallatin, Esq., then secretary to the Treasury, and laid before Congress in 1816, sets the superior advantages resulting from the unrestricted

freedom of industry in a very striking point of view. "No cause," says he, "has, perhaps, more promoted in every respect the general improvement of the United States, than the absence of those systems of internal restriction and monopoly which continue to disfigure the state of society in other countries. No laws exist here, directly or indirectly, confining men to a particular occupation or place, or excluding any citizen from any branch he may, at any time, think proper to pursue. Industry is, in every respect, free and unfettered; every species of trade, commerce, and profession, and manufacture, being equally open to all, *without requiring any regular apprenticeship, admission, or licence.* Hence the improvement of America has not been confined to the improvement of her agriculture, and to the rapid formation and settlement of new states in the wilderness; but her citizens have extended their commerce to every part of the globe, and carry on with complete success even those branches for which a monopoly had heretofore been considered essentially necessary."

There is in *Rees's Cyclopædia*, article *Company*, a list of the different Civic Companies belonging to the City of London, in which the periods of their incorporation, and various other important particulars with respect to several of them, are specified.

COMPASS (Ger. *Ein Kompass;* Du. *Zeekompas;* Da. *Söekompass;* Sp. *Sjöcompass;* Fr. *Boussole, Compas de mer;* It. *Bussola;* Sp. *Aguja de marear;* Port. *Compasso de marear;* Rus. *Kompass korabelnüi*), or mariner's compass, an instrument composed of a needle and card, by which the ship's course is directed. The needle, with little variation, always points towards the north, and hence the mode of steering by the compass.

The common opinion is that the compass was invented by Flavio Gioia, a citizen of the once famous republic of Amalphi, very near the beginning of the fourteenth century. Dr. Robertson has adopted this opinion, and regrets that contemporary historians furnish no details as to the life of a man to whose genius society is so deeply indebted. — (*Hist. of America*, vol. i. p. 47. 8vo ed.) But though Gioia may have made improvements on the compass, it has been shown that he has no claim to be considered as its discoverer. Passages have been produced from writers who flourished more than a century before Gioia, in which the polarity of the needle, when touched by the magnet, is distinctly pointed out. Not only, however, had this singular property been discovered, but also its application to the purposes of navigation, long previously to the fourteenth century. Old French writers have been quoted (*Macpherson's Annals of Commerce*, anno 1200; *Rees's Cyclopædia*), that seem fully to establish this fact. But whatever doubts may exist with respect to them, cannot affect the passages which the learned Spanish antiquary, Don Antonio de Capmany (*Questiones Criticas*, p. 73—132.), has given from a work of the famous Raymond Lully (*De Contemplatione*) published in 1272. In one place Lully says, "as the needle, when touched by the magnet, naturally turns to the north" (*sicut acus per naturam vertitur ad septentrionem dum sit tacta à magnete*). This is conclusive as to the author's acquaintance with the polarity of the needle; and the following passage from the same work — "as the nautical needle directs mariners in their navigation" (*sicut acus nautica dirigit marinarios in sua navigatione, &c.*) is no less conclusive as to its being used by sailors in regulating their course. There are no means of ascertaining the mode in which the needle Raymond Lully had in view was made use of. It has been sufficiently established — (see the authorities already referred to, and *Azuni, Dissertation sur l' Origine de la Boussole,*) — that it was usual to float the needle, by means of a straw, on the surface of a basin of water; and Capmany contends that we are indebted to Gioia for the card, and the method now followed of suspending the needle; improvements which have given to the compass all its convenience, and a very large portion of its utility. But this part of his *Dissertation*, though equally learned and ingenious, is by no means so satisfactory as the other. It is difficult to conceive how mariners at sea could have availed themselves of a floating needle; but, however this may be, it seems most probable that Gioia had considerably improved the construction of the compass; and that, the Amalphitans having been the first to introduce it to general use, he was, with excusable partiality, represented by them, and subsequently regarded by others, as its inventor.

The reader will not consider these details out of place in a work on commerce, which the compass has done so much to extend. "Its discovery," to borrow the language of Mr. Macpherson, "has given birth to a new era in the history of commerce and navigation. The former it has extended to every shore of the globe, and increased and multiplied its operations and beneficial effects in a degree which was not conceivable by those who lived in the earlier ages. The latter it has rendered expeditious, and comparatively safe, by enabling the navigator to launch out upon the ocean free from the danger of rocks and shoals. By the use of this noble instrument, the whole world has become one vast commercial commonwealth, the most distant inhabitants of the earth are brought together for their mutual advantage, ancient prejudices are obliterated, and mankind are civilised and enlightened." — (Vol. i. p. 366.)

COMPOSITION, in commerce, commonly implies the dividend or sum paid by an insolvent debtor to his creditors, and accepted by them in payment for their debts.

CONEY WOOL (Ger. *Kaninchenwolle*; Du. *Konynhair*; Fr. *Poil de lapin*; It. *Pelo di Coniglio*; Sp. *Conejuna*), the fur of rabbits. This article is extensively used in the hat manufacture; and besides the large supplies raised at home, a great deal is imported. The imports usually range from about 300,000 to about 500,000 skins a year; but, in 1831, they exceeded 900,000, while, in 1827, they were only 197,000.

CONSTANTINOPLE, formerly the metropolis of the Eastern, as it still is of the Turkish Empire, is situated on a triangular point of land, on the European side of the Sea of Marmara (Propontis), at the point where it unites with the Bosphorus, or channel leading to the Black Sea, in lat. 41° 0′ 12″ N., lon. 28° 59′ 2″ E. Population variously estimated at from 300,000 to 600,000, but believed, by the best authorities, to be about 400,000. The situation of this renowned city is, in a commercial point of view, one of the finest imaginable. Standing on the narrow straits uniting the Mediterranean and Euxine Seas, she at once commands, and is the *entrepôt* for, the commerce between them. The harbour, whence the Turkish court has taken the appellation of the Sublime Porte, is most excellent. It consists of an extensive inlet, or arm of the sea, stretching along the north-east side of the city, which it divides from the suburbs of Galata and Pera. It has sufficient depth of water to float the largest ships, and can accommodate more than 1,000 sail. The strong current that sets through the Bosphorus into the Sea of Marmara strikes against Seraglio Point—(see Plan); a part of the water, being in consequence forced into the harbour, runs along its south-western side in the direction marked by the arrows—(see Plan),—till, arriving at its extremity, it escapes by the opposite side. In the middle the water is still. On leaving the port, it is necessary to keep well over to the northern side; for otherwise the ship might be taken by the current, and driven on Seraglio Point. It may be worth while, however, to remark, that notwithstanding this inconvenience, the current has been of signal service to the city, by scouring the harbour, and carrying away the filth and ballast by which it must otherwise have been long since choked up. The distance across from Seraglio Point to the opposite suburb of Scutari, on the Asiatic coast, is rather more than an English mile. Within less than $\frac{1}{4}$ of a mile of the latter is a rocky islet, upon which is a tower and light-house, known by the name of the Tower of Leander. Foreigners reside in Galata, Pera, and the suburbs on the eastern side of the harbour; and it is there, consequently, that the principal trade of the place is carried on. The quays are good, and ships lie close alongside.

The Bosphorus, or channel of Constantinople, runs in a N.E. by N. direction about 15 miles, varying in breadth from $1\frac{1}{4}$ to $\frac{1}{2}$ mile. It is swept by a rapid current, which it requires a brisk gale to stem, and has throughout a great depth of water. The Hellespont, or strait of the Dardanelles, leading from the Archipelago to the Sea of Marmara, is about 13 leagues in length. Its direction is nearly N.E. Where narrowest, it is little more than a mile across. It also is swept by a strong current, and has deep water throughout.

The subjoined plan of part of Constantinople and its port is copied, without reduction, from the beautiful plan of the city and Bosphorus, drawn and engraved by M. Merzoff Robert of Munich, and published by Mr. Wilde, of this city.

Nothing can be more imposing than the appearance of the city when seen from the sea, but on landing the illusion vanishes. The streets are narrow, dark, ill-paved and irregular. Owing to the want of any effective system of police, and of the most ordinary attention to cleanliness, they are extremely filthy; and are infested with herds of dogs, and also with rats, which perform the functions of scavengers. The houses are mostly built of wood, and fires are very frequent. Most of these happen designedly; the burning of a few hundred houses being deemed the readiest and most effectual means of making the government aware of the public dissatisfaction, and of procuring a redress of grievances!

Money.—Accounts are kept in piastres of 40 paras, or 120 aspers. The Turkish coin has been so much degraded, that the piastre, which a few years ago was worth 2*s.* sterling, is now worth little more than 4*d.* A bag of silver (*kefer*) = 500 piastres, and a bag of gold (*kitze*) = 30,000 piastres.

Weights and Measures.—The commercial weights are—176 drams = 1 rottolo; 2·272 rottoli = 1 oke; 6 okes = 1 batman; $7\frac{1}{3}$ batmans = 1 quintal or cantaro = 124·457 ($124\frac{1}{2}$ very nearly) lbs. avoirdupois = 56·437 kilogrammes = 116·527 lbs. of Hamburgh. The quintal of cotton is 45 okes = 127·2 lbs. avoirdupois.

The pik, or pike, is of two sorts, the greater and the less. The greater, called *kalebi* or *arschim* used in the measurement of silks and woollens, is very near 28 inches (27·9). The lesser, called *endese*, used in the measuring of cottons, carpets, &c. = 27 inches. Hence 100 long piks = 77·498 English yards, and 100 short piks = 75·154 do. But in ordinary commercial affairs, the pik is estimated at $\frac{3}{4}$ of an English yard.

Corn is measured by the *kisloz* or *killow* = 0·941 of a Winchester bushel; $8\frac{1}{2}$ kisloz = 1 quarter. The *fortin* = 4 kisloz.

Oil and other liquids are sold by the *alma* or *meter* = 1 gallon 3 pints English wine measure. The alma of oil should weigh 8 okes.—(*Nelkenbrecher* and *Dr. Kelly.*)

The *Port Charges* on account of English vessels in the harbours of the Ottoman empire are fixed by treaty at 300 aspers, neither more nor less.

References to Plan. — A, Seraglio Point: B, Galata; C, Scutari; D, Tower and lighthouse of Leander. The arrows show the direction of the currents. The soundings are in fathoms.

Trade, &c. — Owing to the vicious institutions of the Turks, and the disorganised state of the empire, the trade of Constantinople is very far from being so extensive as might be supposed from its situation and population. The imports consist of corn, iron, timber, tallow, and furs, principally from the Black Sea; and of cotton stuffs and yarn, tin, tin plates, woollens, silks, cutlery, watches and jewellery, paper, glass, furniture, indigo, cochineal, &c. from England and other European countries. Corn and coffee are imported from Alexandria; but a good deal of Brazil and West India coffee is also imported, particularly in American bottoms. Sugar is partly imported from the East, but

principally from the West Indies. The exports are very trifling, consisting of silk, carpets, hides, wool, goats' hair, potashes, wax, galls, bullion and diamonds, and a few other articles. Ships carrying goods to Constantinople, either return in ballast, or get return cargoes at Smyrna, Odessa, Salonica, &c., on which places they frequently procure bills at Constantinople. Trade is chiefly in the hands of English, French, and other European merchants (denominated Franks), and of Armenians and Greeks. Bargains are negotiated on their account by Jew brokers, some of whom are rich.

Commercial Policy of the Turks. — It is singular that as respects commerce, the policy of the Turkish government, whether originating in design or carelessness, is entitled to the highest praise. "No restrictions," says Mr. Thornton, "are laid on commerce, except in the instance of a general prohibition of exporting the articles necessary for the support of human life to foreign countries, especially from the capital, where alone it is rigorously enforced; and this impolitic restraint will no doubt be removed, when the Turkish government shall become sensible, that what is intended as the means of securing abundance, is, in fact, the sole cause of that scarcity which is sometimes experienced. With this one exception, commerce is perfectly free and unfettered. Every article of foreign or domestic growth or manufacture is conveyed into every port, and over every province, without any interference on the part of the magistrates, after payment of the duties. On this subject I speak from actual experience, and may appeal to every foreign or native merchant in Turkey for its general truth." — (*Present State of Turkey*, vol. i. p. 82.)

The duties, too, are extremely moderate, being only *three* per cent. on imports, and as as much on exports; so that in almost all that relates to her commercial regulations, Turkey is entitled to read a lesson to the most civilised European powers; and this she has done in a very able manner, in an official paper published in the *Moniteur Ottoman*, in September, 1832. We extract a few paragraphs from this very interesting document.

"It is recognised throughout Europe that it would be useful to the great majority to substitute, for the system of prohibitions, that of liberty, which theoretical men advocate; the difficulty is, to find means to separate the future from the past without a violent rupture. Hence the difficulties of government in satisfying all the exigencies of agriculture, industry, and commerce, driven in a circle where every measure in favour of one, acts immediately in an inverse sense on the other. The endeavour is vain to establish, between so many crossing interests, a factitious equilibrium which absolute liberty of exchange alone can give.

"Thus, one of the most important questions which occupies the meditation of statesmen in Europe, is, to discover how the palings which pen commerce up in narrow spaces may be thrown down withou shocks that might endanger public order.

"Good sense, tolerance, and hospitality, have long ago done for the Ottoman empire, what the other states of Europe are endeavouring to effect by more or less happy political combinations. Since the throne of the sultans has been elevated at Constantinople, commercial prohibitions have been unknown; they opened all the ports of their empire to the commerce, to the manufactures, to the territorial produce of the Occident, or, to say better, of the whole world. Liberty of commerce has reigned here without limits, as large, as extended as it was possible to be.

"Never has the divan dreamed, under any pretext of national interest, or even of reciprocity, of restricting that faculty which has been exercised, and is to this day, in the most unlimited sense, by all the nations who wish to furnish a portion of the consumption of this vast empire, and to share in the produce of its territory.

"Here every object of exchange is admitted, and circulates without meeting any obstacle other than the payment of an infinitely small portion of the value to the Custom-house. The chimera of a balance of trade never entered into heads sensible enough not to dream of calculating whether there was most profit in buying or selling. Thus the markets of Turkey, supplied from all countries, refusing no objects which mercantile spirit puts in circulation, and imposing no charge on the vessels that transport them, are seldom or never the scenes of those disordered movements occasioned by the sudden deficiency of such or such merchandise, which, exorbitantly raising prices are the scourges of the lower orders, by unsettling their habits, and by inflicting privations. From the system of restrictions and prohibitions arise those devouring tides and ebbs which sweep away in a day the labour of years, and convert commerce into a career of alarms and perpetual dangers. In Turkey, where this system does not exist, these disastrous effects are unknown.

"The extreme moderation of the duties is the complement of this régime of commercial liberty: and in no portion of the globe are the officers charged with the collection, of more confiding facility for the valuations, and of so decidedly conciliatory a spirit in every transaction regarding commerce.

"Away with the supposition that these facilities granted to strangers, are concessions extorted from weakness! The dates of the contracts termed capitulations, which establish the rights actually enjoyed by foreign merchants, recall periods at which the Mussulman power was altogether predominant in Europe. The first capitulation which France obtained was in 1535, from Soliman the Canonist (the Magnificent). The dispositions of these contracts have become antiquated, the fundamental principles remain. Thus, 300 years ago, the sultans, by an act of munificence and of reason, anticipated the most ardent desires of civilised Europe, and proclaimed unlimited freedom of commerce."

Did the policy of Turkey in other respects harmonise with this, she would be one of the most civilised and powerful of nations, instead of being one of the most abject and degraded. Unfortunately, however, this is very far from being the case. Tyranny, corruption, and insecurity universally prevail. "The cultivator of the soil is ever a helpless prey to injustice and oppression. The government agents have to suffer in their turn from the cruelty and rapacity of which they themselves have been guilty; and the manufacturer has to bear his full share of the common insecurity; he is fixed to the spot and cannot escape the grasp of the local governor. The raw material monopolised by a bey or ayan, may be forced upon him at a higher price than he could purchase it himself, and perhaps of inferior quality; fines may be imposed upon him, he may be

taken for forced labour, or troops may be quartered on his workshop." — (*Urquhart on Turkey and its Resources*, p. 139.)

This miserable system has overspread some of the fairest provinces of Europe and Asia with barbarism — turned their cities into villages, and their palaces into cottages: but the degradation in which they are involved, would have been still more complete, but for the freedom of commerce they have always enjoyed. This has tended to keep alive the seeds of industry, and to counteract the destructive influence of oppression and insecurity. Had their intercourse with foreigners been either prohibited, or placed under oppressive restrictions, the barbarism of Turkey would have been completed, and it is difficult to suppose that there could have been either wealth or industry in the empire.

Trade of Turkey with England. — The trade between this country and Turkey is of much greater value and importance than is generally supposed; and appears to be susceptible of an almost indefinite increase. Cotton stuffs and twist are the great articles of export from Great Britain to Turkey; and notwithstanding the convulsed and distracted state of the latter during the last 5 years, she has continued to take off a rapidly increasing amount of these staple articles. In 1825, for example, we exported direct for Turkey, (including what is now the kingdom of Greece), 13,674,000 yards of cotton cloth, and 446,462 lbs. of cotton twist; whereas, in 1831, we exported to Turkey (exclusive of the Morea), 24,565,000 yards of cloth, and 1,735,760 lbs. of twist, being an increase of nearly 100 per cent. in the exports of stuffs, and of 400 per cent. in those of yarn! The Turkish manufactures of muslins, ginghams, handkerchiefs, &c. have suffered severely from this extraordinary importation of British goods; so much so, that of 600 looms for muslins busily employed in Scutari in 1812, only 40 remained in 1831; and of 2,000 weaving establishments in Tournovo, at the former epoch, there were only 200 at the latter! — (*Urquhart on Turkey, &c.* p. 150.) But the great consumption of Turkey consists of coarse home-made fabrics; and we are assured by the very intelligent author now referred to, that this great branch has not been sensibly affected by our imports. Hitherto, indeed, they have been principally intended for the wealthier part of the community; but as cottons are universally worn by the mass of the people, the trade will not attain to any thing like the extent to which it may be carried, till we supply the peasantry with the stuffs suitable for their use. It is creditable to the discernment of the Americans, that they were the first to perceive the superior importance of this class of customers, and to set about supplying them with coarse unbleached stuffs. The Manchester manufacturers immediately followed in the same track, and with signal success. Plain goods now form the half of our investments for Turkey; and it is impossible, seeing the extent to which articles of this sort are made use of in all parts of the empire, and, indeed, of the East, to form any clear idea of what may be the future magnitude of this trade.

Of the European states, Austria and Switzerland have been our most formidable rivals in the supply of Turkey with cottons. The stuffs were, in several respects, well fitted for the Eastern markets; but owing to the difficulty they lay under of getting returns, and the continued and rapid reduction in the price of English cottons, we seem to have gained a decided advantage over them, and are now nearly in the exclusive possession of the market. Cheapness is every where the grand desideratum. Though our muslins and chintzes be still very inferior in fineness to those of the East, and our red dye (a colour in great esteem in Turkey, Persia, &c.) be inferior in brilliancy, these defects are more than balanced by the greater cheapness of our goods; and from Smyrna to Canton, from Madras to Samarcand, we are every where supplanting the native fabrics; and laying the foundations of a commerce that will be eminently beneficial to all parties.

Exclusive of cottons, we exported to Constantinople, Smyrna, and other Turkish ports, in 1831, arms and ammunition of the value of 21,785*l.*; earthenware, 6,434*l.*; hardware and cutlery, 11,067*l.*; iron and steel, 50,095*l.*; refined sugar, 41,020*l.*; woollens, to above 18,000*l.*; and some lesser articles; making, with cotton stuffs and yarn, the declared or real value of the direct exports of British produce and manufactures to the whole empire 888,654*l.*, besides those exported to it at second hand from Malta, the Ionian Islands, &c. We also supplied her with a considerable quantity of colonial produce. Our imports from Turkey during the same year, were, wheat 7,383 quarters, currants 8,702 cwt., figs 26,243 cwt., hides 4,685, indigo 4,181 lbs., madder root 23,833 cwt., olive oil 108,193 gallons, opium 8,184 lbs., raisins 100,458 cwt., silk 452,266 lbs., valonia 102,225 cwt., cotton wool 366,550 lbs., with carpets, bullion, galls, sponges, &c. — (*Parl. Paper*, No. 55. Sess. 1833.)

Our commerce with Turkey would be considerably facilitated by a reduction of the duties on figs, currants, oil, and carpets. Nothing, however, would contribute so much to its extension, as the establishment of order and tranquillity throughout the country. But this, we fear, is beyond the ability of the Ottoman government. The abuses which have reduced the empire to its present state of degradation seem to be inherent in the structure of Turkish society, and to be in harmony with the habits and prejudices of the people. If such be the case, reform must come from without, and not from within. But of whatever other advantages a revolution might be productive, it is

difficult to believe that it would bring along with it a more liberal system of commercial policy than that which at present exists.*

CONSUL, in commerce, an officer appointed by competent authority to reside in foreign countries, in the view of facilitating and extending the commerce carried on between the subjects of the country which appoints him, and those of the country or place in which he is to reside.

Origin and Appointment of Consuls. — The office of consul appears to have originated in Italy, about the middle of the twelfth century. Soon after this, the French and other Christian nations trading to the Levant began to stipulate for liberty to appoint consuls to reside in the ports frequented by their ships, that they might watch over the interests of their subjects, and judge and determine such differences with respect to commercial affairs as arose amongst them. The practice was gradually extended to other countries; and in the sixteenth century was generally established all over Europe. — (*Martens, Précis du Droit des Gens*, § 147.)

British consuls were formerly appointed by the Crown, upon the recommendation of great trading companies, or of the merchants engaged in the trade with a particular country or place; but they are now directly appointed by government, without requiring any such recommendation, though it, of course, is always attended to when made.

The right of sending consuls to reside in foreign countries depends either upon a tacit or express convention. Hence their powers differ very widely in different states. In some they exercise a very extensive jurisdiction over the subjects of the state which appoints them; but the extent of this jurisdiction is not discretionary, and must, in all cases, be regulated either by an express convention between the state appointing and the state receiving the consul, or by custom. Consuls established in England have no judicial power; and the British government has rarely stipulated with other powers for much judicial authority for its consuls. Turkey, however, is an exception to this remark. English consuls enjoy in that country several peculiar privileges conferred by ancient treaties, and confirmed by that signed at the Dardanelles in 1809. It is there stipulated and agreed upon —

"That if there happen any suit, or other difference or dispute, among the English themselves, *the decision thereof shall be left to their own ambassador or consul*, according to their custom, without the judge or other governors, our slaves, intermeddling therein.

"That if an Englishman, or other subject of that nation, shall be involved in any lawsuit, or other affair connected with law, (with a Turk,) the judge shall not hear nor decide thereon, until the ambassador, consul, or interpreter shall be present; and all suits exceeding the value of 4,000 aspers, shall be heard at the Sublime Porte, and no where else.

"That the consuls appointed by the English ambassadors in our sacred dominions, for the protection of their merchants, shall never, under any pretence, be imprisoned, nor their houses sealed up, nor themselves sent away; but all suits or differences in which they may be involved, shall be represented to our Sublime Porte, where their ambassador will answer for them.

"That in case any Englishman, or other person subject to that nation, or navigating under its flag, should happen to die in our sacred dominions, our fiscal and other officers shall not, upon pretence of its not being known to whom the property belongs, interpose any opposition or violence, by taking or seizing the effects that may be found at his death, but they shall be delivered up to such Englishman, whoever he may be, to whom the deceased may have left them by his will; and should he have died intestate, then the property shall be delivered up to the English consul, or his representative who may be then present; and in case there be no consul, or consular representative, they shall be registered by the judge, in order to his delivering up the whole thereof, whenever any ship shall be sent by the ambassador to receive the same."

Conformably to these capitulations, and the by-laws of the Levant Company, Nos. 39, 40, and 41., the consuls were authorised to administer justice in all cases of contention amongst British subjects within the Turkish dominions; and they were further authorised to send to England, in safe custody, any British subject resident in Turkey, who should decline their jurisdiction, or appeal from them to the courts of the Grand Signior, or of any other potentate. And the act 6 Geo. 4. c. 33. § 4., for the abolition of the Levant Company, expressly provides for the continuance to the consuls appointed by his Majesty, of the same rights and duties of jurisdiction over British subjects in Turkey, that were enjoyed by the consuls appointed by the Company.

At present, therefore, consuls in Turkey enjoy extensive judicial powers; but owing to the freedom of Turkish commerce, and the simplicity of the regulations under which it is carried on, their other functions, with the exception of furnishing statistical details, none

* The treatise of Mr. Urquhart, entitled *Turkey and its Resources*, to which we are principally indebted for these details, is a work of distinguished talent, discovering throughout an intimate acquaintance with the subjects treated of. At the same time we cannot help differing wholly from Mr. Urquhart in his views as to direct and indirect taxation. We believe that no inconsiderable part of the poverty and degradation of Turkey is to be ascribed to the prevalence of the former, which has every where, and at all periods, been a fruitful source of oppression and misery. The most superficial reader of this work will see that we are no friends to excessive customs duties; but it is to their abuse, and not to the duties themselves, that we object. The duties we impose on brandy, for example, have been carried to such a height as to defeat their object, and to be productive of an immense amount of smuggling and demoralisation. And yet there can be no more proper subject of taxation; nor, provided the duties were reduced to 8*s.* or 10*s.* a gallon, is it possible to imagine any less unexceptionable tax. The defects inherent in our system of customs duties might easily be removed, not only without any diminution, but with a large accession, of revenue; but though it were otherwise, we are satisfied that the imposition of direct taxes on property or income would occasion more injury in the course of 4 or 5 years, than the present customs duties, with all their defects, would occasion in half a century.

of which they have hitherto communicated, are extremely unimportant.* Mr. Urquhart, whose opinion as to all that respects Turkey is deservedly of very great weight, seems to think that the judicial powers enjoyed by the European consuls in that country, have been productive of much mischief. Still, however, we doubt whether they could be entirely dispensed with in a country so peculiarly situated. But there can be no doubt that it is highly necessary that the greatest care should be taken in the selection of the individuals to whom such powers are intrusted.

Other states have occasionally given to consuls similar powers to those conceded to them in Turkey. Thus, in the treaty between Sweden and the United States of America, ratified on the 24th of July, 1818, it is stipulated that the consuls appointed by either government to reside within the dominions of the other, or their substitutes, "shall, as such, have the right of acting as judges or arbiters in all cases of differences which may arise between the captains and crews of the vessels of the nation whose affairs are intrusted to their care. The respective governments shall have no right to interfere in these sort of affairs, except in the case of the conduct of the crews disturbing public order and tranquillity in the country in which the vessel may happen to be, or in which the consul of the place may be obliged to call for the intervention and support of the executive power, in order to cause his decision to be respected; it being, however, well understood, that this sort of judgment or arbitration cannot deprive the contending parties of their rights of appealing on their return to the judicial authorities of their country."

Duties of Consuls. — The duties of a consul, even in the confined sense in which they are commonly understood, are important and multifarious. It is his business to be always on the spot, to watch over the commercial interests of the subjects of the state whose servant he is; to be ready to assist them with advice on all doubtful occasions; to see that the conditions in commercial treaties are properly observed; that those he is appointed to protect are subjected to no unnecessary or unjustifiable demands in conducting their business; to represent their grievances to the authorities at the place where they reside, or to the ambassador of the sovereign appointing him at the court on which the consulship depends, or to the government at home; in a word, to exert himself to render the condition of the subjects of the country employing him, within the limits of his consulship, as comfortable, and their transactions as advantageous and secure, as possible.

The following more detailed exposition of the *general* duties of a British consul, is taken from Mr. Chitty's work on *Commercial Law*: —

"A British consul, in order to be properly qualified for his employment, should take care to make himself master of the language used by the court and the magistracy of the country where he resides, so as to converse with ease upon subjects relating to his duties. If the common people of the port use another, he must acquire that also, that he may be able to settle little differences without troubling the magistracy of the place for the interposition of their authority; such as accidents happening in the harbour, by the ships of one nation running foul of and doing damage to each other.

"He is to make himself acquainted, if he be not already, with the law of nations and treaties, with the tariff or specification of duties on articles imported or exported, and with all the municipal ordinances and laws.

"He must take especial notice of all prohibitions to prevent the export or import of any articles, as well on the part of the state wherein he resides, as of the government employing him; so that he may admonish all British subjects against carrying on an illicit commerce, to the detriment of the revenues, and in violation of the laws of either. And it is his duty to attend diligently to this part of his office, in order to prevent smuggling, and consequent hazard of confiscation or detention of ships, and imprisonment of the masters and mariners. — (*Beawes, Lex Merc.* vol. ii. p. 42.)

"It is also his duty to protect from insult or imposition British subjects of every description within his jurisdiction. If redress for injury suffered is not obtained, he is to carry his complaint by memorial to the British minister residing at the court on which the consulship depends. If there be none, he is to address himself directly to the court; and if, in an important case, his complaint be not answered, he is to transmit the memorial to his Majesty's secretary of state. — (*Beawes, Warden, &c.*)

"When insult or outrage is offered by a British subject to a native of the place, and the magistrate thereof complains to the consul, he should summon, and in case of disobedience may by armed force bring before him the offender, and order him to give immediate satisfaction; and if he refuse, he resigns him to the civil jurisdiction of the magistrate, or to the military law of the garrison; nevertheless *always acting as counsellor or advocate at his trial,* when there is question of life or property.

* No answer has hitherto (15th of October 1833) been received to the *Circular Queries* from any one of the Turkish consuls.

"But if a British subject be accused of an offence alleged to have been committed at sea, within the dominion or jurisdiction of his sovereign, it is then the duty of the consul to claim cognizance of the cause for his sovereign, and to require the release of the parties, if detained in prison by the magistracy of the place on any such accusation brought before them, and that all judicial proceedings against them do instantly cease; and he may demand the aid of the power of the country, civil and military, to enable him to secure and put the accused parties on board such British ship as he shall think fit, that they may be conveyed to Great Britain, to be tried by their proper judges. If, contrary to this requisition, the magistrates of the country persist in proceeding to try the offence, the consul should then draw up and transmit a memorial to the British minister at the court of that country; and if that court give an evasive answer, the consul should, if it be a sea offence, apply to the Board of Admiralty at London, stating the case; and upon their representation, the secretary for the proper department will lay the matter before the king, who will cause the ambassador of the foreign state, resident in England, to write to his court abroad, desiring that orders may immediately be given by that government, that all judicial proceedings against the prisoner be stayed, and that he be released. — (See *Case of Horseman and his Crew*, *Beawes*, vol. ii. p. 422.)

"It is the duty also of a British consul to relieve all distressed British mariners, to allow them *6d.* daily for their support, to send them home in the first British vessels that sail for England, and to keep a regular account of his disbursements, which he is to transmit yearly, or oftener if required, to the Navy Office, attested by two British merchants of the place: this is provided for by positive enactment — (1 *Geo.* 2. s. 2. c. 14. § 12.) He is also to give free passes to all poor British subjects wishing to return home, directed to the captains of the king's packet boats, or ships of war, requiring them to take them on board. — (See SEAMEN.)

"The consul is not to permit a British merchant ship to leave the port where he resides without his passport, which he is not to grant until the master and crew thereof have satisfied all just demands upon them; and for this purpose he ought to see the governor's pass of a garrisoned town, or the burgomaster's; unless the merchant or factor to whom the ship was consigned will make himself responsible. — (*Beawes, Lex Merc.* vol. ii. p. 423.)

"It is also his duty to claim and recover all wrecks, cables, and anchors, belonging to British ships, found at sea by fishermen or other persons, to pay the usual salvage, and to communicate a report thereof to the Navy Board.

"The consuls and vice-consuls of his Majesty are, by express enactment (46 Geo. 3. c. 98. § 9.), empowered to administer oaths in all cases respecting quarantine, in like manner as if they were magistrates of the several towns or places where they respectively reside. It is also laid down, that a consul is to attend, if requested, all arbitrations where property is concerned between masters of British ships and the freighters, being inhabitants of the place where he resides." — (*Chitty on Commercial Law*, vol. i. pp. 58—61., and the numerous authorities there quoted.)

Any individual, whether he be a subject of the state by which he is appointed, or of another, may be selected to fill the office of consul, provided he be approved and admitted by the government in whose territory he is to reside. In most instances, however, but not always, consuls are the subjects of the state appointing them.

Much, however, of the peculiar duties of a consul must always depend on the nature of the intercourse with the country to which he is sent, and of the instructions given him. British consuls are regularly supplied with copies of all acts relating to trade and navigation, quarantine, slave trade suppression, emigration, &c., and with the treaties between this and other countries, and must, of course, shape their conduct accordingly. They are strictly forbidden from corresponding with private parties on public matters. We subjoin an extract from the *General Instructions for British Consuls.*

"He will bear in mind that it is his principal duty to protect and promote the lawful trade and trading interests of Great Britain by every fair and proper means, taking care to conform to the laws and regulations in question; and whilst he is supporting the lawful trade of Great Britain, he will take special notice of all prohibitions with respect to the export or import of specified articles, as well on the part of the state in which he resides, as of the government of Great Britain, so that he may caution all British subjects against carrying on an illicit commerce to the detriment of the revenue, and in violation of the laws and regulations of either country; and he will not fail to give to this department immediate notice of any attempt to contravene those laws and regulations.

"The consul will give his best advice and assistance, when called upon, to his Majesty's trading subjects, quieting their differences, promoting peace, harmony, and good-will amongst them, and conciliating as much as possible the subjects of the two countries, upon all points of difference which may fall under his cognizance. In the event of any attempt being made to injure British subjects either in their persons or property, he will uphold their rightful interests, and the privileges secured to them by treaty, by due representation in the proper official quarter. He will, at the same time, be careful to conduct himself with mildness and moderation in all his transactions with the public authorities, and he will not upon any account urge claims, on behalf of his Majesty's subjects, to which they are not justly and fairly entitled. If redress cannot be obtained from the local administration, or if the matter of complaint be not within their jurisdiction, the consul will apply to his Majesty's consul-general, or to his Majesty's minister, if there be no consul-general in the country wherein he resides, in order that he may make a representation to the higher authorities, or take such other steps in the case as he may

think proper; and the consul will pay strict attention to the instructions which he may receive from the minister or consul-general."

Emoluments of Consuls. Prohibition of Trading, &c. — The emoluments of our consuls were, until these few years, principally derived from certain fees, depending on the tonnage, length of the voyages, &c. of the British ships entering and clearing out of the limits of their consulships. But this mode of remunerating them was materially changed by the act 6 Geo. 4. c. 87. The fees payable under this act — (see *post*) — are but inconsiderable; but the deficiency has been, partly at least, compensated by salaries allowed by government.

At present, British consuls are, in some instances, permitted to carry on trade, while in others they are interdicted from having any thing to do with it. The principle on which the distinction is made does not seem very obvious. We observe, for example, that the consul at Petersburgh, who must have a great deal to do, is allowed to trade; while the consul at Odessa, whose duties must be much lighter, is denied this privilege. There is the same distinction between the consuls at Venice and Trieste; the latter, whose duties must be the heavier of the two, being allowed to act as a merchant, while the other is not. If this distinction must be kept up, the preferable plan would seem to be to interdict all consuls resident at the great ports, and those resident at other ports principally in the character of political agents, from trading; and to permit it to others. The public duties of the former are either quite sufficient wholly to engross their attention, or they are of such a kind as would make it very inexpedient for those employed in them to be occupied in mercantile pursuits: in the case of the smaller class of ports, but little frequented by British ships, and where the consuls have no peculiar political functions to discharge, there is a less urgent necessity for prohibiting them from carrying on business on their own account. At the same time, however, we are clearly of opinion that it would in *all* cases be better not to allow consuls to engage, either directly or indirectly, in any sort of industrious undertaking. The main end and purpose of their institution is the facilitating of commerce with the nation in which they reside; and in furtherance of such object they ought, on all occasions, to communicate the fullest and earliest information in their power touching commercial matters, not only to the government that appoints them, but to such of its subjects as may apply for their advice and assistance. But, however advantageous publicity may be to others, it may in various ways be extremely hostile to the interests of the consul considered in his capacity of merchant; and, when his own advantage and his public duty are set in opposition, it requires little sagacity to discover which will have the ascendancy. Hence the fair presumption is, that a trading consul will rather endeavour to profit by the peculiar information his situation may enable him to obtain, than to communicate it to others. His interests as a merchant must frequently, also, even when such is not really the case, appear to be in opposition to those of the parties for whose behoof he is said to be appointed; and under such circumstances, his proceedings, however fair, will always be liable to the suspicion of partiality. It is material, also, to observe that mercantile consuls labour under peculiar disadvantages in the obtaining of information. If a consul, not engaged in business, make a proper application to a public functionary, or merchant, for information as to any subject with which they may be acquainted, he will, in most instances, learn all that they know. But it is obvious, on general principles, and we have been assured of the fact by some of the most intelligent officers of the class, that if a trading consul make the same application, the chances are 10 to 1 he will either learn nothing, or nothing that is not false or misleading. The inquiries of the former excite no jealousy, those of the latter invariably do. The former is known to be actuated only by a feeling of liberal curiosity, or by a wish properly to discharge his public duties; but, the latter being engaged in business, gets credit only for selfish and interested motives, and is believed to be seeking the information merely that he may turn it to his own account. A mercantile consul is, therefore, uniformly the object of the suspicions of all parties, both of his countrymen, and of the foreigners amongst whom he resides. Instead of being, as he ought to be, an independent public functionary, he necessarily gets entangled in the cabals and intrigues of those whose differences it is his province to conciliate. He is tempted, also, to engage in smuggling adventures, contrary to his duty, and highly injurious to the character of his nation. And though he should be proof against temptations of this sort, he is, like all other individuals, subject to misfortune and bankruptcy; and may, in this way, bring discredit and embarrassment on the government that appoints him. These reasons seem to be far more than sufficient to vindicate the policy of interdicting consuls from trading. But were it otherwise, it is enough to decide the question to state, that if they be made properly to perform the functions of their office, it will occupy every moment of their time. To the argument in favour of the existing system derived from economical considerations we do not attach the smallest weight. To attempt to save a few thousand pounds by allowing an important class of public functionaries to engage in avocations inconsistent with

their duty, and destructive of their utility, would be something the very reverse of economy.

Cost of the Establishment. Improvements made in it. — We had occasion, in the former edition of this work, to complain of the cost and inadequacy of our consular establishment. But its expense has since been very much, and, in some instances perhaps, too much, reduced; at the same time that measures have been taken for increasing the duties of the consuls, by making them furnish details as to the trade, manufactures, duties, prices, &c. of the districts in which their consulships are situated. Hitherto this important department of what ought to be the peculiar duty of a consul has been most strangely neglected; but if it be properly attended to, it will occupy a large portion of the consul's time, and will be a field for the display of superior talents. Some of the answers made by the consuls to the *Circular Queries* prepared by the author of this work, have been drawn up with great care and intelligence, and reflect much credit on their authors. There are a good many certainly of a very inferior description; but this is not to be wondered at — it being hardly possible for those who have not given a good deal of their time to such subjects, to make a proper reply to queries relating to them. And if the system is to be perfected to the degree of which it is susceptible, the salaries allowed to the consuls ought to be such as to afford a sufficient remuneration for the services of gentlemen of character, familiar with the principles of public law, commerce, and statistics; and such only ought to be nominated to consular situations. We subjoin that part of the *General Instructions for the Consuls* that has reference to statistical inquiries.

"The consul will forward to the secretary of state, in duplicate, so soon as the information he can collect will enable him so to do, but at any rate within a period of 6 months from the date of his arrival at his residence, a general Report on the trade of the place and district, specifying the commodities, as well of the export as import trade, and the countries which supply the latter, together with the increase or decline in late years, and the probable increase or decline to be expected, and the causes in both cases. He will state the general regulations with respect to trade at the place where he is resident, and their effects. He will give the average market prices within the year of the several articles of export and import; he will particularise what articles, if any, are absolutely prohibited to be imported into the country wherein he resides; what articles are prohibited to be imported from any other places than from the place of their growth or production; whether there be any privileges of importation, and what those privileges are, in favour of ships that are of the built of, or belonging to, the country wherein he resides; whether there be any difference in the duty on goods when imported into that country in a foreign ship, and if so, whether it be general, or applicable only to particular articles; what are the rates of duty payable on goods imported into the said country; whether there be any tonnage duty or other port dues, and what, payable on shipping entering at, or clearing from, the ports of that country; whether there be any (and, if so, what) ports in that country wherein goods may be warehoused on importation, and afterwards exported with or without payment of any duties, and under what regulations."

He is also to transmit an annual statement of the trade with the principal ports of his consulships; and quarterly returns of the prices of corn, &c. This is a good beginning, and, if it be properly followed up, may lead to very advantageous results.

The following are the provisions of the act 6 Geo. 4. c. 87. with respect to the salaries and charges of consuls: —

Salaries to Consuls. — "Whereas the provision which hath hitherto been made for the maintenance and support of the consuls general and consuls appointed by his Majesty to reside within the dominions of sovereigns and foreign states in amity with his Majesty, is inadequate to the maintenance and support of such consuls general and consuls, and it is expedient to make further and due provisions for that purpose;" it is therefore enacted, that it shall be lawful for his Majesty, by any orders to be issued by the advice of his privy council, to grant to all or any of the consuls general or consuls appointed by his Majesty to reside within any of the dominions of any sovereign or foreign state or power in amity with his Majesty, such reasonable salaries as to his Majesty shall seem meet, and by such advice from time to time to alter, increase, or diminish any such salaries or salary as occasion may require. — (6 *Geo.* 4. c. 87. § 1.)

Terms on which Salaries shall be granted. Leave of Absence. — Such salaries shall be issued and paid to such consuls general and consuls without fee or deduction; provided that all such salaries be granted during his Majesty's pleasure, and not otherwise, and be held and enjoyed by such consuls general and consuls, so long only as they shall be actually resident at the places at which they may be so appointed to reside, and discharging the duties of such their offices: provided nevertheless, that in case his Majesty shall, by any order to be for that purpose issued through one of his principal secretaries of state, grant to any such consul general or consul leave of absence from the place to which he may be so appointed, such consul general or consul shall be entitled to receive the whole, or such part as to his Majesty shall seem meet, of the salary accruing during such period of absence. — § 2.

Salaries in lieu of Fees formerly paid. Consuls not to take other than the Fees hereinafter mentioned. — The salaries so to be granted shall be taken by the consuls general and consuls as a compensation for all salaries heretofore granted, and all fees of office and gratuities heretofore taken by them from the masters or commanders of British vessels, or from any other person, for any duties or services by such consuls general or consuls done or performed for any such persons; and no such consuls general or consuls shall, from the 1st of January, 1826, be entitled, on account of any thing by him done in the execution of such his office, or for any service by him rendered to any masters or commanders of British vessels, or to any other person in the execution of such his office, to ask or take any fees, recompence, gratuity, compensation, or reward, or any sum of money, save as herein-after is excepted. — § 3.

Certain Fees still allowed to be taken. — It shall be lawful for all consuls general and consuls appointed by his Majesty, and resident within the dominions of any sovereign, or any foreign state or power in amity with his Majesty, to accept the several fees particularly mentioned in the tables to this present act annexed, marked with the letters A. and B., for the several things and official acts and deeds particularly mentioned in the said schedules; and it shall be lawful for his Majesty, by any orders to be by him made, by the advice of his privy council, from time to time, as occasion may require, to diminish, or wholly to abolish, all or any of the fees aforesaid, and to establish and authorise the payment of any greater or smaller or new or additional fees for the several things mentioned in the said schedules, or for any other thing to be by any such consul general or consul done in the execution of such his office. — § 4.

Penalty on Consuls demanding more Fees than specified in the Schedule. — In case any consul general or consul appointed by his Majesty as aforesaid shall, by himself or deputy, or by any person authorised thereto in his behalf, ask or accept for any thing by him done in the execution of such his office, or for any service, or duty by him rendered or performed in such his office, for any person whomsoever, any other or greater fee or remuneration than is specified in the schedule, or than shall be sanctioned and specified in or by any such order in council, the person so offending shall forfeit and become liable to pay to his Majesty any sum of sterling British money, not exceeding the amount of the salary of such person for 1 year, nor less than the 12th part of such annual salary, at the discretion of the court in which such penalty may be recovered; and shall moreover upon a second conviction for any such offence forfeit such his office, and for ever after become incapable of serving his Majesty in the same or the like capacity. — § 5.

Table of Fees to be exhibited at Custom-houses. — A printed copy of the tables of fees allowed by this act, or which may be sanctioned or allowed by any order to be made in pursuance of this act by his Majesty in council, shall be exhibited in a conspicuous manner, for the inspection of all persons, in the Custom-house in the port of London, and in all other Custom-houses in the several ports and harbours of the United Kingdom of Great Britain and Ireland; and printed copies thereof shall, by the collector or other chief officer of customs in all such ports and harbours, be delivered gratuitously, and without fee or reward, to every master of any vessel clearing out of any such port or harbour, and demanding a copy thereof. — § 6.

Table of Fees to be exhibited at Consuls' Offices. — A copy of the schedule or table of fees to this present act annexed, or which may be established and authorised by any such order in council, shall be hung up and exhibited in a conspicuous place in the public offices of all consuls general or consuls appointed by his Majesty, in the foreign places to which they may be so appointed, for the inspection of all persons interested therein; and any consul general or consul omitting or neglecting to exhibit any such copy of the schedules in such his public office, or refusing to permit the same to be inspected by any person interested therein, shall for every such offence forfeit and pay a sum of British sterling money not exceeding one half the amount of the salary of such person for 1 year, nor less than the 12th part of such annual salary, at the discretion of the court in which such penalty may be recovered. — § 7.

Superannuation. — "And whereas it is expedient that his Majesty should be enabled to grant to the said consuls general and consuls, appointed as aforesaid, allowances in the nature of superannuation or reward for meritorious public services;" it is further enacted, that all the regulations contained in 50 Geo. 3. c. 117., 3 Geo 4. c. 113., 5 Geo. 4. c. 104., respecting superannuation allowances, are hereby extended to the said consuls general and consuls, so far as such regulations can be applied to the cases of such several persons respectively, as fully to all intents and purposes as if the same were repeated and re-enacted in this present act. — § 8.

Allowances during War. — If it shall at any time happen that by reason of any war which may hereafter arise between his Majesty and any sovereign, or foreign state or power, within the dominions of whom any such consul general or consul shall be appointed to reside, he shall be prevented from residing, and shall in fact cease to reside, at the place to which he may be so appointed, it shall be lawful for his Majesty, by any order to be issued by the advice of his privy council, to grant to any such consul general or consul, who may have served his Majesty in that capacity for any period not less than 3 years, nor more than 10 years next preceding the commencement of any such war, a special allowance not exceeding the proportion of their respective salaries to which such consuls general and consuls would be entitled under the provisions of the said act of 3 Geo. 4., in case the period of their respective service had exceeded 10 years and had not exceeded 15 years: provided that in case any such consul general or consul shall have served in such his office for the space of 10 years and more, it shall be lawful for his Majesty, by any such order in council as aforesaid, to grant to him such a proportion of his salary, which, by the said act is authorised to be granted, as a superannuation allowance, according to the several periods of service exceeding 10 years, in the said act. — § 9.

Commencement. — This act shall take effect from the 1st of January, 1826, except where any other commencement is particularly directed. — § 22.

Tables of Fees allowed to be taken by Consuls General and Consuls, by the preceding Act of 6 Geo. 4. c. 87.

Table A. — Certificate of due landing of goods exported from the United Kingdom	2 dollars.
Signature of ship's manifest	2 do.
Certificate of origin, when required	2 do.
Bill of health, when required	2 do.
Signature of muster roll, when required	2 do.
Attestation of a signature, when required	1 do.
Administering an oath, when required	½ do.
Seal of office, and signature of any other document not specified herein, when required	1 do.
Table B. — Bottomry or arbitration bond	2 do.
Noting a protest	1 do.
Order of survey	2 do.
Extending a protest or survey	1 do.
Registrations	1 do.
Visa of passport	½ do.
Valuation of goods	1 per cent.

Attending sales, ½ per cent. where there has been a charge for valuing; otherwise, 1 per cent.
Attendance out of consular office at a shipwreck, 5 dollars per diem for his personal expenses, over and above his travelling expenses.

Ditto on opening a will	5 dollars.
Management of property of British subjects dying intestate	2½ per cent.

The dollars mentioned in the preceding tables are in all cases to be paid by the delivery of dollars, each of which is to be of the value of 4*s*. 6*d*. sterling, and no more, according to the rate of exchange prevailing at the place where such payment is made.

CONTRABAND, in commerce, a commodity prohibited to be exported or imported, bought or sold.

Contraband is also a term applied to designate that class of commodities which neutrals are not allowed to carry during war to a belligerent power.

It is a recognised general principle of the law of nations, that ships may sail to and trade with all kingdoms, countries, and states in peace with the princes or authorities whose flags they bear; and that they are not to be molested by the ships of any other power at war with the country with which they are trading, unless they engage in the conveyance of *contraband* goods. But great difficulty has arisen in deciding as to the goods comprised under this term. The reason of the limitation suggests, however, the

species of articles to which it principally applies. It is indispensable that those who profess to act upon a principle of neutrality should carefully abstain from doing any thing that may discover a bias in favour of either party. But a nation who should furnish one of the belligerents with supplies of warlike stores, or with supplies of any article, without which that belligerent might not be able to carry on the contest, would obviously forfeit her neutral character; and the other belligerent would be warranted in preventing such succours from being sent, and in confiscating them as lawful prize. All the best writers on international law admit this principle; which, besides being enforced during every contest, has been sanctioned by repeated treaties. In order to obviate all disputes as to what commodities should be deemed contraband, they have sometimes been specified in treaties or conventions. — (See the references in *Lampredi del Commercio de' Popoli Neutrali*, § 9.) But this classification is not always respected during hostilities; and it is sufficiently evident that an article which might not be contraband at one time, or under certain circumstances, may become contraband at another time, or under different circumstances. It is admitted on all hands, even by M. Hubner, the great advocate for the freedom of neutral commerce — (*De la Saisie des Bâtimens Neutres*, tom. i. p. 193.) — that every thing that may be made *directly available* for hostile purposes is contraband, as arms, ammunition, horses, timber for ship-building, and all sorts of naval stores. The greatest difficulty has occurred in deciding as to provisions, which are sometimes held to be contraband, and sometimes not. Lord Stowell has shown that the *character of the port* to which the provisions are destined, is the principal circumstance to be attended to in deciding whether they are to be looked upon as contraband. A cargo of provisions intended for an enemy's port, in which it was known that a warlike armament was in preparation, would be liable to arrest and confiscation; while, if the same cargo were intended for a port where none but merchantmen were fitted out, the most that could be done would be to detain it, paying the neutral the same price for it he would have got from the enemy.

By the ancient law of Europe, a ship conveying any contraband article was liable to confiscation as well as the article. But in the modern practice of the courts of admiralty of this and other countries, a milder rule has been adopted, and the carriage of contraband articles is attended only with the loss of freight and expenses, unless when the ship belongs to the owner of the contraband cargo, or when the simple misconduct of conveying such a cargo has been connected with other malignant and aggravating circumstances. Of these a false destination and false papers are justly held to be the worst. — (*5 Rob. Adm. Rep.* 275.)

The right of visitation and search is a right inherent in all belligerents; for it would be absurd to allege that they had a right to prevent the conveyance of contraband goods to an enemy, and to deny them the use of the only means by which they can give effect to such right. — (*Vattel*, book iii. c. 7. § 114.) The object of the search is twofold: *first*, to ascertain whether the ship is neutral or an enemy, for the circumstance of its hoisting a neutral flag affords no security that it is really such; and, *secondly*, to ascertain whether it has contraband articles, or enemies' property, on board. All neutral ships that would navigate securely during war must, consequently, be provided with passports from their government, and with all the papers or documents necessary to prove the property of the ship and cargo — (see *Ship's Papers*); and they must carefully avoid taking any contraband articles or belligerent property on board. And hence, as Lampredi has observed, a merchant ship which seeks to avoid a search by crowding sail, or by open force, may justly be captured and subjected to confiscation. — (§ 12.)

It has, indeed, been often contended that *free ships make free goods* (*que le pavillon couvre la marchandise*), and that a belligerent is not warranted in seizing the property of an enemy in a neutral ship, unless it be contraband. The discussion of this important question would lead us into details which do not properly come within the scope of this work. We may, however, shortly observe, that no such privilege could be conceded to neutrals, without taking from belligerents the right, inseparable from a state of war, of seizing an enemy's property if found in places where hostilities may be lawfully carried on, as on the high seas. In fact, were the principle in question admitted, the commerce of a belligerent power with its colonies, or other countries beyond sea, might be prosecuted in neutral ships, with as much security during war as in peace; so that neutrals would, in this way, be authorised to render a belligerent more important assistance than, perhaps, they could have done had they supplied him with troops and ammunition! But it is surely unnecessary to say, that to act in this way is a proceeding altogether at variance with the idea of neutrality. Neutrals are bound to conduct themselves in the *spirit of impartiality*; and must not afford such aid or assistance to one party, as may the better enable him to make head against the other. It is their duty "*non interponere se bello, non hoste imminente hostem eripere.*" And yet it is manifest that the lending of neutral bottoms to carry on a belligerent's trade is in direct contradiction to this rule. The ships or cruisers of a particular power may have swept those of its enemy from the

sea, and reduced him to a state of great difficulty, by putting a stop to his commerce with foreigners, or with his own colonies; but of what consequence would this be, if neutrals might step in to rescue him from such difficulties, by carrying on that intercourse for him which he can no longer carry on for himself? It is natural enough that such a privilege should be coveted by neutrals: but, however advantageous to them, it is wholly subversive of the universally admitted rights of belligerent powers, as well as of the principles of neutrality; and cannot, therefore, be truly said to be bottomed on any sound principle.

In the war of 1756, the rule was laid down by Great Britain, that neutrals are not to be allowed to carry on a trade during war, that they were excluded from during peace; so that, supposing a nation at war with Great Britain had, while at peace, prohibited foreigners from engaging in her colonial or coasting trade, we should not have permitted neutrals to engage in it during war. This rule has been much complained of; but the principle on which it is founded seems a sound one, and it may in most cases be safely adopted. The claims of neutrals cannot surely be carried further than that they should be allowed to carry on their trade during war, as they had been *accustomed* to carry it on during peace, except with places under blockade; but it is quite a different thing when they claim to be allowed to employ themselves, during war, in a trade in which they had not previously any right to engage. To grant them this, would not be to preserve to them their former rights, but to give them new ones which may be fairly withheld. Supposing, however, that either of the belligerent powers has *force sufficient to prevent any intercourse between the other and its colonies, or any intercourse between different ports of the other*, she might, in the exercise of the legitimate rights of a belligerent, exclude neutrals from such trade, even though it had formerly been open to them; because otherwise she would be deprived of the advantage of her superior force; and the neutrals would, in fact, when employed in this way, be acting as the most efficient allies of her enemy.

For a full discussion of this important and difficult question, and of the various distinctions to which it gives rise, see the work of Hubner (*De la Saisie des Bâtimens Neutres*, 2 tomes, 12mo. 1757), in which the different arguments in favour of the principle that "the flag covers the cargo" are stated with great perspicuity and talent. The opposite principle has been advocated by Lampredi, in his very able treatise *Del Commercio de' Popoli Neutrali*, § 10.: by Lord Liverpool, in his *Discourse on the Conduct of Great Britain in respect to Neutrals*, written in 1757; and, above all, by Lord Stowell, in his justly celebrated decisions in the Admiralty Court. Martens inclines to Hubner's opinion. — (See *Précis du Droit des Gens*, liv. 8. c. 7.)

CONVOY, in navigation, the term applied to designate a ship or ships of war, appointed by government, or by the commander in chief on a particular station, to escort or protect the merchant ships proceeding to certain ports. Convoys are mostly appointed during war; but they are sometimes, also, appointed during peace, for the security of ships navigating seas infested with pirates.

Individuals have not always been left to themselves to judge as to the expediency of sailing with or without convoy. The governments of most maritime states have thought proper, when they were engaged in hostilities, to oblige their subjects to place themselves under an escort of this sort, that the enemy might not be enriched by their capture. Acts to this effect were passed in this country during the American war and the late French war. The last of these acts (43 Geo. 3. c. 57.) enacted, that it should not be lawful for any ship belonging to any of his Majesty's subjects (except as therein provided) to depart from any port or place whatever, unless under such convoy as should be appointed for that purpose. The master was required to use his utmost endeavours to continue with the convoy during the whole voyage, or such part thereof as it should be directed to accompany his ship; and not to separate therefrom without leave of the commander, under very heavy pecuniary penalties. And in case of any ship departing without convoy contrary to the act, or wilfully separating therefrom, all insurances on the ship, cargo, or freight, belonging to the master, or to any other person directing or privy to such departure or separation, were rendered null and void. The customs officers were directed not to allow any ship that ought to sail with convoy to clear out from any place in the United Kingdom for foreign parts, without requiring from the master, bond with one surety, with condition that the ship should not depart without convoy, nor afterwards desert or wilfully separate from it. The regulations of this act did not extend to ships not requiring to be registered, nor to those licensed to sail without convoy, nor to those engaged in the coasting trade, nor to those belonging to the East India Company, &c.

It is very common, during periods of war, to make *sailing or departing with convoy* a condition in policies of insurance. This, like other warranties in a policy, must be ***strictly*** performed. And if a ship warranted to sail with convoy, sail without it, the

policy becomes void, whether this be imputable to any negligence on the part of the insured, or the refusal of government to appoint a convoy.

There are five things essential to sailing with convoy: viz. *first*, it must be with a regular convoy under an officer appointed by government; *secondly*, it must be from the place of rendezvous appointed by government; *thirdly*, it must be a convoy for the voyage; *fourthly*, the master of the ship must have sailing instructions from the commanding officer of the convoy; and *fifthly*, the ship must depart and continue with the convoy till the end of the voyage, unless separated by necessity.

With respect to the third of these conditions we may observe, that a warranty to sail with convoy generally means a convoy *for the voyage*; and it is not necessary to add the words "for the voyage" to make it so. Neither will the adding of these words in some instances, make the omission of them, in any case, the ground of a different construction. A warranty to sail with convoy does not, however, uniformly mean a convoy that is to accompany the ship insured the entire way from the port of departure to her port of destination; but such convoy as government may think fit to appoint as a sufficient protection for ships going the voyage insured, whether it be for the whole or only a part of the voyage.

Sailing instructions, referred to in the fourth condition, are written or printed directions delivered by the commanding officer of the convoy to the several masters of the ships under his care, that they may understand and answer signals, and know the place of rendezvous appointed for the fleet in case of dispersion by storm, or by an enemy, &c. These sailing instructions are so very indispensable, that no vessel can have the full protection and benefit of convoy without them: hence, when, through the negligence of the master, they are not obtained, the ship is not said to have sailed with convoy; and a warranty in a policy of insurance to that effect is held not to be complied with. If, however, the master do all in his power to obtain sailing instructions, but is prevented from obtaining them by any insuperable obstacle, as the badness of the weather; or if they be refused by the commander of the convoy; the warranty in the policy is held to be complied with.

For further information as to convoy, see *Abbott on the Law of Shipping*, part iii. c. 3.; *Marshall on Insurance*, book i. c. 9. § 5., and the *Act* 43 *Geo.* 3. c. 57, *&c.*

COPAIVA. See Balsam.

COPAL, improperly called gum copal, is a valuable and singular kind of resin, that naturally exudes from different large trees, and is imported partly from America, and partly from the East Indies. The best copal is hard and brittle, in rounded lumps of a moderate size, easily reducible to a fine powder, of a light lemon yellow colour, beautifully transparent, but often, like amber, containing parts of insects and other small extraneous bodies in its substance. Its specific gravity varies from 1·045 to 1·139. It has neither the solubility in water common to gums, nor the solubility in alcohol common to resins, at least in any considerable degree. It may be dissolved by digestion in drying linseed oil, and other volatile menstrua. This solution forms a beautiful transparent varnish, which, when properly applied, and slowly dried, is very hard and very durable. Copal varnish was first discovered in France, and was long known by the name of *vernis martin*. It is applied to snuff-boxes, tea-boards, and other utensils. It preserves and gives lustre to paintings; and contributes to restore the decayed colours of old pictures, by filling up cracks, and rendering the surface capable of reflecting light more uniformly. Copal is liable to be confounded with *gum animé*, when the latter is very clear and good. But it is of importance to distinguish between them, as the animé, though valuable as a varnish, is much less so than the finest copal; the varnish with the former being darker coloured, and not so hard. Besides the external appearance of each, which is pretty distinct to a practised eye, the solubility in alcohol furnishes a useful test, — the animé being readily soluble in this fluid, while the copal is hardly affected by it; copal is also brittle between the teeth, whereas animé softens in the mouth. — (*Rees's Cyclopædia; Ure's Dictionary, &c.*)

The imports of gum animé and copal are not distinguished in the custom-house accounts. The entries of both for home consumption amounted, at an average of the 3 years ending with 1831, to 123,7⅔ lbs. a year. The duty has been judiciously reduced from 56*s.* to 6*s.* a cwt. Copal fetches in the London market from 6*d.* to 1*s.* 7*d.* per lb., duty paid.

COPENHAGEN, the capital of Denmark, situated on the east coast of the island of Zealand, in the channel of the Baltic called the Sound; in lat. 55° 41′ N., lon. 12° 35′ 46″ E. Population about 105,000. It is a well-built, handsome city. In going into Copenhagen, the course is between the buoy on the Stubben Bank to the left, and the buoy on the Middle-grounds, and those in advance of the three Crown batteries on the right, W.S.W. by compass. From the three crowns to the roads the course is S.S.W. The water in the channel is from 6 to 4 fathoms deep; but it is narrow, and the navigation rather difficult. There is no obligation to take a pilot on board; but if a vessel wish for one, she may heave to abreast of the battery, when he will come to her.

Vessels not intending to come into harbour bring up in the roads, at from ¼ to ½ a mile from shore, in about 4 fathoms, the town bearing S.S.W. In the harbour, within the boom, the water is from 17 to 18 feet deep. Vessels in harbour load and unload alongside the quay. The anchorage in the roads is good and safe.

Money. — Accounts are kept in rixdollars of 6 marcs, or 96 skillings; the rixdollar being formerly worth about 4*s.* 1*d.* sterling. But in 1813, a new monetary system was adopted, according to which the new or *Rigsbank* dollar is worth 2*s.* 3½*d.*, being half the value of the old specie dollar, and ⅜ of the old current dollar. But the money generally used in commercial transactions is bank money, which is commonly at a heavy discount. The *par* of exchange, estimated by the Rigsbank dollar, would be 8 dollars 7·6 skillings per pound sterling.

Weights and Measures. — The commercial weights are, 16 pounds = 1 lispound; 20 lispound = 1 shippeund; 100 lb. = 110¼ lbs. avoirdupois = 134 lbs. Troy = 101 lbs. of Amsterdam = 103 lbs. of Hamburgh.

The liquid measures are, 4 ankers = 1 ahm or ohm; 1⅓ ahm = 1 hogshead; 2 hogsheads = 1 pipe; 2 pipes = 1 quarter. The anker = 10 (very nearly) English wine gallons. A *fuder* of wine = 930 pots; and 100 pots = 25⅓ wine gallons.

The dry measures are, 4 viertels = 1 scheffel; 8 scheffels = 1 toende or ton; 12 tons = 1 last = 47½ Winchester bushels. The last of oil, butter, herrings, and other oily substances, should weigh 224 lbs. nett.

The measure of length is the Rhineland foot = 12⅓ inches very nearly. The Danish ell = 2 feet; 100 ells = 68⅔ English yards.

Trade of Copenhagen. — This is not very considerable, and has latterly declined. Anchors, pitch, and tar, are chiefly imported from Sweden and Norway; flax, hemp, masts, sail-cloth, and cordage, from Russia; West India produce from the Danish West India islands; tobacco from America; wines and brandy from France: coal, earthenware, and salt are the principal articles of direct import from England. Of coal, we sent to Denmark (principally to Copenhagen), in 1830, 100,127 tons, and of salt 1,272,487 bushels. Owing to the erroneous policy of the Danish government, which is attempting, at a great public loss, to raise and bolster up manufactures, the direct imports of woollens and cottons are quite inconsiderable. These articles are not, however, absolutely prohibited; but are admitted on condition of their being stamped, and put up to auction by the Custom-house, which, after retaining 30 per cent. of the gross produce of the sale, pays over the residue to the importer, who is generally the purchaser. This oppressive regulation reduces the legitimate importation of these articles to next to nothing; but the illicit importation is very considerable, principally by the Elbe and the Holstein frontier. The exports consist, for the most part, of the produce of the soil, as grain, rapeseed, butter and cheese, beef and pork, hides, horses and cattle, corn, brandy, bones, &c. In 1830, the imports of grain into this country from Denmark were as follows, viz. wheat 88,033 quarters, barley 75,532 do., oats 118,203 do., rye 1,151 do., peas and beans 5,182 do., the importation of rapeseed during the same year was 286,569 bushels. — (See Corn Laws.) We subjoin

An Account, extracted from the Returns published by the Danish Custom-house of the principal Articles of Agricultural Produce exported from Denmark in 1831.

Articles exported.	Quantities exported. Danish Weights and Measures.	Quantities exported. British Weights and Measures.	Real or declared Value in Rigsbank Dollars.	Value in Sterling. £	s.	d.
Wheat and wheat flour	113,696 ton.	54,952 qrs.				
Rye and rye flour	78,460 —	37,921 —				
Barley, flour and groats	584,384 —	282,408 —				
malt	19,092 —	9,228 —	3,964,772	446,036	17	0
Oats, meal and groats	351,340 —	169,815 —				
Buckwheat do.	6,988 —	3,377 —				
Peas	15,995 —	7,730 —				
Beans and tares	31,133 —	15,047 —				
Rapeseed	143,154 —	71,608 —	1,390,487	156,429	15	9
Butter	47,658 bar.	- -	2,382,900	268,076	5	0
Cheese	872,000 lbs.	8,590 cwt.	54,500	6,131	5	0
Brandy (corn)	2,319⅜ hhd.	115,775 galls.				
Pork, salted	1,449,787 lbs.	14,331 cwt.				
smoked	365,789 —	3,603 —				
Beef, salted	691,104 —	6,808 —				
smoked	15,773 —	156 —				
Hides and skins —						
calf, sheep, and lamb	1,112,582 lbs.	10,960 cwt.	2,885,316	324,598	1	0
ox, cow, and horse	1,744,007 —	16,169 —				
Wool, sheep	779,488 —	857,436 —				
Cattle —						
Horses	12,350 head	- -				
Oxen	23,013 —	- -				
Cows	8,461 —	- -				
Calves	5,056 —	- -				
		Rbd.	10,677,975	£1,201,272	3	9

We have no means of ascertaining the proportion shipped from Copenhagen, but it was very considerable.

Shipping. — In 1831, there entered the port of Copenhagen 1,505 ships; of which 309 were from Sweden, 305 from Prussia, 208 from Norway, 160 from Great Britain, 137 from Russia, 90 from Finland, 29 from

France, &c. The tonnage of these ships is not stated; but many were of very small burden. Subjoined is an

Account of the Danish Shipping employed in the Foreign and in the Carrying Trade of Denmark in the Year 1830.

Countries and Places.	No. of Ships.	Tonnage.	Nature of Cargoes exported from Denmark.	Whence arrived. From Dan. Ports.	Whence arrived. From For. Ports.	Nature of Cargoes imported into Denmark.	Destination. For Dan. Ports.	Destination. For For. Ports.
Russia - -	255	24,198	Ballast, fruit, bricks, and piece goods -	194	61	Hemp, flax, ashes, tallow, seeds, and timber	161	94
Prussia -	579	29,836	Ballast, herrings, train oil, and colonial produce - -	444	135	Linen, flax, wood, staves, and timber -	421	158
Mecklenburgh	114	2,547	Herrings, train oil, colonial produce, and provisions -	102	12	Ballast, corn and seeds, wool, and piece goods - -	101	13
Lubeck -	383	7,472	Corn, and provisions, piece goods, herrings, &c. - -	362	21	Piece goods, iron, deals and timber, salt, &c. - -	342	41
Sweden and Norway -	710	25,696	Corn and provisions, wool, piece goods, and colonial produce	592	118	Iron, tar, deals, timber, fish, herrings, train oil - -	559	151
Hamburgh and Bremen	555	31,154	Corn and seeds, butter, provisions, and piece goods -	160	395	Ballast, piece goods, tobacco, colonial produce - -	308	247
Netherlands -	269	15,159	Corn, flour and seeds, piece goods, &c. -	96	173	Ballast, piece goods, and colonial produce	92	177
Great Britain	837	46,422	Corn, seeds, oilcakes, bones, wool, hides, &c. - - -	587	250	Ballast, coals, salt, piece goods, and colonial produce -	635	202
France -	122	15,858	Corn and provisions, piece goods, fish, and hides - -	31	91	Wine, salt, piece goods and ballast -	37	85
Spain - -	76	8,451	Ballast, piece goods, fish, butter, &c. -	3	73	Oil and fruit, wine, and salt - -	30	46
Portugal -	67	9,500	Ballast, corn, piece goods, fish, flax, &c.	2	65	Wine, piece goods, salt, fruit, &c. -	15	52
Mediterranean	66	9,637	Fish, pitch, and tar, timber, train oil, piece goods -	13	53	Ballast, fruit, wine, and piece goods -	8	58
Brazil - -	11	2,416	Ballast, wheat, and piece goods -	—	11	Colonial produce -	2	9
	4044	225,354		2586	1458		2711	1333

This return does not, however, include vessels engaged in the fisheries, or in the coasting trade, the latter of which is very considerable.

About 200 Danish ships are engaged in the carrying trade of the Mediterranean. Latterly, however, the Swedes and Norwegians have obtained an ascendancy in this department.

Excluding vessels under 20 tons, there belonged, in 1830, to

	Ships.	Tonnage.
Denmark - -	1,563	65,375
Sleswick - -	1,022	33,926
Holstein - - -	1,106	27,683
Total - - -	3,696	124,984

Colonial Trade. — In the West Indies, the Danes possess the island of St. Croix, which, though small, is fertile, and well cultivated. All the ports of Denmark may send vessels thither, but the return cargoes must be discharged at places having sugar refineries. The principal part of the trade is in the hands of Copenhagen merchants. St. Croix produces about 25,000,000 lbs. of sugar, and 1,400,000 gallons of rum. In 1831, 23 ships, of the aggregate burden of 5,772 tons, arrived at Copenhagen from St. Croix. A good deal of the colonial produce brought into Denmark is again exported.

The trade to the settlement of Tranquebar and Serampore, in India, is in the hands of an exclusive company. Whether it be owing to the deadening influence of monopoly, or to the real superiority of the Americans, who supply the Continental markets with tea, &c. at a cheaper rate, only *one* ship a year has latterly sailed from Copenhagen for India! The trade to the Danish settlements on the African coast is, if possible, of still less importance.—(*N. B.* For an account of the trade on the Kiel Canal, see CANALS.)

Port Charges vary according as the vessel has come from this or the further side of Cape Finisterre, or from the Indian seas; as she is wholly, or only part loaded; and as she clears out with goods that have been *in transitu*, and are for the most part free of duty, or has on board a cargo of native produce subject to duty. On a ship of 300 tons belonging to a privileged nation from this side Cape Finisterre, unloading and loading mixed cargoes in Copenhagen, the different public charges, including Sound dues, brokerage, &c., would be about 67*l.* 10*s.*; and from the further side of Cape Finisterre, the charges would be about 99*l.* 10*s.* When a ship is not fully loaded, lastage money and light dues are only charged in proportion to the cargo on board. Lastage money is not charged on ships outward bound, laden with transit goods, as tar, pitch, iron, &c. But notwithstanding these deductions, it is obvious that port charges at Copenhagen are very heavy, and there can be no doubt that they are a material obstacle to the extension of trade.

Commission on purchases is generally 2 per cent., and on sales, 3 per cent., including 1 per cent. *del credere.*

Citizenship. — To enable a foreigner to trade as a merchant in Denmark, he must become a burgher, which costs about 100*l.*, and it will require about 60*l.* more to free him from the obligation of serving in the militia. The obstacles in the way of a foreigner establishing himself in Denmark as a manufacturer are much greater, on account of the exclusive privileges enjoyed by the guilds or corporations into which the principal crafts or trades are divided.

Credit. — Goods imported into Copenhagen are commonly sold on credit: 3 months is the term generally allowed on most sorts of goods, and in a few instances 6 months. The discount for ready money is 4 per cent. Bankruptcy is of rare occurrence.

Insurance. — Marine insurance is effected on liberal terms, by a company established in 1746. A good many risks are, however, insured at Amsterdam and Hamburgh.

Careening, Ships' Stores, &c. — Copenhagen has good building-yards, and is in all respects an eligible place for the repair of ships, and for supplying them with provisions. Subjoined is an

Account of the Average Prices of Ships' Provision at Copenhagen in 1831, in Imperial Weights and Measures, and Sterling Money.

	£	s.	d.		£	s.	d.	
Biscuits, ships', 1st quality						0	15	0 per cwt.
Ditto 2d ditto						0	12	0 ditto.
Butter, 1st quality	2	8	0	to	2	10	0	ditto.
Ditto, 2d ditto					2	4	0	ditto.
Cheese	0	13	5	to	0	17	0	ditto.
Peas	1	8	9	—	1	12	0	per Imp. qr.
Beef, salted	1	18	0	—	1	19	0	per 200 lbs.
Pork, ditto	2	16	0	—	2	18	0	ditto.
Bacon	0	0	3¼	—	0	0	3½	per lb.

Spirits. — Rum, 2*s.* to 2*s.* 6*d.* French Brandy, 2*s.* 4*d.* to 3*s.* per gallon.

Tares. — Statement of the Tares allowed by the Custom-house at Copenhagen, on the principal Articles of Importation.

Articles.	Description of Packages.	Tares.	Articles.	Description of Packages.	Tares.
Almonds	Linen bags	4 per ct.	Pepper	Bags of 150 lbs. and under	2 lbs.
Cassia lignea	All sorts of packages	16 —		exceeding 150 lbs.	4 —
Cinnamon	do.	do.		Linen bags	do.
Cocoa	In linen bags	4 per ct.	Pimento	do.	do.
Coffee	Casks of 400 lbs. and under	16 —	Raisins	½ barrel	18 lbs.
	exceeding 400 lbs.	12 —		¼ do.	12 —
	Matted bags of 150 lbs. & under	2 lbs.		Casks exceeding ½ barrel	10 per ct.
	exceeding 150 lbs.	4 —		do. under ½ barrel	12 —
	East India bags, double	do.	Rice	Casks	10 —
	do. single	2 lbs.		Barrels	24 lbs.
Colours, painters'	Unmixed and not enumerated	10 per ct.		½ do.	18 —
	do. and enumerated, and not being ochre, white lead, or brown red	12 —		¼ do.	12 —
	Prepared	do.		⅛ do.	8 —
Cotton	Bags, or bales	4 lbs.		Bags of 100 lbs. and not exceeding 150 lbs.	4 —
Currants	All sorts of packages	16 per ct.		150 lbs. and under	2 —
Delft ware	do.	12 —	Saltpetre	All kinds of packages	10 per ct.
Figs	½ casks	12 lbs.	Soap, white	do.	14 —
	¼ do.	18 —	Sugar, raw	In casks	17 —
	Casks	10 per ct.		Brazil boxes	do.
	Baskets, or frails	8 —		Havannah do.	12 —
Glass ware	Boxes	32 —	refined	Casks (transit)	do.
	Bottles in crates and in straw	20 —	Tobacco	do.	do.
	do. in boxes and in sawdust	40 —		Baskets packed in mats	3 —
Hardware	In casks and boxes	12 —	Turpentine	Casks (thick)	17 —
	Packed in mats, per piece	4 lbs.	oil	do.	20 —
Hops	Bags and pockets	4 per ct.		do. cased	34 —
Indigo	All sorts of packages	20 —	Vitriol	Glass bottles or flasks in baskets	20 —
Mustard	Glasses, in boxes and casks	12 —		do. in boxes	
Ochre	All sorts of packages	10 —		do. packed in sawdust	40 —
Olive oil	In single and double casks	18 —		Stone bottles	30 —
	Bottled, in baskets and straw	20 —	White lead	All kinds of packages	10 —
	do. in boxes and sawdust	40 —			

General Remarks. — On the whole, the commerce of Denmark may be pronounced to be in a stationary state. But from her advantageous situation between the Baltic and North Sea, and the industrious, persevering character of the inhabitants, there can be little doubt that it may be materially extended. It is needless, however, to expect any considerable improvement till the present system of domestic policy be, in many respects, altogether changed. The Danish government has long been exerting itself to bolster up a manufacturing interest, by laying oppressive duties on most species of manufactured articles. Even under the most favourable circumstances, such conduct, though it may benefit a few individuals, is sure to be productive of great national loss. But in the case of Denmark, the circumstances are such as to render the restrictive system peculiarly injurious. All, or nearly all, the branches of industry carried on in the kingdom are subjected to the government of guilds or corporations; no person can engage in any line of business until he has been authorised by its peculiar guild; and as the sanction of this body is rarely obtained without a considerable sacrifice, the real effect of the system is to fetter competition and improvement, and to perpetuate monopoly and routine. Even the Danish writers acknowledge that such is the influence of the present regulations. "*Nos ouvriers,*" say they, "*sont chers, travaillent lentement, et souvent mal et sans goût; leur education est negligée. On ne les forme point à penser, et l'apprentif suit machinalement ce qu'il voit faire au maître.*" — (*Catteau, Tableau des Etats Danois,* tome ii. p. 260.) It would be idle to imagine that a country which has to import coal, should, however favourably situated in other respects, be able to manufacture cottons, woollens, &c. at so cheap a rate as they may be imported from others enjoying greater natural facilities for their production. But when to the physical obstacles in the way of manufactures, we add others, not less formidable, of a political nature, the attempt to force them into existence by dint of customs duties and regulations becomes absolutely ludicrous.

The port charges and transit duties are also exceedingly heavy; and the Sound duties, being charged on native as well as foreign ships, operate as an *inland* duty on the trade

between different parts of the country. We are glad, however, to be able to state, that the more intelligent portion of the Danish people are quite aware of the mistaken policy on which they are now proceeding; and there is reason to believe that it will, at no distant period, be rendered more in accordance with the spirit of the age, and more conducive to the improvement of the people. In 1832, a petition, signed by almost all the merchants of Copenhagen, was addressed to the king, containing an able and distinct exposition of the circumstances which depress Danish commerce. The petitioners pray for the emancipation of commercial pursuits from all the restrictions laid upon them by guilds and corporations, or, in other words, for the freedom of industry; for a revision and reduction of the transit duties, and a change in the mode of charging the Sound duties; for a reduction of the tonnage duties, and a remission of the charge on account of light money on ships arriving at Copenhagen that have already paid for the lights at Elsineur; they further pray for the abolition of the East India Company's monopoly, and the freedom of trade to the East Indies and China; and for a reduction of the duties on several articles of domestic produce when exported, and of foreign produce when imported. What is here asked is so reasonable, and, if granted, would add so much to the real prosperity of the country, that we trust the government will earn for itself a new title to the public esteem by honestly endeavouring to meet the wishes of the petitioners.

In compiling this article, we have consulted *Oddy's European Commerce*, pp. 330—369.; *Dictionnaire du Commerce* (*Ency. Méthodique*, tome II. pp. 5—16.), *Catteau, Tableau des Etats Danois*, tome ii. pp. 292—371.; the *Consul's Answers to Circular Queries*, which do that functionary great credit; and communications from merchants at Copenhagen.

COPPER (Ger. *Kupfer*; Du. *Koper*; Da. *Kobber*; Sw. *Kopper*; Fr. *Cuivre*; It. *Rame*; Sp. *Cobre*; Port. *Cobre*; Rus. *Mjed*, *Krasnoi mjed*; Pol. *Miedz*; Lat. *Cuprum*; Arab. *Nehass*; Sans. *Tamra*), a well-known metal, so called from its having been first discovered, or at least wrought to any extent, in the island of Cyprus. It is of a fine red colour, and has a great deal of brilliancy. Its taste is styptic and nauseous; and the hands, when rubbed for some time on it, acquire a peculiar and disagreeable odour. It is harder than silver; its specific gravity varies according to its state, being, when quite pure, near 9·000. Its malleability is great: it may be hammered out into leaves so thin as to be blown about by the slightest breeze. Its ductility is also considerable. Its tenacity is so great, that a copper wire 0·078 of an inch in diameter is capable of supporting 302·26 lbs. avoirdupois without breaking. Its liability to oxidation from exposure to air or damp is its greatest defect. The rust with which it is then covered is known by the name of verdigris, and is one of the most active poisons.—(*Thomson's Chemistry.*)

If we except gold and silver, copper seems to have been more early known than any other metal. In the first ages of the world, before the method of working iron was discovered, copper was the principal ingredient in all domestic utensils and instruments of war. Even now it is applied to so many purposes, as to rank next, in point of utility, to iron.

Alloys of Copper are numerous and of great value. Those of tin are of most importance. Tin added to copper makes it more fusible, less liable to rust, or to be corroded by the air and other common substances, harder, denser, and more sonorous. In these respects the alloy has a real advantage over unmixed copper: but this is in many cases more than counterbalanced by the great brittleness which even a moderate portion of tin imparts; and which is a singular circumstance, considering that both metals are separately very malleable.

Copper alloyed with from 1 to 5 per cent. of tin is rendered harder than before; its colour is yellow, with a cast of red, and its fracture granular: it has considerable malleability. This appears to have been the usual composition of many of the ancient edged tools and weapons, before the method of working iron was brought to perfection. The χαλκος of the Greeks, and, perhaps, the *æs* of the Romans, was nothing else. Even their copper coins contain a mixture of tin. The ancients did not, in fact, possess (as has been often contended) any peculiar process for hardening copper, except by adding to it a small quantity of tin. An alloy in which the tin is from 0·1 to ⅛ of the whole is hard, brittle, but still a little malleable, close grained, and yellowish white. When the tin is as much as ⅛ of the mass, it is entirely brittle; and continues so in every higher proportion. The yellowness of the alloy is not entirely lost till the tin amounts to 0·3 of the whole.

Copper (or sometimes copper with a little zinc), alloyed with as much tin as will make from about 0·1 to ⅛ of the whole, forms an alloy, which is principally employed for bells, brass cannon, bronze statues, and various other purposes. Hence it is called *bronze*, or *bell metal*; and is excellently fitted for the uses to which it is applied, by its hardness, density, sonorousness, and fusibility. For cannon, a lower proportion of tin is commonly used. According to Dr. Watson, the metal employed at Woolwich consists of 100 parts of copper and from 8 to 12 of tin; hence it retains some little malleability, and, therefore, is tougher than it would be with a larger portion of tin. This alloy being more sonorous than iron, brass guns give a louder report than iron guns. A common alloy for bell metal is 80 parts of copper and 20 of tin: some artists add to these ingredients zinc, antimony, and silver, in small proportions; all of which add to the sonorousness of the compound.—(See BELL METAL.)

When, in an alloy of copper and tin, the latter metal amounts to about ⅓ of the mass, the result is a beautiful compound, very hard, of the colour of steel, and susceptible of a very fine polish. It is well adapted for the reflection of light for optical purposes; and is therefore called *speculum metal*. Besides the above ingredients, it usually contains a little arsenic, zinc, or silver. The application of an alloy similar to the above, to the construction of mirrors, is of great antiquity, being mentioned by Pliny; who says, that formerly the best mirrors were reckoned those of Brundusium, of tin and copper mixed (*stanno et ære mistis*). — (*Hist. Nat.* lib. xxxiii. § 9.)

For the alloys of copper with zinc, see the articles BRASS, PINCHBECK. See, also, *Thomson's Chemistry*; *Rees's Cyclopædia*; *Dr. Watson's Chemical Essays*, vol. iv., &c.

British Copper Trade. — Great Britain has various copper mines, in Cornwall, Devonshire, Wales, &c., but particularly in the first. Though known long before, the Cornish copper mines were not wrought with much spirit till last century. From 1726 to 1735, they produced at an average about 700 tons a year of pure copper. During the ten years from 1766 to 1775, they produced, at an average, 2,650 tons. In 1798, the produce exceeded 5,000 tons; and it now amounts to about 12,000 tons, worth, at 100*l.* a ton, no less than 1,200,000*l.* sterling! In 1768, the famous mines in the Parys mountain, near Amlwch, in Anglesea, were discovered. The supplies of ore furnished by them were for a long time abundant beyond all precedent; but for many years past the productiveness of the mine has been declining, and it now yields comparatively little copper. At present the mines in Anglesea, and other parts of Wales, yield from 1,750 to 2,000 tons of copper; those of Devonshire yield about 500 tons; the quantity produced in the other parts of England being quite inconsiderable. The Irish mines produce about 500 tons. Those of Scotland never were productive, and have been almost entirely abandoned. The entire produce of the copper mines of the empire may, therefore, be estimated at present at from 14,500 to 15,000 tons.

In consequence of the greatly increased supplies of copper that were thus obtained, England, instead of being, as formerly, dependent on foreigners for the greater part of her supplies of this valuable metal, became, previously to 1793, one of the principal markets for the supply of others. And notwithstanding the vastly increased demand for copper during the war for the sheathing of ships and other purposes, the exports continued to increase and the imports to diminish; the greater productiveness of the Cornish mines having sufficed not only to balance the increased demand, but also to make up for the falling off in the supplies from Anglesea.

Owing to the want of coal in Cornwall, the ores are not smelted on the spot, but are, for the most part, sent to Swansea; it being found cheaper to carry the ores to the coal than the contrary.

Account of the Copper produced from the Mines in Cornwall since 1800; showing the Quantity of Ore, of Metal or Fine Copper, the Value of the Ores in Money, the average Percentage or Produce, and the average Standard or Miner's Price of Fine Copper, made up to the End of June in each Year.

Years.	Quantity of Ores.	Metal or Fine Copper.				Value of the Ores.			Produce of Ores per cent.	Average Standard Price per Ton.		
	Tons.	*Tons.*	*cwt.*	*qrs.*	*lbs.*	£	*s.*	*d.*		£	*s.*	*d.*
1800	55,981	5,187	0	3	7	550,925	1	0	9½	133	3	6
1801	56,611	5,267	18	3	10	476,313	1	0	9¼	117	5	0
1802	53,937	5,228	15	3	5	445,694	4	0	9⅝	110	18	0
1803	60,566	5,616	16	0	21	533,910	16	0	9¼	122	0	0
1804	64,637	5,374	18	1	20	507,840	11	0	8⅜	138	5	0
1805	78,452	6,234	5	0	6	862,410	16	0	7⅞	169	16	0
1806	79,269	6,863	10	2	13	730,845	6	6	8⅝	138	5	0
1807	71,694	6,716	12	1	26	6 9,002	13	0	9⅜	120	0	0
1808	67,867	6,795	13	2	25	495,303	1	6	10	100	7	0
1809	76,245	6,821	13	1	19	770,028	15	6	8⅞	143	12	0
1810	66,048	6,182	19	1	27	570,035	8	0	8½	132	5	0
1811	66,786	6,141	13	3	7	556,723	19	0	9¼	120	12	0
1812	71,547	5,720	7	2	4	549,665	6	6	8⅜	111	0	0
1813	74,047	6,918	3	0	6	594,345	10	0	9⅜	115	7	0
1814	74,322	6,369	13	3	7	627,501	10	0	8½	130	12	0
1815	78,483	6,525	6	3	25	552,813	8	6	8¼	117	16	0
1816	77,334	6,697	4	0	17	447,959	17	0	8⅝	98	13	0
1817	76,701	6,498	2	0	16	494,010	12	6	8⅛	108	10	0
1818	86,174	6,859	7	1	1	686,005	4	6	7⅞	134	15	0
1819	88,736	6,804	2	2	7	623,595	4	6	7⅛	127	10	0
1820	91,473	7,508	0	3	26	602,441	12	0	8⅛	113	15	0
1821	98,426	8,514	19	2	12	605,968	19	6	8⅝	103	0	0
1822	104,523	9,140	8	3	20	663,085	13	6	8¾	104	0	0
1823	95,750	7,927	17	2	7	608,033	1	0	8¼	109	18	0
1824	99,700	7,823	15	1	10	587,178	3	6	7⅞	110	0	0
1825	107,454	8,226	3	0	21	726,353	12	0	7⅝	124	4	0
1826	117,308	9,026	12	3	15	788,971	15	6	7⅝	123	3	0
1827	126,710	10,311	14	3	15	745,178	1	0	8¼	106	1	0
1828	130,366	9,921	1	2	11	756,174	16	0	7⅝	112	7	0
1829	124,502	9,656	10	3	4	717,334	0	0	7¾	109	14	0
1830	133,964	10,748				773,846			8	106	5	0
1831	144,402	12,044				806,090			8¼	100	0	0

Exports of British Copper since 1820.

Years.	Unwrought.	Coin.	Sheets, Nails, &c.	Wire.	Wrought Copper of other Sorts.	Total of British Copper exported.
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
1820	41,155	10	58,121	8	22,663	121,958
1821	34,543	155	66,676	21	24,035	125,431
1822	25,829	- - -	65,070	40	22,731	113,671
1823	24,082	802	56,146	98	25,387	106,516
1824	19,209	95	62,920	292	23,580	106,096
1825	10	2,134	51,437	40	25,002	78,624
1826	2,604	1,807	65,264	11	26,307	95,994
1827	26,583	1,450	74,943	8	40,439	143,424
1828	21,591	1,150	52,472	71	48,897	124,121
1829	52,978	15	59,871	13	46,643	1 9,521
1830	56,792	640	66,351	16	56,443	183,154
1831	67,200	96	70,477	149	32,690	170,613
1832	77,497	2	79,944	13	37,455	194,612

N.B. — The foreign copper imported is altogether intended for re-exportation. In 1832, 13,894 cwt of copper were smelted from foreign ore. The East Indies and China, France, and the United States, are the great markets for British copper. The exports to these countries, in 1832, were respectively 82,880, 35,984, and 31,235 cwt.

For the following details with respect to the state of the British copper trade in 1830, we are indebted to Mr. Pascoe Grenfell, who is largely engaged in it, and on whose accuracy every reliance may be placed: —

"The quantity of copper produced during last year (1830) in Cornwall, from ores raised in that county,

exceeded *ten thousand* tons of pure metal: and if to this be added what has been produced in Wales, in other parts of England, and in Ireland, the whole quantity of *fine* or *pure* metal produced in the United Kingdom, in 1829, may be fairly stated at *twelve thousand* tons.

"The quantity of British copper exported in 1829 amounts, according to an account recently laid before the House of Commons, to 7,976 tons of fine metal; to which adding the exports of foreign copper, the total export was 8,817 tons. The copper imported is altogether intended for re-exportation. I cannot state its precise quantity in fine metal, because the greater part of it arrives in a state of *ore*, and I have no means of knowing the produce in pure metal of that ore, beyond such part of it as may come into my own possession.

"The value of the 12,000 tons of copper produced in the United Kingdom, as above stated, at 90*l.* per ton, is 1,080,000*l.*"

Foreign Copper. — Copper ores are abundant in Sweden, Saxony, Russia, Persia, Japan, China, Chili, &c. Near Fahlun, in the province of Dalecarlia, in Sweden, is the celebrated copper mine of the same name, supposed to have been wrought nearly 1,000 years. For a long time it was one of the most productive mines in the world. Towards the beginning of the seventeenth century it yielded an annual produce of about 8,000,000 lbs. of pure metal; but it has since greatly declined; and it is most probable that at no distant period it will be wholly abandoned. — (*Thomson's Travels in Sweden*, p. 221.) There are still, however, several productive copper mines in other parts of Sweden. The exports of copper from Stockholm in 1832 amounted to 4,536 skippounds, or 723 tons English, besides the exports from Gottenburgh and other ports. The product of the copper mines in the government of Olonetz, in Russia, is estimated at 210,000 poods, or 3,375 tons (Eng.) a year. — (*Schnitzler, Essai d'une Statistique Générale, &c.* p. 41.) The copper mines of Chili are also very rich, and their produce is at present imported into Canton and Calcutta direct from Valparaiso. The copper mines of Japan are said to be among the richest in the world. The Dutch annually import about 700 tons of their produce into Batavia; and the Chinese from 800 to 1,000 tons into Canton and other ports. In fact, Japan copper is spread over all the East, and is regularly quoted in the Price Currents of Canton, Calcutta, and Singapore. — (See p. 245.) It is purer, and brings a higher price, than any other species of bar or slab copper. It is uniformly met with in the shape of bars or ingots, very much resembling large sticks of red sealing wax. When the copper of South America is worth in the Canton market from 15 to 16 dollars per picul, that of Japan fetches from 18 to 20. Pretty considerable quantities of copper are imported into Calcutta from Bushire and Bussorah. This is mostly the produce of the Persian mines; but a little is understood to come from the Russian mines in Georgia.

Customs Regulations. — Old copper sheathing, old copper utensils, and old copper and pewter utensils of British manufacture, imported from British plantations, and also old copper stripped off vessels in ports in the United Kingdom, may be admitted to entry, duty free, under the following regulations; viz. —

1st. Old copper sheathing stripped off British vessels in ports in the British possessions, upon proof to the satisfaction of the Commissioners of Customs, that such sheathing was stripped off in such ports, and also that the said sheathing is the property of the owner of the ship from which it was so stripped, to be delivered to such owner.

2d. Old copper sheathing stripped off any ship in any port in the United Kingdom, upon the fact being certified by the landing-waiter superintending the process; the old copper to be delivered only to the coppersmith who may re-copper the vessel from which the copper was stripped, he making proof to that fact.

3d. Old worn-out British copper and pewter utensils to be in all cases delivered when brought from British possessions abroad in British ships, upon the consignee submitting proof that they had been used on a particular estate, and are consigned on account of the owner of that estate, and that he (the consignee) verily believes them to have been of British manufacture. — (*Min. Com. Cus.*, 15th of Feb. 1833.)

Copper ore may be taken out of warehouses to be smelted, on proper notice being given to the customs officers, and giving sufficient security, by bond, for returning the computed quantity of fine copper in it. — (7 & 8 *Geo.* 4. c. 58. § 23.)

Copper is in extensive demand all over India; being largely used in the dock-yards, in the manufacture of cooking utensils, in alloying spelter and tin, &c. The funeral of every Hindoo brings an accession to the demand, according to his station; the relatives of the deceased giving a brass cup to every Brahmin present at the ceremony: so that 5, 10, 50, 100, 1,000, and sometimes more than 10 times this last number, are dispensed upon such occasions. — (*Bell's Commerce of Bengal.*)

COPPERAS, a term employed by the older chemists, and popularly, as synonymous with vitriol. There are three sorts of copperas: the *green*, or sulphate of iron; the *blue*, or sulphate of copper; and the *white*, or sulphate of zinc. Of these, the first is the most important.

Sulphate of iron is distinguished in common by a variety of names, as Martial vitriol, English vitriol, &c. When pure, it is considerably transparent, of a fine bright, though not very deep, grass green colour; and of a nauseous astringent taste, accompanied with a kind of sweetness. Its specific gravity is 1·834. It uniformly reddens the vegetable blues. This salt was well known to the ancients; and is mentioned by Pliny, (*Hist. Nat.* lib. xxxiv. § 12.), under the names of *misy*, *sory*, and *calchantum*. It is not made in the direct way, because it can be obtained at less charge from the decomposition of pyrites on a large scale in the neighbourhood of collieries. It exists in two states; one containing oxide of iron, with 0·22 of oxygen, which is of a pale green, not altered by gallic acid, and giving a white precipitate with prussiate of potass. The other, in which the iron is combined with 0·30 of oxygen, is red, not crystallisable, and gives a black precipitate with gallic acid, and a blue with prussiate of potass. In the common sulphate, these two are often mixed in various proportions.

Sulphate of iron is of great importance in the arts. It is a principal ingredient in dyeing; in the manufacture of ink, and of Prussian blue: it is also used in tanning, painting, medicine, &c. Sulphuric acid, or oil of vitriol, was formerly manufactured from sulphate of iron. — (See Acids.)

Sulphate of copper, or *blue* vitriol, commonly called Roman or Cyprian vitriol, is of an elegant sapphire blue colour, hard, compact, and semi-transparent; when perfectly crystallised, of a flattish, rhomboidal, decahedral figure; its taste is extremely nauseous, styptic, and acrid; its specific gravity is 2·1943. It is used for various purposes in the arts, and also in medicine.

Sulphate of zinc, or *white* vitriol, is found native in the mines of Goslar and other

places. Sometimes it is met with in transparent pieces, but more commonly in white efflorescences. These are dissolved in water, and crystallised into large irregular masses, somewhat resembling fine sugar, having a sweetish, nauseous, styptic taste. Its specific gravity, when crystallised, is 1·912; when in the state in which it commonly occurs in commerce, it is 1·3275. Sulphate of zinc is prepared in the large way from some varieties of the native sulphuret. The ore is roasted, wetted with water, and exposed to the air. The sulphur attracts oxygen, and is converted into sulphuric acid; and the metal, being at the same time oxidized, combines with the acid. After some time the sulphate is extracted by solution in water; and the solution being evaporated to dryness, the mass is run into moulds. Thus, the white vitriol of the shops generally contains a small portion of iron, and often of copper and lead. — (*Lewis's Mat. Medica; Ure's Dictionary; Rees's Cyclopædia; Thomson's Chemistry, &c.*)

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CORAL (Ger. *Korallen;* Du. *Koraalen;* Fr. *Corail;* It. *Corale;* Sp. and Port. *Coral;* Rus. *Korallü;* Lat. *Corallium;* Arab. *Besed;* Pers. *Merjān;* Hind. *Moonga*), a marine production, of which there are several varieties. It was well known to the ancients, but it was reserved for the moderns to discover its real nature. It is, in fact, the nidus or nest of a certain species of vermes, which has the same relation to coral, that a snail has to its shell. As an ornament, black coral is most esteemed; but the red is also very highly prized. Coral is found in very great abundance in the Red Sea, the Persian Gulf, in various places in the Mediterranean, on the coast of Sumatra, &c. It grows on rocks, and on any solid submarine body; and it is necessary to its production, that it should remain fixed to its place. It has generally a shrub-like appearance. In the Straits of Messina, where a great deal is fished up, it usually grows to nearly a foot in length, and its thickness is about that of the little finger. It requires 8 or 10 years to arrive at its greatest size. The depth at which it is obtained is various — from 10 to 100 fathoms or more; but it seems to be necessary to its production that the rays of the sun should readily penetrate to the place of its habitation. Its value depends upon its size, solidity, and the depth and brilliancy of its colour; and is so very various, that while some of the Sicilian coral sells for 8 or 10 guineas an ounce, other descriptions of it will not fetch 1*s.* a pound. It is highly prized by opulent natives in India, as well as by the fair sex throughout Europe. The inferior or worm-eaten coral is used in some parts of the Madras coast, in the celebration of funeral rites. It is also used medicinally. Besides the fishery in the Straits of Messina already alluded to, there are valuable fisheries on the shores of Majorca and Minorca, and on the coast of Provence. A good deal of Mediterranean coral is exported to India, which, however, draws the largest portion of its supplies from the Persian Gulf. The produce of the fishery at Messina is stated by Spallanzani (*Travels in the Two Sicilies*, vol. iv. p. 308, &c.) to amount to 12 quintals of 250 lbs. each.

The manner of fishing coral is nearly the same every where. That which is most commonly practised in the Mediterranean, is as follows:—Seven or 8 men go in a boat, commanded by the proprietor; the caster throws his net, if we may so call the machine which he uses to tear up the coral from the bottom of the sea; and the rest work the boat, and help to draw in the net. This is composed of two beams of wood tied crosswise, with leads fixed to them to sink them: to these beams is fastened a quantity of hemp, twisted loosely round, and intermingled with some loose netting. In this condition the machine is let down into the sea; and when the coral is pretty strongly entwined in the hemp and nets, they draw it up with a rope, which they unwind according to the depth, and which it sometimes requires half a dozen boats to draw. If this rope happen to break, the fishermen run the hazard of being lost. Before the fishers go to sea, they agree for the price of the coral; and the produce of the fishery is divided, at the end of the season, into 13 parts; of which the proprietor has 4, the caster 2, and the other 6 men 1 each: the thirteenth belongs to the company for payment of boat-hire, &c. — (See *Ainslie's Mat. Indica; Rees's Cyclopedia; Ency. Metrop.; Bell's Com. of Bengal, &c.*)

CORDAGE (Ger. *Tauwerk;* Du. *Touwwerk;* Fr. *Manœuvres, Cordage;* It. *Caolame;* Sp. *Jarcia, Cordaje*), a term used in general for all sorts of cord, whether small, middling, or great, made use of in the rigging of ships. The manufacture of cordage is regulated by the act 25 Geo. 4. c. 56., which specifies the sort of materials that are to be employed in the manufacture of cables, hawsers, and other ropes, the marks that are to be affixed to them, and the penalties for non-compliance with the respective enactments. — (See Cable.) Masters of British ships are obliged, on coming into any port in Great Britain or the colonies, to report, under a penalty of 100*l.*, the foreign cordage, not being standing or running rigging, in use on board such ship. (3 & 4 Will. 4. cap. 52. § 8.)

The following table shows how many fathoms, feet, and inches, of a rope of any size, not exceeding 14 inches, make 1 cwt.

At the top of the table, marked inches, fathoms, feet, inches, the first column is the circumference of a rope in inches and quarters; the second, the fathoms, feet, and inches, that make up 1 cwt. of such a rope. One example will make it plain.

Suppose it is required how much of a 7-inch rope will make 1 cwt.: find 7, in the 3d column, under inches, or circumference of the rope, and immediately opposite to it you will find 9, 5, 6; which shows that in a rope of 7 inches, there will be 9 fathoms 5 feet 6 inches required to make 1 cwt.

Inches.	Fathom.	Feet.	Inches.	Inches.	Fathom.	Feet.	Inches.	Inches.	Fathom	Feet.	Inches.	Inches.	Fathom.	Feet.	Inches.	Inches.	Fathom.	Feet.	Inches.
1	486	0	0	3¾	34	3	9	6½	11	3	0	9¼	5	4	0	11¾	3	3	3
1¼	313	3	0	4	30	1	6	6¾	10	4	0	9½	5	2	0	12	3	2	3
1½	216	3	0	4¼	26	5	3	7	9	5	6	9¾	5	0	6	12¼	3	2	1
1¾	159	3	0	4½	24	0	0	7¼	9	1	6	10	4	5	0	12½	3	2	0
2	124	3	0	4¾	21	3	0	7½	8	4	0	10¼	4	4	1	12¾	2	7	8
2¼	96	2	0	5	19	3	0	7¾	8	3	6	10½	4	2	2	13	2	5	3
2½	77	3	0	5¼	17	4	0	8	7	3	6	10¾	4	1	8	13¼	2	4	9
2¾	65	4	0	5½	16	1	0	8¼	7	0	8	11	4	0	3	13½	2	4	0
3	54	0	0	5¾	14	4	6	8½	6	4	3	11¼	3	5	7	13¾	2	3	6
3¼	45	5	2	6	13	3	0	8¾	6	2	1	11½	3	4	1	14	2	2	1
3½	39	3	0	6¼	12	2	9	9	6	0	0								

CORK (Ger. *Kork*; Du. *Kork*, *Kurk*, *Vlothout*; Fr. *Liège*; It. *Sughero*, *Suvero*; Sp. *Corcho*; Port. *Cortica* (*de Sovreiro*); Rus. *Korhowoe derewo*; Lat. *Suber*), the thick and spongy bark of a species of oak (*Quercus Suber* Lin.), abundant in dry mountainous districts in the south of France, and in Spain, Portugal, Italy, and Barbary. The tree grows to the height of 30 feet or more, has a striking resemblance to the *Quercus Ilex*, or evergreen oak, and attains to a great age. After arriving at a certain state of maturity, it periodically sheds its bark; but this valuable product is found to be of a much better quality when it is artificially removed from the tree, which may be effected without any injury to the latter. After a tree has attained to the age of from 26 to 30 years, it may be barked; and the operation may be subsequently repeated once every 8 or 10 years*, the quality of the cork improving with the increasing age of the tree. The bark is taken off in July and August; and trees that are regularly stripped are said to live for 150 years, or more.—(*Poiret*, *Hist. Philosophique des Plantes*, tom. vii. 419.)

Cork is light, porous, readily compressible, and wonderfully elastic. It may be cut into any sort of figure, and, notwithstanding its porosity, is nearly impervious to any common liquor. These qualities make it superior to all other substances for stoppers for bottles, in the manufacture of which it is principally made use of. It is also employed as buoys to float nets, in the construction of life-boats, the making of waterproof shoes, and in various other ways. Before being manufactured into stoppers, the cork is charred on each side; this makes it contract, lessens its porosity, and consequently fits it the better for cutting off all communication between the external air and the liquid in the bottle. Spanish black is made of calcined cork.

The Greeks and Romans were both well acquainted with cork. They seem also to have occasionally used it as stoppers for vessels (*Cadorum obturamentis*, Plin. Hist. Nat. lib. xvi. cap. 8.); but it was not extensively employed for this purpose till the 17th century, when glass bottles, of which no mention is made before the 15th century, began to be generally introduced.—(*Beckmann's Hist. Invent.* vol. ii. pp. 114—127. Eng. ed.)

The duty on manufactured cork is prohibitory; and on the rude article it is very heavy, being no less than 8*s.* a cwt. or 8*l.* a ton. The quantity entered for home consumption amounts, at an average, to from 40,000 to 45,000 cwts. Its price, including duty, varies with the variations in its quality, from about 20*l.* to about 70*l.* a ton. The Spanish is the best, and fetches the highest price.

CORN (Ger. *Corn*, *Getreide*; Du. *Graanen*, *Koren*; Da. *Korn*; Sw. *Säd*, *Spanmal*; Fr. *Bleds*, *Grains*; It. *Biade*, *Grani*; Sp. *Granos*; Rus. *Chljeb*; Pol. *Zboze*; Lat. *Frumentum*), the grain or seed of plants separated from the spica or ear, and used for making bread, &c. Such are wheat, rye, barley, oats, maize, peas, &c.; which see.

CORNELIAN. See CARNELIAN.

CORN LAWS AND CORN TRADE.—From the circumstance of corn forming, in this and most other countries, the principal part of the food of the people, the trade in it, and the laws by which that trade is regulated, are justly looked upon as of the highest importance. But this is not the only circumstance that renders it necessary to enter at some length into the discussion of this subject. Its difficulty is at least equal to its interest. The enactments made at different periods with respect to the corn trade, and the opinions advanced as to their policy, have been so very various and contradictory, that it is indispensable to submit them to some examination, and, if possible, to ascertain the *principles* which ought to pervade this department of commercial legislation.

I. HISTORICAL SKETCH OF THE CORN LAWS.
II. PRINCIPLES OF THE CORN LAWS.
III. BRITISH CORN TRADE.
IV. FOREIGN CORN TRADE.

* Beckmann (vol. ii. p. 115. Eng. ed.) says, that "when the tree is 15 years old, it may be barked, and this can be done successively for 8 years." This erroneous statement having been copied into the article CORK in Rees's Cyclopædia, has thence been transplanted to a multitude of other works.

I. Historical Sketch of the Corn Laws.

For a long time the regulations with respect to the corn trade were principally intended to promote abundance and low prices. But, though the purpose was laudable, the means adopted for accomplishing it had, for the most part, a directly opposite effect. When a country exports corn, it seems, at first sight, as if nothing could do so much to increase her supplies as the prevention of exportation: and even in countries that do not export, its prohibition seems to be a prudent measure, and calculated to prevent the supply from being diminished, upon any emergency, below its natural level. These are the conclusions that immediately suggest themselves upon this subject; and it requires a pretty extensive experience, an attention to facts, and a habit of reasoning upon such topics, to perceive their fallacy. These, however, were altogether wanting when the regulations affecting the corn trade began to be introduced into Great Britain and other countries. They were framed in accordance with what were supposed to be the dictates of common sense; and their object being to procure as large a supply of the prime necessary of life as possible, its exportation was either totally forbidden, or forbidden when the home price was above certain limits.

The principle of absolute prohibition seems to have been steadily acted upon, as far as the turbulence of the period would admit, from the Conquest to the year 1436, in the reign of Henry VI. But at the last mentioned period an act was passed, authorising the exportation of wheat whenever the home price did not exceed 6*s.* 8*d.* (equal in amount of pure silver to 12*s.* 10$\frac{3}{4}$*d.* present money) per quarter, and barley when the home price did not exceed 3*s.* 4*d.* In 1463, an additional benefit was intended to be conferred on agriculture by prohibiting importation until the home price exceeded that at which exportation ceased. But the fluctuating policy of the times prevented these regulations from being carried into full effect; and, indeed, rendered them in a great measure inoperative.

In addition to the restraints laid on exportation, it has been common in most countries to attempt to increase the supply of corn, not only by admitting its unrestrained importation from abroad, but by holding out extraordinary encouragement to the importers. This policy has not, however, been much followed in England. During the 500 years immediately posterior to the Conquest, importation was substantially free; but it was seldom or never promoted by artificial means: and during the last century and a half it has, for the most part, been subjected to severe restrictions.

Besides attempting to lower prices by prohibiting exportation, our ancestors attempted to lower them by proscribing the trade carried on by corn dealers. This most useful class of persons were looked upon with suspicion by every one. The agriculturists concluded that they would be able to sell their produce at higher prices to the consumers, were the corn dealers out of the way: while the consumers concluded that the profits of the dealers were made at their expense; and ascribed the dearths that were then very prevalent entirely to the practices of the dealers, or to their buying up corn and withholding it from market. These notions, which have still a considerable degree of influence, led to various enactments, particularly in the reign of Edward VI., by which the freedom of the internal corn trade was entirely suppressed. The *engrossing* of corn, or the buying of it in one market with intent to sell it again in another, was made an offence punishable by imprisonment and the pillory; and no one was allowed to carry corn from one part to another without a licence, the privilege of granting which was confided by a statute of Elizabeth to the quarter sessions. But as the principles of commerce came to be better understood, the impolicy of these restraints gradually grew more and more obvious. They were considerably modified in 1624; and, in 1663, the engrossing of corn was declared to be legal so long as the price did not exceed 48*s.* a quarter — (15 *Chas.* 2. c. 7.); an act which, as Dr. Smith has justly observed, has, with all its imperfections, done more to promote plenty than any other law in the statute book. In 1773, the last remnant of the *legislative* enactments restraining the freedom of the internal corn dealers, was entirely repealed. But the engrossing of corn has, notwithstanding, been since held to be an offence at common law; and, so late as 1800, a corn dealer was convicted of this imaginary crime. He was not, however, brought up for judgment; and it is not very likely that any similar case will ever again occupy the attention of the courts.

The acts of 1436 and 1463, regulating the prices when exportation was allowed and when importation was to cease, continued, nominally at least, in force till 1562, when the prices at which exportation might take place were extended to 10*s.* for wheat and 6*s.* 8*d.* for barley. But a new principle — that of imposing duties on exportation — was soon after introduced; and, in 1571, it was enacted that wheat might be exported, paying a duty of 2*s.* a quarter, and barley and other grain a duty of 1*s.* 4*d.*, whenever the home price of wheat did not exceed 20*s.* a quarter, and barley and malt 12*s.* At the Restoration, the limit at which exportation might take place was very much extended; but as

the duty on exportation was, at the same time, so very high as to be almost prohibitory, the extension was of little or no service to the agriculturists. This view of the matter seems to have been speedily taken by the legislature; for, in 1663, the high duties on exportation were taken off, and an *ad valorem* duty imposed in their stead, at the same time that the limit of exportation was extended. In 1670, a still more decided step was taken in favour of agriculture; an act being then passed which extended the exportation price to 53*s.* 4*d.* a quarter for wheat, and other grain in proportion, imposing, at the same time, prohibitory duties on the importation of wheat till the price rose to 53*s.* 4*d.*, and a duty of 8*s.* between that price and 80*s.* But the real effects of this act were not so great as might have been anticipated. The extension of the limit of exportation was rendered comparatively nugatory, in consequence of the continuance of the duties on exportation caused by the necessities of the Crown; while the want of any proper method for the determination of prices went far to nullify the prohibition of importation.

At the accession of William III. a new system was adopted. The interests of agriculture were then looked upon as of paramount importance: and to promote them, not only were the duties on exportation totally abolished, but it was encouraged by the grant of a *bounty* of 5*s.* on every quarter of wheat exported while the price continued at or below 48*s.*; of 2*s.* 6*d.* on every quarter of barley or malt, while their respective prices did not exceed 24*s.*; and of 3*s.* 6*d.* on every quarter of rye, when its price did not exceed 32*s.* — (1 *Will.* & *Mary*, c. 12.) A bounty of 2*s.* 6*d.* a quarter was subsequently given upon the exportation of oats and oatmeal, when the price of the former did not exceed 15*s.* a quarter. Importation continued to be regulated by the act of 1670.

Much diversity of opinion has been entertained with respect to the policy of the bounty. That it was intended to raise the price of corn is clear, from the words of the statute, which states, "that the exportation of corn and grain into foreign parts, *when the price thereof is at a low rate in this kingdom*, hath been a great advantage not only to the owners of land, but to the trade of the kingdom in general; therefore," &c. But admitting this to have been its object, it has been contended that the low prices which prevailed during the first half of last century show that its real effect had been precisely the reverse; and that it had, by extending tillage, contributed to reduce prices. It will be afterwards shown that this could not really be the case; and the fall of prices may be sufficiently accounted for by the improved state of agriculture, the gradual consolidation of farms, the diminution of sheep husbandry, &c., combined with the slow increase of the population. In point of fact, too, prices had begun to give way 30 years before the bounty was granted; and the fall was equally great in France, where, instead of exportation being encouraged by a bounty, it was almost entirely prohibited; and in most other Continental states. — (For proofs of what is now stated, see the article *Corn Laws*, in the new edition of the *Ency. Brit.*)

The Tables annexed to this article show that, with some few exceptions there was, during the first 66 years of last century, a large export of corn from England. In 1750, the wheat exported amounted to 947,000 quarters; and the total bounties paid during the 10 years from 1740 to 1751 reached the sum of 1,515,000*l.* But the rapid increase of population subsequently to 1760, and particularly after the peace of Paris, in 1763, when the commerce and manufactures of the country were extended in an unprecedented degree, gradually reduced this excess of exportation, and occasionally, indeed, inclined the balance the other way. This led to several suspensions of the restrictions on importation; and, at length, in 1773, a new act was framed, by which foreign wheat was allowed to be imported on paying a nominal duty of 6*d.* whenever the home price was at or above 48*s.* a quarter, and the bounty * and exportation were together to cease when the price was at or above 44*s.* This statute also permitted the importation of corn at any price, duty free, in order to be again exported, provided it were in the mean time lodged under the joint locks of the king and the importer.

The prices when exportation was to cease by this act seem to have been fixed too low; and, as Dr. Smith has observed, there appears a good deal of impropriety in prohibiting exportation altogether the moment it attained the limit, when the bounty given to force it was withdrawn; yet, with all these defects, the act of 1773 was a material improvement on the former system, and ought not to have been altered unless to give greater freedom to the trade.

The idea that this law must, when enacted, have been injurious to the agriculturists, seems altogether illusory: the permission to import foreign grain, when the home price rose to a moderate height, certainly prevented their realising exorbitant profits, in dear years, at the expense of the other classes; and prevented an unnatural proportion of the capital of the country from being turned towards agriculture. But as the limit at which importation at a nominal duty was allowed, was fixed a good deal above the average price

* The bounty amounted to 5*s.* on every quarter of wheat; 2*s.* 6*d.* on every quarter of barley; 3*s.* 6*d.* on every quarter of rye; and 2*s.* 6*d.* on every quarter of oats.

of the reign of George II., it cannot be maintained that it had any tendency to reduce previous prices, which is the only thing that could have discouraged agriculture: and, in fact, no such reduction took place.

It is, indeed, true, that, but for this act, we should not have imported so much foreign grain in the interval between 1773 and 1791. This importation, however, was not a consequence of the decline of agriculture; for it is admitted that every branch of rural economy was more improved in that period than in the whole of the preceding century; but arose entirely from a still more rapid increase of the manufacturing population, and hence, of the effective demand for corn.

By referring to the Tables annexed to this article, it will be seen that, in 1772, the balance on the side of wheat imported amounted to 18,515 quarters; and in 1773, 1774, and 1775, all years of great prosperity, the balance was very much increased. But the loss of a great part of our colonial possessions, the stagnation of commerce, and difficulty of obtaining employment, occasioned by the American war, diminished the consumption; and this, combined with unusually productive harvests, rendered the balance high on the side of exportation, in 1778, 1779, and 1789. In 1783 and 1784, the crop was unusually deficient, and considerable importations took place; but in 1785, 1786, and 1787, the exports again exceeded the imports; and it was not till 1788, when the country had fully recovered from the effects of the American war, and when manufacturing improvements were carried on with extraordinary spirit, that the imports permanently overbalanced the exports.

The growing wealth and commercial prosperity of the country had thus, by increasing the population and enabling individuals to consume additional quantities of food, caused the home supply of corn to fall somewhat short of the demand; but it must not, therefore, be concluded that agriculture had not at the same time been very greatly meliorated. "The average annual produce of wheat," says Mr. Comber, "at the beginning of the reign of George III. (1760), was about 3,800,000 quarters, of which about 300,000 had been sent out of the kingdom, leaving about 3,500,000 for home consumption. In 1773, the produce of wheat was stated in the House of Commons to be 4,000,000 quarters, of which the whole, and above 100,000 imported, were consumed in the kingdom. In 1796, the consumption was stated by Lord Hawkesbury to be 500,000 quarters per month, or 6,000,000 quarters annually, of which about 180,000 were imported; showing an increased produce in about 20 years of 1,820,000 quarters. It is evident, therefore, not only that no defalcation of produce had taken place in consequence of the cessation of exportation, as has been too lightly assumed from the occasional necessity of importation, but that it had increased with the augmentation of our commerce and manufactures."—(*Comber on National Subsistence*, p. 180.)

These estimates are, no doubt, very loose and unsatisfactory; but the fact of a great increase of produce having taken place is unquestionable. In a report by a committee of the House of Commons on the state of the *waste lands*, drawn up in 1797, the number of acts passed for enclosing, and the number of acres enclosed, in the following reigns, are thus stated:—

	Number of Acts.	Number of Acres.
In the reign of Queen Anne - -	2	1,439
George I. - - -	16	17,960
George II. - -	226	318,778
George III. to 1797	1,532	2,804,197

It deserves particular notice, that from 1771 to 1791, both inclusive, the period during which the greater number of these improvements were effected, there was no rise of prices.

The landholders, however, could not but consider the liberty of importation granted by the act of 1773 as injurious to their interests, inasmuch as it prevented prices from rising with the increased demand. A clamour, therefore, was raised against that law; and in addition to this interested feeling, a dread of becoming habitually dependent on foreign supplies of corn, operated on many, and produced a pretty general acquiescence in the act of 1791. By this act, the price when importation could take place from abroad at the low duty of 6*d.*, was raised to 54*s.*; under 54*s.* and above 50*s.* a middle duty of 2*s.* 6*d.*; and under 50*s.* a prohibiting duty of 24*s.* 3*d.* was exigible. The bounty continued as before, and exportation without bounty was allowed to 46*s.* It was also enacted, that foreign wheat might be imported, stored under the king's lock, and again exported free of duty; but, if sold for home consumption, it became liable to a warehouse duty of 2*s.* 6*d.* in addition to the ordinary duties payable at the time of sale.

In 1797, the Bank of England obtained an exemption from paying in specie; and the consequent facility of obtaining discounts and getting a command of capital, which this measure occasioned, gave a fresh stimulus to agriculture; the efficacy of which was most powerfully assisted by the scarcity and high prices of 1800 and 1801. An agricultural mania now seized the nation; and as the prices of 1804 would not allow the cultivation of the poor soils, which had been broken up in the dear years, to be continued, a new

corn law, being loudly called for by the farmers, was passed in 1804. This law imposed a prohibitory duty of 24*s.* 3*d.* per quarter on all wheat imported when the home price was at or below 63*s.*; between 63*s.* and 66*s.* a middle duty of 2*s.* 6*d.* was paid, and above 66*s.* a nominal duty of 6*d.* The price at which the bounty was allowed on exportation was extended to 50*s.*, and exportation without bounty to 54*s.* By the act of 1791, the maritime counties of England were divided into 12 districts, importation and exportation being regulated by the particular prices of each; but by the act of 1804 they were regulated, in England, by the *aggregate average* of the maritime districts; and in Scotland by the aggregate average of the 4 maritime districts into which it was divided. The averages were taken 4 times a year, so that the ports could not be open or shut for less than 3 months. This manner of ascertaining prices was, however, modified in the following session; it being then fixed that importation, both in England and Scotland, should be regulated by the average price of the 12 maritime districts of England.

In 1805, the crop was very considerably deficient, and the average price of that year was about 22*s.* a quarter above the price at which importation was allowed by the act of 1804. As the depreciation of paper, compared with bullion, was at that time only *four* per cent., the high price of that year must have been principally owing to the new law preventing importation from abroad till the home price was high, and then fettering mercantile operations; and to the formidable obstacles which the war threw in the way of importation. In 1806*, 1807, and 1808, the depreciation of paper was nearly 3 per cent.; and the price of wheat in those years being generally from 66*s.* to 75*s.*, the importations were but small. From autumn 1808, to spring 1814 the depreciation of the currency was unusually great; and several crops in that interval being likewise deficient, the price of corn, influenced by both causes, rose to a surprising height. At that time no vessel could be laden in any Continental port for England without purchasing a licence, and the freight and insurance were at least 5 times as high as during peace. But the destruction of Napoleon's anti-commercial system, in the autumn of 1813, having increased the facilities of importation, a large quantity of corn was poured into the kingdom; and, in 1814, its *bullion* price fell below the price at which importation was allowed.

Before this fall of price, a committee of the House of Commons had been appointed to inquire into the state of the laws affecting the corn trade; and recommended in their Report (dated 11th of May, 1813) a very great increase of the prices at which exportation was allowable, and when importation free of duty might take place. This recommendation was not, however, adopted by the House; but the fact of its having been made when the home price was at least 112*s.* a quarter, displayed a surprising solicitude to exclude foreigners from all competition with the home growers.

The wish to lessen the dependence of the country on foreign supplies formed the sole ostensible motive by which the committee of 1813 had been actuated, in proposing an alteration in the act of 1804. But after the fall of price in autumn 1813, and in the early part of 1814, it became obvious, on comparing our previous prices with those of the Continent, that without an alteration of the law in question this dependence would be a good deal increased; that a considerable extent of such poor lands as had been brought into cultivation during the high prices, would be again thrown into pasturage; and that rents would be considerably reduced. These consequences alarmed the landlords and occupiers; and in the early part of the session of 1814, a series of resolutions were voted by the House of Commons, declaring that it was expedient to repeal the bounty, to permit the free exportation of corn whatever might be the home price, and to impose a graduated scale of duties on the importation of foreign corn. Thus, foreign wheat imported when the home price was at or under 64*s.* was to pay a duty of 24*s.*; when at or under 65*s.* a duty of 23*s.*; and so on, till the home price should reach 86*s.*, when the duty was reduced to 1*s.*, at which sum it became stationary. Corn imported from Canada, or from the other British colonies in North America, was to pay half the duties on other corn. As soon as these resolutions had been agreed to, two bills founded on them — one for regulating the importation of foreign corn, and another for the repeal of the bounty, and for permitting unrestricted exportation — were introduced. Very little attention was paid to the last of these bills; but the one imposing fresh duties on importation encountered a very keen opposition. The manufacturers, and every class not directly supported by agriculture, stigmatised it as an unjustifiable attempt artificially to keep up the price of food, and to secure excessive rents and large profits to the landholders and farmers at the expense of the consumers. Meetings were very generally held, and resolutions entered into strongly expressive of this sentiment, and dwelling on

* Several impolitic restraints had been for a long time imposed on the free importation and exportation of corn between Great Britain and Ireland, but they were wholly abolished in 1806; and the act of that year (46 Geo. 3. c. 97.), establishing a free trade in corn between the 2 great divisions of the empire, was not only a wise and proper measure in itself, but has powerfully contributed to promote the general advantage.

the fatal consequences which, it was affirmed, a continuance of the high prices would have on our manufactures and commerce. This determined opposition, coupled with the indecision of ministers, and perhaps, too, with an expectation on the part of some of the landholders that prices would rise without any legislative interference, caused the miscarriage of this bill. The other bill, repealing the bounty and allowing an unlimited freedom of exportation, was passed into a law.

Committees had been appointed in 1814, by both Houses of Parliament, to examine evidence and report on the state of the corn trade; and, in consequence, a number of the most eminent agriculturists were examined. The witnesses were unanimous in this only,—that the protecting prices in the act of 1804 were insufficient to enable the farmers to make good the engagements into which they had subsequently entered, and to continue the cultivation of the inferior lands lately brought under tillage. Some of them thought that 120*s.* ought to be fixed as the lowest limit at which the importation of wheat free of duty should be allowed: others varied from 90*s.* to 100*s.* — from 80*s.* to 90*s.* — and a few from 70*s.* to 80*s.* The general opinion, however, seemed to be that 80*s.* would suffice; and as prices continued to decline, a set of resolutions founded on this assumption were submitted to the House of Commons by Mr. Robinson, of the Board of Trade (now Lord Goderich); and having been agreed to, a bill founded on them was, after a very violent opposition, carried in both Houses by immense majorities, and finally passed into a law (55 Geo. 3. c. 26.). According to this act, all sorts of foreign corn, meal, or flour, might be imported at all times free of duty into any port of the United Kingdom, in order to be warehoused; but foreign corn was not permitted to be imported for home consumption, except when the average prices of the several sorts of British corn were as follows: viz. wheat, 80*s.* per quarter; rye, peas, and beans, 53*s.*; barley, bear, or bigg, 40*s.*; and oats, 26*s.*: and all importation of corn from any of the British plantations in North America was forbidden, except when the average home prices were at or under, wheat, 67*s.* per quarter; rye, peas, and beans, 44*s.*; barley, bear, or bigg, 33*s.*; and oats, 22*s.*

The agriculturists confidently expected that this act would immediately effect a rise of prices, and render them steady at about 80*s.* But, for reasons which will be afterwards stated, these expectations were entirely disappointed; and there has been a more ruinous fluctuation of prices during the 18 years that have elapsed since it was passed, than in any previous period of our recent history. In 1821, when prices had sunk very low, a committee of the House of Commons was appointed to inquire into the causes of the depressed state of agriculture, and to report their observations thereupon. This committee, after examining a number of witnesses, drew up a report, which, though not free from error, is a very valuable document. It contains a forcible exposition of the pernicious effects arising from the law of 1815, of which it suggested several important modifications. These, however, were not adopted; and as the low prices, and consequent distress of the agriculturists, continued, the subject was brought under the consideration of parliament in the following year. After a good deal of discussion a new act was then passed (3 Geo. 4. c. 60.), which enacted, that after prices had risen to the limit of free importation fixed by the act of 1815, that act was to cease and the new statute to come into operation. This statute lowered the prices fixed by the act of 1815, at which importation could take place for home consumption, to the following sums, viz. —

	For Corn not of the British Possessions in North America.	For Corn of the British Possessions in North America.
Wheat	70*s.* per quarter.	59*s.* per quarter.
Rye, peas, and beans	46*s.* —	39*s.* —
Barley, bear, or bigg	35*s.* —	30*s.* —
Oats	25*s.* —	20*s.* —

But, in order to prevent any violent oscillation of prices from a large supply of grain being suddenly thrown into the market, it was enacted, that a duty of 17*s.* a quarter should be laid on all wheat imported from foreign countries, during the first 3 months after the opening of the ports, if the price was between 70*s.* and 80*s.* a quarter, and of 12*s.* afterwards; that if the price was between 80*s.* and 85*s.*, the duty should be 10*s.* for the first 3 months, and 5*s.* afterwards; and that if the price should exceed 85*s.*, the duty should be constant at 1*s.*; and proportionally for other sorts of grain.

This act, by preventing importation until the home price rose to 70*s.*, and then loading the quantities imported between that limit and the limit of 85*s.* with heavy duties, was certainly more favourable to the views of the agriculturists than the act of 1815. But, unluckily for them, the prices of no species of corn, except barley, were sufficiently high, while this act existed, to bring it into operation.

In 1825, the first approach was made to a better system, by permitting the importation of wheat from British North America, without reference to the price at home, on payment of a duty of 5*s.* a quarter. But this act was passed with difficulty, and was limited to one year's duration.

Owing to the drought that prevailed during the summer of 1826, there was every prospect that there would be a great deficiency in the crops of that year; and, in order to prevent the disastrous consequences that might have taken place, had importation been prevented until the season was too far advanced for bringing supplies from the great corn markets in the north of Europe, his Majesty was authorised to admit 500,000 quarters of foreign wheat, on payment of such duties as the order in council for its importation should declare. And when it was ascertained that the crops of oats, peas, &c. were greatly below an average, ministers issued an order in council, on their own responsibility, on the 1st of September, authorising the immediate importation of oats on payment of a duty of 2*s.* 2*d.* a boll; and of rye, peas, and beans, on payment of a duty of 3*s.* 6*d.* a quarter. A considerable quantity of oats was imported under this order, the timely appearance of which had undoubtedly a very considerable effect in mitigating the pernicious consequences arising from the deficiency of that species of grain. Ministers obtained an indemnity for this order on the subsequent meeting of parliament.

Nothing could more strikingly evince the impolicy of the acts of 1815 and 1822, than the necessity, under which the legislature and government had been placed, of passing the temporary acts and issuing the orders alluded to. The more intelligent portion of the agriculturists began, at length, to perceive that the corn laws were not really calculated to produce the advantages that they had anticipated; and a conviction that increased facilities should be given to importation became general throughout the country. The same conviction made considerable progress in the House of Commons; so much so, that several members who supported the measures adopted in 1815 and 1822, expressed themselves satisfied that the principle of exclusion had been carried too far, and that a more liberal system should be adopted. Ministers having participated in these sentiments, Mr. Canning moved a series of resolutions, as the foundation of a new corn law, on the 1st of March, 1827. These resolutions were to the effect that foreign corn might always be imported, free of duty, in order to be warehoused; and that it should always be admissible for home consumption on payment of certain duties. Thus, in the instance of wheat, it was resolved that, when the home price was at or above 70*s.* a quarter, the duty should be a fixed one of 1*s.*; and that for every shilling that the price fell below 70*s.* a duty of 2*s.* should be imposed; so that when the price was at 69*s.* the duty on importation was to be 2*s.*, when at 68*s.* the duty was to be 4*s.*, and so on. The limit at which the constant duty of 1*s.* a quarter was to take place in the case of barley, was originally fixed at 37*s.*, but it was subsequently raised to 40*s.*; the duty increasing by 1*s.* 6*d.* for every 1*s.* which the price fell below that limit. The limit at which the constant duty of 1*s.* a quarter was to take place in the case of oats was originally fixed at 28*s.*; but it was subsequently raised to 33*s.*, the duty increasing at the rate of 1*s.* a quarter for every shilling that the price fell below that limit. The duty on colonial wheat was fixed at 6*d.* the quarter when the home price was above 65*s.*; and when the price was under that sum, the duty was constant at 5*s.*; the duties on other descriptions of colonial grain were similar. These resolutions were agreed to by a large majority; and a bill founded on them was subsequently carried through the House of Commons. Owing, however, to the change of ministers, which took place in the interim, several peers, originally favourable to the bill, and some, even, who assisted in its preparation, saw reason to become amongst its most violent opponents; and a clause moved by the Duke of Wellington, interdicting all importation of foreign corn until the home price exceeded 66*s.*, having been carried in the Lords, ministers gave up the bill, justly considering that such a clause was entirely subversive of its principle.

A new set of resolutions with respect to the corn trade were brought forward in 1828, by Mr. Charles Grant. They were founded on the same principles as those which had been rejected during the previous session. But the duty was not made to vary equally, as in Mr. Canning's resolutions, with every equal variation of price; it being 23*s.* 8*d.* when the home price was 64*s.* the Imperial quarter; 16*s.* 8*d.* when it was 69*s.*; and 1*s.* only when it was at or above 73*s.* After a good deal of debate, Mr. Grant's resolutions were carried in both Houses; and the act embodying them (9 Geo. 4. c. 60.) is that by which the corn trade is now regulated. An abstract of this act will be found in a subsequent part of this article.

II. Principles of the Corn Laws.

1. *Internal Corn Trade.* — It is needless to take up the reader's time by endeavouring to prove by argument the advantage of allowing the free conveyance of corn from one province to another. Every one sees that this is indispensable, not only to the equal distribution of the supplies of food over the country, but to enable the inhabitants of those districts that are best fitted for the raising and fattening of cattle, sheep, &c. so

addict themselves to these or other necessary occupations not directly connected with the production of corn. We shall, therefore, confine the few remarks we have to make, on this subject, to the consideration of the influence of the speculations of the corn merchants in buying up corn in anticipation of an advance. Their proceedings in this respect, though of the greatest public utility, have been the principal cause of that odium to which they have been so long exposed.

Were the harvests always equally productive, nothing would be gained by storing up supplies of corn; and all that would be necessary would be to distribute the crop equally throughout the country, and throughout the year. But such is not the order of nature. The variations in the aggregate produce of a country in different seasons, though not perhaps so great as are commonly supposed, are still very considerable; and experience has shown that two or three unusually luxuriant harvests seldom take place in succession; or that when they do, they are invariably followed by those that are deficient. The speculators in corn anticipate this result. Whenever prices begin to give way in consequence of an unusually luxuriant harvest, speculation is at work. The more opulent farmers withhold either the whole or a part of their produce from market; and the more opulent dealers purchase largely of the corn brought to market, and store it up in expectation of a future advance. And thus, without intending to promote any one's interest but their own, the speculators in corn become the great benefactors of the public. They provide a relief stock against those years of scarcity which are sure at no distant period to recur: while, by withdrawing a portion of the redundant supply from immediate consumption, prices are prevented from falling so low as to be injurious to the farmers, or at least are maintained at a higher level than they would otherwise have reached; provident habits are maintained amongst the people; and that waste and extravagance are checked, which always take place in plentiful years, but which would be carried to a much greater extent if the whole produce of an abundant crop were to be consumed within the season.

It is, however, in scarce years that the speculations of the corn merchants are principally advantageous. Even in the richest countries, a very large proportion of the individuals engaged in the business of agriculture are comparatively poor, and are totally without the means of withholding their produce from market, in order to speculate upon any future advance. In consequence the markets are always most abundantly supplied with produce immediately after harvest; and in countries where the merchants engaged in the corn trade are not possessed of large capitals, or where their proceedings are fettered and restricted, there is then, almost invariably, a heavy fall of prices. But as the vast majority of the people buy their food in small quantities, or from day to day as they want it, their consumption is necessarily extended or contracted according to its price at the time. Their views do not extend to the future; they have no means of judging whether the crop is or is not deficient. They live, as the phrase is, from hand to mouth; and are satisfied if, in the mean time, they obtain abundant supplies at a cheap rate. But it is obvious, that were there nothing to control or counteract this improvidence, the consequence would very often be fatal in the extreme. The crop of one harvest must support the population till the crop of the other harvest has been gathered in; and if that crop should be deficient — if, for instance, it should only be adequate to afford, at the usual rate of consumption, a supply of 9 or 10 months' provisions instead of 12 — it is plain that, unless the price were so raised immediately after harvest, as to enforce economy, and put, as it were, the whole nation on short allowance, the most dreadful famine would be experienced previously to the ensuing harvest. Those who examine the accounts of the prices of wheat and other grain in England, collected by Bishop Fleetwood and Sir F. M. Eden, will meet with abundant proofs of the accuracy of what has now been stated. In those remote periods when the farmers were generally without the means of withholding their crops from market, and when the trade of a corn dealer was proscribed, the utmost improvidence was exhibited in the consumption of grain. There were then, indeed, very few years in which a considerable scarcity was not experienced immediately before harvest, and many in which there was an absolute famine. The fluctuations of price exceeded every thing of which we can now form an idea; the price of wheat and other grain being 4 or 5 times as high in June and July, as in September and October. Thanks, however, to the increase of capital in the hands of the large farmers and dealers, and to the freedom given to the operations of the corn merchants, we are no longer exposed to such ruinous vicissitudes. Whenever the dealers, who, in consequence of their superior means of information, are better acquainted with the real state of the crops than any other class of persons, find the harvest likely to be deficient, they raise the price of the corn they have warehoused, and bid against each other for the corn which the farmers are bringing to market. In consequence of this rise of prices, all ranks and orders, but especially the lower, who are the great consumers of corn, find it indispensable to use greater economy, and to check all improvident and wasteful consumption. Every class being thus immediately put upon short allowance,

the pressure of the scarcity is distributed equally throughout the year; and instead of indulging, as was formerly the case, in the same scale of consumption as in seasons of plenty, until the supply became altogether deficient, and then being exposed without resource to the attacks of famine and pestilence, the speculations of the corn merchants warn us of our danger, and compel us to provide against it.

It is not easy to suppose that these proceedings of the corn merchants should ever be injurious to the public. It has been said that in scarce years they are not disposed to bring the corn they have purchased to market until it has attained an exorbitant price, and that the pressure of the scarcity is thus often very much aggravated; but there is no real ground for any such statement. The immense amount of capital required to store up any considerable quantity of corn, and the waste to which it is liable, render most holders disposed to sell as soon as they can realise a fair profit. In every extensive country in which the corn trade is free, there are infinitely too many persons engaged in it to enable any sort of combination or concert to be formed amongst them; and though it were formed, it could not be maintained for an instant. A large proportion of the farmers and other small holders of corn are always in straitened circumstances, more particularly if a scarce year has not occurred so soon as they expected; and they are consequently anxious to relieve themselves, as soon as prices rise, of a portion of the stock on their hands. Occasionally, indeed, individuals are found, who retain their stocks for too long a period, or until a reaction takes place, and prices begin to decline. But instead of joining in the popular cry against such persons, every one who takes a dispassionate view of the matter will perceive that, inasmuch as their miscalculation must, under the circumstances supposed, be exceedingly injurious to themselves, we have the best security against its being carried to such an extent as to be productive of any material injury or even inconvenience to the public. It ought also to be borne in mind, that it is rarely, if ever, possible to determine beforehand, when a scarcity is to abate in consequence of new supplies being brought to market; and had it continued a little longer, there would have been no miscalculation on the part of the holders. At all events, it is plain that, by declining to bring their corn to market, they preserved a resource on which, in the event of the harvest being longer delayed than usual, or of any unfavourable contingency taking place, the public could have fallen back; so that, instead of deserving abuse, these speculators are most justly entitled to every fair encouragement and protection. A country in which there is no considerable stock of grain in the barn-yards of the farmers, or in the warehouses of the merchants, is in the most perilous situation that can easily be imagined, and may be exposed to the severest privations, or even famine. But so long as the sagacity, the miscalculation, or the avarice of merchants and dealers retain a stock of grain in the warehouses, this last extremity cannot take place. By refusing to sell it till it has reached a very high price, they put an effectual stop to all sorts of waste, and husband for the public those supplies which they could not have so frugally husbanded for themselves.

We have already remarked that the last remnant of the shackles imposed by statute on the freedom of the internal corn dealer was abolished in 1773. It is true that engrossing, forestalling, and regrating — (see ENGROSSING, &c.) — are still held to be offences at common law; but there is very little probability of any one being in future made to answer for such ideal offences.

2. *Exportation to Foreign Countries.* — The fallacy of the notion so long entertained, that the prevention of exportation was the surest method of increasing plenty at home, is obvious to every one who has reflected upon such subjects. The markets of no country can ever be steadily and plentifully supplied with corn, unless her merchants have power to export the surplus supplies with which they may be occasionally furnished. When a country without the means of exporting grows nearly her own average supplies of corn, an abundant crop, by causing a great overloading of the market, and a heavy fall of price, is as injurious to the farmer as a scarcity. It may be thought, perhaps, that the greater quantity of produce in abundant seasons will compensate for its lower price; but this is not the case. It is uniformly found that variations in the quantity of corn exert a much greater influence over prices, than equal variations in the quantity of almost any thing else offered for sale. Being the principal necessary of life, when the supply of corn happens to be less than ordinary, the mass of the people make very great, though unavailing, exertions, by diminishing their consumption of other and less indispensable articles, to obtain their accustomed supplies of this prime necessary; so that its price rises much more than in proportion to the deficiency. On the other hand, when the supply is unusually large, the consumption is not proportionally extended. In ordinary years, the bulk of the population is about adequately fed; and though the consumption of all classes be somewhat greater in unusually plentiful years, the extension is considerable only among the lowest classes, and in the feeding of horses. Hence it is, that the increased supply at market, in such years, goes principally to cause a glut, and, consequently, a ruinous decline of prices. These statements are corroborated by the

widest experience. Whenever there is an inability to export, from whatever cause it may arise, an unusually luxuriant crop is uniformly accompanied by a very heavy fall of price, and severe agricultural distress; and when two or three such crops happen to follow in succession, the ruin of a large proportion of the farmers is completed.

If the mischiefs resulting from the want of power to export stopped here, they might, though very great, be borne; but they do not stop here. It is idle to suppose that a system ruinous to the producers can be otherwise to the consumers. A glut of the market, occasioned by luxuriant harvests, and the want of power to export, cannot be of long continuance: for, while it continues, it can hardly fail, by distressing all classes of farmers, and causing the ruin of many, to give a check to every species of agricultural improvement, and to lessen the extent of land in tillage. When, therefore, an unfavourable season recurs, the reaction is, for the most part, appalling. The supply, being lessened not only by the badness of the season, but also by a diminution of the quantity of land in crop, falls very far below an average; and a severe scarcity, if not an absolute famine, is most commonly experienced. It is, therefore, clear, that if a country would render herself secure against famine, and injurious fluctuations of price, she must give every possible facility to exportation in years of unusual plenty. If she act upon a different system, — if her policy make exportation in such years impracticable, or very difficult, — she will infallibly render the bounty of Providence an injury to her agriculturists; and two or three abundant harvests in succession will be the forerunners of scarcity and famine.

3. *Bounty on the Exportation of Corn.* — In Great Britain, as already observed, we have not only been allowed to export for a long series of years, but from the Revolution down to 1815 a bounty was given on exportation, whenever the home prices were depressed below certain limits. This policy, however, erred as much on the one hand as a restriction on exportation errs on the other. It causes, it is true, an extension of the demand for corn: but this greater demand is not caused by natural, but by artificial means; it is not a consequence of any really increased demand on the part of the foreigner, but of our furnishing the exporters of corn with a *bonus*, in order that they may sell it abroad below its natural price! To suppose that a proceeding of this sort can be a public advantage, is equivalent to supposing that a shopkeeper may get rich by selling his goods below what they cost.—(See Bounty.)

4. *Importation from Foreign Countries.* — If a country were, like Poland or Russia, uniformly in the habit of exporting corn to other countries, a restriction on importation would be of no material consequence; because, though such restriction did not exist, no foreign corn would be imported, unless its ports were so situated as to serve for an *entrepôt*. A restriction on importation is sensibly felt only when it is enforced in a country which, owing to the greater density of its population, the limited extent of its fertile land, or any other cause, would, either occasionally or uniformly, import. It is familiar to the observation of every one, that a total failure of the crops is a calamity that but rarely occurs in an extensive kingdom; that the weather which is unfavourable to one description of soil, is generally favourable to some other description; and that, except in anomalous cases, the total produce is not very different. But what is thus generally true of single countries, is always true of the world at large. History furnishes no single instance of a universal scarcity; but it is uniformly found, that when the crops in a particular country are unusually deficient, they are proportionally abundant in some other quarter. It is clear, however, that a restriction on importation excludes the country which enacts it from profiting by this beneficent arrangement. She is thrown entirely on her own resources. Under the circumstances supposed, she has nothing to trust to for relief but the reserves in her warehouses; and should these be inadequate to meet the exigency of the crisis, there are apparently no means by which she can escape experiencing all the evils of scarcity, or, it may be, of famine. A country deprived of the power to import is unable to supply the deficiencies of her harvests by the surplus produce of other countries; so that her inhabitants may starve amidst surrounding plenty, and suffer the extreme of scarcity, when, but for the restrictions on importation, they might enjoy the greatest abundance. If the restriction be not absolute, but conditional; if, instead of absolutely excluding foreign corn from the home markets, it merely loads it with a duty; the degree in which it will operate to increase the scarcity and dearth will depend on the magnitude of that duty. If the duty be constant and moderate, it may not have any very considerable effect in discouraging importation; but if it be fluctuating and heavy, it will, by falsifying the speculations of the merchants, and making a corresponding addition to the price of the corn imported, be proportionally injurious. In whatever degree foreign corn may be excluded in years of deficient crops, to the same extent must prices be artificially raised, and the pressure of the scarcity rendered so much the more severe.

Such would be the disastrous influence of a restriction on importation in a country which, were there no such obstruction in the way, would sometimes import and some-

times export. But its operation would be infinitely more injurious in a country which, under a free system, would uniformly import a portion of her supplies. The restriction, in this case, has a twofold operation. By preventing importation from abroad, and forcing the population to depend for subsistence on corn raised at home, it compels recourse to be had to comparatively inferior soils; and thus, by increasing the cost of producing corn above its cost in other countries, adds proportionally to its average price. The causes of fluctuation are, in this way, increased in a geometrical proportion; for, while the prevention of importation exposes the population to the pressure of want whenever the harvest happens to be less productive than usual, it is sure, at the same time, by raising average prices, to hinder exportation in a year of unusual plenty, until the home prices fall ruinously low. It is obvious, therefore, that a restriction of this sort must be alternately destructive of the interests of the consumers and producers. It injures the former by making them pay, at an average, an artificially increased price for their food, and by exposing them to scarcity and famine whenever the home crop proves deficient; and it injures the latter, by depriving them of the power to export in years of unusual plenty, and by overloading the market with produce, which, under a free system, would have met with an advantageous sale abroad.

The principle thus briefly explained, shows the impossibility of permanently keeping up the home prices by means of restrictions on importation, at the same time that it affords a clue by which we may trace the causes of most of that agricultural distress which has been experienced in this country since the peace. The real object of the Corn Law of 1815 was to keep up the price of corn to 80*s.* a quarter; but to succeed in this, it was indispensable not only that foreign corn should be excluded when prices were under this limit, but that the markets should never be overloaded with corn produced at home: for it is clear, according to the principle already explained, that if the supply should in ordinary years be sufficient to feed the population, it must, in an unusually abundant year, be more than sufficient for that purpose; and when, in such a case, the surplus is thrown upon the market, it cannot fail, in the event of our average prices being considerably above the level of those of the surrounding countries, to cause a ruinous depression. Now, this was the precise situation of this country at the end of the war. Owing partly to the act of 1804, but far more to the difficulties in the way of importation, and the depreciation of the currency, prices attained to an extraordinary elevation from 1809 to 1814, and gave such a stimulus to agriculture, that we grew, in 1812 and 1813, sufficient corn for our own supply. And, such being the case, it is clear, though our ports had been hermetically sealed against importation from abroad, that the first luxuriant crop must have occasioned a ruinous decline of prices. It is the exclusion, not the introduction, of foreign corn that has caused the distress of the agriculturists; for it is this exclusion that has forced up the price of corn in this country, in scarce and average years, to an unnatural level, and that, consequently, renders exportation in favourable seasons impossible, without such a fall of prices as is most disastrous to the farmer. It may be mentioned in proof of what is now stated, that the average price of wheat in England and Wales in 1814, was 74*s.* a quarter, and in 1815 it had fallen to 64*s.* But as these prices would not indemnify the occupiers of the poor lands brought under tillage during the previous high prices, they were gradually relinquishing their cultivation. A considerable portion of them was converted into pasture; rents were generally reduced; and wages had begun to decline: but the legislature having prohibited the importation of foreign corn, the operation of this natural principle of adjustment was unfortunately counteracted, and the price of 1816 rose to 75*s.* 10*d.* This rise was, however, insufficient to occasion any new improvement; and as foreign corn was now excluded, and large tracts of bad land had been thrown out of cultivation, the supply was so much diminished, that, notwithstanding the increase in the value of money, prices rose in 1817, partly, no doubt, in consequence of the bad harvest of the previous year, to 94*s.* 9*d.*; and in 1818, to 84*s.* 1*d.* These high prices had their natural effect. They revived the drooping spirits of the farmers, who imagined that the Corn Law was, at length, beginning to produce the effects anticipated from it, and that the golden days of 1812, when wheat sold for 125*s.* a quarter, were about to return! But this prosperity carried in its bosom the seeds of future mischief. The increased prices necessarily occasioned a fresh extension of tillage; capital was again applied to the improvement of the soil; and this increase of tillage, conspiring with favourable seasons, and the impossibility of exportation, sunk prices to such a degree, that they fell, in October, 1822, so low as 38*s.* 1*d.*, the average price of that year being only 43*s.* 3*d.*

It is thus demonstrably certain, that the recurrence of periods of distress, similar to those that have been experienced by the agriculturists of this country since the peace, cannot be warded off by restricting or prohibiting importation. A free corn trade is the only system that can give them that security against fluctuations that is so indispensable. The increased importation that would take place, were the ports always open, as soon as any considerable deficiency in the crops was apprehended, would prevent prices from

rising to an oppressive height; while, on the other hand, when the crops were unusually luxuriant, a ready outlet would be found for the surplus in foreign countries, without its occasioning any very heavy fall. To expect to combine steadiness of prices with restrictions on importation, is to expect to reconcile what is contradictory and absurd. The higher the limit at which the importation of foreign corn into a country like England is fixed, the greater will be the oscillation of prices. If we would secure for ourselves abundance, and avoid fluctuation, we must renounce all attempts at exclusion, and be ready to deal in corn, as we ought to be in every thing else, on fair and liberal principles.

That the restrictions imposed on the foreign corn trade during the last 10 years should not have been productive of more disastrous consequences than those that have actually resulted from them, is, we believe, principally to be ascribed to the very great increase that has taken place in the imports from Ireland. Previously to 1806, when a perfectly free corn trade between Great Britain and Ireland was for the first time established, the yearly imports did not amount to 400,000 quarters, whereas they now amount to 2,600,000; and any one who has ever been in Ireland, or is aware of the wretched state of agriculture in it, and of the amazing fertility of the soil, must be satisfied that a very slight improvement would occasion an extraordinary increase in the imports from that country; and it is believed by those best qualified to form an opinion on such a subject, that the settlement of the Catholic question, and the disfranchisement of the 40*s.* freeholders, by promoting the public tranquillity, and taking away one of the principal inducements to the pernicious practice of splitting farms, has, in this respect, already had great influence, and that it will eventually lead to the most material improvements. Hence it is by no means improbable, that the growing imports from Ireland may, at no distant period, reduce our prices to the level of those of the Continent, and even render us an occasionally exporting country. These, however, are contingent and uncertain results; and supposing them to be ultimately realised, the Corn Laws must in the mean time be productive of great hardship, and must, in all time to come, aggravate to a frightful extent the misery inseparable from bad harvests.

Nothing but the great importance of the subject could excuse us for dwelling so long on what is so very plain. To facilitate production, and to make commodities cheaper and more easily obtained, are the grand motives which stimulate the inventive powers, and which lead to the discovery and improvement of machines and processes for saving labour and diminishing cost; and it is plain that no system of commercial legislation deserves to be supported, which does not conspire to promote the same objects: but a restriction on the importation of corn into a country like England, which has made a great comparative advance in population and manufacturing industry, is diametrically opposed to these principles. The density of our population is such, that the exclusion of foreign corn forces us to resort to soils of a decidedly less degree of fertility than those that are under cultivation in the surrounding countries; and, in consequence, our average prices are comparatively high. We have resolved that our people should not employ their capital and labour in those branches of manufacturing and commercial industry in which they have a decided advantage over every other country; but that they should be made to force comparatively barren soils to yield them a scanty return for their outlay. If we could, by laying out 1000*l.* on the manufacture of cottons or hardware, produce a quantity of these articles that would exchange for 400 quarters of American or Polish wheat; and if the same sum, were it expended in cultivation in this country, would not produce more than 300 quarters; the prevention of importation occasions an obvious sacrifice of 100 out of every 400 quarters consumed in the empire; or, which is the same thing, it occasions an artificial advance of 25 per cent. in the price of corn. In a public point of view, the impolicy of such a system is obvious; but it seems, at first sight, as if it were advantageous to the landlords. The advantage is, however, merely apparent: at bottom there is no real difference between the interests of the landlords and those of the rest of the community. It would be ridiculous, indeed, to imagine for a moment that the landlords can be benefited by a system in which those tremendous fluctuations of prices, so subversive of all agricultural prosperity, are inherent; but though these could be got rid of, the result would be the same. The prosperity of agriculture must always depend upon, and be determined by, the prosperity of other branches of industry; and any system which, like the corn laws, is most injurious to the latter, cannot but be injurious to the former. Instead of being publicly advantageous, high prices are in *every case* distinctly and completely the reverse. The smaller the sacrifice for which any commodity can be obtained, so much the better. When the labour required to produce, or the money required to purchase, a sufficient supply of corn is diminished, it is as clear as the sun at noon-day that more labour or money must remain to produce or purchase the other necessaries, conveniences, and amusements of human life, and that the sum of national wealth and comforts must be proportionally augmented. Those who suppose that a rise of prices can ever be a means

of improving the condition of a country might, with equal reason, suppose that it would be improved by throwing its best soils out of cultivation, and destroying its most powerful machines. The opinions of such persons are not only opposed to the plainest and most obvious scientific principles, but they are opposed to the obvious conclusions of common sense, and the universal experience of mankind.

Experience of the injurious effects resulting from the Corn Laws has induced many that were formerly their zealous advocates to come round to a more liberal way of thinking. It would, however, be unjust not to mention that there has always been a large and respectable party amongst the landlords, opposed to all restrictions on the trade in corn; and who have uniformly thought that their interests, being identified with those of the public, would be best promoted by the abolition of restrictions on importation. A protest expressive of this opinion, subscribed by 10 peers, was entered on the Journals of the House of Lords, against the corn law of 1815. This document is said to have been drawn up by Lord Grenville, who has always been the enlightened advocate of sound commercial principles. Its reasoning is so clear and satisfactory, that we are sure we shall gratify our readers, as well as strengthen the statements previously made, by laying it before them.

"*Dissentient.* — I. Because we are adverse in principle to all new restraints on commerce. We think it certain that public prosperity is best promoted by leaving uncontrolled the free current of national industry; and we wish rather, by well considered steps, to bring back our commercial legislation to the straight and simple line of wisdom, than to increase the deviation by subjecting additional and extensive branches of the public interest to fresh systems of artificial and injurious restrictions.

"II. Because we think that the great practical rule, of leaving all commerce unfettered, applies *more peculiarly*, and on still stronger grounds of justice as well as policy, to the corn trade than to any other. Irresistible, indeed, must be that necessity which could, in our judgment, authorise the legislature to tamper with the sustenance of the people, and to impede the free purchase of that article on which depends the existence of so large a portion of the community.

"III. Because we think that the expectations of ultimate benefit from this measure are founded on a delusive theory. We cannot persuade ourselves that this law will ever contribute to produce plenty, cheapness, or steadiness of price. So long as it operates at all, its effects must be the opposite of these. *Monopoly is the parent of scarcity, of dearness, and of uncertainty.* To cut off any of the sources of supply, can only tend to lessen its abundance; to close against ourselves the cheapest market for any commodity, must enhance the price at which we purchase it; and to confine the consumer of corn to the produce of his own country, is to refuse to ourselves the benefit of that provision which Providence itself has made for equalising to man the variations of climate and of seasons.

"IV. But whatever may be the future consequences of this law at some distant and uncertain period, we see with pain that these hopes must be purchased at the expense of a great and present evil. To compel the consumer to purchase corn dearer at home than it might be imported from abroad, is the immediate practical effect of this law. In this way alone can it operate. Its present protection, its promised extension of agriculture, must result (if at all) from the profits which it creates by keeping up the price of corn to an artificial level. These future benefits are the consequences expected, but, as we confidently believe, erroneously expected, from giving a bounty to the grower of corn, by a tax levied on its consumer.

"V. Because we think the adoption of any permanent law for such a purpose, required the fullest and most laborious investigation. Nor would it have been sufficient for our satisfaction, could we have been convinced of the general policy of a hazardous experiment. A still further inquiry would have been necessary to persuade us that the present moment is fit for its adoption. In such an inquiry, we must have had the means of satisfying ourselves what its immediate operation will be, as connected with the various and pressing circumstances of public difficulty and distress with which the country is surrounded; with the state of our circulation and currency, of our agriculture and manufactures, of our internal and *external* commerce, and, above all, with the condition and reward of the industrious and labouring classes of our community.

"On all these particulars, as they respect this question, we think that parliament is almost wholly uninformed; on all we see reason for the utmost anxiety and alarm from the operation of this law.

"Lastly, Because, if we could approve of the principle and purpose of this law, we think that no sufficient foundation has been laid for its details. The evidence before us, unsatisfactory and imperfect as it is, seems to us rather to disprove than to support the propriety of the high price adopted as the standard of importation, and the fallacious mode by which that price is to be ascertained. And on all these grounds we are anxious to record our dissent from a measure so precipitate in its course, and, as we fear, so injurious in its consequences."

Attempts have sometimes been made to estimate the pecuniary burden which the restrictions on importation entail in ordinary years upon the country. This, however, is a subject with respect to which it is not possible to obtain any very accurate data. But supposing the total quantity of corn annually produced in Great Britain and Ireland to amount to 52,000,000 quarters, every shilling that is added to its price by the Corn Laws is equivalent to a tax on corn of 2,600,000*l.*; and estimating the average rise on all sorts of grain at 7*s.* a quarter, the total sum will be 18,200,000*l.* So great a quantity of corn is, however, consumed by the agriculturists themselves as food, in seed, the keep of horses, &c., that not more than a half, perhaps, of the whole quantity produced is brought to market. If we are nearly right in this hypothesis, and in the previous estimates, it will follow that the restrictions cost the classes not engaged in agriculture no less than 9,100,000*l.*, exclusive of their own pernicious consequences. Of this sum a *fifth*, probably, or 1,800,000*l.* may go to the landlords as rent; and this is *all* that the agriculturists can be said to gain by the system, for the additional price received by the farmer on that portion of the produce exclusive of rent is no more than the ordinary return for his capital and labour. His profits, indeed, instead of being increased by this system, are really diminished by it; (for proofs of this, see the note on *Corn Laws*, in my edition of the *Wealth of Nations*, vol. iv. pp. 358—361.;) and though the rents of the

landlords be, nominally at least, somewhat increased by it, it is, notwithstanding, abundantly certain that it is any thing but advantageous to them. It would require a far larger sum to balance the injury which fluctuations of price occasion to their tenants, and the damage done to their estates by over-cropping when prices are high, than all that is derived from the restrictions.

5. *Duties on Importation.* — A duty may be equitably imposed on imported corn, for two objects; that is, either for the sake of revenue, or to balance any excess of taxes laid on the agriculturists over those laid on the other classes. — (See my edition of *Wealth of Nations*, vol. iv. pp. 363—369.) With respect, however, to a duty imposed for the sake of revenue, it may be doubted whether corn be a proper subject for taxation. But at all events such a duty should be exceedingly moderate. It would be most inexpedient to attempt to add largely to the revenue by laying heavy duties on the prime necessary of life.

If it be really true that agriculture is more heavily taxed than any other branch of industry, the agriculturists are entitled to demand that a duty be laid on foreign corn when imported, corresponding to the *excess* of burdens affecting them. It has been doubted, however, whether they are in this predicament. But though the question be by no means free from difficulty, we should be disposed to decide it in the affirmative, being pretty well satisfied that, owing to the local and other burdens laid on the land, those occupying it are really subjected to heavier taxes than any other class. It is difficult, or rather, perhaps, impossible, to estimate with any degree of precision what the *excess* of taxes laid on the agriculturists beyond those laid on manufacturers and merchants may amount to; but we have elsewhere shown, that if we estimate it as making an addition of 5*s.* or 6*s.* to the quarter of wheat, we shall certainly be beyond the mark. — (See my edition of the *Wealth of Nations*, vol. iv. p. 369.) However, we should, in a case of this sort, reckon it safer to err on the side of too much protection than of too little; and would not, therefore, object to a fixed duty of 6*s.* or 7*s.* a quarter being laid on wheat, and a proportional duty being laid on other species of grain. Under such a system the ports would be always open. The duty would not be so great as to interpose any very formidable obstacle to importation. Every one would know beforehand the extent to which it would operate; at the same time that the just rights and interests of the agriculturists, and of every other class, would be maintained unimpaired.

When a duty is laid on the importation of foreign corn, for the equitable purpose of countervailing the peculiar duties laid on the corn raised at home, an *equivalent drawback* ought to be allowed on its exportation. "In allowing this drawback, we are merely returning to the farmer a tax which he has already paid, and which he must have, to place him in a fair state of competition in the foreign market, not only with the foreign producer, but with his own countrymen who are producing other commodities. It is essentially different from a bounty on exportation, in the sense in which the word bounty is usually understood; for, by a bounty, is generally meant a tax levied on the people for the purpose of rendering corn unnaturally cheap to the foreign consumer; whereas what I propose is to sell our corn at the price at which we can really afford to produce it, and not to add to its price a tax which shall induce the foreigner rather to purchase it from some other country, and deprive us of a trade which, under a system of free competition, we might have selected." — (*Ricardo on Protection to Agriculture*, p. 53.)

A duty accompanied with a drawback, as now stated, would not only be an equitable arrangement, but it would be highly for the advantage of farmers, without being injurious to any one else. The radical defect, as already shown, of the system followed from 1815 down to the present moment, in so far, at least, as respects agriculture, is, that it forces up prices in years when the harvest is deficient, while it leaves the market to be glutted when it is abundant. But while a constant duty of 6*s.* would secure to the home growers all the increase of price which the regard due to the interests of others should allow them to realise in a bad year, the drawback of 6*s.*, by enabling them to export in an unusually plentiful year, would prevent the markets from being overloaded, and prices from falling to the ruinous extent that they now occasionally do. Such a plan would render the business of a corn dealer, and of agriculture, comparatively secure; and would, therefore, provide for the continued prosperity of them both. We are astonished that the agriculturists have not taken this view of the matter. If they be really entitled to a duty on foreign corn, on account of their being heavier taxed than the other classes of their fellow citizens, they must also be entitled to a corresponding drawback. And it admits of demonstration, that *their* interests, as well as those of the community, would be far better promoted by such a duty and drawback as we have suggested, than they can ever be by any system of mere duties, how high soever they may be carried.

The principal objection to this plan is, that it would not be possible to levy the duty when the home price became very high, and that, consequently, it would be every now and then necessary to suspend it. But this objection does not seem to be by any means

so formidable as it has sometimes been represented. It may, we think, be concluded on unassailable grounds, that were the ports constantly open under a moderate fixed duty and an equivalent drawback, extreme fluctuations of price would be very rare. Supposing it were enacted, that when the home price rises above a certain high level, as 80*s.*, the duty should cease, we believe the clause would very seldom come into operation; and those who object that it is not fair to the farmers to deprive them of the full advantage to be derived from the highest prices, should recollect that in matters of this sort it is not always either possible, or, if possible, prudent, to carry the soundest principles to an extreme; and that, generally speaking, the public interests will be better consulted by guarding against scarcity and dearth, than by securing, at all hazards, a trifling though just advantage to a particular class.

III. British Corn Trade.

1. *Quantity of Corn consumed in Great Britain.* — Attempts have sometimes been made to compute the quantity of corn raised in a country, from calculations founded on the number of acres in tillage, and on the average produce per acre; but it is plain that no accurate estimate can ever be framed of the extent of land under cultivation. It is perpetually changing from year to year; and the amount of produce varies not only with the differences of seasons, but also with every improvement of agriculture. This method, therefore, is now rarely resorted to; and the growth of corn is generally estimated from the *consumption*. The conclusions deduced from this criterion must indeed be subject to error, as well from variations in the consumption, occasioned by variations in the price of corn, as from the varying extent to which other food is used. But supposing the prices of corn to be reduced to an average, if the consumption of a considerable number of persons, of all ranks and orders, and of all ages and sexes, were accurately determined, we should be able, supposing the census of the population to be nearly correct, to make a very close approximation to the total consumption of the country. Mr. Charles Smith, the well-informed and intelligent author of the Tracts on the Corn Trade, made many curious investigations, with a view to discover the mean annual consumption of corn; and reducing it to *the standard of wheat*, he found it to be at the rate of about *a quarter for each individual*, young and old. This estimate has been confirmed by a variety of subsequent researches; and, among others, by inquiries made during the scarcity of 1795 and 1796, by the magistrates of Suffolk, in 42 different parishes, in the view of ascertaining the average consumption of each family, which they found to correspond very closely with Mr. Smith's estimate. It is also worthy of remark, that M. Paucton, the intelligent author of the *Métrologie*, estimates the mean annual average consumption in France, when reduced to the standard of wheat, at about 10 bushels for each individual; and as the French consume considerably more bread, and less animal food, than the English, this estimate affords a strong proof of the correctness of that of Mr. Smith.

Having taken the population of England and Wales in 1765 at 6,000,000, Mr. Smith reckoned the consumers of each kind of grain, the quantity consumed by each individual, and hence, the whole consumed by man, to be as follows: —

Estimated Population of England and Wales.	Average Consumption of each Person.	Consumed by Man.
		Qrs.
3,750,000 consumers of wheat, at 1 quarter each		3,750,000
739,000 do. of barley, at 1⅜ do.		1,016,125
888,000 do. of rye, at 1⅛ do.		999,000
623,000 do. of oats, at 2⅞ do.		1,791,225
Consumed by man		7,556,350
In addition to this, Mr. Smith estimated the wheat distilled, made into starch, &c.		90,000
Barley used in malting, &c.		3,417,000
Rye for hogs, &c.		31,000
Oats for horses, &c.		2,461,500
Total of home consumption		13,555,850
Add excess of exports over imports		398,624
		13,954,474
Add seed (one tenth)		1,395,447
Total growth of all kinds of grain in England and Wales in 1765		15,349,921

This estimate, it will be observed, does not include either Scotland or Ireland; and later inquiries have rendered it probable that Mr. Smith underrated the population of England and Wales by nearly 1,000,000. The most eminent agriculturists seem also to be of opinion that the allowance for seed ought to be stated as high as a *seventh*.

Mr. Chalmers, availing himself of the information respecting the numbers of the people furnished under the population act of 1800, estimated the total consumption of all the different kinds of grain in Great Britain at that epoch at 27,185,300 quarters,

whereof wheat constituted 7,676,100 quarters. The crops of 1800 and of 1801 being unusually deficient, the importation in these years was proportionally great; but excluding these scarcities, the total average excess of all sorts of grain imported from Ireland and foreign countries into Great Britain over the exports had previously amounted to about 1,000,000 quarters, which deducted from 27,185,300, leaves 26,185,300, to which if we add *one seventh* as seed, we shall have 29,925,057 quarters as the average growth of Great Britain in 1800.

The population of Ireland, as ascertained by the census of 1821, amounted to very near 7,000,000, and probably at present exceeds 8,000,000. The greatest portion of its inhabitants are, it is true, supported by the potato, and seldom or never taste bread; but we shall perhaps be within the mark, if we estimate the number of those fed on the various kinds of corn at 3,000,000, and the average quantity of the different sorts of grain consumed by each individual at 2 quarters. This would give 6,000,000 quarters as the total consumption of Ireland.

But the population of Great Britain increased, from 10,942,000 in 1800, to 16,537,000 in 1831; and both Mr. Western and Dr. Colquhoun concurred in estimating the average consumption of the whole empire, in 1812 and 1814, at about 35,000,000 quarters.

The following is Dr. Colquhoun's estimate: —

Species of Grain.	Estimated Average of the Population of Great Britain and Ireland.	Each Person averaged.	Consumed by Man.	Consumed by Animals.	Used in Beer and Spirits.	Used in various Manufactures.	Total of Quarters.
		Quarters.	*Quarters.*	*Quarters.*	*Quarters.*	*Quarters.*	
Wheat - -	9,000,000	1	9,000,000	- -	- -	170,000	9,170,000
Barley - -	1,500,000	1¼	1,875,000	210,000	4,250,000	- -	6,335,000
Oats - -	4,500,000	1½	6,750,000	10,200,000	- -	- -	16,950,000
Rye - -	500,000	1¼	625,000	59,000	- -	1,000	685,000
Beans and peas -	500,000	1	500,000	1,360,000	- -	- -	1,860,000
Totals -	16,000,000		18,750,000	11,829,000	4,250,000	171,000	35,000,000

Dr. Colquhoun has made no allowance for seed in this estimate; and there can be no doubt that he has underrated the consumption of oats by at least one half quarter in the consumption of each of the 4,500,000 individuals he supposes fed on them, or by 2,250,000 quarters. Adding, therefore, to Dr. Colquhoun's estimate 5,500,000 quarters for seed, and 2,250,000 quarters for the deficiency of oats, it will bring it to 42,750,000 quarters; and taking the increase of population since 1813 into account, it does not appear to us that the annual average consumption of the different kinds of grain in the United Kingdom can now be estimated at less than FORTY-FOUR millions of quarters, exclusive of seed, and at FIFTY-TWO millions when it is included. Assuming this estimate to be correct, and the proportion of wheat to amount to *twelve* millions of quarters, the progressive consumption will be as follows: —

Consumption of Wheat and other Grain in the United Kingdom, in a Year, Six Months, a Month, a Week, &c.

	Wheat.	Other Grain.	Total.
	Qrs.	*Qrs.*	*Qrs.*
A year - - -	12,000,000	40,000,000	52,000,000
Six months - -	6,000,000	20,000,000	26,000,000
Three months - -	3,000,000	10,000,000	13,000,000
Six weeks - -	1,500,000	5,000,000	6,500,000
One month - -	1,000,000	3,333,333	4,333,333
Two weeks - - -	500,000	1,666,666	2,166,666
One week - -	250,000	833,333	1,083,333
One day - - -	35,714	119,048	154,762

The total imports of foreign corn in 1831 amounted to 3,541,809 quarters, being the largest quantity ever brought into Great Britain in any 1 year. Now, as this quantity does not amount to one fourteenth part of the entire produce, it would seem as if the greatest importation could have but a very slight influence on prices; but it has been already shown that a very large proportion, perhaps a half, of the entire corn produced in the empire is never brought to market, but is partly consumed by the agriculturists, and partly used as seed and in the feeding of farm horses, &c. Hence, if we are nearly right in this estimate, it follows that an importation of 3,500,000 quarters is really equivalent to about *one seventh* part of the entire produce brought to market in an average year, and must consequently have a very material influence in alleviating the pressure of scarcity in a bad year, and in checking the rise of prices.

2. *Regulations under which the Corn Trade of Great Britain is at present conducted.* — These regulations are embodied in the act 9 Geo. 4. c. 60., an abstract of which is subjoined: —

Sections 1. and 2. repeal the acts 55 Geo. 3. c. 26., 3 Geo. 4. c. 60., and 7 & 8 Geo. 4. c. 58., and so much of the act 6 Geo. 4. c. 111. as imposes duties on the importation of buck-wheat and Indian corn.

Foreign Corn may be imported on Payment of the Duties specified. — And whereas it is expedient that corn, grain, meal, and flour, the growth, produce, and manufacture of any foreign country, or of any British possession out of Europe, should be allowed to be imported into the United Kingdom for consumption, upon the payment of duties to be regulated from time to time according to the average price of British corn made up and published in manner herein-after required; be it therefore enacted, that there shall be levied and paid to his Majesty, upon all corn, grain, meal, or flour entered for home consumption in the United Kingdom from parts beyond the seas, the several duties specified and set forth in the table annexed to this act; and that the said duties shall be raised, levied, collected, and paid in such and the same manner in all respects as the several duties of customs mentioned and enumerated in the table of duties of customs inwards annexed to the act 6 Geo. 4. c. 111. — § 3.

The following is the table referred to: —

If imported from any foreign Country:	L.	s.	d.
Wheat: — According to the average price of wheat, made up and published in manner required by law; *videlicet*,			
Whenever such price shall be 62*s.* and under 63*s.* the quarter, the duty shall be for every quarter	1	4	8
Whenever such price shall be 63*s.* and under 64*s.* the quarter, the duty shall be for every quarter	1	3	8
Whenever such price shall be 64*s.* and under 65*s.* the quarter, the duty shall be for every quarter	1	2	8
Whenever such price shall be 65*s.* and under 66*s.* the quarter, the duty shall be for every quarter	1	1	8
Whenever such price shall be 66*s.* and under 67*s.* the quarter, the duty shall be for every quarter	1	0	8
Whenever such price shall be 67*s.* and under 68*s.* the quarter, the duty shall be for every quarter	0	18	8
Whenever such price shall be 68*s.* and under 69*s.* the quarter, the duty shall be for every quarter	0	16	8
Whenever such price shall be 69*s.* and under 70*s.* the quarter, the duty shall be for every quarter	0	13	8
Whenever such price shall be 70*s.* and under 71*s.* the quarter, the duty shall be for every quarter	0	10	8
Whenever such price shall be 71*s.* and under 72*s.* the quarter, the duty shall be for every quarter	0	6	8
Whenever such price shall be 72*s.* and under 73*s.* the quarter, the duty shall be for every quarter	0	2	8
Whenever such price shall be at or above 73*s.* the duty shall be for every quarter	0	1	0
Whenever such price shall be under 62*s.* and not under 61*s.* the duty shall be for every quarter	1	5	8
And in respect of each integral shilling, or any part of each integral shilling by which such price shall be under 61*s.*, such duty shall be increased by 1*s.*			
Barley: — Whenever the average price of barley, made up and published in manner required by law, shall be 33*s.* and under 34*s.* the quarter, the duty shall be for every quarter	0	12	4
And in respect of every integral shilling by which such price shall be above 33*s.*, such duty shall be decreased by 1*s.* 6*d.*, until such price shall be 41*s.*			
Whenever such price shall be at or above 41*s.*, the duty shall be for every quarter	0	1	0
Whenever such price shall be under 33*s.* and not under 32*s.*, the duty shall be for every quarter	0	13	10
And in respect of each integral shilling, or any part of each integral shilling, by which such price shall be under 32*s.*, such duty shall be increased by 1*s.* 6*d.*			
Oats: — Whenever the average price of oats, made up and published in manner required by law, shall be 25*s.* and under 26*s.* the quarter, the duty shall be for every quarter	0	9	3
And in respect of every integral shilling by which such price shall be above 25*s.*, such duty shall be decreased by 1*s.* 6*d.*, until such price shall be 31*s.*			
Whenever such price shall be at or above 31*s.*, the duty shall be for every quarter	0	1	0
Whenever such price shall be under 25*s.* and not under 24*s.*, the duty shall be for every quarter	0	10	9
And in respect of each integral shilling, or any part of each integral shilling, by which such price shall be under 24*s.* such duty shall be increased by 1*s.* 6*d.*			
Rye, Peas, and Beans: — Whenever the average price of rye, or of peas, or of beans, made up and published in manner required by law, shall be 36*s.* and under 37*s.* the quarter, the duty shall be for every quarter	0	15	6
And in respect of every integral shilling by which such price shall be above 36*s.*, such duty shall be decreased by 1*s.* 6*d.*, until such price shall be 46*s.*			
Whenever such price shall be at or above 46*s.*, the duty shall be for every quarter	0	1	0
Whenever such price shall be under 36*s.* and not under 35*s.*, the duty shall be for every quarter	0	16	9
And in respect of each integral shilling, or any part of each integral shilling, by which such price shall be under 35*s.*, such duty shall be increased by 1*s.* 6*d.*			
Wheat Meal and Flour: — For every barrel, being 196 lbs., a duty equal in amount to the duty payable on 38½ gallons of wheat.			
Oatmeal: — For every quantity of 181½ lbs., a duty equal in amount to the duty payable on a quarter of oats.			
Maize or Indian Corn, Buck-Wheat, Bear, or Bigg: — For every quarter, a duty equal in amount to the duty payable on a quarter of barley.			
If the Produce of and imported from any British Possession in North America, or elsewhere out of Europe.			
Wheat: — For every quarter	0	5	0
Until the price of British wheat, made up and published in manner required by law, shall be 67*s.* per quarter.			
Whenever such price shall be at or above 67*s.*, the duty shall be for every quarter	0	0	6
Barley: — For every quarter	0	2	0
Until the price of British barley, made up and published in manner required by law, shall be 31*s.* per quarter.			
Whenever such price shall be at or above 34*s.*, the duty shall be for every quarter	0	0	6
Oats: — For every quarter	0	2	6
Until the price of British oats, made up and published in manner required by law, shall be 25*s.* per quarter.			
Whenever such price shall be at or above 25*s.*, the duty shall be for every quarter	0	0	6
Rye, Peas, and Beans: — For every quarter	0	3	0
Until the price of British rye, or of peas, or of beans, made up and published in manner required by law, shall be 41*s.*			
Whenever such price shall be at or above 41*s.*, the duty shall be for every quarter	0	0	6
Wheat Meal and Flour: — For every barrel being 196 lbs., a duty equal in amount to the duty payable on 38½ gallons of wheat.			
Oatmeal: — For every quantity of 181½ lbs., a duty equal in amount to the duty payable on a quarter of oats.			
Maize or Indian Corn, Buck-Wheat, Bear, or Bigg: — For every quarter, a duty equal in amount to the duty payable on a quarter of barley.			

Regulations to be observed upon shipping Corn from any British Possession out of Europe, &c. — No corn, grain, meal, or flour shall be shipped from any port in any British possession out of Europe, as being the produce of any such possession, until the owner or proprietor or shipper thereof shall have made and subscribed, before the collector or other chief officer of customs at the port of shipment, a declaration in writing, specifying the quantity of each sort of such corn, grain, or flour, and that the same was the produce of some British possession out of Europe to be named in such declaration, nor until such owner or proprietor or shipper shall have obtained from the collector or other chief officer of the customs at the said port a certificate, under his signature, of the quantity of corn, grain, meal, or flour so declared to be shipped; and before any corn, grain, meal, or flour shall be entered at any port or place in the United Kingdom, as being the produce of any British possession out of Europe, the master of the ship importing the same shall produce and deliver to the collector or other chief officer of customs of the port or place of importation a copy of such declaration, certified to be a true and accurate copy thereof, under the hand of the collector or other chief officer of customs at the port of shipment before whom the same was made, together with the certificate, signed by the said collector or other chief officer of customs, of the quantity of corn so declared to be shipped; and such master shall also make and subscribe, before the collector or other chief officer of customs at the port or place of importation, a declaration in writing, that the several quantities of corn, grain, meal, or flour on board such ship, and proposed to be entered under the authority of such declaration, are the same that were mentioned and referred to in the declaration and certificate produced by him, without any admixture or addition; and if any person shall, in any such declaration, wilfully and corruptly make any false statement respecting the place of which any such corn,

grain, meal, or flour was the produce, or respecting the identity of any such corn, grain, meal, or flour, such person shall forfeit and become liable to pay to his Majesty the sum of 100*l.*, and the corn, grain, meal, or flour to such person belonging, on board any such ship, shall also be forfeited; and such forfeitures shall and may be sued for, prosecuted, recovered, and applied in such and the same manner in all respects as any forfeiture incurred under and by virtue of the said act 6 Geo. 4. c. 111.: Provided always, that the declarations aforesaid shall not be required in respect of any corn, grain, meal, or flour which shall have been shipped within 3 months next after the passing of this act. — § 4.

Penalty for importing Malt or ground Corn. — It shall not be lawful to import, from parts beyond the seas into the United Kingdom, for consumption there, any malt, or to import, for consumption into Great Britain, any corn ground, except wheat meal, wheat flour, and oatmeal; or to import, for consumption, any corn ground into Ireland; and that if any such article as aforesaid shall be imported contrary to the provisions aforesaid, the same shall be forfeited. — § 5.

Account of Corn and Flour imported, &c. to be published in the Gazette monthly. — The commissioners of his Majesty's customs shall, once in each calendar month, cause to be published in the London Gazette an account of the total quantity of each sort of corn, grain, meal, and flour respectively, which shall have been imported into the United Kingdom; and also an account of the total quantity of each sort of the corn, grain, meal, and flour respectively, upon which the duties of importation shall have been paid in the United Kingdom during the calendar month next preceding; together with an account of the total quantity of each sort of the said corn, grain, meal, and flour respectively remaining in warehouse at the end of such next preceding calendar month. — § 6.

Section 7. enacts, that if any foreign state shall subject British vessels, goods, &c., to any higher duties or charges than are levied on the vessels, &c. of other countries, his Majesty may prohibit the importation of corn from such state.

Weekly Returns of Purchases and Sales of Corn to be made in the Places herein mentioned. — And whereas it is necessary, for regulating the amount of such duties, that effectual provision should be made for ascertaining from time to time the average prices of British corn; be it therefore enacted, that weekly returns of the purchases and sales of British corn shall be made in the manner herein-after directed, in the following cities and towns; (that is to say,) London, Uxbridge, Hertford, Royston, Chelmsford, Colchester, Rumford, Maidstone, Canterbury, Dartford, Chichester, Guildford, Lewes, Rye, Bedford, Windsor, Aylesbury, Ipswich, Woodbridge, Sudbury, Huntingdon, Hadleigh, Stowmarket, Bury Saint Edmunds, Beccles, Bungay, Lowestoft, Cambridge, Ely, Wisbeach, Norwich, Yarmouth, Lynn, Thetford, Watton, Diss, East Dereham, Harleston, Holt, Aylesham, Fakenham, North Walsham, Lincoln, Gainsborough, Glanford Bridge, Lowth, Boston, Sleaford, Stamford, Spalding, Derby, Northampton, Leicester, Nottingham, Worcester, Coventry, Reading, Oxford, Wakefield, Warminster, Birmingham, Leeds, Newark, York, Bridlington, Beverley, Howden, Sheffield, Hull, Whitby, New Malton, Durham, Stockton, Darlington, Sunderland, Barnard Castle, Walsingham, Belford, Hexham, Newcastle-upon-Tyne, Morpeth, Alnwick, Berwick-upon-Tweed, Carlisle, Whitehaven, Cockermouth, Penrith, Egremont, Appleby, Kirkby-in-Kendal, Liverpool, Ulverston, Lancaster, Preston, Wigan, Warrington, Manchester, Bolton, Chester, Nantwich, Middlewich, Four Lane Ends, Denbigh, Wrexham, Carnarvon, Haverford West, Carmarthen, Cardiff, Gloucester, Cirencester, Tedbury, Stow-on-the-Wold, Tewkesbury, Bristol, Taunton, Wells, Bridgewater, Frome, Chard, Monmouth, Abergavenny, Chepstow, Pont-y-pool, Exeter, Barnstaple, Plymouth, Totness, Tavistock, Kingsbridge, Truro, Bodmin, Launceston, Redruth, Helstone, Saint Austel, Blandford, Bridport, Dorchester, Sherbourne, Shaston, Wareham, Winchester, Andover, Basingstoke, Fareham, Havant, Newport, Ringwood, Southampton, and Portsmouth; and for the purpose of duly collecting and transmitting such weekly returns as aforesaid, there shall be appointed in each of the said cities and towns, in manner herein-after directed, a fit and proper person to be inspector of corn returns. — § 8.

Appointing Comptroller of Corn Returns. — It shall be lawful for his Majesty to appoint a fit and proper person to be comptroller of corn returns, for the purposes herein-after mentioned, and to grant to such comptroller of corn returns such salary and allowances as to his Majesty shall seem meet: Provided always, that such person shall be appointed to and shall hold such his office during his Majesty's pleasure, and not otherwise; and shall at all times conform to and obey such lawful instructions, touching the execution of the duties of such his office, as shall from time to time be given to him by the Lords of the committee of privy council appointed for the consideration of all matters relating to trade and foreign plantations. — § 9.

Sections 10, 11, 12. embody the comptroller's oath, enact that he shall execute his office in person and not by deputy, provide for supplying his place during illness or absence, and authorise him to send and receive letters relating exclusively to the duties of his office free of postage.

Sections 13. and 14. authorise the Lord Mayor and aldermen to appoint an inspector for the city of London, who is to do the duty in person, &c.

Sections 15, 16. and 17. declare that no person shall be eligible to the office of corn inspector in the city of London, who shall be engaged in trade as a miller, maltster, or corn factor, or be anywise concerned in the buying of corn for sale, or in the sale of bread made thereof; they also embody the oath the inspector is to take, and provide for the enrolment of his appointment.

Dealers in Corn in London to deliver in a Declaration to the Lord Mayor, &c. — Every person who shall carry on trade or business in the city of London, or within 5 miles from the Royal Exchange in the said city, as a corn factor, or as an agent employed in the sale of British corn, and every person who shall sell any British corn within the present Corn Exchange in Mark Lane in the said city, or within any other building or place which now is or may hereafter be used within the city of London, or within 5 miles from the Royal Exchange in the said city, for such and the like purposes for which the said Corn Exchange in Mark Lane hath been and is used, shall, before he or they shall carry on trade or business, or sell any corn in manner aforesaid, make and deliver to the Lord Mayor, or 1 of the aldermen of the city of London, a declaration in the following words; (that is to say,)

"I *A. B.* do declare, that the returns to be by me made, conformably to an act passed in the ninth year of the reign of King George the Fourth, intituled [*here set forth the title of this act*], of the quantities and prices of British corn which henceforth shall be by or for me sold or delivered, shall, to the best of my knowledge and belief, contain the whole quantity, and no more, of the corn *bonâ fide* sold and delivered by or for me within the periods to which such returns respectively shall refer, with the prices of such corn, and the names of the buyers respectively, and of the persons for whom such corn shall have been sold by me respectively; and to the best of my judgment the said returns shall in all respects be conformable to the provisions of the said act."

Which declaration shall be in writing, and shall be subscribed with the hand of the person so making the same; and the Lord Mayor or such alderman as aforesaid of the city of London for the time being shall and he is hereby required to deliver a certificate thereof, under his hand, to the inspector of corn returns for the city of London, to be by him registered in a book to be by him provided and kept for that purpose. — § 18.

Dealers in Corn to make Returns to Corn Inspector. — Every such corn factor and other person as aforesaid, who is herein-before required to make and who shall have made such declaration as aforesaid, shall and he or she is hereby required to return or cause to be returned, on Wednesday, in each and every week, to the inspector of corn returns for the city of London, an account in writing, signed with his or her own name, or the name of his or her agent duly authorised in that behalf, of the quantities of each respective sort of British corn by him or her sold during the week ending on and including the next preceding Tues-

day, with the prices thereof, and the amount of every parcel, with the total quantity and value of each sort of corn, and by what measure or weight the same was sold, and the names of the buyers thereof, and of the persons for and on behalf of whom such corn was sold; and it shall and may be lawful for any such inspector of corn returns to deliver to any person making or tendering any such returns a notice in writing, requiring him or her to declare and set forth therein where and by whom and in what manner any such British corn was delivered to the purchaser or purchasers thereof; and every person to whom any such notice shall be so delivered shall and he or she is hereby required to comply therewith, and to declare and set forth in such his or her return the several particulars aforesaid. — § 19.

Sections 20, 21, 22, 23. and 24. authorise the appointment of corn inspectors in the places before-mentioned, forbid those being employed as such who have within the preceding 12 months been engaged in any department of the corn trade, or as a miller, or maltster, forbid those who are appointed from engaging in such occupations, prescribe the oath they are to take, and provide for the enrolment of their appointments, &c.

Dealers in Corn in Cities and Towns to make Declaration. — Every person who shall deal in British corn at or within any such city or town as aforesaid, or who shall at or within any such city or town engage in or carry on the trade or business of a corn factor, miller, maltster, brewer, or distiller, or who shall be the owner or proprietor, or part owner or proprietor, of any stage coaches, wagons, carts, or other carriages carrying goods or passengers for hire to and from any such city or town, and each and every person who, as a merchant, clerk, agent, or otherwise, shall purchase at any such city or town any British corn for sale, or for the sale of meal, flour, malt, or bread made or to be made thereof, shall, before he or she shall so deal in British corn at any such city or town, or shall engage in or carry on any such trade or business as aforesaid, or shall purchase any British corn for any such purpose as aforesaid, at or within any such city or town, make and deliver, in manner herein-after mentioned, a declaration in the following words; (that is to say,)

"I *A. B.* do declare, that the returns to be by me made conformably to the act passed in the ninth year of the reign of King George the Fourth, intituled [*here set forth the title of this act*], of the quantities and prices of British corn which henceforward shall by or for me be bought, shall, to the best of my knowledge and belief, contain the whole quantity, and no more, of the British corn *bonâ fide* bought for or by me within the periods to which such returns respectively shall refer, with the prices of such corn, and the names of the sellers respectively; and to the best of my judgment the said returns shall in all respects be conformable to the provisions of the said act."

Which declaration shall be in writing, and shall be subscribed with the hand of the person so making the same, and shall by him or her, or by his or her agent, be delivered to the mayor or chief magistrate, or to some justice of the peace for such city or town, or for the county, riding, or division in which the same is situate, who are hereby required to deliver a certificate thereof to the inspector of corn returns for any such city or town as aforesaid, to be by him registered in a book to be by him provided and kept for that purpose. — § 25.

Inspectors empowered to require such Declaration from Corn Dealers. — It shall and may be lawful for any inspector of corn returns for the city of London, or for any such other city or town as aforesaid, to serve upon and deliver to any person buying or selling corn in any such city or town, and who is not within the terms and meaning of this present act specially required to make any such declaration as aforesaid, a notice in writing under the hand of such inspector, requiring him to make such declaration as aforesaid; and any person upon whom such notice shall be served as aforesaid shall and he is hereby required to comply with such notice, and to make such declaration in such and the same manner in all respects as if he or she had been specially required to make the same by the express provisions of this present act. — § 26.

Corn Dealers to make Returns in Writing to Corn Inspectors. — All persons who are herein-before required to make and who shall have made such declaration as aforesaid, shall and they are hereby required, on the first market day which shall be holden in each and every week within each and every such city or town as aforesaid at or within which they shall respectively deal in corn, or engage in or carry on any such trade or business as aforesaid, or purchase any corn for any such purpose as aforesaid, to return or cause to be returned, to the inspector of corn returns for such city or town, an account in writing, signed with their names respectively, of the amount of each and every parcel of each respective sort of British corn so by them respectively bought during the week ending on and including the day next preceding such first market day as aforesaid, with the price thereof, and by what weight or measure the same was so bought by them, with the names of the sellers of each of the said parcels respectively, with the names of the person or persons, if any other than the person making such return, for or on account of whom the same was so bought and sold; and it shall and may be lawful for any such inspector of corn returns to deliver to any person making or tendering any such return a notice in writing, requiring him or her to declare and set forth therein where and by whom and in what manner any such British corn was delivered to him or her; and every person to whom any such notice shall be delivered shall and he or she is hereby required to comply therewith, and to declare and set forth in such his or her return, or in a separate statement in writing, the several particulars aforesaid. — § 27.

Inspector not to include Returns until he has ascertained that the Persons making them have taken the Declaration required. — No inspector of corn returns shall include, in the return so to be made by them as aforesaid to the comptroller of corn returns, any account of sales or purchases of corn, unless such inspector shall have received satisfactory proof that the person or persons tendering such account hath made the declaration herein-before required, and hath delivered the same to the mayor or chief magistrate or to some justice of the peace of the city or town for which such inspector shall be so appointed to act, or to some justice of the peace for the county, riding, or division in which such city or town is situate. — § 28.

Inspector to enter Returns made to him in a Book, &c. — Every inspector of corn returns shall duly and regularly enter, in a book to be by him provided and kept for that purpose, the several accounts of the quantities and prices of corn returned to him by such persons respectively as aforesaid; and every such inspector of corn returns for the city of London, and for the several other cities and towns aforesaid, shall in each and every week return to the comptroller of corn returns an account of the weekly quantities and prices of the several sorts of British corn sold in the city or town for which he is appointed inspector, according to the returns so made to him as aforesaid, and in such form as shall be from time to time prescribed and directed by the said comptroller of corn returns; and the said returns shall be so made to the said comptroller by the inspector of corn returns for the city of London on Friday in each week, and by the inspector of corn returns for the several other cities and towns as aforesaid within 3 days next after the first market day holden in each and every week in any such city or town. — § 29.

Average Prices to be made up and published every Week. — The average prices of all British corn, by which the rate and amount of the said duties shall be regulated, shall be made up and computed on Thursday in each and every week in manner following; (that is to say,) the said comptroller of corn returns shall on such Thursday in each week, from the returns received by him during the week next preceding, ending on and including the Saturday in such preceding week, add together the total quantities of each sort of British corn respectively appearing by such returns to have been sold, and the total prices for which the same shall thereby appear to have been sold, and shall divide the amount of such total prices respectively by the amount of such total quantities of each sort of British corn respectively, and the sum produced thereby shall be added to the sums in like manner produced in the 5 weeks immediately preceding the same, and the amount of such sums so added shall be divided by 6, and the sum thereby given shall be deemed and taken to be the aggregate average price of each such sort of British corn respectively, for the

purpose of regulating and ascertaining the rate and amount of the said duties; and the said comptroller of corn returns shall cause such aggregate weekly averages to be published in the next succeeding Gazette, and shall on Thursday in each week transmit a certificate of such aggregate average prices of each sort of British corn to the collector or other chief officer of the customs at each of the several ports of the United Kingdom; and the rate and amount of the duties to be paid under the provisions of this act shall from time to time be regulated and governed at each of the ports of the United Kingdom respectively by the aggregate average prices of British corn at the time of the entry for home consumption of any corn, grain, meal, or flour chargeable with any such duty, as such aggregate average prices shall appear and be stated in the last of such certificates as aforesaid which shall have been received as aforesaid by the collector or other chief officer of customs at such port. — § 30.

How Quantities of Corn are to be computed. — In the returns so to be made as aforesaid to the comptroller of corn returns, and in the publications so to be made from time to time in the London Gazette, and in the certificate so to be transmitted by the said comptroller of corn returns to such collectors or other chief officers of the customs as aforesaid, the quantities of each sort of British corn respectively shall be computed and set forth by, according, and with reference to the imperial standard gallon. — § 31.

Comptroller may use the present Averages. — Until a sufficient number of weekly returns shall have been received by the said comptroller of corn returns under this act, to afford such aggregate average prices of British corn as aforesaid, the weekly average prices of British corn published by him immediately before the passing of this act shall by him be used and referred to in making such calculations as aforesaid, in such and the same manner as if the same had been made up and taken under and in pursuance of this act. — § 32.

What shall be deemed British Corn. — All corn or grain, the produce of the United Kingdom, shall be deemed and taken to be British corn for the purposes of this act. — § 33.

Provisions of this Act may be applied to any Town in the United Kingdom. — For the purpose of ascertaining the average price of corn and grain sold within the United Kingdom of Great Britain and Ireland, it shall and may be lawful for his Majesty, by any order or orders to be by him made, by and with the advice of his privy council, to direct that the provisions of this act, so far as regards the appointment of inspectors and the making of weekly returns, shall be applicable to any cities or towns within the United Kingdom of Great Britain and Ireland which shall be named in any such order or orders in council: Provided always, that the returns so received from such towns shall not be admitted into the averages made up for the purpose of regulating the duties payable upon foreign corn, grain, meal, or flour. — § 34.

Section 35. provides for the continuance in office of the present comptrollers and inspectors.

If Returns are untrue, Comptroller to lay a Statement thereof before the Committee of Privy Council. — If the said comptroller of corn returns shall at any time see cause to believe that any return so to be made as aforesaid to any such inspector of corn returns for the city of London, or for any other such city or town as aforesaid, is fraudulent or untrue, the said comptroller shall and he is hereby required, with all convenient expedition, to lay before the Lords of the said committee of privy council a statement of the grounds of such his belief; and if, upon consideration of any such statement, the said Lords of the said committee shall direct the said comptroller to omit any such return in the computation of such aggregate weekly average price as aforesaid, then and in that case, but not otherwise, the said comptroller of corn returns shall and he is hereby authorised to omit any such return in the computation of such aggregate weekly average price. — § 36.

Section 37. enacts, that corn dealers having made the declaration previous to this act shall transmit returns and comply with the rules hereby required.

Comptroller to issue Directions respecting Inspection of Books of Inspectors. — The comptroller of corn returns shall and he is hereby authorised from time to time, in pursuance of any instructions which he shall receive in that behalf from the Lords of the said committee of privy council, to issue to the several inspectors of corn returns any general or special directions respecting the inspection by any person or persons of the books so directed as aforesaid to be kept by every such inspector of corn returns; and no such inspector as aforesaid shall permit or suffer any person to inspect any such book, or to peruse or transcribe any entry therein, except in compliance with some such general or special directions from the said comptroller of corn returns as aforesaid. — § 38.

Copy of the last Return to be affixed on Market Place on each Market Day. — Each and every inspector of corn returns shall and he is hereby required on each and every market day to put up or cause to be put up in the market place of the city or town for which he shall be appointed inspector, or if there shall be no market place in such city or town, then in some other conspicuous place therein, a copy of the last return made by him to the comptroller of corn returns, omitting the names of the parties who may have sold and bought the said corn; and every such inspector shall also again put up such account on the market day immediately following that on which it shall first have been put up, in case the same shall from accident or any other cause have been removed, and shall take due care that the same shall remain up for public inspection until a new account for the ensuing week shall have been prepared and set up. — § 39.

Sections 40. and 41. relate to the payment of comptrollers and inspectors.

Penalty on Corn Dealers for not making Declarations or Returns. — If any person who is hereby required to make and deliver the declaration or declarations herein-before particularly mentioned and set forth, or either of them, shall not make and deliver such declaration or declarations at the time, and in the form and manner, and to the person or persons, herein before directed and prescribed in that behalf, every person so offending shall forfeit and pay the sum of 20*l.* for each and every calendar month during which he shall neglect or delay to make and deliver any such declaration; and if any person who is herein-before required to make any return to any such inspector of corn returns as aforesaid shall not make such returns to such inspector, at the time and in the form and manner herein-before directed and prescribed, every such offender shall for such his offence forfeit and pay the sum of 20*l.* — § 42.

Sections 43, 44. and 45. regard the recovery and application of penalties, and impose a fine, not exceeding 10*l.*, on any person, lawfully summoned as a witness touching any matter of fact under this act, who refuses to attend without reasonable excuse.

Punishment for making false Returns. — If any person shall make any false and fraudulent statement in any such return as he is herein-before directed and required to make, or shall falsely and wilfully include, or procure or cause to be included, in any such return, any British corn which was not truly and *bonâ fide* sold or bought to, by, or on behalf of the person or persons in any such return mentioned in that behalf, in the quantity and for the price therein stated and set forth, every such offender shall be and be deemed guilty of a misdemeanor. — § 46.

Act not to affect the Practice of measuring or Privileges of the City of London. — Nothing in this act contained shall extend to alter the present practice of measuring corn, or any of the articles aforesaid, to be shipped from or to be landed in the port of London, but that the same shall be measured by the sworn meters appointed for that purpose, by whose certificate the searchers or other proper officers of his Majesty's customs are hereby empowered and required to certify the quantity of corn or other articles as aforesaid so shipped or landed; and that nothing in this act contained shall extend to lessen or take away the rights and privileges of, or the tolls or duties due and payable to, the mayor and commonalty and citizens of the city of London, or to the mayor of the said city for the time being, or to take away the privileges of any persons lawfully deriving title from or under them. — § 47.

Limitation of Actions. — Actions brought or commenced under this act must be within three months after the matter or thing done. Defendants may plead the general issue; and if judgment be given against the plaintiff, defendants shall have treble costs. — § 48.

3. Tables showing the Prices of the different Sorts of Grain in Great Britain, the Quantities imported and exported, &c.

I. Account of the Prices of Middling or Mealing Wheat per Quarter at Windsor Market, as ascertained by the Audit-Books of Eton College.

Years.	Prices of Wheat at Windsor, 9 Gallons to the Bushel.			Prices of Wheat reduced to the Winchester Bushel of 8 Gallons.			Average of Ten Years according to the Winchester Bushel of 8 Gallons.		
	£	s.	d.	£	s.	d.	£	s.	d.
1646	2	8	0	2	2	8			
1647	3	13	8	3	5	5⅔			
1648	4	5	0	3	15	6¾			
1649	4	0	0	3	11	1¼			
1650	3	16	8	3	8	1⅔			
1651	3	13	4	3	5	2¼			
1652	2	9	6	2	4	0			
1653	1	15	6	1	11	6⅔			
1654	1	6	0	1	3	1¼			
1655	1	13	4	1	9	7⅓	2	11	7¾
1656	2	3	0	1	18	2⅔			
1657	2	6	8	2	1	5⅓			
1658	3	5	0	2	17	9¼			
1659	3	6	0	2	18	8			
1660	2	16	6	2	10	2¾			
1661	3	10	0	3	2	2¾			
1662	3	14	0	3	5	9¼			
1663	2	17	0	2	10	8			
1664	2	0	6	1	16	0			
1665	2	9	4	2	3	10¼	2	10	5¾
1666	1	15	0	1	12	0			
1667	1	16	0	1	12	0			
1668	2	0	0	1	15	6¾			
1669	2	4	4	1	19	5			
1670	2	1	8	1	17	0⅓			
1671	2	2	0	1	17	4			
1672	2	1	0	1	16	5¼			
1673	2	6	8	2	1	5⅔			
1674	3	8	8	3	1	0⅔			
1675	3	4	8	2	17	5⅔	2	0	11⅔
1676	1	18	0	1	13	9¼			
1677	2	2	0	1	17	4			
1678	2	19	0	2	12	5¼			
1679	3	0	0	2	13	4			
1680	2	5	0	2	0	0			
1681	2	6	8	2	1	5⅔			
1682	2	4	0	1	19	1¼			
1683	2	0	0	1	15	6⅔			
1684	2	4	0	1	19	1¼			
1685	2	6	8	2	1	5⅔	2	1	4¼
1686	1	14	0	1	10	2⅔			
1687	1	5	2	1	2	4⅓			
1688	2	6	0	2	0	10⅔			
1689	1	10	0	1	6	8			
1690	1	14	8	1	10	9⅔			
1691	1	14	0	1	10	2⅔			
1692	2	6	8	2	1	5⅔			
1693	3	7	8	3	0	1¼			
1694	3	4	0	2	16	10⅔			
1695	2	13	0	2	7	1¼	1	19	6¾
1696	3	11	0	3	3	1¼			
1697	3	0	0	2	13	4			
1698	3	8	4	3	0	9			
1699	3	4	0	2	16	10¾			
1700	2	0	0	1	15	6⅔			
1701	1	17	8	1	13	5⅔			
1702	1	9	6	1	6	2¾			
1703	1	16	0	1	12	0			
1704	2	6	6	2	1	4			
1705	1	10	0	1	6	8	2	2	11
1706	1	6	0	1	3	1¼			
1707	1	8	6	1	5	4			
1708	2	1	6	1	16	10⅔			
1709	3	18	6	3	9	9¼			
1710	3	18	0	3	9	4			
1711	2	14	0	2	8	0			
1712	2	6	4	2	1	2¼			
1713	2	11	0	2	5	4			
1714	2	10	4	2	4	9			
1715	2	3	0	1	18	2¼	2	4	2¼
1716	2	8	0	2	2	8			
1717	2	5	8	2	0	7¼			
1718	1	18	10	1	14	6¼			
1719	1	15	0	1	11	1¼			
1720	1	17	0	1	12	10⅔			
1721	1	17	6	1	13	4			
1722	1	16	0	1	12	0			
1723	1	14	8	1	10	10⅔			
1724	1	17	0	1	12	10⅔			
1725	2	8	6	2	3	1¼	1	15	4¾
1726	2	6	0	2	0	10⅔			
1727	2	2	0	1	17	4			
1728	2	14	6	2	8	5⅓			
1729	2	6	10	2	1	7⅓			
1730	1	16	6	1	12	5¼			
1731	1	12	10	1	9	2⅔			
1732	1	6	8	1	3	8⅓			
1733	1	8	4	1	5	2¼			
1734	1	18	10	1	14	6⅓			
1735	2	3	0	1	18	2⅔	1	15	2
1736	2	0	4	1	15	10¼			
1737	1	18	0	1	13	9¼			
1738	1	15	6	1	11	6⅔			
1739	1	18	6	1	14	2⅔			
1740	2	10	8	2	5	1⅓			
1741	2	6	8	2	1	5⅔			
1742	1	14	0	1	10	2⅔			
1743	1	4	10	1	2	1			
1744	1	4	10	1	2	1			
1745	1	7	6	1	4	5⅓	1	12	1
1746	1	19	0	1	14	8			
1747	1	14	10	1	10	11⅓			
1748	1	17	0	1	12	10⅔			
1749	1	17	0	1	12	10⅔			
1750	1	12	6	1	8	10⅔			
1751	1	18	6	1	14	2⅔			
1752	2	1	10	1	17	2⅓			
1753	2	4	8	1	19	8⅓			
1754	1	14	8	1	10	9⅔			
1755	1	13	10	1	10	1	1	1	2⅔
1756	2	5	2	2	0	1⅔			
1757	3	0	0	2	13	4			
1758	2	10	0	2	4	5⅓			
1759	1	19	8	1	15	3			
1760	1	16	6	1	12	5¼			
1761	1	10	2	1	6	9⅔			
1762	1	19	0	1	14	8			
1763	2	0	8	1	16	1⅔			
1764	2	6	8	2	1	5⅔			
1765	2	14	0	2	8	0	1	19	3¼
1766	2	8	6	2	3	1¼			
1767	3	4	6	2	17	4			
1768	3	0	6	2	13	9¼			
1769	2	5	8	2	0	7			
1770	2	9	0	2	3	6⅔			
1771	2	17	0	2	10	8			
1772	3	6	0	2	18	8			
1773	3	6	6	2	19	1⅓			
1774	3	2	0	2	15	1⅓			
1775	2	17	8	2	11	3⅓	2	11	3¾
1776	2	8	0	2	2	8			
1777	2	15	0	2	8	10¾			
1778	2	9	6	2	4	0			
1779	2	0	8	1	16	1⅔			
1780	2	8	6	2	3	1⅓			
1781	2	19	0	2	12	5⅓			
1782	3	0	6	2	13	9⅓			
783	3	1	0	2	14	2⅔			
1784	3	0	6	2	13	9⅓			
1785	2	14	0	2	8	0	2	7	8½
1786	2	7	6	2	2	2⅔			
1787	2	11	6	2	5	9¾			
1788	2	15	6	2	9	4			
1789	3	3	2	2	16	1⅔			
1790	3	3	2	2	16	1⅔			
1791	2	15	6	2	9	4			
1792*	-	-		2	13	0			
1793	-	-		2	15	8			
1794	-	-		2	14	0			
1795	-	-		4	1	6	2	14	3¾
1796	-	-		4	0	2			
1797	-	-		3	2	0			
1798	-	-		2	14	0			
1799	-	-		3	15	8			
1800	-	-		6	7	0			
1801	-	-		6	8	6			
1802	-	-		3	7	2			
1803	-	-		3	0	0			
1804	-	-		3	9	6			
1805	-	-		4	8	0	4	1	2½
1806	-	-		4	3	0			
1807	-	-		3	18	0			
1808	-	-		3	19	2			
1809	-	-		5	6	0			
1810	-	-		5	12	0			
1811	-	-		5	8	0			
1812	-	-		6	8	0			
1813	-	-		6	0	0			
1814	-	-		4	5	0			
1815	-	-		3	16	0	4	17	6
1816	-	-		4	2	0			
1817	-	-		5	16	0			
1818	-	-		4	18	0			
1819	-	-		3	18	0			
1820	-	-		3	16	0			
1821	-	-		3	11	0			
1822	-	-		2	13	0			
1823	-	-		2	17	0			
1824	-	-		3	12	0			
1825	-	-		4	4	0	3	18	8½
1826	-	-		3	13	0			

The Eton Account of Prices commenced in 1595; the accuracy of the returns in the first years cannot, however, be so implicitly relied on, as those quoted above. — Bishop Fleetwood and Sir F. M. Eden have collected, with great industry, almost all the existing information respecting the state of prices in England during the last *six hundred* years.

* From this year, inclusive, the account at Eton College has been kept according to the bushel of 8 gallons, under the provision of the act 31 Geo. 3. c. 30. § 82.

II. Account of the Average Prices of British Corn per Winchester Quarter, in England and Wales, since 1771, as ascertained by the Receiver of Corn Returns.

Years.	Wheat.			Rye.			Barley.			Oats.			Beans.			Peas.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1771	2	7	2	1	14	4	1	5	8	0	16	8	1	8	6			
1772	2	10	8	1	16	8	1	5	4	0	16	2	1	10	0			
1773	2	11	0	1	13	4	1	8	4	0	17	2	1	13	0			
1774	2	12	8	1	14	4	1	8	6	0	17	10	1	11	2			
1775	2	8	4	1	12	10	1	6	0	0	16	6	1	8	8			
1776	1	18	2	1	6	10	1	0	2	0	15	0	1	6	6			
1777	2	5	6	1	8	0	1	0	6	0	15	8	1	8	6			
1778	2	2	0	1	8	4	1	2	8	0	15	2	1	7	8			
1779	1	13	8	1	3	4	0	19	6	0	14	0	1	4	2			
1780	1	15	8	1	2	2	0	17	0	0	12	10	1	2	2			
1781	2	4	8	1	6	10	0	17	2	0	13	8	1	3	0			
1782	2	7	10	1	8	10	1	2	6	0	15	2	1	6	0			
1783	2	12	8	1	15	8	1	10	4	0	19	10	1	14	10			
1784	2	8	10	1	12	2	1	7	10	0	18	4	1	12	2			
1785	2	11	10	1	8	0	1	4	0	0	17	2	1	10	8			
1786	1	18	10	1	7	2	1	4	4	0	18	0	1	13	2			
1787	2	1	2	1	7	8	1	2	8	0	16	8	1	11	10			
1788	2	5	0	1	7	8	1	2	0	0	15	8	1	7	2			
1789	2	11	2	1	9	10	1	2	10	0	16	0	1	7	2			
1790	2	13	2	1	14	0	1	5	6	0	18	10	1	11	0			
1791	2	7	2	1	11	4	1	5	10	0	18	2	1	10	6			
1792	2	2	11	1	10	8	1	6	9	0	17	10	1	11	7	1	12	8
1793	2	8	11	1	15	11	1	11	9	1	1	3	1	17	8	1	18	4
1794	2	11	8	1	17	9	1	12	10	1	2	0	2	2	6	2	6	8
1795	3	14	2	2	8	5	1	17	8	1	4	9	2	6	8	2	13	4
1796	3	17	1	2	7	0	1	15	7	1	1	9	1	18	10	2	3	6
1797	2	13	1	1	11	11	1	7	9	0	16	9	1	7	6	1	13	5
1798	2	10	3	1	10	11	1	9	1	0	19	10	1	10	1	1	13	11
1799	3	7	6	2	3	9	1	16	0	1	7	7	2	4	7	2	5	2
1800	5	13	7	3	16	11	3	0	0	1	19	10	3	9	3	3	7	5
1801	5	18	3	3	19	9	3	7	9	1	16	6	3	2	8	3	7	8
1802	3	7	5	2	3	3	1	13	1	1	0	7	1	16	4	1	19	6
1803	2	16	6	1	16	11	1	4	10	1	1	3	1	14	8	1	18	6
1804	3	0	1	1	17	1	1	10	4	1	3	9	1	18	7	2	0	10
1805	4	7	10	2	14	4	2	4	8	1	8	0	2	7	5	2	8	4
1806	3	19	0	2	7	4	1	18	6	1	5	8	2	3	9	2	3	6
1807	3	13	3	2	7	6	1	18	4	1	8	1	2	7	3	2	15	11
1808	3	19	0	2	12	4	2	2	1	1	13	8	3	0	8	3	6	7
1809	4	15	7	3	0	9	2	7	3	1	12	8	3	0	9	3	0	2
1810	5	6	2	2	19	0	2	7	11	1	9	4	2	13	7	2	15	9
1811	4	14	6	2	9	11	2	1	10	1	7	11	2	7	10	2	11	6
1812	6	5	5	3	15	11	3	6	6	2	4	0	3	12	8	3	13	7
1813	5	8	9	3	10	7	2	18	4	1	19	5	3	16	5	3	18	6
1814	3	14	0	2	4	6	1	17	4	1	6	6	2	6	7	2	10	0
1815	3	4	4	1	17	10	1	10	3	1	3	10	1	16	1	1	18	10
1816	3	15	10	2	3	2	1	13	5	1	3	6	1	18	4	1	18	4
1817	4	14	9	2	16	6	2	8	3	1	12	1	2	12	0	2	11	5
1818	4	4	1	2	14	10	2	13	6	1	12	11	3	3	1	2	19	11
1819	3	13	0	2	9	0	2	6	8	1	9	4	2	15	5	2	16	0

No account kept of the price of peas till 1792.

III. Account of the Average Prices of British Corn per Imperial Quarter, in England and Wales, since 1820, as ascertained by the Receiver of Corn Returns.

Years.	Wheat.			Rye.			Barley.			Oats.			Beans.			Peas.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1820	3	7	11	2	2	0	1	13	10	1	4	9	2	3	4	2	5	11
1821	2	16	2	1	12	1	1	6	0	0	19	6	1	10	11	1	12	9
1822	2	4	7	1	0	11	1	1	11	0	18	2	1	4	6	1	6	5
1823	2	13	5	1	11	11	1	11	7	1	2	11	1	13	1	1	15	0
1824	3	4	0	2	1	5	1	16	5	1	4	10	2	0	1	2	0	8
1825	3	8	7	2	2	4	2	0	1	1	5	8	2	2	10	2	5	5
1826	2	18	9	2	1	2	1	14	5	1	6	9	2	4	3	2	7	8
1827	2	16	9	1	19	0	1	16	6	1	7	4	2	7	7	2	7	7
1828	3	0	5	1	14	2	1	12	10	1	2	6	1	18	4	2	0	6
1829	3	6	3	1	14	10	1	12	6	1	2	9	1	16	8	1	16	8
1830	3	4	3	1	15	10	1	12	7	1	4	5	1	16	1	1	19	2
1831	3	6	4	2	0	0	1	18	0	1	5	4	1	19	10	2	1	11
1832	2	18	8	1	14	7	1	13	1	1	0	5	1	15	4	1	17	0

N. B. — The Winchester bushel contains 2150·42 cubic inches, while the Imperial bushel contains 2218·192 cubic inches, being about one thirty-secondth part larger than the former. — (See BUSHEL, and WEIGHTS AND MEASURES.)

The following account of the current prices of *all sorts* of corn in the London market, 7th of October, 1833, is interesting, from its showing their comparative values, and the estimation in which they are held: —

IV. — Current Prices of Grain, Seeds, &c. per Imperial Quarter. London, 7th of October, 1833.

British.	Per Quarter.
	s. s.
Wheat, Essex, Kent, and Suffolk, old red	54 to 56
do. do. white	60 — 62
do. do. new red	51 — 53
do. do. white	55 — 59
Norfolk and Lincolnshire, old	47 — 54
Northumberland, Berwick, and Scot., do.	50 — 54
Galway and Limerick, white and red	46 — 48
Cork and Youghal do.	46 — 48
Dublin, Waterford, and Clonmel, do.	46 — 48
Rye, new	34 — 36
Barley, Kent, Essex, Norfolk, and Suffolk, new	32 — 35
Lincolnshire, and Yorkshire do.	0 — 0
stained and grinding do.	27 — 30
Scotch	0 — 0
Malt, Essex, Norfolk, and Suffolk	50 — 60
Kingston and Ware	63 — 65
Oats, Norfolk, Cambridgeshire, Lincolnshire, and Yorkshire, feed	19 — 21
do. Poland	20 — 22
Northumberland, Berwick, and Scotch, potato	24 — 25
do. feed	23 — 24
Devonshire, and West Country feed, or black	18 — 20
Dundalk, Newry, and Belfast, potato, 21s. to 22s. 6d. feed	19 — 21
Limerick, Sligo, and Westport, feed	18 — 20
do. do. potato	20 — 22
Cork, Waterford, Dublin, Youghal, and Clonmel, black	17 — 19
Cork, Waterford, Dublin, Youghal, and Clonmel, white	19 — 21
Galway	18 — 20
Beans, tick, new	29 — 32
old	34 — 36
harrow and small, new	35 — 35
do. old	37 — 39
Peas, boiling	44 — 46
hog, grey, and maple	38 — 42
Tares	40 — 44
Flour, English, per sack of 280 lbs.	42 — 45
do. fine do.	46 — 50
Scotch and North Country	41 — 43
Irish	41 — 44
Linseed, crushing, per quarter	0 — 0
sowing, do.	0 — 0
cake, per 1,000 of 3 lbs. each, 11l. to 11l. 10s.	
Cloverseed, old English white, per cwt.	58 — 62
do. red do.	46 — 56
foreign white do.	56 — 66
do. red do.	52 — 64
new English white, do.	56 — 66
do. red do.	40 — 56
Trefoil, new do.	24 — 30
Rapeseed, crushing, new, per last, 22l. to 25l.	
cake, per ton, 4l. 10s. to 5l.	

Foreign.	Free. Per Qr.	In Bond. Per Qr.
	s. s.	s. s.
Wheat, Dantzic and Königsberg, finest high mixed	66 to 68	48 to 50
do. good mixed	56 — 58	46 — 48
do. red mixed	52 — 56	36 — 40
Stettin	0 — 0	0 — 0
Danish	0 — 0	27 — 32
Hamburgh and Pomeranian	52 — 56	0 — 0
Zealand and Brabant	0 — 0	0 — 0
Odessa, soft	46 — 49	22 — 27
Riga, Petersburgh, and Liebau, soft	45 — 48	0 — 0
Archangel	38 — 40	0 — 0
Tuscan, red	58 — 60	0 — 0
Canada	58 — 61	45 — 55
Spanish, soft	56 — 62	0 — 0
Buck or brank	32 — 34	0 — 0
Indian corn	32 — 36	0 — 0
Rye, Baltic, dried	30 — 32	0 — 0
do. undried	31 — 32	22 — 24
Barley, Hamburgh, Dantzic, Königsberg, and Riga, malting	0 — 0	0 — 0
do. grinding	0 — 0	0 — 0
Danish do.	0 — 0	0 — 0
Oats, Dutch brew and thick	21 — 22	14 — 16
Danish	16 — 19	11 — 12
Friesland brew and thick	20 — 21	0 — 0
Russian	20 — 21	0 — 0
Beans, tick	32 — 34	22 — 0
small	0 — 0	23 — 24
Mediterranean	0 — 0	0 — 0
Peas, white, boiling	42 — 45	32 — 35
grey or hog	0 — 0	0 — 0
Tares (duty 10s.)	0 — 0	0 — 0
Flour, Dantzic, per barrel	0 — 0	0 — 0
American, sour, do.	0 — 0	21 — 22
do. sweet, do.	0 — 0	25 — 28

	L s. L s.
Linseed, Russian, crushing (duty 1s. per quarter), per quarter	2 0 to 2 8
do. sowing, per barrel	0 0 — 0 0
Mediterranean, per quarter	2 8 — 2 12
Rapeseed (duty 1s. per qr.), crushing, new, per quarter	22 0 — 24 0
Linseed cake (duty 2d. per cwt.), per ton	7 0 — 8 0
Rape cake (duty 2d. per cwt.), do.	4 10 — 4 15
Cloverseed, red (duty 20s. per cwt.), per ton	2 10 — 3 6
white (duty 20s. per cwt.) do.	2 12 — 3 10

V. — Account of the Quantity of Wheat and Wheat Flour exported, and of Foreign Wheat and Wheat Flour imported, in the following Years (Winchester Measure).

Years.	Wheat and Flour exported.	Foreign Wheat and Flour imported.	Years.	Wheat and Flour exported.	Foreign Wheat and Flour imported.	Years.	Wheat and Flour exported.	Foreign Wheat and Flour imported.
England.	Qrs.	Qrs.	England.	Qrs.	Qrs.	Gt. Britain.	Qrs.	Qrs.
1697	14,699	400	1732	202,058		1766	164,939	11,020
1698	6,857	845	1733	427,199	7	1767	5,071	497,905
1699	557	486	1734	498,196	6	1768	7,433	349,268
1700	49,056	5	1735	153,343	9	1769	49,892	4,378
1701	98,324	1	1736	118,170	16	1770	75,449	34
1702	90,230		1737	461,602	32	1771	10,089	2,510
1703	166,615	50	1738	580,596	2	1772	6,959	25,474
1704	90,313	2	1739	279,542	5,423	1773	7,637	56,857
1705	96,185		1740	54,390	7,568	1774	15,928	289,149
1706	188,392	77	1741	45,417	40	1775	91,037	560,988
1707	74,155		1742	293,260	1	1776	210,664	20,578
1708	83,406	86	1743	371,431	2	1777	87,686	233,883
1709	169,680	1,552	1744	231,984	2	1778	141,070	106,394
1710	13,924	400	1745	324,839	6	1779	222,261	5,039
1711	76,949		1746	130,646		1780	224,059	3,915
1712	145,191		1747	266,907		1781	103,021	159,866
1713	176,227		1748	543,387	385	1782	145,152	80,695
1714	174,821	16	1749	629,049	382	1783	51,943	584,183
1715	166,490		1750	947,602	279	1784	89,288	216,947
1716	74,926		1751	661,416	3	1785	132,685	110,863
1717	22,954		1752	429,279		1786	205,466	51,463
1718	71,800		1753	299,609		1787	120,536	59,339
1719	127,762	20	1754	356,270	201	1788	82,971	148,710
1720	83,084		Gt. Britain.			1789	140,014	112,656
1721	81,633		1755	237,466		1790	30,892	222,557
1722	178,880		1756	102,752	5	1791	70,626	469,056
1723	157,720		1757	11,545	141,562	1792	300,278	622,417
1724	245,865	148	1758	9,234	20,353	1793	76,629	490,398
1725	204,413	12	1759	227,641	162	1794	155,048	327,902
1726	142,183		1760	393,614	3	1795	18,839	313,793
1727	30,315		1761	441,956		1796	24,679	879,200
1728	3,817	74,574	1762	295,385	56	1797	54,525	461,767
1729	18,993	40,315	1763	429,538	72	1798	59,782	396,721
1730	93,971	76	1764	396,857	1	1799	39,362	463,185
1731	130,025	4	1765	167,126	104,547	1800	22,013	1,264,520

VI.—Account specifying the Total Quantities of all Sorts of Grain imported into Great Britain, from different Countries, in each Year, from 1801 to 1825, both inclusive; the Average Quantity of all Sorts of Grain, and the Average Quantity of each particular Species of Grain, as Wheat, Rye, Barley, &c., imported in each of the above Years, from each different Country, in Winchester Quarters.

Years.	Russia.	Sweden and Norway.	Denmark.	Prussia.	Germany.	The Netherlands.	France and South of Europe.	United States of America.	British North American Colonies.	Other Foreign Countries, Isle of Man, and Prize Corn.	Ireland.
1801	204,656	26,375	7,088	663,584	699,340	351,330	3,223	372,151	67,724	10,074	900
1802	12,870	10,961	3,882	377,984	151,363	103,194	2,032	80,820	75,172	856	467,067
1803	16,448	540	8,619	171,001	161,147	81,758	1,565	109,832	43,245	1,782	343,548
1804	8,215	19,931	31,029	531,364	138,810	170,977	168	4,351	21,214	4,576	316,958
1805	173,874	25,859	52,837	702,605	126,146	72,516	2,794	13,475	2,250	8,511	306,923
1806	57,416	- -	10,284	90,040	108,581	29,949	3,790	79,906	9,801	5,613	466,947
1807	6,183	110	74,049	22,890	141,537	237,523	32,113	250,866	27,693	18,996	465,406
1808	3,664	195	1,800	- -	29,998	18,137	11,736	13,206	21,506	12,236	656,770
1809	14,089	2,348	9,027	2,015	169,655	328,582	30,848	172,878	23,737	20,848	933,658
1810	66,869	87,961	132,287	316,224	255,475	436,286	241,345	98,361	25,938	28,465	632,849
1811	49,597	40,391	45,127	97,886	2,429	- -	5,167	18,097	440	15,934	430,189
1812	128,437	14,919	52,302	9,063	619	2	454	11,524	23,774	17,970	600,268
1813	64,938	71,629	58,872	133,907	125,156	- -	- -	1,093	1	10,112	977,164
1814	9,760	30,926	18,356	186,241	116,861	420,009	170,596	2	3	7,476	812,895
1815	1,443	626	9,250	19,428	35,279	135,778	79,051	45,586	25	6,600	821,192
1816	24,198	660	14,874	94,791	54,157	118,048	1,189	7,209	3	4,077	873,865
1817	405,933	1,166	149,012	414,947	253,403	191,141	35,372	316,364	25,876	8,016	699,809
1818	676,793	2,455	342,213	829,646	571,864	761,874	92,891	187,576	56,617	8,740	1,207,851
1819	543,554	2,255	123,638	323,350	235,076	193,029	218,215	47,654	14,257	6,484	967,861
1820	372,169	13,492	147,595	356,288	218,711	78,813	12,917	91,098	40,898	9,869	1,417,120
1821	28,445	- -	26,778	39,258	51,540	19,964	102	38,488	40,916	12,163	1,822,816
1822	22,040	- -	15,045	28,745	21,528	3,024	741	6,242	23,439	5,000	1,063,089
1823	14,568	- -	6,948	8,743	4,635	3,896	102	4,237	209	10,303	1,528,153
1824	14,500	2,858	106,998	76,780	231,430	132,160	1,395	33,872	891	9,154	1,634,024
1825	26,895	4,284	248,282	217,836	372,839	63,954	499	12,903	95,059	15,227	2,203,962
Annual average of the above 25 years	117,902	14,397	67,847	228,584	171,103	158,078	37,932	80,712	25,627	10,363	865,968
Annual average of ditto for wheat	53,377	9,576	16,324	157,359	58,103	56,817	24,649	74,024	24,863	4,836	187,438
Do. rye	9,968	960	1,123	5,689	5,189	1,690	293	2,421	- -	1,438	253
Do. barley	7,112	987	18,808	18,718	24,839	9,500	1,097	31	51	2,194	33,331
Do. oats	46,652	2,446	30,672	39,209	75,828	84,269	1,953	3	1	1,703	639,857
Do. peas and beans	785	428	823	7,609	7,144	5,802	9,124	201	697	151	4,922
Do. Indian corn	8	- -	97	- -	- -	- -	816	4,022	15	41	167

VII.—Account of the Imports into Great Britain of all Descriptions of Foreign Corn in 1831; specifying the Countries whence they were imported, and the Quantities brought from each.—(*Parl. Paper*, No. 426. Sess. 1832.)

Countries from which imported.	Barley and Barley Meal.	Beans.	Indian Corn and Meal.	Oats and Oatmeal.	Peas.	Rye and Rye Meal.	Wheat and Wheat Flour.	Buck Wheat.	Total.
	Qrs. bu.	*Qrs. bu.*	*Qrs. bu.*	*Qrs. bu.*	*Qrs. bu.*	*Qrs. bu.*	*Qrs. bu.*	*Qrs. bu.*	*Qrs. bu.*
Russia	42,568 2	- -	316 6	369,608 1	6,372 7	53,911 5	464,584 1	2 0	937,363 6
Sweden	1,718 7	- -	- -	20,663 5	34 3	60 6	71 2	- -	22,548 7
Denmark	115,658 1	1,299 4	- -	96,996 5	2,667 2	5,832 2	55,967 6	- -	278,421 4
Prussia	60,778 6	1,157 5	- -	70,115 4	35,211 0	18,447 3	296,286 5	- -	481,996 7
Germany	116,928 3	7,664 4	- -	31,450 1	13,962 7	7,103 5	218,507 4	0 1	395,617 1
The Netherlands	12,284 0	7,070 3	- -	15,226 0	471 0	4,205 2	30,249 4	- -	69,506 1
France	18,737 7	1,454 0	17,893 2	7,936 0	122 5	137 4	103,700 5	6,691 4	156,673 3
The Azores	- -	0 4	2,649 3	- -	- -	- -	22 2	- -	2,672 1
Spain	2,318 3	0 4	1,598 5	30 0	4 4	- -	154,671 1	- -	158,623 1
—— the Canary Islands	418 6	- -	- -	- -	- -	- -	1,082 4	- -	1,501 2
Italy	3,003 1	3,691 4	47 6	1 0	- -	- -	253,295 5	- -	260,039 0
Malta	- -	1,031 3	- -	- -	- -	- -	13,339 7	- -	14,371 2
Ionian Islands	- -	- -	- -	- -	- -	- -	249 3	- -	249 3
Turkey	624 0	0 1	- -	- -	0 2	- -	6,215 4	- -	6,839 7
Cape of Good Hope	1 0	- -	- -	1 0	- -	- -	2,183 4	- -	2,185 4
Mauritius	- -	- -	- -	- -	- -	- -	0 6	- -	0 6
East India Company's territories	15 1	- -	- -	- -	136 0	- -	5,490 4	- -	5,641 5
Van Diemen's Land	- -	- -	- -	- -	- -	- -	45 5	- -	45 5
British North American colonies	240 3	- -	0 4	6,902 6	461 6	233 6	218,327 2	- -	226,166 3
British West Indies	- -	- -	0 4	- -	0 1	- -	3 4	- -	4 1
United States of America	- -	0 1	22,195 3	599 4	- -	1,887 3	463,418 7	- -	488,101 2
Chili and Peru	- -	- -	- -	- -	- -	- -	140 7	- -	140 7
Isles of Guernsey, Jersey, Alderney & Man — foreign produce	1,128 2	- -	- -	- -	92 5	- -	9,242 1	- -	10,463 0
Isles of Guernsey, Jersey, Alderney & Man — British produce	5,498 6	18 5	- -	2,831 2	22 0	- -	14,265 5	- -	22,636 2
Total	381,922 0	23,388 6	44,702 1	622,361 4	59,559 2	91,819 4	2,311,362 2	6,693 5	3,541,809 0

VIII. Accounts of the Annual Imports of Corn, Flour, and Meal, from Ireland into Great Britain, since 1807.

Years.	Wheat and Wheat Flour.	Barley and Barley Meal.	Rye.	Oats and Oatmeal.	Indian Corn.	Beans.	Peas.	Total.
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.
1807	45,111	23,048	431	389,640	- -	5,167		463,406
1808	43,497	30,586	573	579,974	- -	2,140		656,770
1809	68,124	16,619	425	845,782	- -	2,708		933,658
1810	127,510	8,321	20	493,251	10	3,757		632,849
1811	147,567	2,713	21	275,757	- -	4,131		430,189
1812	160,843	43,262	178	391,926	- -	5,059		600,268
1813	217,454	63,560	430	691,493	- -	4,532		977,164
1814	225,821	16,779	4	564,010	- -	6,191		812,805
1815	189,544	27,108	207	597,357	- -	6,796		821,192
1816	121,631	62,254	43	683,714	- -	6,223		873,865
1817	59,025	26,766	614	611,117	- -	2,287		699,809
1818	108,230	25,387	4	1,069,585	- -	4,845		1,207,851
1819	154,031	20,311	2	789,613	- -	3,904		967,861
1820	404,747	87,095	134	916,250	1	8,893		1,417,120
1821	569,700	82,884	550	1,162,249	- -	7,433		1,822,816
1822	463,004	22,532	353	589,237	- -	7,963		1,063,089
1823	400,068	19,274	198	1,102,487	- -	6,126		1,528,153
1824	356,408	45,872	112	1,225,085	- -	6,547		1,634,024
1825	396,018	165,082	240	1,629,856	- -	12,786		2,203,962
1826	314,851	64,885	77	1,303,734	- -	7,190	1,452	1,692,189
1827	405,255	67,791	256	1,343,267	1,795	10,037	1,372	1,829,743
1828	652,584	84,204	1,404	2,075,631	280	7,068	4,944	2,826,135
1829	519,493	97,140	568	1,673,938	30	10,444	4,503	2,305,806
1830	529,717	189,745	414	1,471,252	28	19,053	2,520	2,212,729
1831	557,520	185,409	515	1,655,934	563	15,039	4,663	2,419,643
1832	572,586	123,068	294	1,890,321	3,057	14,512	1,916	2,605,734

IX.—Account of the Foreign and Colonial Corn, Flour, and Meal, *entered for Home Consumption* in the United Kingdom since 1815; specifying the Total Amount of Duty received thereon, and the Rates of Duty; in Imperial Quarters.—(*Appendix to Agricultural Report* of 1833, p. 620.)

Years.	Corn, &c. entered for Home Consumption.							Duty received.	Average Rates of Duty.											
	Wheat and Flour.	Barley and Meal.	Rye and Meal.	Oats and Oatmeal.	Indian Corn.	Beans and Peas.	Total.	Total.	Wheat.		Barley.		Rye.		Oats.		Indian Corn.		Beans and Peas.	
	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	Qrs.	*L.*	Per qr. *s.*	*d.*	Pr. q. *s.*	*d.*	Per qr. *s.*	*d.*	Per qr. *s.*	*d.*	Per qr. *s.*	*d.*	Per qr. *s.*	*d.*
1815	- -	160	148	214	- -	1	523													
1816	225,263	14,918	10,259	76,294	- -	- -	326,734													
1817	1,020,949	133,438	134,927	473,813	157	17,122	1,777,706													
1818	1,593,518	695,621	79,221	990,947	1,411	177,850	3,338,568													
1819	122,133	364,012	17,295	523,515	26,738	199,716	1,255,407													
1820	34,274	- -	- -	726,848	- -	3	761,125													
1821	2	- -	- -	- -	- -	- -	2													
1822																				
1823	12,137	- -	- -	- -	- -	- -	12,137	10,310	16	11⅜										
1824	15,777	59,265	- -	619,340	1,249	- -	675,629	176,383	11	11½	8	6¾					4	9¾	9	)
1825	525,231	270,679	3,442	15	91	30,767	830,225	296,121	8	6¾	4	4¾	6	6	4	0	4	10	6	5¾
1826	315,892	332,241	67,241	1,185,214	6,222	182,894	2,097,104	412,595	11	5¾	5	2¼	2	9½	2	3	3	11	3	5
1827	572,733	236,291	21,887	1,851,248	145,842	117,834	2,886,555	792,934	21	4¾	1	0	6	2	1	3¾	2	9½	2	6½
1828	842,050	217,545	489	14,374	22,747	119,782	1,216,987	188,412	1	9¾	5	1	3	6	8	0½	2	4½	8	2¼
1829	1,364,220	202,406	65,331	192,890	22,688	96,514	1,944,049	900,208	9	2¾	9	0¾	2	1½	11	1¾	9	7½	10	8
1830	1,701,885	52,107	19,121	900,319	4,100	63,644	2,741,176	798,000	6	4½	9	5¾	12	6	4	2¾	12	7½	7	8¾
1831	1,491,631	522,709	56,868	355,120	65,428	83,444	2,968,985	555,158	4	8	1	7	2	7¾	7	3½	4	2¾	5	10½
1832	325,435	72,665	61	2,865	1,021	21,181	423,229	309,676	16	2	9	6½	17	0½	2	6¼	9	4½	10	4

We have, in the previous parts of this article, sufficiently illustrated the impolicy, generally speaking, of imposing duties on the importation of corn; but besides the objections that may be made to all duties of this sort, from their tendency to force up average prices, and to render exportation in abundant years impossible, the duty now existing in this country is liable to some which may be looked upon as peculiar to itself. From the way in which it is graduated, it introduces a new element of uncertainty into every transaction connected with the corn trade; producing a disinclination on the part of the merchant to import, and of the foreigner to raise corn for our markets. Suppose a merchant commissions a cargo of wheat when the price is at 71*s.* a quarter; in the event of the price declining only 3*s.*, or to 68*s.*, the duty will rise from 6*s.* 8*d.* to 16*s.* 8*d.*; so that if the merchant brings the grain to market, he will realise 13*s.* 8*d.* a quarter less than he expected, and 10*s.* less than he would have done had there been no duty, or the duty been constant!

It may, perhaps, be said that if, on the one hand, the present scale of duties is injurious to the merchant when prices are falling, and when importation is consequently either unnecessary or of less advantage, it is, on the other hand, equally advantageous to him when prices are rising, and when the public interests require that importation should be encouraged: but the prices in the view of the merchant when he gives an order, are usually such as he supposes will yield a fair profit; and if they rise, this rise would, supposing the duty to be constant, yield such an extra profit as would of itself induce him to increase his importation to the utmost. If it were possible to devise a system that would diminish the losses of the merchants engaged in unfavourable speculations, by

making a proportional deduction from the extraordinary gains of those whose speculations turn out to be unusually successful, something, perhaps, might be found to say in its favour. But the system we have been considering proceeds on quite opposite principles: its effect is not to diminish risks, but to increase them; it adds to the loss resulting from an unsuccessful, and to the profit resulting from a successful, speculation!

It would, therefore, seem, that if a duty is to be imposed, one that is constant is preferable to one that fluctuates. When the duty is constant, all classes, farmers as well as merchants, are aware of its amount, and can previously calculate the extent of its influence. But the effect of a duty that fluctuates with the fluctuations of price, can never be appreciated beforehand. Its magnitude depends on contingent and accidental circumstances; and it must, therefore, of necessity, prejudice the interests of the farmer as well as of the corn dealer.

It appears, from No. IX. of the preceding accounts, that in 1828, 842,000 quarters of wheat were entered for home consumption, at an average duty of only 1*s.* 9¼*d.* per quarter! In 1829 the imports were 1,364,000 quarters, and the duty 9*s.* 2¾*d.* In 1830 the imports rose to 1,702,000 quarters, and the duty fell to 6*s.* 4½*d.*; and in 1831 the imports were 1,491,000 quarters, and the duty 4*s.* 8*d.* Had the duty been a constant one of 6*s.* or 7*s.*, the interests of all parties would have been materially promoted. But there are obviously very slender grounds for thinking that the quantity imported would have been considerably increased; for though the present system of duties frequently checks importation for a lengthened period, yet, on the other hand, when prices rise, and the duties are reduced, every bushel in the warehouses is immediately entered for home consumption; and the chance, which is every now and then occurring, of getting grain entered under the nominal duty of 1*s.*, probably tempts the merchants to speculate more largely, though at a greater risk to themselves, than they would do under a different system. A moderate duty, accompanied by an equal drawback, besides giving a greater degree of security to the corn trade, would, in this respect, be particularly beneficial to the farmer. Under the present system it is not possible to foretell, with any thing approaching to accuracy, what may be the range of prices during any future period, however near; so that the trade of a farmer, which is naturally one of the most stable, has been rendered almost a species of gambling. But were the ports always open under the plan previously suggested, every one would be aware that variations of price would be confined within comparatively narrow limits: and the business of farming would acquire that security, of which it is, at present, so completely destitute, and which is so indispensable to its success.

IV. Foreign Corn Trade.

Polish Corn Trade. — Dantzic is the port whence we have always been accustomed to import the largest supplies of corn; and it would seem fully established by the data collected by Mr. Jacob, in his tours, that 28*s.* or 30*s.* a quarter is the lowest price for which any considerable quantity of wheat for exportation can be permanently raised in the corn-growing provinces in the vicinity of Warsaw: its *minimum* cost price, when brought to London, according to the data furnished by Mr. Jacob, would be as under: —

	s.	*d.*
Cost of wheat, at Warsaw, per quarter	28	0
Conveyance to the boats, and charges for loading and stowing, and securing it by mats	0	6
Freight to Dantzic	5	0
Loss on the passage by pilfering, and rain causing it to grow	3	0
Expenses at Dantzic in turning, drying, screening, and warehousing, and loss of measure	2	0
Profit or commission, as the case may be, to the merchant at Dantzic	1	6
Freight, primage, insurance, and shipping charges, at Dantzic and in London	8	0
Cost of the wheat to the English merchant	48	0

It ought, however, to be observed, that the premium paid the underwriters does not cover the risk attending damage from heating or otherwise on the voyage; and it ought further to be observed, that the freight from Warsaw to Dantzic, and from Dantzic home, is here charged at the lowest rate. Mr. Jacob supposes that an extraordinary demand for as much wheat as would be equal to *six* days' consumption of that grain in England, or for 216,000 quarters, would raise the cost of freight on the Vistula from 30 to 40 per cent.: and as such a demand could hardly be supplied without resorting to the markets in the provinces to the south of Warsaw, its *minimum cost* to the London merchants could not, under such circumstances, amount, even supposing some of these statements to be a little exaggerated, to less than from 50*s.* to 53*s.* or 55*s.* a quarter.

Mr. Grade, of Dantzic, furnished the committee of 1831 with the following Table of the average prices of corn at that city, free on board, in decennial periods, from 1770 to 1820.

Average Price, from Ten to Ten Years, of the different Species of Corn, free on board, per Quarter, in Sterling Money, at Dantzic.

	Wheat.		Rye.		Barley.		Oats.	
	s.	d.	s.	d.	s.	d.	s.	d.
From 1770 to 1779 - - -	33	9	21	8	16	1	11	1
1780 — 1789 - - -	33	10	22	1	17	11	12	4
1790 — 1799 - - -	43	8	26	3	19	3	12	6
1800 — 1809 - - -	60	0	34	10	25	1	13	1
1810 — 1819 - - - -	55	4	31	1	26	0	20	4
Aggregate Average Price of 49 Years -	45	4	27	2	20	10	13	10

In 1823, 1824, 1825, and 1826, prices, owing to the cessation of the demand from England, were very much depressed; but they have since attained to near their former elevation.

We subjoin a statement, furnished by the British consul, of the

Average Prices of Grain, bought from Granary, in Sterling Money, at Dantzic, per Imperial Quarter.

Years.	Wheat.		Rye.		Barley.		Oats.		White and Yellow Peas.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
1822	30	3	18	4½	12	5½	10	11½	15	7
1823	27	9	18	6½	14	10½	11	0½	18	2½
1824	23	8	11	2⅛	8	11⅛	7	7	11	11⅛
1825	24	2	11	4	10	5	8	1	14	7
1826	25	1	15	3⅛	13	5⅛	12	5⅛	23	1⅛
1827	26	11	18	2	16	9	13	10	31	11

Years.	Wheat.		Rye.		Barley.		Oats.		White and Yellow Peas.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
1828	37	1	19	5	14	3	11	3	28	4
1829	47	1	17	4	13	8	10	11	18	8
1830	42	2	20	3	15	0	11	2	20	8
1831	50	2	28	6	21	3	15	8	27	7
Average - -	33	5	17	10	14	1	11	3½	21	0¾

The shipping charges may, we believe, be taken at 8*d.* or 9*d.* a quarter; and this, added to the above, gives 34*s.* 1*d.* or 34*s.* 2*d.* for the average price of wheat, *free on board*, at Dantzic, during the 10 years ending with 1831. The charges on importation into England, warehousing here, and then delivering to the consumer, exclusive of duty and profit, would amount to about 10*s.* a quarter. This appears from the following

Account of the Ordinary Charges on 100 Quarters of Wheat, shipped from Dantzic on Consignment, and landed under Bond in London.—(*Parl. Paper*, No. 333. Sess. 1827. p. 28.)

	£	s.	d.	£	s.	d.
One hundred quarters, supposed cost at Dantzic, free on board, 30*s.*	-	-	-	150	0	0
Freight at 5*s.* per quarter, and 10 per cent. - - -	27	10	0			
Metage ex ship, &c., 6*s.* 6*d.* per last - - - -	3	5	0			
Lighterage and landing, 9*d.* per quarter - - -	3	15	0			
Insurance on 180*l.*, including 10 per cent. imaginary profit, at 80*s.* per cent.; policy 5*s.* per cent. - - -	7	14	0			
Granary rent and insurance for one week - - -	0	5	0			
Turning and trimming, about - - - -	0	2	0			
Delivering from granary, 3*d.* per quarter - - -	1	5	0			
Metage, &c. ex granary, 2*s.* per last - - - -	1	0	0			
Commission on sale, 1*s.* per quarter - - -	5	0	0			
Del credere, 1 per cent. on, suppose, 40*s.* - - -	2	0	0			
				51	16	0
Total cost to importer if sold in bond				201	16	0
Imaginary profit 10 per cent. -				20	3	6
				221	19	6
Would produce, at 44*s.* 4*d.* per quarter				£221	13	4

N. B. — Loss on remeasuring not considered.
Freight and insurance are taken in this statement at an average, being sometimes higher and sometimes lower.

Nothing, therefore, can be more perfectly unfounded, than the notions so prevalent in this country as to the extreme cheapness of corn at Dantzic. When there is little or no foreign demand, and all that is brought to the city is thrown upon the home market, prices are, of course, very much depressed; but when there is a moderate demand for exportation, they immediately rise to something like the average level of the European market. During the greater number of the years embraced in the consular return, the Polish corn trade was very much depressed; and in some seasons the exports were extremely limited. But notwithstanding these unfavourable circumstances, the price of wheat, free on board, at an average of the whole period, was 34*s.* 1*d.* a quarter. Now, if we add to this 10*s.* a quarter for freight and other charges attending its importation into England, and delivery to the consumer, it could not, in the event of its being charged with a duty of 6*s.* or 7*s.* a quarter on importation, be sold so as to indemnify the importer for his outlay, without yielding him any profit, for less than 50*s.* or 51*s.* a quarter. And there are really no very satisfactory reasons for supposing that it could be disposed of for so little; for whenever it has been admitted into the British ports under any thing like reasonable duties, prices at Dantzic have uniformly been above 40*s.* a

quarter. Supposing, however, that, in the event of our ports being always open, the growth of corn in Poland would be so much increased as to admit of wheat being shipped in ordinary seasons for 34*s.*, still it is quite plain it could not be sold in London, under a duty of 6*s.* or 7*s.*, for less than 53*s.* or 54*s.* a quarter.

It is difficult to draw any conclusions on which it would be safe to place much reliance as to the supplies of corn that might be obtained from Dantzic, were our ports constantly open under a reasonable duty. Mr. Jacob gives the following

Account of the Total annual Average Quantity of Wheat and Rye exported from Dantzic, in Periods of 25 Years each, for the 166 Years ending with 1825.

Years.	Wheat. Quarters.	Rye. Quarters.	Total. Quarters.
1651 to 1675	81,775	225,312	307,087
1676 — 1700	124,897	227,482	352,379
1701 — 1725	59,795	170,100	229,895
1726 — 1750	80,624	119,771	200,395
1751 — 1775	141,080	208,140	349,220
1776 — 1800	150,299	103,045	253,344
1801 — 1825	200,330	67,511	267,841

"The average of the whole period," Mr. Jacob observes, "gives an annual quantity of wheat and rye, of 279,794 quarters; and this surplus may be fairly considered as the nearest approach that can be made, with existing materials, to what is the usual excess of the produce of bread corn above the consumption of the inhabitants, when no extraordinary circumstances occur to excite or check cultivation." — (*Report*, p. 49.)

We have, however, been assured by gentlemen intimately acquainted with the countries traversed by the Vistula, the Bug, &c., that Mr. Jacob has very much underrated their capabilities of improvement; and that were our ports opened under a fixed duty of 6*s.* or 7*s.* a quarter on wheat, and other grain in proportion, we might reckon upon getting from Dantzic an annual supply of from 350,000 to 450,000 quarters. We incline to think that this is a very moderate estimate. Hitherto, owing to the fluctuating and capricious nature of our demand, it has proved of little advantage to the cultivators; and but little corn has been raised in the expectation of its finding its way to England. But it would be quite another thing were our ports always open. The supply of the English markets would then be an object of the utmost importance to the Polish agriculturists, who, there can be no doubt, would both extend and improve their tillage. We subjoin an

Account of the Exports of Corn from Dantzic during the Three Years ending with 1831, specifying the Quantities sent to different Countries, reckoned in Quarters of 10⅓ to the Last.

Species of Corn.	1829.				1830.				1831.			
	Britain and her Possessions.	France.	Holland.	Other Countries.	Britain and her Possessions.	France.	Holland.	Other Countries.	Britain and her Possessions.	France.	Holland.	Other Countries.
	Qrs.	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*	*Qrs.*		*Qrs.*	*Qrs.*
Wheat	214,933	24,169	64,594	3,070	328,982	21,473	43,970	4,163	125,330	- -	7,908	562
Rye	8,980	9,455	30,866	28,974	8,453	52	28,753	47,816	2,510	- -	4,560	5,456
Barley	5,648	237	2,118	672	4,128	- -	788	2,452	11,380	- -	- -	300
Oats	8,923	274			20,997	- -	- -	465	2,220			
Peas	2,444	- -	217	181	14,312	- -	1,768	856	14,780	- -	560	510
Total of Corn	259,128	34,135	97,795	32,897	376,872	21,525	75,279	55,732	156,220	- -	13,032	6,828
Flour, barrels of 196 lbs.	2,016				8,926	- -	2,776	108	10	- -	- -	2
Biscuits, bags of 1 cwt.	5,224				10,287½	- -	- -	72	6,732	- -	- -	200

Quality of Dantzic Wheat. — It will be seen from the subjoined accounts, that the price of wheat at Dantzic, during the 10 years ending with 1831, was very near 7*s.* a quarter above its average price at Hamburgh during the same period, and about 2*s.* above the average of Amsterdam. This difference is entirely owing to the superior quality of the Dantzic wheat. Though small grained, and not so heavy as several other sorts, it is remarkably thin-skinned, and yields the finest flour. Some of the best white, or, as it is technically termed, "high mixed" Dantzic wheat, is superior to the very best English; but the quantity of this sort is but limited, and the average quality of all that is exported from Dantzic is believed to approach very nearly to the average quality of English wheat. Allowing for its superior quality, it will be found that wheat is, speaking generally, always cheaper in Dantzic than in any of the Continental ports nearer to London. There are but few seasons, indeed, in which Dantzic wheat is not largely imported into Amsterdam; and it frequently, also, finds its way into Hamburgh. But it is quite impossible that such should be the case, unless, taking quality and other modifying circumstances into account, it were really cheaper than the native and other wheats met with in these markets. When there is any considerable importation into England, it is of every day occurrence for merchants to order Dantzic wheat in preference to that of Holstein, or of the Lower Elbe, though the latter might frequently

be put into warehouse here for 20*s.* a quarter less than the former! It is, therefore, quite indispensable, in attempting to draw any inferences as to the comparative prices of corn in different countries, to make the requisite allowances for differences of quality. Unless this be done, whatever conclusions may be come to can hardly fail of being false and misleading; and when they happen to be right, they can only be so through the merest accident.

Dantzic being by far the greatest port for the exportation of corn in the north of Europe, its price may be assumed as the general measure of the price in other shipping ports. At all events, it is certain that when Dantzic is exporting, wheat cannot be shipped, taking quality into account, at a cheaper rate from any other place. The importer invariably resorts to what he believes to be, all things considered, the cheapest market; and it is a contradiction and an absurdity to suppose that he should burden himself with a comparatively high freight, and pay 34*s.* 1*d.* for wheat at Dantzic, provided he could buy an equally good article in so convenient a port as Hamburgh for 26*s.* 6½*d.*

If, therefore, we are right in estimating the price at which wheat could be imported from Dantzic under a duty of 6*s.* or 7*s.*, at from 53*s.* to 54*s.*, we may be assured that this is the lowest importation price. The greater cheapness of the imports from other places is apparent only; and is uniformly countervailed by a corresponding inferiority of quality. — (For further details as to the Polish corn trade, see Dantzic, Königsberg, &c.)

Russian Corn Trade.—Russia exports large quantities of wheat, rye, oats, and meal. The wheat is of various qualities; but the greater portion of it is small grained, coarse, brown, and very badly dressed. The hard, or Kubanka, is the best; it keeps well, and is in considerable demand for mixing with other wheats that are old or stale. Russian oats are very thin; but, being dried in the straw, they weigh better than could be expected from their appearance, and are reckoned wholesome food. Our imports from Russia, in 1831, were extraordinarily large, she having supplied us with no fewer than 464,000 quarters of wheat and wheat flour, 369,000 quarters of oats and oatmeal, 54,000 quarters of rye and rye meal, 42,000 quarters of barley and barley meal, &c., making a grand total of 937,000 quarters! Generally, however, our imports do not exceed a fifth part of this quantity. The quarter of hard wheat was worth, free on board, at Petersburgh, in November 1832, when there was no demand for exportation, from 28*s.* to 28*s.* 6*d.*—(The reader will find notices of the Russian corn trade under the articles Archangel, Petersburgh, and Riga. For an account of the corn trade by the Black Sea, see *post*, and the article Odessa.)

Danish Corn Trade. — The export of wheat from Denmark Proper, that is, from Jutland and the islands, is but inconsiderable. There is, however, a pretty large exportation of wheat and other grain, as well as of butter, cheese, beef, &c., from Sleswick and Holstein. As already stated, the quality of the wheat is inferior; for, though it looks plump, it is coarse and damp. The chief shipping port for Danish corn is Kiel; but owing to the superior facilities enjoyed by Hamburgh, the greater portion of it is consigned to that city. In 1831 we imported from Denmark 55,960 quarters of wheat, 115,658 do. of barley, 96,996 do. of oats, with some small quantities of rye and beans. — (For an account of the exports of raw produce from Denmark in 1831, see Copenhagen.)

Corn Trade of the Elbe, &c. — Next to Dantzic, Hamburgh is, perhaps, the greatest corn market in the north of Europe, being a depôt for large quantities of Baltic corn, and for the produce of the extensive countries traversed by the Elbe. But the excess of the exports of wheat from Hamburgh over the imports, is less than might have been expected, and amounted, at an average of the 10 years ending with 1825, to only 48,263 quarters a year. It appears from the subjoined table that the average price of wheat at Hamburgh, during the 10 years ending with 1831, was only 26*s.* 6⅓*d.* a quarter, being about 7*s.* a quarter under the level of Dantzic; but this extreme lowness of price is altogether ascribable to the inferiority of the Holstein and Hanover wheats, which are generally met with in great abundance at Hamburgh. Wheat from the Upper Elbe is of a better quality. Bohemian wheat is occasionally forwarded by the river to Hamburgh; but the charges attending its conveyance from Prague amount, according to Mr. Jacob, to full 17*s.* a quarter, and prevent its being sent down, except when the price is comparatively high. In 1830, there was shipped from Hamburgh for British ports, 271,700 quarters of wheat, 1,900 of rye, 18,200 of barley, and 2,800 of oats. Perhaps we might be able, did our prices average about 55*s.*, to import in ordinary years from 250,000 to 300,000 quarters of wheat from Denmark and the countries intersected by the Weser and the Elbe.

Average Prices of Corn at Hamburgh, during the Ten Years ending with 1831, in Sterling Money, per Imperial Quarter.

Years.	Wheat.	Rye.	Barley.	Oats.	Years.	Wheat.	Rye.	Barley.	Oats.
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*		*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
1822	27 6	15 5	13 0	9 4	1828	27 10	20 8	13 4	10 2
1823	27 6	18 4	14 6	11 0	1829	34 5	18 8	13 3	9 4
1824	24 0	13 0	12 6	8 6	1830	25 10	21 3	14 9	10 3
1825	20 6	12 9	13 10	8 6	1831	33 4	26 8	19 9	10 0
1826	18 4	17 1	13 3	12 4	Average	26 6½	18 9	14 6¾	10 7¼
1827	26 3	23 10	17 7	16 9					

Amsterdam is an important depôt for foreign corn, every variety of which may be found there. Only a small part of its own consumption is supplied by corn of native growth; so that the prices in it are for the most part dependent on the prices at which corn can be brought from Dantzic, Kiel, Hamburgh, and other shipping ports. Rotterdam is a very advantageous port for warehousing foreign corn; being conveniently situated, and the warehouse rent low, not exceeding 2*d.* or 2¼*d.* per quarter per month. We subjoin an account of the

Average Prices, per Imperial Quarter, of Wheat, Rye, Barley, and Oats grown within the Consulship of Amsterdam, during the Ten Years ending with 1831.

Years.	Wheat.	Rye.	Barley.	Oats.	Years.	Wheat.	Rye.	Barley.	Oats.
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*		*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
1822	25 0	16 8	13 0	9 4	1828	34 6	24 0	19 0	12 10
1823	21 1	20 6	16 1	8 0	1829	46 10	25 7	19 5	13 10
1824	20 3	17 4	14 2	9 8	1830	41 9	27 4	20 0	18 1
1825	23 4	16 5	15 9	12 0	1831	42 8	30 0	22 4	18 6
1826	25 0	19 3	17 7	16 4	Average	31 4¼	23 7¼	17 9¼	14 0¼
1827	33 2	29 0	21 0	21 8					

Previously to the late revolution in the Netherlands, there used to be a considerable trade in corn from Antwerp to England. Wheats, both white and red, are among the finest we receive from the Continent, and are, of course, pretty high priced. Beans and peas are also fine. Antwerp buck-wheat is the best in Europe. According to Mr. Jacob, the cost of storing and turning wheat per month at Antwerp does not exceed 1½*d.* a quarter, or about half what it costs in London.

French Corn Trade. — It appears, from the accounts given by the Marquis Garnier in the last edition of his translation of the *Wealth of Nations*, that the price of the *hectolitre* of wheat at the market of Paris amounted, at an average of the 19 years beginning with 1801 and ending with 1819, to 20 fr. 53 cent.; which is equal to 30 fr. 80 cent. the septier; or, taking the exchange at 25 fr., to 45*s.* 6*d.* the quarter. Count Chaptal, in his valuable work, *Sur l'Industrie Française* (tom. i. p. 226.), published in 1819, estimates the ordinary average price of wheat throughout France at 18 fr. the hectolitre, or 42*s.* 10*d.* the quarter. The various expenses attending the importation of a quarter of French wheat into London may be taken, at a medium, at about 6*s.* a quarter. France, however, has very little surplus produce to dispose of; so that it would be impossible for us to import any considerable quantity of French corn without occasioning a great advance of price; and in point of fact, our imports from France have been at all times quite inconsiderable.

The mean of the different estimates framed by Vauban, Quesnay, Expilly, Lavoisier, and Arthur Young, gives 61,519,672 septiers, or 32,810,000 quarters, as the total average growth of the different kinds of grain in France. — (*Peuchet, Statistique Elémentaire*, p. 290.) We, however, took occasion formerly to observe (*Supp. to Encyc. Brit.* art. *Corn Laws*) that there could not be a doubt that this estimate was a great deal too low; and the more careful investigations of late French statisticians fully confirm this remark. It is said that the mean annual produce of the harvests of France, at an average of the 4 years ending with 1828, amounted to 60,533,000 hectolitres of wheat, and 114,738,000 ditto of other sorts of grain; making in all 175,271,000 hectolitres, or 62,221,205 Winch. quarters. Of this quantity it is supposed that 16 per cent. is consumed as seed, 19 per cent. in the feeding of different species of animals, and 2 per cent. in distilleries and breweries. — (*Bulletin des Sciences Géographiques*, tom. xxv. p. 34.) This estimate is believed to be pretty nearly accurate; perhaps, however, it is still rather under the mark.

The foreign corn trade of France was regulated down to a very late period by a law which forbade exportation, except when the home prices were below certain limits; and which restrained and absolutely forbade importation except when they were above certain other limits. The prices regulating importation and exportation differed in the different districts into which the kingdom was divided; and it has not unfrequently happened that corn warehoused in a particular port, where it was either not admissible at all, or not admissible except under payment of a high duty, has been carried to another port in

another district, and admitted duty free! But during the last 2 years importation has been at all times allowed under graduated duties, which, however, like those of this country, become prohibitory when the prices sink to a certain level. The division of the kingdom into separate districts is still kept up; and in June, 1833, while the duties on wheat imported into some of the departments were only 4 fr. 75 cent., they were, in others, as high as 12 fr. 25 cent. An official announcement is issued on the last day of each month, of what the duties are to be in that district during the succeeding month. These depend, with certain modifications, on the average prices of the districts.

Spanish Corn Trade. — The exportation of corn from Spain was formerly prohibited under the severest penalties. But in 1820, grain and flour were both allowed to be freely exported; and in 1823, this privilege was extended to all productions (*frutos*) the growth of the soil. There is now, in fact, no obstacle whatever, except the expense of carriage, to the conveyance of corn to the sea-ports, and thence to the foreigner. Owing, however, to the corn-growing provinces being principally situated in the interior, and to the extreme badness of the roads, which renders carriage to the coast both expensive and difficult, the exports are reduced within comparatively narrow limits; the same difficulty of carriage frequently gives rise to very great differences in the prices of places, in all parts of the country, only a few leagues distant. Were the means of communication improved, and any thing like security given to the husbandman, Spain would, in no long time, become one of the principal exporting countries of Europe. Old Castile, Leon, Estremadura, and that part of Andalusia to the south and east of Seville, are amongst the finest corn countries of Europe; and might be made to yield immense supplies. But owing to the disturbed state of the country, and the want of a market for their produce, they can hardly be said to be at all cultivated. And yet such is their natural fertility, that in good seasons the peasants only reap those fields nearest to the villages! Latterly we have began to import corn from Bilbao, Santander, and other ports in the north of Spain; and in 1831, she supplied us with no fewer than 158,000 quarters. — (See Bilbao.)

Corn Trade of Odessa. — Odessa, on the Black Sea, is the only port in Southern Europe from which any considerable quantity of grain is exported. We believe, indeed, that the fertility of the soil in its vicinity has been much exaggerated; but the wheat shipped at Odessa is principally brought from Volhynia and the Polish provinces to the south of Cracow, the supplies from which are susceptible of an indefinite increase. Owing to the cataracts in the Dnieper, and the Dniester having a great number of shallows, most part of the corn brought to Odessa comes by land carriage. The expense of this mode of conveyance is not, however, nearly so great as might be supposed. The carts with corn are often in parties of 150; the oxen are pastured during the night, and they take advantage of the period when the peasantry are not occupied with the harvest, so that the charge on account of conveyance is comparatively trifling.

Both soft and hard wheat is exported from Odessa; but the former, which is by far the most abundant, is only brought to England. Supposing British wheat to sell at about 60*s.*, Odessa wheat, in good order, would not be worth more than 52*s.* in the London market; but it is a curious fact, that in the Mediterranean the estimation in which they are held is quite the reverse; at Malta, Marseilles, Leghorn, &c., Odessa wheat fetches a decidedly higher price than British wheat.

The hard wheat brought from the Black Sea comes principally from Taganrog. It is a very fine species of grain; it is full 10 per cent. heavier than British wheat, and has less than half the bran. It is used in Italy for making macaroni and vermicelli, and things of that sort; very little of it has found its way to England.

The voyage from Odessa to Britain is of uncertain duration, but generally very long. It is essential to the importation of the wheat in a good condition, that it should be made during the winter months. When the voyage is made in summer, unless the wheat be very superior, and be shipped in exceedingly good order, it is almost sure to heat; and has sometimes, indeed, been injured to such a degree as to require to be dug from the hold with pickaxes. Unless, therefore, means be devised for lessening the risk of damage during the voyage, there is little reason to think that Odessa wheat will ever be largely imported into Britain. — (See the evidence of J. H. Lander, Esq. and J. Schneider, Esq. before the Lords' Committee of 1827, on the price of foreign corn.)

It appears from the report of the British consul, dated Odessa, 31st of December, 1830, that the prices of wheat during the quarter then terminated varied from 22*s.* 4*d.* to 34*s.* 6*d.* a quarter. During the summer quarter, 149,029 quarters of wheat were exported.

We copy the following account from the evidence of J. H. Lander, Esq. referred to above: —

Account of the average Prices of Wheat at Odessa, with the Shipping Charges, reduced into British Measure and Currency; the Rate of Exchange (the whole taken Quarterly for the Years 1814 to 1824, inclusive); and the Quantities annually exported.

Quarter ending	Price per Chetwert in Russian Money.	Charges on Shipping.	Exchange.	Price on board per Quarter.	Quantity exported.	Observations.
	R.	*R.*	*R.*	*s.* *d.*	*Quarters.*	
1814. March 31.	20·75	2·75	18·60	33 8	187,685	
June 30.	21·50	2·65	18·90	34 1		
Sept. 30.	17·50	2·50	19·55	27 3		
Dec. 31.	18·	2·50	20·50	26 8		
1815. March 31.	24·30	3·55	20·30	36 6	372,309	
June 30.	21·	2·75	20·10	31 6		
Sept. 30.	24·80	2·95	20·60	35 11		
Dec. 31.	23·50	3·75	21·20	34 3		
1816. March 31.	32·	5·50	22·10	45 3	801,591	
June 30.	35·35	3·60	22·60	46 0		
Sept. 30.	35·80	3·65	23·10	45 7		
Dec. 31.	36·90	3·65	23·	47 0		
1817. March 31.	44·75	4·40	22·40	58 6	870,893	
June 30.	34·60	3·60	22·	46 4		
Sept. 30.	30·	3·30	21·55	41 2		
Dec. 31.	33·60	3·75	22·80	47 11		
1818. March 31.	29·80	3·80	20·55	43 7	538,513	
June 30.	22·70	2·85	20·85	32 8		
Sept. 30.	23·80	2·90	20·40	34 11		
Dec. 31.	21·30	2·80	19·20	33 6		
1819. March 31.	17·20	2·60	19·80	26 8	627,926	
June 30.	17·30	2·60	20·85	25 5		
Sept. 30.	16·30	2·55	21·85	23 1		
Dec. 31.	14·	2·45	23·70	18 6		
1820. March 31.	15·30	2·50	24·30	19 7	534,199	
June 30.	17·	2·60	24·20	21 7		
Sept. 30.	19·30	2·65	24·40	24 0		
Dec. 31.	23·30	2·75	23·40	29 8		
1821. March 31.	24·50	2·80	23·70	30 9	435,305	
June 30.	23·50	2·75	24·15	29 0		
Sept. 30.	20·15	2·65	25·25	24 3		
Dec. 31.	19·80	2·65	24·90	24 2		
1822. March 31.	17·25	2·60	24·80	20 8	342,752	
June 30.	17·75	2·60	25·	21 8		
Sept. 30.	17·45	2·60	24·65	21 7		
Dec. 31.	15·25	2·50	23·90	19 10		The present price of wheat is less than the cost of cultivation. The charge on warehousing wheat at Odessa does not exceed 2*d.* per quarter per month.
1823. March 31.	15·20	2·50	24·	19 8	443,035	
June 30.	15·	2·50	24·50	19 2		
Sept. 30.	12·25	2·35	24·75	15 7		
Dec. 31.	12·70	2·30	24·95	16 0		
1824. March 31.	12·90	2·30	25·40	16 1	427,767	
June 30.	13·	2·30	25·10	16 3		
Sept. 30.	13·	2·30	25·10	16 3		
Dec. 31.	13·	2·30	24·50	16 7		

The entire expense of importing a quarter of wheat from Odessa to London may be estimated at from 16*s.* to 19*s.* We borrow, from the valuable evidence of J. Schneider, Esq. already referred to, the following account, which states in detail the various items of expense.—(See Table, next page.)

The price free on board is estimated, in this Table, at under 16*s.*, being no less than 12*s.* below the *average* price of October and December, 1830, as returned by the consul; but notwithstanding, if we add to the cost of the wheat in London, as given in this statement, 6*s.* of duty, and allow 10*s.* for its supposed inferiority to English wheat, its price here, when thus reduced to the standard of the latter, would be about 50*s.* 6*d.* At present (7th of October, 1833), Odessa wheat, entered for home consumption, is worth in the London market from 42*s.* to 46*s.*; being about 10*s.* below the average of English wheat.

American Corn Trade. — The prices of wheat at New York and Philadelphia may be taken, on an average, at from 37*s.* to 40*s.* a quarter; and as the cost of importing a quarter of wheat from the United States into England amounts to from 10*s.* to 12*s.*, it is seen that no considerable supply could be obtained from that quarter, were our prices under 50*s.* or 52*s.* It ought also to be remarked, that prices in America are usually higher than in the Baltic; so that but little can be brought from the former, except when the demand is sufficient previously to take off the cheaper wheats of the northern ports.

The exports of wheat from the United States are, however, comparatively trifling; it being in the shape of flour that almost all their exports of corn are made. The shipments of this important article from Baltimore, Philadelphia, New York, New Orleans, and other ports, are usually very large. The British West Indies, Cuba, Mexico, Brazil, England, and France, are the principal markets to which it is sent. All sorts of flour, whether made of wheat, rye, Indian corn, &c. exported from the United States, must previously be submitted to the inspection of officers appointed for that purpose. The law further directs, that the barrels, in which it is shipped, shall be of certain dimensions, and that each barrel shall contain 196 lbs. of flour, and each half barrel 98 lbs. The inspector,

Pro forma Invoice of 2,000 Chetwerts of Wheat shipped at Odessa for London.

2,000 chetwerts wheat, at 12 rs. per chet.											Rs. 24,000
				Charges.							
Measuring when received, at 5 cops. per chet.										Rs. 100	
Ditto when shipped		9	—							180	
Duty		77	—							1,540	
Carriage to the mole		18	—							360	
Lighterage		15	—							300	
Use of bags		10	—							200	
Brokerage, ½ per cent.										120	
											2,800
											Rs. 26,800
Commission, 3 per cent.											804
											Rs. 27,600
Exchange at 24 rs. per £ sterling											£1,150 3 4
											£ s. d.
Would produce 1,450 Imperial quarters, to cost per quarter											0 15 10
Charges in London.					£	s.	d.	£	s.	d.	
Policy duty on 1,200*l.* at ¼ per cent.					3	0	0				
Insurance on 1,150*l.* at 2*l.* 2*s.* per cent.					24	3	0				
								27	3	0	
Commission do. ½								5	15	0	
Freight on 1,453 quarters wheat, at 12*s.* per quarter					871	10	0				
Primage, 10 per cent.					87	3	7				
Gratification					10	10	0				
								969	9	7	
Charterparty, 1*l.*; Custom-house entries, 10*s.*								1	10	0	
Metage on ship, at 4*s.* 3½*d.* per last								31	3	7	
Lastage								1	4	2	
Lighterage of 1,453 quarters at 4*d.*								24	4	4	
Landing, wharfage, housing, and delivering, at 9*d.*								54	9	8	
Rent 4 weeks, at 5*s.* per 100 quarters per week								14	10	7	
Metage, &c. ex granary								7	5	0	
								£1,136	15	0	
Or per quarter											0 15 8
											1 11 6
Estimated charge for probable damage on the voyage											0 2 0
Factorage in London											0 1 0
Del credere, 1 per cent.											£1 14 6

having ascertained that the barrels correspond with the regulations as to size, weight, &c., decides as to the quality of the flour: the first, or best sort, being branded *Superfine;* the second, *Fine;* the third, *Fine Middlings;* and the fourth, or lowest quality, *Middlings.* Such barrels as are not merchantable are marked *Bad;* and their exportation, as well as the exportation of those deficient in weight, is prohibited. Rye flour is divided into 2 sorts, being either branded *Superfine Rye Flour,* or *Fine Rye Flour.* Maize flour is branded *Indian Meal;* flour made from buck-wheat is branded *B. Meal.* Indian meal may be exported in hhds. of 800 lbs. Flour for home consumption is not subjected to inspection. The inspection must take place at the time and place of exportation, under a penalty of 5 dollars per barrel. Persons altering or counterfeiting marks or brands forfeit 100 dollars; and persons putting fresh flour into barrels already marked or branded, or offering adulterated wheaten flour for sale, forfeit in either case 5 dollars for each barrel.

The fees of branding were reduced in 1832. They amount, in New York, to 3 cents for each hogshead, and 1 cent for each barrel and half barrel of full weight. A fine of 30 cents is levied on every barrel or half barrel below the standard weight, exclusive of 20 cents for every pound that it is deficient.

The act 9 Geo. 4. c. 60. enacts, that every barrel of wheaten flour imported, shall be deemed equivalent to 38½ gallons of wheat, and shall be charged with a corresponding duty (*antè*, p. 418.). Hence, when the price of British wheat per quarter is between 52*s.* and 53*s.*, the duty on the barrel of flour is 20*s.* 10¼*d.*; when wheat is between 60*s.* and 61*s.*, the duty on flour is 16*s.* 0½*d.*; and when wheat is between 69*s.* and 70*s.*, the duty on flour is 8*s.* 2¾*d.**

The following Tables, derived principally from private but authentic sources, give a very complete view of the foreign corn trade of the United States during the last 10 years.

* There is a Table of the duties on flour, according to the variations in the price of British wheat, in the valuable work of Mr. Reuss (p. 117.) relating to the trade between Great Britain and America.

I. — Account of the Quantities of Flour and Grain exported from the United States, from October 1st, 1821, to September 30th, 1831, with the Prices of Flour at Philadelphia, and of Wheat and Indian Corn at New York.

Years.	Wheat Flour.	Rye Flour.	Corn Meal.	Wheat.	Indian Corn.	Price of Wheat Flour per Barrel at Philadelphia.	Price of Wheat per Bushel at New York.	Price of Indian Corn per Bushel at New York.
	Barrels.	*Barrels.*	*Barrels.*	*Bushels.*	*Bushels.*	*Dolls. cents.*	*Dolls. cents.*	*Dolls. cents.*
1831	1,805,205	19,049	204,206	405,384	566,761	- -	1 19	0 70
1830	1,225,881	26,298	145,301	45,289	444,107	4 98	0 98	0 57
1829	837,385	34,191	173,775	4,007	897,656	6 35	1 38	0 58
1828	860,809	22,214	174,639	8,906	704,902	5 60	1 8	0 53
1827	865,491	13,345	131,041	22,182	978,664	5 23	0 97	0 65
1826	857,820	14,472	158,625	45,166	505,381	4 65	0 90	0 79
1825	813,906	29,545	187,285	17,960	869,644	5 10	1 4	0 56
1824	996,792	31,879	152,723	20,373	779,297	5 62	1 15	0 47
1823	756,702	25,665	141,501	4,272	749,034	6 82	1 5	0 53
1822	827,865	19,971	148,288	4,418	509,098	6 58	0 90	0 49
1821	1,056,119	23,523	131,669	25,812	607,277	4 78	0 89	0 53

II. — Account of the Quantity and Destination of Wheat Flour exported from the United States, commencing 1st of October, 1821, and ending 30th of September, 1831.

Years.	America.			Europe.					Africa.	Asia.	Total.
	British N. Amer. Prov.	West Indies.	South Amer.	Gr. Britain and Ireland.	France.	Spain and Portugal.	Madeira.	Other Parts of Europe.	All Parts.	All Parts.	
	Barrels.	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*	*Barls.*	*Barls.*	*Barrels.*
1831	150,645	371,876	319,616	879,430	23,991	364	12,811	35,416	2,751	8,305	1,805,205
1830	149,966	281,256	347,290	326,182	56,590	10,222	9,628	36,924	2,609	5,214	1,225,881
1829	91,088	248,236	235,591	221,176	17,464	509	3,779	14,959	221	4,362	837,385
1828	86,680	370,371	308,110	23,258	6,266	294	4,061	54,371	1,737	5,662	860,809
1827	107,420	362,674	271,524	53,129	19	4,293	5,171	52,114	4,909	7,238	865,491
1826	72,904	433,094	285,563	18,357	275	504	6,119	27,716	5,403	7,885	857,820
1825	30,780	429,760	252,786	27,272	102	730	3,597	55,818	7,623	15,438	813,906
1824	39,191	424,359	357,372	70,873	426	939	25,851	47,449	3,883	6,439	996,792
1823	29,681	442,468	198,256	4,252	51	62,387	4,752	2,088	903	11,864	756,702
1822	89,840	436,849	211,039	12,096	228	25,104	21,375	976	3,929	26,429	827,865
1821	131,035	551,396	156,888	94,541	1,175	71,958	26,572	9,074	3,123	10,357	1,056,119

Owing to the diminished demand in England, the exports in the year ending 30th of September, 1832, fell considerably under the level of the 2 preceding years, being only 864,919 barrels, valued at 4,880,623 dollars. There were exported, during the same year, 88,304 bushels of wheat, and 451,230 bushels of Indian corn. — (*Papers laid before Congress*, 15th of February, 1833.)

Mr. Reuss gives (p. 120.) the following *pro forma* account of the expenses attending the importation of a cargo of 5,000 bushels of wheat from New York, supposing it to cost 1 doll. 12 cents a bushel, which is about its average price.

	Dollars.
5,000 bushels, at 1 dol. 12 cents per bushel	5,600·00
Winnowing, measuring, and delivery on board - - -	150·00
Brokerage, ½ per cent. - -	28·00
Insurance, 6,000 dols. at 1½ per cent.	90·00
	268·00
	5,868·00
Commission, 5 per cent.	293·40
	6,161·40
Exchange, 110 per cent.	1,260 1 8

	L. s. d.	*L. s. d.*
Freight, 125 tons at 15*s.* per ton - - -	93 15 0	
Primage, 5 p. cent.	4 13 9	
	98 8 9	
Entry, officer's fees, and city dues -	1 10 0	
Metage from the ship at 2*s.* 8*d.* per last of 10 qrs. - -	6 18 4	
	117 7 1	

	L. s. d.	*L. s. d.*
Brought forward -	117 7 1	
Petty charges, at 1*s.* per last of 10 qrs.	2 12 0	
Lighterage and porterage to granary, 9*d.* per quarter - -	19 10 0	
Granary rent and fire insurance, say 4 weeks, at 2*s.* per 100 qrs. per week	2 2 0	
Turning, at 2*s.* per 100 quarters -	0 10 6	
Metage and porterage to the granary, at 4*s.* per 100 quarters - -	10 8 0	
Do. do. from the do. at 5*s.* per qr.	11 16 8	
Postage and stamps - -	1 7 0	
Factorage, 1*s.* per quarter - -	26 0 0	
Commission, 2½ per cent. } Guarantee, 1 — } 4½ per cent.	63 0 11	
Interest, 1 — }		244 4 2
		1,504 5 10
In London.		
103·06 quarters Winchester measure, equal to 100 quarters Imperial.		
5,000 bushels Winchester measure, equal to 604 quarters Imperial measure, costing 49*s.* 9½*d.* per quarter in bond - -		1,503 14 2

The usual price of wheat in Canada, when there is a demand for the English market, is about 40*s.* a quarter; but taking it as low as 35*s.*, if we add to this 12*s.* a quarter as the expenses of carriage and warehousing, it will make its price in Liverpool, when delivered to the consumer, 47*s.*; and being spring wheat, it is not so valuable, by about 6*s.* a quarter, as English wheat. The duty on corn imported from a British colony being, when the home price is under 67*s.*, only 5*s.*, it is suspected that a good deal of the flour brought from Canada has been really furnished by the United States. It is certain, too, that in the present year (1833) wheat has been sent from Archangel to Canada, in the view (as is alleged) of its being re-shipped, under the low duty, to British ports; the saving of duty being supposed sufficient to countervail the cost of a double voyage across the Atlantic! But grain from the colonies is not admitted into England at the low duty, without the exporters subscribing a declaration that it is the produce of such colonies; any wilful inaccuracy in such document being punished by the forfeiture of the corn so imported, and of 100*l.* of penalty; and in addition to this, the corn, flour, &c. must also be accompanied by a *certificate of origin* subscribed by the collector or comptroller at the port of shipment. It is, therefore, difficult to see how the importers of Russian corn into Canada are to succeed in getting it shipped for England as colonial corn; and we believe that most of it will go to the West Indies.

Account of all Corn and Flour imported into Great Britain from Canada, during the Five Years ending with 1832; specifying the Quantities in each Year.—(*Parl. Paper*, No. 206. Sess. 1832.)

Corn and Flour.	1828.	1829.	1830.	1831.	1832.
	Qrs. bus.	*Qrs. bus.*	*Qrs. bus.*	*Qrs. bus.*	*Qrs. bus.*
Wheat	14,415 4	4,055 5	58,963 6	189,885 1	88,686 6
Barley	- - -	- - -	- - -	209 5	
Oats	580 0	61 4	1,223 1	3,750 2	0 2
Peas	1,868 3	1,616 2	1424 6	461 6	8 0
Indian corn	5 0	7 0			
Total of corn	16,868 7	5,740 3	61,611 5	194,306 6	88,695 0
	Cwt. qrs. lbs.	*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*
Wheat meal or flour	16,571 0 27	5,579 1 0	61,904 3 13	96,039 1 14	48,809 2 27
Oatmeal	- - -	- - -	519 1 13	142 0 24	1 2 13
Indian meal	- - -	1 3 6			
Rye meal	- - -	- - -	- - -	885 0 15	
Total of meal and flour	16,571 0 27	5,581 0 6	62,424 0 26	97,066 2 25	48,811 1 12

Inferences from the above Review of Prices. — We may, we think, satisfactorily conclude, from this pretty lengthened review of the state of the foreign corn trade, that in the event of all restrictions on the importation of corn into our markets being abolished, it could not, in ordinary years, be imported for less than 46*s.* or 47*s.* a quarter. But taking it so low as 44*s.*, it is plain it could not, in the event of its being charged with a duty of 6*s.* or 7*s.*, be sold for less than 50*s.* or 51*s.*

Now, it appears, from the account No. III. page 423., that the average price of wheat in England and Wales, for the *ten* years ending with 1832, amounted to 61*s.* 8¾*d.* a quarter; and it will be observed that the crops from 1826 to 1831 were very deficient, and that the importations in those years were unusually large. But without taking this circumstance into account, it is clear, from the previous statements, that the opening of the ports under a fixed duty of 6*s.* or 7*s.* could not occasion a reduction of more than 9*s.* or 10*s.* a quarter in the prices of the last 10 years; and not more than 7*s.* or 8*s.* on the prices of last year (1832).

We feel pretty confident that these statements cannot be controverted; and they show, conclusively, how erroneous it is to suppose that the repeal of the existing corn laws, and the opening of the ports for importation, under a duty of 6*s.* or 7*s.*, would throw a large proportion of our cultivated lands into pasture, and cause a ruinous decline in the price of corn. The average price of wheat in England and Wales, in 1802, 1803, and 1804, — years of decided agricultural improvement, — was exactly 61*s.* a quarter, being almost identical with its price during the last 10 years; while the reduction of taxation, the greater cheapness of labour, and the various improvements that have been made in agriculture since 1804, must enable corn to be raised from the same soils at a less expense now than in that year. It cannot be justly said that 1823 was by any means an unfavourable year for the farmers; and yet the average price of wheat was then only 51*s.* 9*d.*, being rather *less* than its probable average price under the system we have ventured to propose. The landlords and farmers may, therefore, take courage. Their prosperity does not depend on restrictive regulations; but is the effect of the fertility of the soil which belongs to them, of the absence of all oppressive feudal privileges, and of the number and wealth of the consumers of their produce. The unbounded freedom of the corn trade would not render it necessary to abandon any but the most worthless soils, which ought never to have been broken up; and would, consequently, have but a very slight effect on rent; while it would be in other respects supremely advantageous to the landlords, whose interests are closely identified with those of the other classes.

COTTON (Ger. *Baumwolle;* Du. *Katoen, Boomwol;* Da. *Bomuld;* Sw. *Bomull;* Fr. *Coton;* It. *Cotone, Bambagia;* Sp. *Algodon;* Port. *Algodão;* Rus. *Chlobtschataja bumaga;* Pol. *Bawelna;* Lat. *Gossypium, Bombax;* Arab. *Kutun;* Sans. *Kapasa;* Hind. *Rûhi;* Malay, *Kapas*), a species of vegetable wool, the produce of the *Gossypium herbaceum*, or cotton shrub, of which there are many varieties. It is found growing naturally in all the tropical regions of Asia, Africa, and America, whence it has been transplanted, and has become an important object of cultivation, in the southern parts of the United States, and to some extent also in Europe.

Cotton is distinguished in commerce by its colour, and the length, strength, and fineness of its fibre. White is usually considered as characteristic of secondary quality. Yellow, or a yellowish tinge, when not the effect of accidental wetting or inclement seasons, is considered as indicating greater fineness.

There are many varieties of raw cotton in the market, their names being principally derived from the places whence they are brought. They are usually classed under the denominations of *long and short stapled.* The best of the first is the *sea-island* cotton, or that brought from the shores of Georgia; but its qualities differ so much, that the price

of the finest specimens is often four times as great as that of the inferior. The superior samples of Brazil cotton are reckoned among the long stapled. The *upland* or *bowed* Georgia cotton forms the largest and best portion of the short stapled class. All the cottons of India are short stapled.

The estimation in which the different kinds of cotton wool are held may be learned from the following statement of their prices in Liverpool, on the 1st of November, 1833. The inferiority of Bengal and Surat cotton is sometimes ascribed to the defective mode in which it is prepared; but Mr. Horace H. Wilson doubts whether it can be grown in India of a better kind. The raw cotton of the Indian islands has hitherto been almost entirely consumed on the spot.

Prices of Cotton in Liverpool, 1st November, 1833.

	d.		d.		d.		d.
Sea-island, stained and saw-ginn'd	8	to	12	Alabama and Mobile, good fair	$8\frac{7}{8}$	to	$9\frac{3}{8}$
inferior	$12\frac{1}{2}$	—	13	good	$9\frac{1}{2}$	—	$10\frac{1}{2}$
middling	13	—	$13\frac{1}{4}$	Upland, inferior	$7\frac{7}{8}$	—	8
fair, clean, not fine	$13\frac{1}{4}$	—	14	middling	$8\frac{1}{8}$	—	$8\frac{1}{2}$
good, clean, & rather fine	$14\frac{1}{4}$	—	$15\frac{1}{2}$	fair	$8\frac{5}{8}$	—	$8\frac{7}{8}$
fine and clean	16	—	20	good fair	9	—	$9\frac{1}{2}$
New Orleans, inferior	$7\frac{7}{8}$	—	$8\frac{1}{4}$	good	$9\frac{5}{8}$	—	$10\frac{1}{2}$
middling	$8\frac{3}{8}$	—	$8\frac{5}{8}$	Egyptian	13	—	$13\frac{1}{2}$
fair	$8\frac{3}{4}$	—	$9\frac{1}{8}$	Pernambuco	$9\frac{3}{4}$	—	$11\frac{3}{4}$
good fair	$9\frac{1}{4}$	—	$9\frac{3}{4}$	Bahia	9	—	$10\frac{1}{2}$
good	$9\frac{7}{8}$	—	$10\frac{3}{4}$	Maranham	$9\frac{1}{2}$	—	11
very choice gin marks	11	—	12	Demerara	$8\frac{1}{2}$	—	$11\frac{1}{2}$
Alabama and Mobile, inferior	$7\frac{1}{2}$	—	$7\frac{7}{8}$	West India	8	—	$9\frac{1}{2}$
middling	8	—	$8\frac{1}{4}$	Carthagena	7	—	8
fair	$8\frac{3}{8}$	—	$8\frac{3}{4}$	Surat	$4\frac{3}{4}$	—	$7\frac{1}{2}$

A small quantity of very superior cotton has been imported from New South Wales.

The manufacture of cotton has been carried on in Hindostan from the remotest antiquity. Herodotus mentions (lib. iii. c. 106.) that in India there are wild trees that produce a sort of wool superior to that of sheep, and that the natives dress themselves in cloth made of it.— (See, to the same effect, *Arrian Indic.* c. 16. p. 582.) The manufacture obtained no footing worth mentioning in Europe till last century.

1. *Rise and Progress of the British Cotton Manufacture.* — The rapid growth and prodigious magnitude of the cotton manufacture of Great Britain are, beyond all question, the most extraordinary phenomena in the history of industry. Our command of the finest wool naturally attracted our attention to the woollen manufacture, and paved the way for that superiority in it to which we have long since attained: but when we undertook the cotton manufacture, we had comparatively few facilities for its prosecution, and had to struggle with the greatest difficulties. The raw material was produced at an immense distance from our shores; and in Hindostan and China the inhabitants had arrived at such perfection in the arts of spinning and weaving, that the lightness and delicacy of their finest cloths emulated the web of the gossamer, and seemed to set competition at defiance. Such, however, has been the influence of the stupendous discoveries and inventions of Hargraves, Arkwright, Crompton, Cartwright, and others, that we have overcome all these difficulties — that neither the extreme cheapness of labour in Hindostan, nor the excellence to which the natives had attained, has enabled them to withstand the competition of those who buy their cotton; and who, after carrying it 5,000 miles to be manufactured, carry back the goods to them. This is the greatest triumph of mechanical genius: and what perhaps is most extraordinary, our superiority is not the late result of a long series of successive discoveries and inventions; on the contrary, it has been accomplished in a very few years. Little more than half a century has elapsed since the British cotton manufactory was in its infancy; and it *now* forms the principal business carried on in the country, — affording an advantageous field for the accumulation and employment of millions upon millions of capital, and of thousands upon thousands of workmen! The skill and genius by which these astonishing results have been achieved, have been one of the main sources of our power: they have contributed in no common degree to raise the British nation to the high and conspicuous place she now occupies. Nor is it too much to say that it was the wealth and energy derived from the cotton manufacture that bore us triumphantly through the late dreadful contest, at the same time that it gives us strength to sustain burdens that would have crushed our fathers, and could not be supported by any other people.

The precise period when the manufacture was introduced into England is not known; but it is most probable that it was some time in the early part of the 17th century. The first authentic mention is made of it by Lewis Roberts, in his *Treasure of Traffic*, published in 1641, where it is stated, "The town of Manchester, in Lancashire, must be also herein remembered, and worthily for their encouragement commended, who buy the yarne of the Irish in great quantity, and weaving it, returne the same again into Ireland to sell. Neither doth their industry rest here; for they buy cotton wool in London that comes first from Cyprus and Smyrna, and at home worke the same, and perfect it into

fustians, vermillions, dimities, and other such stuffes, and then return it to London, where the same is vented and sold, and not seldom sent into forrain parts, who have means, at far easier termes, to provide themselves of the said first materials." — (Orig. ed. p. 32.) It is true, indeed, that mention is frequently made by previous writers, and in acts of the legislature passed at a much earlier period *, of "Manchester cottons," "cotton velvets," "fustians," &c.; but it is certain that these articles were *wholly composed of wool*, and had most probably been denominated cottons from their having been prepared in imitation of some of the cotton fabrics imported from India and Italy.

From the first introduction of the cotton manufacture into Great Britain down to the comparatively late period of 1773, the weft, or transverse threads of the web, only, were of cotton; the warp, or longitudinal threads, consisting wholly of linen yarn, principally imported from Germany and Ireland. In the first stage of the manufacture, the weavers, dispersed in cottages throughout the country, furnished themselves as well as they could with the warp and weft for their webs, and carried them to market when they were finished: but about 1760, a new system was introduced. The Manchester merchants began about that time to send agents into the country, who employed weavers, whom they supplied with foreign or Irish linen yarn for warp, and with raw cotton, which being carded and spun, by means of a common spindle or distaff, in the weaver's own family, was then used for weft. A system of domestic manufacture was thus established; the junior branches of the family being employed in the carding and spinning of the cotton, while its head was employed in weaving, or in converting the linen and cotton yarn into cloth. This system, by relieving the weaver from the necessity of providing himself with linen yarn for warp and raw cotton for weft, and of seeking customers for his cloth when finished, and enabling him to prosecute his employment with greater regularity, was an obvious improvement on the system that had been previously followed; but it is at the same time clear that the impossibility of making any considerable division among the different branches of a manufacture so conducted, or of prosecuting them on a large scale, added to the interruption given to the proper business of the weavers, by the necessity of attending to the cultivation of the patches of ground which they generally occupied, opposed invincible obstacles to its progress, so long as it was conducted in this mode.

It appears from the Custom-house returns, that the total quantity of cotton wool annually imported into Great Britain, at an average of the *five* years ending with 1705, amounted to only 1,170,881 lbs. The accounts of the imports of cotton from 1720 to 1770 have not been preserved; but until the last 2 or 3 years of that period the manufacture increased very slowly, and was of very trifling amount. Dr. Percival, of Manchester, who had the best means of being accurately informed on the subject, states that the entire value of all the cotton goods manufactured in Great Britain, at the accession of George III. in 1760, was estimated to amount to only 200,000*l.* a year, and the number of persons employed was quite inconsiderable: but in 1767, a most ingenious person, James Hargraves, a carpenter at Blackburn in Lancashire, invented the *spinning jenny*. At its first invention, this admirable machine enabled *eight* threads to be spun with the same facility as one; and it was subsequently brought to such perfection, that a little girl was able to work no fewer than from *eighty* to *one hundred and twenty* spindles.

The jenny was applicable only to the spinning of cotton for weft, being unable to give to the yarn that degree of firmness and hardness which is required in the longitudinal threads or warp: but this deficiency was soon after supplied by the introduction of the *spinning-frame*, — that wonderful piece of machinery which spins a vast number of threads of any degree of fineness and hardness, leaving to man merely to feed the machine with cotton, and to join the threads when they happen to break. It is not difficult to understand the principle on which this machine is constructed, and the mode of its operation. It consists of two pairs of rollers, turned by means of machinery. The lower roller of each pair is furrowed or fluted longitudinally, and the upper one is covered with leather, to make them take a hold of the cotton. If there were only one pair of rollers, it is clear that a carding of cotton passed between them would be drawn forward by the revolution of the rollers, but it would merely undergo a certain degree of compression from their action. No sooner, however, has the carding, or *roving*, as it is technically termed, begun to pass through the first pair of rollers, than it is received by the second pair, which are made to revolve with (as the case may be) 3, 4, or 5 times the velocity of the first pair. By this admirable contrivance, the roving is drawn out into a thread of the desired degree of tenuity; a twist being given to it by the adaptation of the spindle and fly of the common flax-wheel to the machinery.

Such is the principle on which Sir Richard Arkwright constructed his famous spinning frame. It is obvious that it is radically and completely different from the previous

* In an act of 5 & 6 Edw. 6. (1552), entitled, for the true making of WOOLLEN cloth, it is ordered, "*That all cottons called Manchester, Lancashire, and Cheshire cottons*, full wrought for sale, shall be in length," &c. This proves incontestably, that what were then called cottons were made wholly of wool.

methods of spinning, either by the common hand-wheel or distaff, or by the jenny, which is only a modification of the common wheel. Spinning by rollers was an entirely original idea; and it is difficult which to admire most — the profound and fortunate sagacity which led to so great a discovery, or the consummate skill and address by which it was so speedily perfected, and reduced to practice.*

Since the dissolution of Sir Richard Arkwright's patent, in 1785, the progress of discovery and improvement in every department of the manufacture has been most rapid. The *mule-jenny* — so called from its being a compound of the jenny and the spinning frame — invented by Mr. Crompton, and the *power-loom*, invented by the Rev. Mr. Cartwright, are machines that have had the most powerful influence on the manufacture; and in consequence of their introduction, and of innumerable other inventions and improvements, the prices of cotton cloth and yarn have gone on progressively diminishing. But as the demand for cottons has been, owing to their extraordinary cheapness, extended in a still greater degree, the value of the goods produced, and the number of persons employed in the manufacture, are now decidedly greater than at any previous period.

2. *Imports of Cotton Wool. Countries whence it is imported. Prices, Duties, &c.* — The following Tables have been partly taken from official documents, and partly from the accounts of merchants of great experience. We believe they may be relied on as approaching as near to accuracy as it is possible to attain to in such matters.

Account of the Imports and Exports of Cotton Wool to and from Great Britain, from 1781 to 1812, both inclusive.

Years.	Imported.	Exported.	Years.	Imported.	Exported.
	Lbs.	*Lbs.*		*Lbs.*	*Lbs.*
1781	5,198,778	96,788'	1797	23,354,371	609,058
1782	11,828,039	421,229	1798	31,880,641	601,139
1783	9,735,663	177,626	1799	43,379,278	844,671
1784	11,482,083	201,845	1800	56,010,732	4,416,610
1785	18,400,384	407,496	1801	56,004,305	1,860,872
1786	19,475,020	323,153	1802	60,345,600	3,730,480
1787	23,250,268	1,073,381	1803	53,812,284	1,561,053
1788	20,467,436	853,146	1804	61,867,329	503,171
1789	32,576,023	297,837	1805	59,682,406	804,243
1790	31,447,605	844,154	1806	58,176,283	651,867
1791	28,706,675	363,442	1807	74,925,306	2,176,943
1792	34,907,497	1,485,465	1808	43,605,982	1,644,867
1793	19,040,929	1,171,566	1809	92,812,282	4,351,105
1794	24,358,567	1,349,950	1810	132,488,935	8,787,109
1795	26,401,340	1,193,737	1811	91,576,535	1,266,867
1796	32,126,357	694,962	1812	63,025,936	1,740,912

Account of the Imports of Cotton Wool into Great Britain, of the Stocks on hand on the 31st of December, of the Annual and Weekly Delivery for Consumption, the Amount of the Crops of Cotton in North America, and the Average Price of Uplands, each Year from 1814 to 1832, both inclusive. — (Furnished by Mr. Cook, of Mincing Lane.)

Years.	Total Imports into Great Britain.	Stock in the Ports, 31st of December.	Total Deliveries for Consumption.	Estimated weekly Consumption.	Amount of Crop in North America.	Average Price of Uplands.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Per lb.*
1814	73,728,000	22,272,000	80,640,000	1,664,000		28*d.*
1815	96,200,000	22,360,000	85,800,000	1,612,000		20½*d.*
1816	97,310,000	22,355,000	88,631,000	1,709,500		18¼*d.*
1817	126,240,000	31,034,000	108,356,000	2,051,400	No correct returns.	20*d.*
1818	173,940,000	85,800,000	111,800,000	2,132,000		20*d.*
1819	137,592,000	88,452,000	108,864,000	2,116,800		13½*d.*
1820	147,576,000	103,458,000	125,646,000	2,322,000		11½*d.*
1821	126,420,000	106,800,000	126,420,000	2,476,800	110,940,000	9½*d.*
1822	141,510,000	76,362,000	144,180,000	2,750,100	121,485,000	8¼*d.*
1823	183,700,000	105,875,000	147,125,000	3,025,000	136,125,000	8¼*d.*
1824	147,420,000	64,428,000	174,174,000	3,166,800	152,880,000	8½*d.*
1825	244,360,000	123,968,000	169,264,000	3,456,000	169,860,000	11½*d.*
1826	170,520,000	100,548,000	164,640,000	3,410,400	211,680,000	6¾*d.*
1827	264,330,000	134,244,000	211,167,000	3,801,600	285,120,000	6½*d.*
1828	222,750,000	120,582,000	217,701,000	4,158,000	213,840,000	6¾*d.*
1829	218,324,000	84,966,000	221,676,000	4,263,000	255,780,000	5¾*d.*
1830	259,856,000	95,360,000	242,000,000	4,768,000	292,040,000	6⅞*d.*
1831	280,080,000	84,090,000	257,500,000	5,047,700	311,655,000	5⅝*d.*
1832	270,690,000	73,560,000	259,980,000	5,330,500	296,245,000	6⅝*d.*

* There is, in the new edition of the *Encyclopædia Britannica*, a pretty full account of the life of Sir Richard Arkwright. The question as to his merit as an original discoverer is still undecided. Recently, however, it has been ascertained that a patent for spinning by rollers, revolving with different degrees of velocity, was taken out by Messrs. Wyatt and Paul, so early as 1738. — (See the excellent *Account of the Cotton Manufacture*, by Edward Baines, jun., Esq.) But it does not appear that the inventors had been able to give effect to their happy idea, and all traces of the invention seem to have been lost. The statements in the case printed by Sir Richard Arkwright and his partners in 1782, show, that he was aware of the attempts made in the reign of George II. to spin by machinery; but there is no evidence to prove that he was acquainted with the principle on which these attempts had been made, or that he had seen the patent referred to. Undoubtedly, however, the probability seems to be that he had. But admitting this to be the case, it detracts but little from the substantial merits of Sir Richard Arkwright. If the idea of spinning by rollers did not spring up spontaneously in his mind, he was, at all events, the first who made it available in practice; and showed how it might be rendered a most prolific source of wealth.

In 1786, the supplies of cotton wool were derived from the following sources: —

	Lbs.
From the British West Indies	5,800,000
French and Spanish colonies	5,500,000
Dutch colonies	1,600,000
Portuguese colonies	2,000,000
Smyrna and Turkey	5,000,000
	19,900,000 lbs.

or about 66,000 bales.—*N. B.* The bale or package is of various magnitudes; but may, at an average, be estimated at from 300 to 310 lbs.

Previously to 1790, North America did not supply us with a single pound weight of raw cotton. After the termination of the American war, cotton began to be cultivated in Carolina and Georgia; and it has succeeded so well, that it now forms the principal staple production of the United States. American cotton is generally known by the names of *sea-island*, *upland*, *New Orleans*, and *Alabama*. The first is the finest cotton imported into Britain. It grows on small sandy islands contiguous to the shores of Georgia, and on the low grounds along the sea. The *upland* grows at a distance from the coast, and is so very difficult to separate from the seed, that it was for a considerable period not worth cultivating. But the genius of Mr. Whitney, who invented a machine which separates the wool from the seed with the greatest facility, has done for the planters of Carolina and Georgia what the genius of Arkwright did for the manufacturers of Lancashire. Before Mr. Whitney's invention, in 1793, very little upland was produced, and none was exported from the United States. No sooner, however, had his machine been constructed, than the cultivation of this species of cotton became the principal object of the agriculturists of Carolina and Georgia; and the exports have increased to upwards of 100,000,000 lbs. New Orleans and Alabama cottons are so called from the ports whence they are shipped. At present, the exports of all sorts of cotton from the United States exceed 300,000,000 lbs. a year!

Quantity and Value of the Exports of Cotton Wool from the United States, during the Year ended 30th of September, 1832, specifying the Countries to which Exports were made, with the Quantities and their Values sent to each.

Whither exported.	Sea-island.	Other Kinds of Cotton.	Value.	Whither exported.	Sea-island.	Other Kinds of Cotton.	Value.
	Lbs.	*Lbs.*	*Dollars.*		*Lbs.*	*Lbs.*	*Dollars.*
Russia	- -	838,951	87,973	France on the Atlantic	1,276,004	67,722,972	6,931,564
Sweden and Norway	- -	699,002	75,711	France on the Mediterranean	- -	8,468,831	791,311
Denmark	- -	305,450	27,812	Spain on the Atlantic	- -	1,296,474	142,924
Holland	- -	3,920,016	392,430	Spain on the Mediterranean	- -	987,401	93,491
England	7,011,235	210,196,428	21,262,900	Cuba	- -	335,900	17,660
Scotland	319,994	10,674,457	1,088,343	Italy and Malta	- -	580,974	51,606
Ireland	- -	805,158	77,807	Trieste and other Austrian ports	- -	1,654,775	179,402
Gibraltar	- -	492,778	43,557	Europe generally	- -	380,513	33,353
British E. Indies	136,140	- -	20,420				
British W. Indies	- -	376	41				
Brit. American colonies	- -	36,171	4,298				
Hanse Towns, &c.	- -	4,075,122	403,099	Total	8,743,373	313,471,749	31,724,682

(*Papers laid before Congress*, 15th of February, 1833, p. 218.)

Brazil, the East Indies, Egypt, &c. are, after the United States, the countries that furnish the largest supplies of cotton for exportation.

Of 288,674,000 lbs. of cotton wool imported into the United Kingdom in 1831, 219,333,000 lbs. were from the United States, 31,695,000 lbs. from Brazil, 25,805,000 lbs. from the East Indies, 7,714,000 lbs. from Egypt, 2,401,000 lbs. from the British West Indies, 334,000 lbs. from Columbia, 366,000 lbs. from Turkey and Continental Greece, 344,000 lbs. from Malta, &c. — (*Parl. Paper*, No. 550. Sess. 1833.)

It has been the practice for many years past to levy a duty on cotton wool, when imported. The policy of such a duty is very questionable; and it would be quite intolerable, were it not kept at a low rate. For a number of years previously to 1831, it amounted (on foreign cotton) to 6 per cent *ad valorem;* but, in order to make up, in part, at least, for the loss of revenue caused by the repeal of the duty on printed cottons — (see CALICO), it was raised in that year to *5s.* 10*d.* a cwt. Such a duty would have materially affected the imports of the inferior species of cotton, and the price of coarse goods; and being, in consequence, justly objected to, it was reduced last session (1833) to 2*s.* 11*d.* a cwt. The duty on cotton from a British possession is little more than nominal, being only 4*d.* a cwt. At an average of the 3 years ending with 1832, the duties on cotton produced 449,760*l.*

The subjoined statement is taken from the circular of George Holt and Co., eminent cotton brokers at Liverpool, dated 31st of December, 1832. It contains some additional

and instructive details. Its near agreement with the previous statements affords a strong proof of their and its accuracy.

Statement of the Consumption, Exportation, &c. of Great Britain, for the different Sorts of Cotton Wool, from 1824 to 1832, both inclusive.

Average weekly consumption.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.
Upland	4,212	3,713	3,783	4,241	4,990	5,304	5,452	5,241	6,219
Orleans and Tennessee	2,298	2,442	2,713	3,940	4,210	3,788	5,756	5,800	5,321
Sea-island	754	360	369	673	635	539	460	517	519
Total United States	7,264	6,515	6,865	8,854	9,835	9,631	10,668	11,558	12,059
Brazil	2,890	2,502	1,188	1,815	2,456	3,094	3,602	3,294	2,843
Egypt	362	891	975	1,142	671	485	508	619	881
East India	644	1,096	489	664	738	658	940	765	1,161
Demerara, West India, &c.	473	527	308	502	380	463	284	260	196
Total	11,633	11,531	9,825	12,977	14,080	14,331	16,002	16,496	17,140
Packages annually consumed	604,900	599,600	510,900	674,800	732,200	745,200	832,100	857,800	891,300
Average weight of packages consumed, in lbs.	273	278	294	297	297	294	298	306	311
Weekly consumption in packages, average 311 lbs.	10,213	10,316	9,288	12,194	13,471	13,551	15,333	16,230	17,140
Average weight of packages imported, in lbs.	266	270	295	303	293	297	300	310	319
Packages exported	53,600	72,800	95,000	69,100	63,700	118,100	33,400	74,600	67,100
Lbs. weight annually imported, in millions and tenths	143·7	222·4	171·5	271·1	219·8	221·8	261·2	280·5	287·8
Lbs. weight consumed, do.	165·2	166·8	150·2	197·2	217·9	219·2	247·6	262·7	276·9
Lbs. weight in ports, 31st of Dec. do.	64·0	107·0	89·0	129·2	112·7	80·8	91·4	81·3	76·5
Lbs. weight in Great Britain do.	80·3	115·5	110·9	164·8	147·0	115·5	118·8	114·4	103·7
Average price per lb. of uplands in Liverpool	8½*d.*	11·6*d.*	6¾*d.*	6½*d.*	6·4*d.*	5⅞*d.*	6·9*d.*	6*d.*	6·6*d.*
Do. do. Pernams	11·6*d.*	15·1*d.*	10½*d.*	9·4*d.*	8·4*d*	7½*d.*	8¼*d.*	7¾*d.*	9*d.*
Do. do. Surats	6·6*d.*	8·9*d.*	5½*d.*	5·1*d.*	4·6*d.*	4*d.*	5*d.*	4·6*d.*	5*d.*

We subjoin, from *Burns' Glance*, a tabular statement, annually published at Manchester, and admitted to be drawn up with great care, an account of the cotton spun in Great Britain in 1832, and how that spun in England was disposed of, with several other interesting particulars.

Statement of Cotton spun in England and Scotland in 1832, and the Quantity of Yarn produced; showing also the Quantity spun in England, and how disposed of.

	Number of Bags consumed.	Average Weight of Bags in lbs.	Total Weight in lbs.	Weekly Consumption of Bags.
American cotton	615,402	345	212,313,690	11,834·34
Brazil ditto	135,298	180	24,353,640	2,601·46
Egyptian ditto	45,864	220	10,090,080	882·00
West India ditto	6,454	300	1,936,200	124·06
East India ditto	55,416	330	18,287,280	1,065·36
Taken from inland stock	33,160	310	10,279,600	637·36
Total number of bags consumed	891,594		277,260,490	17,146·02
Allowed for loss in spinning 1¾ oz. per lb.			30,325,366	
Total quantity of yarn spun in England and Scotland				246,935,124
Deduct yarn spun in Scotland				24,338,217
Total quantity of yarn spun in England				222,596,907
How disposed of.				
Exported in yarn, during the year			71,662,850	
— thread			1,041,273	
— manufactured goods			61,251,380	
Estimated quantity of yarn sent to Scotland and Ireland			5,700,000	
Exported in mixed manufactures, not stated in the above named articles, consumed in cotton banding, healds, candle and lamp wick, wadding, and loss in manufacturing goods			12,000,000	
Balance left for home consumption and stock			70,941,404	
				222,596,907

This annual quantity of 222,596,907 lbs. gives a weekly supply of 4,280,709 lbs. Mr. Burns estimates the quantity spun per spindle, per week, at 8⅓ oz., making the total number of spindles employed in England and Wales, in 1832, 7,949,208. Those employed in Scotland, during the same year, are estimated, in the same way, at 881,020. Mr. Burns further calculates the number of looms employed in England and Wales at 203,703. The consumption of flour in the manufacture is much greater than any one not pretty well acquainted with it would readily suppose. The average quantity required for each loom is estimated at 4 lbs. per week; making the total annual consumption, in England and Wales, 42,301,584 lbs., or 215,824 barrels of 196 lbs. each!

We are indebted to Mr. Cook for the following

Account of the Imports of Cotton into the principal Continental Ports in 1830, 1831, and 1832, and of the Stocks on hand in these Years.

	Imports.			Stock, 31st of December.		
	1830.	1831.	1832.	1830.	1831.	1832.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
France - -	87,360,000	65,517,800	78,198,600	18,375,000	10,743,000	6,600,000
Trieste - -	12,705,000	19,782,900	25,799,500	2,640,000	2,590,000	2,490,600
Genoa - -	2,511,000	4,110,000	5,159,000	324,000	1,245,000	1,245,300
Antwerp - -	6,465,000	607,200	4,613,100	1,470,000	315,000	270,000
Amsterdam -	4,974,000	1,661,400	2,453,400	1,170,000	1,424,000	877,200
Rotterdam - -	1,335,000	6,750,000	3,438,900	732,000	1,390,500	516,600
Bremen - -	1,200,000	1,458,300	1,437,900	570,000	373,500	411,000
Hamburgh - -	6,420,000	3,867,900	4,692,000	2,475,000	1,779,000	1,581,600
Petersburgh	2,520,000	891,400	1,847,400	900,000	1,140,000	None.
Total lbs. -	25,520,000	104,646,000	127,670,700	28,656,000	21,000,100	13,992,300
Bales -	(418,400)	(541,780)	(425,570)	(95,520)	(70,740)	(46,640)

3. *Present Value of the British Cotton Manufacture. Amount of Capital, and Number of Persons employed in it.* — It would be very desirable to be able to form a tolerably accurate estimate of the present value of the cotton manufacture, and of the number of persons employed in its different departments; but the data on which such estimates are founded being necessarily very loose, it is impossible to arrive at any thing like precision. Perhaps, however, the following calculations are not very wide of the mark.

In 1817, Mr. Kennedy, one of the best informed cotton manufacturers in the empire, in a paper published in the *Manchester Transactions*, estimated the number of persons employed in the *spinning* of cotton in Great Britain at 110,763; the aid they derived from steam engines as equal to the power of 20,768 horses; and the number of spindles in motion at 6,645,833. Mr. Kennedy further estimated the number of hanks of yarn annually produced at 3,987,500,000; and the quantity of coal consumed in their production at 500,479 tons. We subjoin Mr. Kennedy's statement for the year 1817: —

Raw cotton converted into yarn in the United Kingdom -	110,000,000 lbs.	
Loss in spinning estimated at 1½ oz. per lb. - - -	10,312,500	
Quantity of yarn produced - - - - - -		99,687,500 lbs.
Number of hanks, taking the average at 40 per lb. - - -		3,987,500,000
Number of spindles employed, each spindle being supposed to produce 2 hanks per day, at 300 working days in the year - - - - -		6,645,833
Number of persons employed in spinning, supposing each to produce 120 hanks per day - - - - - - -		110,763
Horse power employed, equal in number to - - - - -		20,768

Four ounces and a half of coal estimated to produce one hank of No. 40.; and 130 lbs. of coal per day equal to one horse power.

But the cotton manufacture has increased rapidly since 1817. Mr. Huskisson stated, in his place in the House of Commons, in March, 1824, that he believed the total value of the cotton goods then annually manufactured in Great Britain amounted to the prodigious sum of *thirty-three and a half* millions; and we believe we shall be about the mark, if we estimate their present value at *thirty-four* millions! If, indeed, we took the increase in the imports of the raw material as a test of the increase in the value of the manufacture, we should estimate it a great deal higher. But it will be afterwards seen that the improvements that have been made in the different processes, and the fall in the price of raw cotton, have had so powerful an influence in reducing the price of the goods brought to market, that, notwithstanding the increase of their quantity, their total value must have remained nearly constant.

The average annual quantity of cotton wool imported, after deducting the exports, may be taken at about 260,000,000 lbs. weight. It is supposed, that of this quantity about 20,000,000 lbs. are used in a raw or half manufactured state, leaving a balance of 240,000,000 for the purposes of manufacturing, the cost of which may be taken, on an average, at 7*d.* per lb. Deducting, therefore, from the total value of the manufactured goods, or 34,000,000*l.*, the value of the raw material, amounting to 7,000,000*l.*, there remains 27,000,000*l.*; which, of course, forms the fund whence the wages of the persons employed in the various departments of the manufacture, the profits of the capitalists, the sums required to repair the wear and tear of buildings, machinery, &c., the expense of coals, &c. &c., must all be derived. If, then, we had any means of ascertaining how this fund is distributed, we should be able, by taking the average of wages and profits, to form a pretty accurate estimate of the number of labourers, and the quantity of capital employed. But here, unfortunately, we have only probabilities and analogies to guide us. It may, however, be confidently assumed, in the first place, that in consequence of the extensive employment of highly valuable machinery in all the departments of the cotton manufacture, the proportion which the profits of capital, and

the sum to be set aside to replace its wear and tear, bears to the whole value of the manufacture, must be much larger than in any other department of industry. We have heard this proportion variously estimated, at from a fourth to a half of the total value of the manufactured goods, exclusive of the raw material; and as the weight of authority seems to be pretty much divided on the subject, we shall take an intermediate proportion. Assuming, therefore, that the profits of the capital employed in the cotton manufacture, the wages of superintendence, &c., the sum required to replace the wear and tear of machinery, buildings, &c., and to furnish coals, &c., amount together to *one third* of the value of the manufactured goods, exclusive of the raw material, or to 9,000,000*l.*, a sum of 18,000,000*l.* will remain as the wages of the spinners, weavers, bleachers, &c. engaged in the manufacture; and taking, inasmuch as a large proportion of children under 16 years of age are employed, the average rate of wages at only 22*l.* 10*s.* a year, we shall have (dividing 18,000,000 by 22·5), 800,000 as the total number of persons directly employed in the different departments of the manufacture.

We should mistake, however, if we supposed that this number, great as it certainly is, comprised the whole number of persons to whom the cotton manufacture furnishes subsistence, exclusive of the capitalists. Of the sum of 9,000,000*l.* set apart as the profit of the capitalists, and the sum required to furnish coal, and to defray the wear and tear of machinery, &c., a large proportion must annually be laid out in paying the wages of engineers, machine-makers, iron-founders, smiths, joiners, masons, bricklayers, &c. It is not easy to say what this proportion may amount to; but taking it at a *third*, or 3,000,000*l.*, and supposing the rate of wages of each individual to average 30*l.* a year, the total number employed in the various capacities alluded to will be (3,000,000 divided by 30) 100,000; and a sum of 6,000,000*l.* will remain to cover the profits of the capital employed in the various branches of the manufacture, to repair the different parts of the machinery and buildings as they wear out, and to buy coal, flour, &c. The account will, therefore, stand as under: —

	£	£
Total value of every description of cotton goods annually manufactured in Great Britain		34,000,000*
Raw material, 240,000,000 lbs. at 7*d.* per lb.	£ 7,000,000	
Wages of 800,000 weavers, spinners, bleachers, &c. at 22*l.* 10*s.* a year each	18,000,000	
Wages of 100,000 engineers, machine-makers, smiths, masons, joiners, &c. at 30*l.* a year each	3,000,000	
Profits of the manufacturers, wages of superintendence, sums to purchase the materials of machinery, coals, &c.	6,000,000	
		34,000,000

The capital employed may be estimated as follows: —	
Capital employed in the purchase of the raw material	4,000,000
Capital employed in payment of wages	10,000,000
Capital vested in spinning-mills, power and hand looms, workshops, warehouses, stocks on hand, &c.	20,000,000
	£34,000,000

Now, this sum of 34,000,000*l.*, supposing the interest of capital, inclusive of the wages of superintendence, &c., to amount to 10 per cent., will yield a sum of 3,400,000*l.*; which being deducted from the 6,000,000*l.* profits, &c., leaves 2,600,000*l.* to purchase materials to repair the waste of capital, the flour required for dressing, the coals necessary in the employment of the steam engines, to effect insurances, and to meet all other outgoings.

The aggregate amount of wages, according to the above estimate, is 21,000,000*l.*; but there are not many departments of the business in which wages have to be advanced more than 6 months before the article is sold. We, therefore, incline to think that 10,000,000*l.* is a sufficient (perhaps too great) allowance for the capital employed in the payment of wages.

* Mr. Kennedy, to whose opinion, on a matter of this sort, the greatest deference is due, considers this estimate as a great deal too high. We cannot, however, bring ourselves to believe that such is really the case. It appears from the official accounts, that the real or declared value of the cotton fabrics exported in 1832 amounted to 12,622,880*l.*, and that of the twist to 4,726,796*l.* Now it appears from the statements in *Burns' Glance*, and other good authorities, that the weight of the cotton yarn retained at home to be wrought up into fabrics for domestic use is about 10 or 12 per cent. greater than the weight of the yarn exported in the shape of manufactured goods. But without taking this greater weight into account, if we suppose that the fabrics retained at home are nearly equal in point of quality to those exported, the value of the manufacture must be at least 30,000,000*l.*, viz. fabrics exported 12,622,000*l.*, twist exported 4,721,000*l.*, and fabrics consumed at home 12,622,000*l.* But a very large proportion of our exports consist of comparatively coarse fabrics destined for the West Indies, Brazil, &c.; and we have been assured by those well acquainted with the trade, that the value of the fabrics made use of at home cannot be less, at an average, than from 30 to 40 per cent. above the value of those exported; but taking it at only 30 per cent., it will make the total value of the manufacture 34,000,000*l.* We do not well see how this statement can be shaken. The exporters have no motive to exaggerate the real value of the goods and yarn sent abroad; but unless they have done so to a very great extent, it will be difficult to impeach the above conclusions.

If we are nearly right in these estimates, it will follow — allowance being made for old and infirm persons, children, &c. dependent on those actually employed in the various departments of the cotton manufacture, and in the construction, repair, &c. of the machinery and buildings required to carry it on — that it must furnish, on the most moderate computation, subsistence for from 1,200,000 to 1,400,000 persons! And for this new and most prolific source of wealth we are indebted partly and principally, as already shown, to the extraordinary genius and talent of a few individuals; but, in a great degree, also, to that security of property and freedom of industry which give confidence and energy to all who embark in industrious undertakings, and to that universal diffusion of intelligence which enables those who carry on any work to press every power of nature into their service, and to avail themselves of productive capacities of which a less instructed people would be wholly ignorant.

The effect that the sudden opening of so vast and profitable a field for the employment of capital and labour has had on the population of the different towns of Lancashire and Lanarkshire, the districts where the cotton manufacture is principally carried on — has been most striking. In 1774, for example, the parish of Manchester is estimated to have contained 41,032 inhabitants — a number which was swelled, in 1831, to 187,019, having more than quadrupled in the space of 57 years! The population of Preston, in 1780, is said not to have exceeded 6,000; whereas it amounts, at present, to 33,112. In like manner, the population of Blackburn has increased from 11,980, in 1801, to 27,091, in 1831; that of Bolton has increased in the same period, from 17,416 to 41,195; that of Wigan, from 10,989 to 20,774, &c. But the progress of Liverpool is most extraordinary, and can be matched only by the progress of one or two cities in the United States. Liverpool is not properly one of the seats of the cotton manufacture; but it is, notwithstanding, mainly indebted to it for the unparalleled rapidity of its growth. It is the grand emporium of the cotton district — the port where almost all the raw cotton, and the various foreign articles required for the employment and subsistence of the persons engaged in the manufacture, are imported, and whence the finished goods are exported to other countries. It has, therefore, become a place of vast trade, and is now, in that respect, second only to London. In 1700, according to the best accounts that can be obtained, the population of Liverpool amounted to only 5,145; in 1750, it had increased to 18,450; in 1770, it amounted to 34,050. The cotton manufacture now began rapidly to extend, and, in consequence, the population of Liverpool increased, in 1801, to 77,653; in 1821, to 118,972; and, in 1831, it amounted to 165,175. The propress of population in Lanarkshire and Renfrewshire has been equally striking. In 1780, the city of Glasgow contained only 42,832 inhabitants; in 1801, that number had increased to 83,769; and, in 1831, it amounted to nearly 203,000. The growth of Paisley is similar. In 1782, it contained, inclusive of the Abbey Parish, only 17,700 inhabitants; in 1801, it contained 36,722; in 1821, it contained about 47,000; and, in 1831, 57,466.

Since the repeal of the absurd system of Irish protecting duties, in 1823, the cotton manufacture has begun to make considerable progress in Ireland. This is proved by a statement laid before the House of Commons, which shows that the number of *yards* of cotton goods, manufactured chiefly from yarn sent from England, exported from Ireland to Great Britain, in 1822, amounted to 406,687; in 1823, to 556,646; in 1824, to 3,840,699; and in 1825, it amounted to no less than 6,418,645; — having increased in nearly a *twelvefold* proportion in 2 years, by the abolition of duties that were intended to *protect* the industry of Ireland! But the unsettled state of the country and the want of coal are insuperable obstacles to the continued increase of the manufacture.

Exports of Cotton Goods and Yarn. Fall of Prices, &c. — For a very long period the woollen manufacture was the great staple of the country. But the progress of improvement in the spinning and manufacturing of cotton, since 1770, being so much more rapid than any that has taken place in the woollen manufacture, the value of the former is now vastly greater than that of the latter. It appears, from the accounts of the declared or real values of the different sorts of exported commodities given by the Custom-house, that the exports of cotton goods, including yarn, amount, at an average, to about 17,000,000*l.* sterling, being about half the value of the whole manufacture; and form of themselves about *two thirds* of the total value of all the wove fabrics exported from the empire. We subjoin a statement, compiled from the Annual Finance Accounts, of the official and the declared or real values of the cotton manufactured goods, cotton yarn, woollen and silk manufactures, and the totals of all other articles of British produce and manufacture, exported from Great Britain to all parts of the world (except Ireland) annually since 1816.

	Years.	Cotton Manufactures.	Cotton Yarn.	Manufactures.			Total of Wove Fabrics.	Total of all other Articles.
				Woollen.	Linen.	Silk.		
		£	£	£	£	£	£	£
Official Values.	1816	16,335,124	1,380,486	5,586,364	1,559,367	161,874	25,023,215	9,751,305
	1817	20,357,147	1,125,257	5,676,920	1,943,194	152,734	29,255,253	9,980,144
	1818	21,627,936	1,296,776	6,344,100	2,153,309	167,559	31,589,683	10,373,844
	1819	16,876,206	1,585,753	4,602,270	1,547,352	126,809	24,738,390	8,185,185
	1820	20,704,600	2,022,153	4,363,973	1,935,186	118,370	29,144,283	8,673,753
	1821	21,630,493	1,898,695	5,500,922	2,303,443	136,402	31,478,955	8,715,938
	1822	24,566,920	2,353,217	5,943,612	2,594,783	141,007	35,599,539	7,958,950
	1823	24,117,549	2,425,419	5,539,789	2,654,098	141,320	34,878,175	8,266,291
	1824	27,170,107	2,984,329	6,136,092	3,283,403	159,648	39,733,579	8,296,457
	1825	26,597,574	2,897,706	5,929,342	2,709,772	150,815	38,285,209	8,167,812
	1826	21,445,565	3,748,526	5,041,585	2,056,760	106,738	32,399,174	7,932,830
	1827	29,203,138	3,979,759	5,979,701	2,808,081	173,334	42,144,013	9,132,435
	1828	28,989,976	4,485,841	5,720,079	3,118,270	178,871	42,493,037	9,536,113
	1829	31,810,436	5,458,985	5,361,997	3,003,394	220,436	45,855,248	9,610,475
	1830	35,395,400	5,655,569	5,551,644	3,101,031	435,045	50,148,689	10,343,948
	1831	33,682,475	5,674,600	6,187,979	3,662,945	469,076	49,704,075	9,386,048
	1832	37,060,750	6,725,505	6,666,700	2,649,343	474,509	53,576,807	11,005,230
Declared Values.	1816	13,072,757	2,628,448	7,844,855	1,452,667	480,522	25,479,252	14,849,690
	1817	14,178,022	2,014,182	7,163,472	1,703,632	408,523	25,467,827	14,869,292
	1818	16,643,579	2,385,305	8,143,193	1,949,815	499,175	29,621,067	15,567,182
	1819	12,388,833	2,516,783	5,986,807	1,391,245	376,798	22,660,467	11,588,029
	1820	13,843,569	2,826,643	5,583,430	1,653,804	374,114	24,278,570	11,290,109
	1821	13,786,957	2,307,830	6,461,567	1,981,465	373,938	24,911,759	10,914,223
	1822	14,534,253	2,700,437	6,488,523	2,192,772	381,455	26,297,429	9,879,468
	1823	13,751,415	2,625,947	5,634,137	2,095,574	350,880	24,457,952	10,233,172
	1824	15,240,006	3,135,496	6,011,534	2,442,440	442,582	27,272,059	10,301,359
	1825	15,034,138	3,206,729	6,193,775	2,130,705	296,677	26,862,024	11,221,749
	1826	10,522,357	3,491,268	4,982,898	1,489,647	168,453	20,652,623	10,195,015
	1827	13,956,825	3,545,568	5,277,861	1,895,186	236,092	24,911,532	11,484,807
	1828	13,545,638	3,594,945	5,120,226	2,000,033	255,755	24,516,647	11,636,151
	1829	13,420,544	3,974,039	4,656,809	1,885,831	267,192	24,204,415	11,008,458
	1830	15,203,713	4,132,258	4,847,398	1,926,256	519,919	26,629,544	11,061,758
	1831	13,207,947	3,974,989	5,385,811	2,301,803	578,260	25,448,810	11,203,884
	1832	12,622,880	4,721,796	5,475,298	1,655,478	529,808	25,005,260	11,040,767

It will be observed, from the above Table, that while the *official* value of the cotton goods exported has been rapidly increasing, their *declared* or real value has been about stationary, or has rather diminished. This circumstance has given rise to a great deal of irrelevant discussion; and has even been referred to as proving that the manufacture is in a declining state! But it proves precisely the contrary. It shows that the decline in the price of the raw material, and the improvements in the machinery and processes used in the manufacture have been so great, that we are now able to export and sell with a profit, (for, unless such were the case, the exportation would very speedily cease,) nearly double the quantity of cotton goods we exported in 1816, for about the same price. Had the Table been carried further back, the result would have been still more striking.

In illustration of this view of the matter, we beg to subjoin the following statement of the production and cost of the different species of cotton yarn in England, in 1812 and 1830. It was furnished by Mr. Kennedy, of Manchester, to the committee on the East India Company's affairs, so that no doubt can be entertained of its accuracy.

Hanks per Day, per Spindle.			Price of Cotton and Waste per lb.		Labour per lb.*		Cost per lb.	
Description of Yarn.	1812.	1830.	1812.	1830.	1812.	1830.	1812.	1830.
No.			*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*
40	2·	2·75	1 6	0 7	1 0	0 7⅓	2 6	1 2½
60	1·5	2·5	2 0	0 10	1 6	1 0½	3 6	1 10⅓
80	1·5	2·	2 2	0 11¼	2 2	1 7⅓	4 4	2 6¾
100	1·4	1·8	2 4	1 1¾	2 10	2 2⅓	5 2	3 4¼
120	1·25	1·65	2 6	1 4	3 6	2 8	6 0	4 0
150	1·	1·33	2 10	1 8	6 6	4 11	9 4	6 7
200	0·75	0·90	3 4	3 0	16 8	11 6	20 0	14 6
250	0·05	0·06	4 0	3 8	31 0	24 6	35 0	28 2

The following Table is interesting, from its exhibiting the state of our trade in wrought cottons with the different countries of the world. It sets the importance of the markets of Brazil, Chili, and the other states of South America, as outlets for our cottons, in a very striking point of view.

* Wages are estimated at the same rate, or at 20*d.* a day, for every person employed, men, women, and children, in 1812 and 1830; the saving being entirely in the better application of the labour.

Account of the Export of Cotton Goods and Yarn, in 1831; specifying the Countries to which they were sent, and the Quantity and Value of those sent to each.—(*Parl. Paper*, No. 550. Sess. 1833.)

Countries to which exported.	Cotton Manufactures.			Cotton Twist and Yarn.	
	Entered by the Yard.		Hosiery, Lace, and Small Wares.		
	Quantity.	Declared Value.	Declared Value.	Quantity.	Declared Value.
	Yards.	£	£	Lbs.	£
Northern Europe—Russia	1,[illegible]	68,412	7,252	13,959,666	790,371
Sweden	[illegible]	615	216	708,510	34,885
Norway	434,744	13,704	1,829	34,440	1,553
Denmark	312,461	6,213	992	118,316	5,716
Prussia	1,456	80	20	19,448	1,556
Germany	41,[illegible]	940,441	205,527	20,435,442	1,195,718
The Netherlands	13,285,524	383,127	214,123	9,091,238	794,536
Southern Europe—France	946,660	35,357	13,613	2,616	1,127
Portugal, Proper	23,[illegible]	373,916	13,454	281,096	17,534
Azores	780,099	17,126	383	3,240	149
Madeira	[illegible]	14,577	677		
Spain and the Balearic Islands	4,756,652	129,778	9,503	36,170	3,147
Canaries	631,079	15,646	515	2,500	131
Gibraltar	9,909,009	238,732	6,158	39,196	3,178
Italy and the Italian islands	38,164,564	1,035,748	44,172	8,444,518	438,834
Malta	1,967,953	49,594	1,403	312,740	13,468
Ionian Islands	[illegible]	5,210	615	62,450	3,643
Turkey and Continental Greece	24,565,580	585,473	3,335	1,735,760	90,015
Morea and Greek islands	344,893	6,540	- -	11,000	600
Africa—Egypt (ports on the Mediterranean)	2,354,628	56,088	26	93,600	6,000
Tripoli, Barbary, and Morocco	7,810	123			
Western coast of Africa	2,384,000	75,058	446	280	34
Cape of Good Hope	2,904,106	83,612	3,807	193	19
St. Helena	73,371	2,173	254		
Mauritius	2,432,894	65,185	3,400		
Asia—East India Company's territories, Ceylon and China	43,385,852	1,182,574	13,972	6,624,823	467,861
Sumatra, Java, and other islands of the Indian Seas	5,915,088	194,889	1,730	312,000	22,653
Philippine Islands	1,132,583	33,639	13	18,800	1,796
New South Wales, Van Diemen's Land, and Swan River	1,905,428	61,567	8,380	7,233	380
New Zealand and South Sea Islands	5,014	135			
America—British Northern colonies	15,618,106	413,737	25,536	307,997	10,376
British West Indies	21,975,459	606,923	31,568	14,416	835
Hayti	6,828,576	178,743	4,731	320	30
Cuba and other Foreign West Indies	11,569,441	364,547	11,329	200	10
United States of America	68,587,893	2,518,824	344,427	317,392	1[illegible] 063
States of Central and Southern America; viz.—Mexico	12,150,426	471,208	23,712	784,215	37,972
Columbia	5,757,502	177,559	9,060	28,880	1,580
Brazil	26,271,527	681,461	20,540	2,740	334
States of the Rio de la Plata	6,242,134	176,874	9,743	800	30
Chili	12,793,220	431,323	26,851	4,800	130
Peru	6,312,931	222,708	19,605		
Isles of Guernsey, Jersey, Alderney, Man, &c.	1,013,852	44,364	35,755	4,405	755
Total export	421,385,303	12,163,513	1,118,672	63,821,440	3,975,019

Such being the vast extent and importance of the cotton manufacture, the probability of our preserving our ascendancy in it becomes a very interesting topic of inquiry. But it is obvious, that a great deal of conjecture must always insinuate itself into our reasonings with respect to the future state of any branch of manufacturing industry. They are all liable to be affected by so many contingent and unforeseen circumstances, that it is impossible to predicate, with any thing like certainty, what may be their condition a few years hence. But abstracting from the effect of national struggles and commotions, which can neither be foreseen nor calculated, we do not think that there is any thing in our state, or in that of the different commercial and manufacturing countries of the world, that should lead us to anticipate that the gloomy forebodings of those who contend that the cotton manufacture of England has reached its zenith, and that it must now begin to decline, will be realised. The natural capabilities we possess for carrying on the business of manufacturing are, all things considered, decidedly superior to those of any other people. But the superiority to which we have already arrived is, perhaps, the greatest advantage in our favour. Our master manufacturers, engineers, and artisans, are more intelligent, skilful, and enterprising, than those of any other country; and the extraordinary inventions they have already made, and their familiarity with all the principles and details of the business, will not only enable them to perfect the processes already in use, but can hardly fail to lead to the discovery of others. Our establishments for spinning, weaving, printing, bleaching, &c. are infinitely more complete and perfect than any that exist elsewhere; the division of labour in them is carried to an

incomparably greater extent; the workmen are trained from infancy to industrious habits, and have attained that peculiar dexterity and sleight of hand in the performance of their separate tasks, that can only be acquired by long and unremitting application to the same employment. Why, then, having all these advantages on our side, should we not keep the start we have already gained? Every other people that attempt to set up manufactures must obviously labour under the greatest difficulties as compared with us. Their establishments cannot, at first, be sufficiently large to enable the division of employments to be carried to any considerable extent, at the same time that expertness in manipulation, and in the details of the various processes, can only be attained by slow degrees. It appears, therefore, reasonable to conclude that such new beginners, having to withstand the competition of those who have already arrived at a very high degree of perfection in the art, must be immediately driven out of every market equally accessible to both parties; and that nothing but the aid derived from restrictive regulations and prohibitions will be effectual to prevent the total destruction of their establishments in the countries where they are set up.

4. *Progress of the Manufacture in other Countries.*—But notwithstanding what has now been stated, a notion seems to be spreading abroad, that we shall have no little difficulty in maintaining our ground against the competition of the Americans, Swiss, Austrians, French, &c., and a good deal of evidence upon this subject was taken before the committee of the House of Commons appointed in 1833 to inquire into the state of manufactures, commerce, and shipping. Such apprehensions appear to us to be quite destitute of any real foundation. Provided we have no agitation, that public tranquillity and security in fact and opinion be maintained unimpaired, we need be under no sort of uneasiness as to any competition to which we can be exposed. The tariff forced cotton, woollen, iron, and other manufactures, into a premature existence in the United States; but we have little doubt that, except in the coarser fabrics, and those where it is necessary to use large quantities of the raw material, the late modifications of the tariff have given a death-blow to the American manufacturing system. Independent, however, of this, there was nothing whatever to fear from that quarter. During the year ended the 30th of September, 1829, the exports of all sorts of cotton goods from America amounted to 1,259,457 dollars; while during the year ended the 30th of September, 1832, they amounted to 1,229,574 dollars. — (*Papers laid before Congress*, 5th of February, 1830, and 15th of February, 1833.) It is plain, therefore, notwithstanding the protection of the tariff, that the exports of manufactured cottons from America have not increased any thing during the last 3 years; and it is very unlikely that even the trifling quantity now exported will be maintained. They have been exported only because the fabrics contained a great deal of the best cotton, which made them more durable and heavy than those manufactured here. But goods of this sort are in very limited demand; and the Manchester manufacturers have already produced an article similar to and cheaper than the American "domestics," which will go far to expel them from the market.

Among the singular statements that have been put forth as to the cotton manufactures of America, one is, that the wages of labour are lower there than here! To dwell on the absurdity of such a statement would be an insult to our readers. But though it were true that wages are as low in Massachusetts as in England, that would afford no real ground for anticipating any formidable competition from America in this department. The price of cottons depends more on the profits of stock than on the wages of labour; and, so far as we know, it has not yet been alleged that they are lower in America than here. Suppose an English and an American manufacturer have each 100,000*l.* vested in cotton mills, and in the floating stock required to carry on the business; if profits in England be 1 per cent. less than in America, the English manufacturer can afford, *cæteris paribus*, to sell his goods for 1,000*l.* less than the American. We are very far from insinuating or believing that this lowness of profit is an advantage; but whatever may be its influence in other respects, so long as it continues, it gives our manufacturers a decided superiority over those of every other country where profits are higher, in the manufacture and sale of all articles, such as cotton yarn and stuffs, principally produced by machinery. It is ludicrous, indeed, to suppose that a half-peopled country like America, possessed of boundless tracts of unoccupied land of the highest degree of fertility, should be able successfully to contend in manufacturing industry, with an old settled, fully peopled, and very rich country like Great Britain. The government which encourages such a misdirection of the public capital and industry, and those who suppose it can end in any thing else than ruin to the parties, are ignorant of the merest elements of the science of wealth.

The following results as to the state of the American cotton manufacture in 1831 have been deduced from the Report of a Committee of Congress in 1832: —

In 12 states they had, mills	795
— spindles	1,246,503
— looms	33,506
The weight of cotton consumed	77,557,316 lbs.
Allowing 2 oz. per lb. for loss	9,694,664
Total weight of yarn produced	67,862,652
Weekly amount	1,305,051
Averaging 16¾ oz. per spindle weekly.	

If the 33,506 looms were employed, and the whole 1,305,051 lbs. of yarn manufactured, each loom must have consumed at an average 39 lbs. weekly, showing that the goods manufactured were of a very heavy description. It also appears from statements made by the same committee, that

The number of males employed were	18,539
— females	38,927
Total number employed in spinning and manufacturing	57,466

The amount paid for wages in the year was 10,294,444 dollars, or 2,144,780*l.*, being 42,895*l.* per week; averaging 14*s.* 11*d.* for each person employed.

They state that the consumption of flour in their manufacture was 1,641,253 lbs, or 8,374 barrels (196 lbs. each), averaging weekly 31,562 lbs., or nearly 1 lb. for each loom.

Note. — By the new American tariff, plain calicoes, &c. imported, not exceeding in value 1*s.* 3*d.* the square yard, to pay 3½*d.* per yard duty. Printed or coloured calicoes, &c., not exceeding 1*s.* 5½*d.* the square yard, to pay 4⅝*d.* per yard duty. Cotton yarn, unbleached and uncoloured, not exceeding in value 2*s.* 6*d.* per lb., to pay 7½*d.* per lb. duty. If bleached or coloured, not exceeding 3*s.* 1½*d.* per lb., to pay 9⅝*d.* per lb. duty.

Little as we have to fear from American, we have still less to fear from Swiss or Austrian competition. America has some advantage over England in the greater cheapness of the raw material; but Switzerland and Austria, situated almost in the very centre of Europe, can only draw their supplies of raw cotton by a distant land carriage by way of Marseilles, Genoa, and Trieste; or by a lengthened navigation up the Rhine or the Elbe; and we have the best authority for affirming, that a bale of cotton may be conveyed at a less expense from Charleston to Manchester, than from Genoa or Trieste, Amsterdam or Hamburgh, to Switzerland or Austria. Switzerland is altogether destitute of coal; all that she does is done by water power, and that is already pretty well exhausted. It is not, however, to be wondered at that the Swiss and Austrians should have succeeded in supplying their own markets, and some of those immediately contiguous, with certain species of yarn; but it seems to us quite visionary to suppose that they will ever do much more than this.

It was stated before the committee of 1833, that the French cotton manufacture had increased, between 1812 and 1826, in the ratio of 310 per cent., while in England its increase was only 270 per cent. This statement is, we believe, accurate as far as it goes; and yet it is eminently calculated, although, no doubt, without being so intended, to mislead. In 1812, and for some years previously, it was hardly possible to import cotton wool into France, and its price was quite excessive. When, therefore, the manufacturers got wool after the return of peace at an ordinary price, it was impossible, seeing that foreign cottons are excluded from France, but that the manufacture should increase with extraordinary rapidity, until the home demand was pretty well supplied An advance of this sort is assuredly no proof of the capacity of France to prosecute the manufacture with advantage, or to export cottons without the aid of a bounty. Had the manufacture gone on increasing in the above, or even in a very inferior ratio, down to the present time, the circumstance might have justly excited attention; but such has not been the case; on the contrary, it has been quite stationary, or has rather, perhaps, retrograded, from 1822 down to the present time. In proof of this, we beg to refer to the *Havre Price Current*, corrected and revised by a Board of merchants, for the 9th of May, 1833. It contains the following

Statement of the Imports of Cotton into France, the Deliveries from the Warehouses, and the Stocks on Hand in each Year from 1822: —

Years.	Imports.	Deliveries.	Stocks, 31st Dec.	Years.	Imports.	Deliveries.	Stocks, 31st Dec.
	Bales.	*Bales.*	*Bales.*		*Bales.*	*Bales.*	*Bales.*
1822	205,861	215,199	42,545	1828	206,132	239,723	54,812
1823	169,845	172,312	40,078	1829	242,230	264,750	29,292
1824	251,074	243,958	47,194	1830	282,752	250,784	61,260
1825	204,572	216,460	35,306	1831	218,393	243,843	35,810
1826	320,174	281,001	74,479	1832	259,159	272,463	22,506
1827	290,617	279,693	85,403				

It is supposed by some, that the competition we have to fear from the Continent does not consist so much in the spinning as in the weaving of cottons; and that the probability is, that our exports of yarn will increase, and our exports of manufactured goods diminish. We do not, however, imagine there is much in this. Our power looms are superior to those of any other country; and it is unhappily true, that the wages of hand

loom weavers here are sunk below the general level of Europe.* There is not, in fact, with the exception of the dyes, a single particular connected with the cotton manufacture, in which we have not a manifest superiority over the Swiss, Austrians, French, Prussians, and every Continental nation. Certainly, however, we are inferior to some of them in the brilliancy and durability of their dyes; and this circumstance occasioned a considerable demand for German and Swiss printed cottons in many parts of the East, where vivid colours are held in the highest estimation. But even there, the greater cheapness of our goods is proving an overmatch for the greater brilliancy of those of our rivals.

On the whole, therefore, we see no reason to think that the British cotton manufacture has reached, much less passed, its zenith. At the same time, however, it can hardly be necessary to observe, considering the vast importance of the trade, that while, on the one hand, nothing should be left undone that may serve to widen its foundations, and to promote its prosperity, on the other, nothing should be attempted that may, by possibility, have an opposite effect. The subsistence of 1,400,000 people is not to be endangered on slight grounds. The abuses even of such a business must be cautiously dealt with, lest, in eradicating them, we shake or disorder the whole fabric. We admit, however, that the case of children employed in the cotton factories is one of those that call fairly for legislative regulation. But it may be questioned whether the plan for having relays of children is the best that might be devised. The general opinion seems to be, that it will, in most instances, be found impossible to carry it into effect. The whole subject, as to the limitation of hours, is confessedly one of great difficulty; and it would perhaps be better, before taking any very decisive steps in the matter, to try the effect of the system of inspection, and of the publication of the inspectors' reports as to the condition of the children employed.

5. Statutory Regulations as to the Employment of Children in Factories.

No statutory restrictions respecting the employment of children in the mills and factories of the United Kingdom existed until the year 1802, when an act of parliament was passed (42 Geo. 3.) for the preservation of the health and morals of apprentices and others employed in cotton and other factories, and directing the local magistrates to report whether the factories were conducted according to law, and to adopt such sanitary regulations as they might think fit. This act was followed, in 1816, by an act, generally called Sir Robert Peel's Act, imposing various regulations on the employment of children in cotton mills.

Both of these acts were repealed in 1831, by an act 1 & 2 Will. 4. c. 39., commonly called Sir John Hobhouse's Act, which provided, that in cotton factories, to which alone it related, no child could legally be employed till it had attained the age of 9 years; and that no person under 18 years of age could be suffered to remain in the factories more than 12 hours in one day; and that on Saturdays they should only be employed in the factories for 9 hours.

Sir John Hobhouse's act was repealed in 1833, by the act 3 & 4 Will. 4. c. 103., which contains the following provisions, comprehending the whole statutory regulations at present applicable to cotton and other factories in the United Kingdom: —

1. That after the 1st of January, 1834, no person under 18 years of age shall be allowed to work in the night, that is, between ½ past 8 P. M. and ½ past 5 A. M., in any cotton or other factory in which steam or water, or any other mechanical power, is or shall be used to propel the machinery, excepting in lace factories.
2. That no person under 18 shall be employed more than 12 hours in one day, nor more than 69 hours in one week.
3. That there shall be allowed, in the course of every day, not less than 1½ hour for meals to every person restricted to the performance of 12 hours' work.
4. That after the 1st of January, 1834, no child, except in silk mills, shall be employed, who shall not be 9 years old.
5. That after the 1st of March, 1834, no child, except in silk mills, shall be employed in any factory more than 48 hours in any one week, nor more than 9 hours in any day, who shall not be 11 years old; nor after the 1st of March, 1835, who shall not be 12 years old; nor after the 1st of March, 1836, who shall not be 13 years old; and that these hours of work shall not be exceeded, even if the child has worked during the day in more factories than one.
6. That children and young persons, whose hours of work are regulated, shall be entitled to 2 holidays and 8 half holidays in every year.
7. That children, whose hours of work are restricted to 9 hours a day, are not to be employed without obtaining a certificate from a physician or surgeon, certifying that they are of the ordinary strength and appearance of children of the age before mentioned, which certificate is to be countersigned by some inspector or justice.
8. That it shall be lawful for his Majesty to appoint, during pleasure, 4 persons to be inspectors of factories, with extensive powers, as magistrates, to examine the children employed in the factories, and to inquire respecting their condition, employment, and education; and that one of the secretaries of state shall have power, on the application of an inspector, to appoint superintendents to superintend the execution of the act.
9. That those inspectors are to make all rules necessary for the execution of the act, and to enforce the attendance at school, for at least 2 hours daily out of 6 days in the week, of children employed in factories, from whose weekly wages a deduction, not exceeding 1 penny in every shilling, for schooling, shall be made.
10. That no child shall be employed, who shall not, on Monday of every week, give to the factory master a certificate of his or her attendance at school for the previous week.
11. That the interior walls of every mill shall be whitewashed every year.
12. That a copy or abstract of the act shall be hung up in a conspicuous part of every mill.
13. That the inspectors shall regularly, once a year, report their proceedings to one of the secretaries of state.

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* For an account of the circumstances which have occasioned this depression, we beg to refer the reader to an article on manufactures, commerce, &c. in the 117th No. of the *Edinburgh Review*. Some of the above statements are taken from that article.

The act also contains regulations extending the hours of work where time shall be lost by the want of, or an excess of, water, in mills situated upon a stream of water; respecting the steps to be taken in order to obtain regular certificates of age for the children requiring them; respecting the erection of schools, where necessary; and respecting the proceedings to be had before inspectors and magistrates for enforcing the act, and the right to appeal from their decisions.

COWHAGE, or COWITCH (Hind. *Kiwach*), the fruit or bean of a perennial climbing plant (*Dolichos pruriens* Lin.). It is a native of India, as well as of several other eastern countries, and of America. The pod is about 4 or 5 inches long, a little curved, and contains from 3 to 5 oval and flattish seeds; the outside is thickly covered with short, bristly, brown hairs, which, if incautiously touched, stick to the skin, and occasion intolerable itching. Syrup thickened with the hairs is prescribed in certain complaints. — (*Ainslie's Materia Indica.*)

COWRIES (Ger. *Kauris*; Du. *Kauris*; Fr. *Coris, Cauris, Bouges*; It. *Cori, Porcellane*; Sp. *Bucios Zimbos*) are small shells brought from the Maldives, which pass current as coin in smaller payments in Hindostan, and throughout extensive districts in Africa. They used to be imported into England previously to the abolition of the slave trade, in which they were subsequently employed. They are an article of trade at Bombay. The best are small, clean, and white, having a beautiful gloss; those that are yellow, large, and without lustre, should be rejected. The freight is calculated at 20 cwt. to the ton. — (*Milburn's Orient. Com.*)

CRANBERRIES, or RED WHORTLEBERRIES, the fruit of a moss plant, the *Vaccinium oxycoccus* of Linnæus. The berries are globular, about the size of currants; are found in mossy bogs in different parts of Scotland, but not in great numbers: they were once common in Lincolnshire, and the northern parts of Norfolk; but since the bogs have been drained and cultivated, they are rarely met with. Cranberries have a peculiar flavour, and a sharp, acid, agreeable taste; they are easily preserved, and are extensively used in making tarts. They are very abundant in North America, and in the northern parts of Russia; the latter being of a superior quality. We import from 30,000 to 35,000 gallons annually. It is said that some very fine ones have recently been brought from New South Wales.

CRAPE (Fr. *Crépe*; Ger. *Flohr, Krausflohr*; It. *Espumilla, Soplillo*; Rus. *Flior*; Sp. *Crespon*), a light transparent stuff, in manner of gauze, made of raw silk, gummed and twisted on the mill and woven without crossing. It is principally used in mourning. Crape was originally manufactured in Bologna; but that made in this country is now deemed superior to any made in Italy.

CREAM OF TARTAR. See Argal.

CREDIT, the term used to express the trust or confidence placed by one individual in another, when he assigns him money, or other property in loan, or without stipulating for its immediate payment. The party who lends is said to give credit, and the party who borrows to obtain credit.

Origin and Nature of Credit. — In the earlier stages of society, credit is in a great measure unknown. This arises partly from the circumstance of very little capital being then accumulated, and partly from government not having the means, or not being sufficiently careful, to enforce that punctual attention to engagements so indispensable to the existence of confidence or credit. But as society advances, capital is gradually accumulated, and the observance of contracts is enforced by public authority. Credit then begins to grow up. On the one hand, those individuals who have more capital than they can conveniently employ, or who are desirous of withdrawing from business, are disposed to lend, or to transfer, a part or the whole of their capital to others, on condition of their obtaining a certain stipulated premium or interest for its use, and what they consider sufficient security for its repayment; and, on the other hand, there are always individuals to be met with, disposed to borrow, partly (and among merchants principally) in order to extend their business beyond the limits to which they can carry it by means of their own capital, or to purchase commodities on speculation, and partly to defray debts already contracted. These different classes of individuals mutually accommodate each other. Those desirous of being relieved from the fatigues of business, find it very convenient to lend their capital to others; while such as are anxious to enlarge their businesses, obtain the means of prosecuting them to a greater extent.

It is plain, that to whatever extent the power of the borrower of a quantity of produce, or a sum of money, to extend his business may be increased, that of the lender must be equally diminished. The same portion of capital cannot be employed by two individuals at the same time. If A. transfer his capital to B., he necessarily, by so doing, deprives himself of a power or capacity of production which B. acquires. It is most probable, indeed, that this capital will be more productively employed in the hands of B. than of A.; for the fact of A. having lent it shows that he either had no means of employing it advantageously, or was disinclined to take the trouble; while the fact of B. having borrowed it shows that he conceives he can advantageously employ it, or that he can invest it so as to make it yield an interest to the lender, and a profit to himself. It is

obvious, however, that except in so far as credit contributes, in the way now mentioned, to bring capital into the possession of those who, it may be fairly presumed, will employ it most beneficially, it conduces nothing to the increase of wealth.

The most common method of making a loan is by selling commodities on credit, or on condition that they shall be paid at some future period. The price is increased proportionally to the length of credit given; and if any doubt be entertained with respect to the punctuality or solvency of the buyer, a further sum is added to the price, in order to cover the risk that the seller or lender runs of not receiving payment, or of not receiving it at the stipulated period. This is the usual method of transacting where capital is abundant, and confidence general; and there can be no manner of doubt that the amount of property lent in Great Britain, the Netherlands, and most other commercial countries, in this way, is infinitely greater than all that is lent in every other way.

When produce is sold in the way now described, it is usual for the buyers to give their bills to the sellers for the price, payable at the period when the credit is to expire; and it is in the effects consequent to the negociation of such bills that much of that magical influence that has sometimes been ascribed to credit is believed to consist. Suppose, to illustrate this, that a paper-maker, A., sells to a printer, B., a quantity of paper, and that he gets his bill for the sum, payable at 12 months after date: B. could not have entered into the transaction had he been obliged to pay ready money; but A., notwithstanding he has occasion for the money, is enabled, by the facility of negociating or discounting bills, to give the requisite credit, without disabling himself from prosecuting his business. In a case like this, both parties are said to be supported by credit; and as cases of this sort are exceedingly common, it is contended that half the business of the country is carried on by its means. All, however, that such statements really amount to is, that a large proportion of those engaged in industrious undertakings do not employ their own capital, but that of others. In the case in question, the printer employs the capital of the paper-maker, and the latter employs that of the banker or broker who discounted the bill. This person had most likely the amount in spare cash lying beside him, which he might not well know what to make of; but the individual into whose hands it has now come, will immediately apply it to useful purposes, or to the purchase of the materials, or the payment of the wages of the workmen employed in his establishment. It is next to certain, therefore, that the transaction will have been advantageous. But still it is essential to bear in mind that it will have been so, not because credit is of itself a means of production, or because it can give birth to capital not already in existence; but because, through its agency, capital finds its way into those channels in which it has the best chance of being profitably employed.

The real advantage derived from the use of bills and bank notes as money consists, as has been already shown, in their substituting so cheap a medium of exchange as paper, in the place of one so expensive as gold, and in the facilities which they give to the transacting of commercial affairs. If a banker lend A. a note for 100*l.* or 1,000*l.*, the latter will be able to obtain an equivalent portion of the land or produce of the country in exchange for it; but that land or produce was already in existence. The issue of the note did not give it birth. It was previously in some one's possession; and it will depend wholly on the circumstance of A.'s employing it more or less advantageously than it was previously employed, whether the transaction will, in a public point of view, be profitable or not. On analysing any case of this kind, we shall invariably find that all that the highest degree of credit or confidence can do, is merely to change the distribution of capital — to transfer it from one class to another. These transfers are occasionally, too, productive of injurious results, by bringing capital into the hands of spendthrifts: this, however, is not, except in the case of the credit given by shopkeepers, a very common effect; and there can be no doubt that the vast majority of regular loans are decidedly beneficial.

Abuses of the present Credit System in Great Britain. Means of obviating them. — The previous observations refer rather to the credit given to individuals engaged in business, who mean to employ the capital which they borrow in industrious undertakings, than to that which is given to individuals not so engaged, and who employ the advances made to them in supporting themselves and their families. In neither case is credit of advantage, unless it be granted with due discrimination, and with reference to the character, condition, and prospects of those receiving it. In this country, however, these considerations have been in a great measure lost sight of, in the granting of credit by shopkeepers and tradesmen of all descriptions. Owing to the competition of such persons, their extreme eagerness to secure customers, and the general indolence of opulent persons, which disinclines them to satisfy every small debt when it is contracted, the system of selling upon credit has become almost universal. Few among us think of paying ready money for any thing; seven tenths of the community are in the constant practice of anticipating their incomes; and there is hardly one so bankrupt in character

and fortune as to be unable to find grocers, bakers, butchers, tailors, &c. ready to furnish him upon credit with supplies of the articles in which they respectively deal. We look upon this facility of obtaining accommodations as a very great evil. They are not, in one case out of five, of any real advantage to the parties receiving them, while they are productive of very pernicious results. The system tempts very many, and sometimes even the most considerate individuals, to indulge in expenses beyond their means; and thus becomes the most fruitful source of bankruptcy, insolvency, and bad faith. To guarantee themselves from the extraordinary risk to which such proceedings expose them, tradesmen are obliged to advance the price of their goods to a most exorbitant height; so that those who are able, and who really mean to pay the debts they contract, are, in fact, obliged to pay those of the hosts of insolvents and swindlers maintained by the present system. Many tradesmen consider themselves as fortunate, if they recover from two thirds to three fourths of the sums standing in their books, at the distance of several years.

The extraordinary extent to which the credit practice is carried may be learned from the inquiries of the Parliamentary Committee on Small Debts. It appears from them, that hatters, shoemakers, &c. in the metropolis, have often 4,000*l.* and upwards on their books in debts below 10*l.*, and that *five sixths of their book debts are below that sum!* A large proportion of these debts are irrecoverable; but owing to the artificial enhancement of prices, those that are good are sufficient to indemnify the traders for the loss of the bad.

It is not easy, we think, to imagine any system better fitted to generate improvidence and fraud. The vast majority of those who become insolvent, or are imprisoned for debt, consist of labourers, artisans, half-pay officers, clerks in public and other offices, annuitants, &c. — persons whom no prudent shopkeeper would ever allow to get permanently into his debt. The following Table exhibits some of the effects resulting from this system. —

Number of Persons committed for Debt to the several Prisons of the Metropolis in the Year 1827, and the Sums for which they were committed. — (*Parl. Paper*, No. 76. Sess. 1828.)

	For Sums above 100*l.*	For Sums between 50*l.* & 100*l.*	For Sums between 50*l.* & 20*l.*	For Sums under 20*l.*	Total.	In Custody January 1. 1828.
King's Bench prison - - -	474	354	550	213	1,591	674
Fleet prison - - -	206	141	223	113	683	253
Whitecross Street prison -	206	273	816	600	1,893	378
Marshalsea prison - - -	20	30	166	414	630	102
Horsemonger Lane prison -	57	58	134	923	1,172	105
Total -	963	856	1,889	2,263	5,969	1,512

It is time, certainly, that something effectual were done to put an end to such flagrant abuses — to a system that sends 923 persons to a single prison for debts under 20*l.*! We do not mean to say or insinuate that credit may not frequently be given to the labouring classes with the best effects: but it is of its abuse that we complain, — of its being indiscriminately granted to every one; to those whom it encourages to continue in a course of idleness and profligacy, as well as to those industrious and deserving persons to whom it may occasionally be of the greatest service. To secure the advantages of credit to the public, free from the enormous evils that result from its abuse, is an object of the highest importance; and few things, we believe, would do so much to secure it, as the taking from creditors the power to arrest and imprison for debt. — (See BANKRUPTCY.)

It was stated in the House of Commons, (19th of February, 1827,) that in the space of $2\frac{1}{2}$ years, 70,000 persons were arrested in and about London, at an expense to the parties, it may be estimated, of between 150,000*l.* and 200,000*l.*! In 1827, in the metropolis and two adjoining counties, 23,515 warrants to arrest were granted, and 11,317 bailable processes were executed. Hence it may be concluded, that in this single year, within the above limits, no fewer than 12,000 persons were deprived of their liberty, on the mere allegation of others, without any *proof* that they owed them a farthing! Well might Lord Eldon say "that *the law of arrest is a permission to commit acts of greater oppression and inhumanity than are to be met with in slavery itself,* and that the redress of such a grievance would not be attended with any fatal consequences to the country."

The following Table, which shows that 1,120 persons were committed to Horsemonger Lane prison, in 1831, for debts amounting, in all, to only 2,417*l.* 7*s.* 5*d.*, being, at an average, no more than 2*l.* 3*s.* 2*d.* each, proves that the discussions which have taken place with respect to the law of arrest and imprisonment, have not, in any degree, lessened its mischievous operation. Whatever else may be dear in England, the fact that thousands of people are annually imprisoned for such miserable trifles, shows that personal liberty is, at at all events, abundantly cheap.

A Return of the Number of Debtors committed to Horsemonger Lane Prison, on Process out of the Courts of Requests, during the Years ending 1st of January, 1832 and 1833; stating the aggregate Amount of Debts and Costs, separately, in each Year; showing, in Classes, the Number confined from One to less than Ten Days, for Ten Days and less than Thirty, Fifty, Seventy, and One Hundred Days; stating, also, the Amount paid out of the County or other Rates for the Maintenance and Support of such Prisoners, as accurately as possible.

	1831.	1832.
Number committed in the year	1,120	945
	£ s. d.	£ s. d.
Aggregate amount of debts	2,417 7 5	2,039 14 9
costs	696 2 7	566 18 2
Number confined from 1 to less than 10 days	610	394
for 10 and - - 30 - -	336	317
30 - - 50 - -	77	119
50 - - 70 - -	47	65
70 - - 100 - -	26	29
100 days and more	24	30
Amount paid out of the county or other rates for the maintenance and support of such prisoners	£ 208	£ 226

We defy any one to show that the law of arrest and imprisonment has a single good consequence to be placed as a set-off against the intolerable evils of which it is productive. Tradesmen depend, as is clearly evinced by the above statements, upon the despotical power which it puts in their hands, to get them out of scrapes; and believe that the fear of being subjected to arrest will stimulate even the most suspicious portion of their debtors to make payment of their accounts. The records of our prisons, and of our insolvent and other courts, show how miserably these expectations are disappointed. We believe, indeed, that we are warranted in affirming that the more respectable classes of shopkeepers and tradesmen are now generally satisfied that the present system requires some very material modifications. The law of arrest and imprisonment is, in fact, advantageous to none but knaves and swindlers, and the lowest class of attorneys, who frequently buy up small accounts and bills, that they may bring actions upon them, and enrich themselves at the expense of the poor, by the magnitude of their charges. Such oppressive proceedings are a disgrace to a civilised country. Were the law in question repealed, credit would be granted to those only who deserved it; for, generally speaking, tradesmen, supposing they had nothing to trust to but their own discretion, would not deal, except for ready money, with those of whose character and situation they were not perfectly informed; and the difficulty under which all idle and improvident persons would thus be placed of obtaining loans, would do much to wean them from their vicious courses, and to render them industrious and honest. "Those," says Dr. Johnson, "who have made the laws, have apparently considered that every deficiency of payment is the crime of the debtor. But the truth is, that the creditor always shares the act, and often more than shares the guilt of improper trust. It seldom happens that any man imprisons another but for debts which he suffered to be contracted in hope of advantage to himself, and for bargains in which he proportioned his profit to his own opinion of the hazard; and there is no reason why one should punish another for a contract in which both concurred."

The power of taking goods in execution for debts is also one that requires to be materially modified. At present, the household furniture of every man, and even the *implements used in his trade*, should there be nothing else to lay hold of, may be seized and sold in satisfaction of any petty claim. It seems to us quite clear that some limits should be set to this power; and that such articles as are indispensable either to the subsistence or the business of any poor man ought to be exempted from execution, and, perhaps, distress. The present practice, by stripping its victims of the means of support and employment, drives them to despair, and is productive only of crimes and disorders.

We are glad to observe that there seems to be a growing conviction among mercantile men, of the inconveniences arising from the present practice. A petition against imprisonment for small debts, subscribed by many of the most eminent merchants, manufacturers, bankers, &c. of the city of Glasgow, was presented to the House of Commons in 1833. It contains so brief, and at the same time so forcible, an exposition of the evils resulting from the present system, that we shall take the liberty of laying it before our readers.

"Your petitioners have been long and seriously impressed with the belief that very great evils have arisen and do arise from the imprisonment of debtors in Scotland, especially for small sums.

"The petitioners will not here question the policy of the existing laws which authorise the imprisonment of debtors for considerable sums, nor do they intend to object to the creditor retaining the fullest power over the property and effects of his debtor; but they are humbly of opinion that, in so far as these laws give creditors the power to imprison debtors for small sums, such as for 8*l.* and under, they are not only injurious to the public, and ruinous to the debtor, but even hurtful to the creditor himself.

It would be a waste of time to dwell upon the hardship of subjecting debtors to imprisonment for mall debts, contracted sometimes certainly under circumstances of real distress, but more frequently from the improper use of credit, with which they are too readily supplied. The creditor takes care that his profit shall be commensurate with his risk; and the debtor is induced to purchase freely, and at any price, that which he is not immediately called upon to pay; the creditor coolly and cruelly calculates upon the power which the law has granted him over the person of his debtor if he fail to discharge his debt to him, while the debtor forgets that, by the credit so imprudently afforded him, he is preparing the way for his own ruin, and that of all who have any dependence upon him.

"The total number of debtors imprisoned in the gaol of Glasgow alone, for debts of 8*l.* and under, was, in the year 1830, 353; in 1831, 419; and in 1832, 437; while the whole number of incarcerations in that gaol for sums of every description were, in the year 1830, 557; in 1831, 630; and in 1832, 696; the proportion of sums of 8*l.* and under being nearly two thirds of the whole on the average of these 3 years.

"To remedy these evils, your petitioners humbly submit that means should be adopted for the repeal of the laws at present in force, in so far as they sanction the recovery of small debts by imprisonment, reserving their effect in every other respect; the result of which would be, that credit for small sums would be greatly limited, if not entirely extinguished, and the poorer classes rendered more provident; and by purchasing with money at a cheaper rate what they now buy at an extravagant price, they would be enabled to procure for themselves additional comforts, from the more economical employment of their small incomes.

"May it therefore please your Honourable House to take this matter into your consideration, and to adopt such means as you in your wisdom shall see proper, to prevent the incarceration of debtors for sums under 8*l.*, and thereby remove or greatly mitigate the evils of improvidence on the part of the debtor, and of oppression on the part of the creditor, which necessarily arise under the present system."

So reasonable a proposal, supported by such conclusive statements, could not fail to make a deep impression; and a bill was consequently introduced by the solicitor general, taking away the power to arrest and imprison for petty debts. This bill was afterwards withdrawn; but there can be no doubt that it will be brought forward again, unless it be resolved to apply a still more radical cure to the abuses complained of.

Propriety of placing all small Debts beyond the Pale of the Law. — The taking away the power of arrest and imprisonment, except in the case of fraudulent bankruptcy would certainly be a material improvement upon the existing system. But we are satisfied that it does not go far enough; and that by far the most desirable and beneficial reform that could be effected in this department would be *to take away all action for debts under a given sum, as 50l. or 100l.* The only exception to this rule should be in the case of *claims for wages*, or labour done under executory contracts. To prevent the measure from being defeated, no action should be granted on bills under 50*l.* or 100*l.*, except upon those drawn by or upon regular bankers. This would be a radical change certainly; but we are fully satisfied that it would be highly advantageous to every class of the community, and most of all to labourers, retail dealers, and small tradesmen. It would protect the former from oppression, at the same time that it would tend powerfully to render them more provident and considerate; it would teach the latter to exercise that discretion in the granting of credit which is so very indispensable; and it would be publicly beneficial, by strengthening the moral principle, and making the contraction of debts for small sums, without the means of paying them, at once difficult and disgraceful.

We agree entirely in opinion with those who think that it is to no purpose to attempt to remedy the defects now pointed out, by multiplying courts and other devices for facilitating the speedy recovery of small debts. This is beginning at the wrong end; or rather it is attempting to obviate the influence of one abuse by instituting another. No wise statesman will ever be easily persuaded to fill the country with petty local courts; for these, when not absolutely necessary, are the merest nuisances imaginable; and he would, at all events, exert himself, in the first instance, to do away, in so far as possible, with the circumstances that make individuals resort to them. But it is certain that nine tenths of the cases in county courts originate in questions as to simple contract debts under 50*l.*; and were such debts placed, as they ought to be, beyond the pale of the law, the courts would be wholly unnecessary. Our object ought not to be to provide means for enforcing payment of trifling debts, but *to prevent their contraction.* We believe, indeed, that, instead of lessening, the multiplication of district courts will materially aggravate, all the evils of the present credit system. The belief that they may readily enforce their claims by resorting to them will make shopkeepers and tradesmen still more disposed than at present to give credit, while the unprincipled, the inconsiderate, and the necessitous will eagerly grasp at this increased facility. What there is of caution amongst our retail dealers is in no inconsiderable degree owing to the want of those petty tribunals so many are anxious to have universally established. The more they are increased, the less will caution prevail. But instead of diminishing this virtue, — for such it really is, — it cannot be too much increased. Nothing will ever deter those who ought not to obtain credit from taking it while in their power; but those who give it may be made to exercise greater discretion; they may be made to know that it is a private transaction between themselves and those to whom they grant it; and that in the case of petty debts they have only their own sagacity to look to, such transactions not being cognizable by law. A measure of the sort here proposed would not, as some appear to imagine, annihilate credit. It would, no doubt, annihilate that spurious indiscriminating species of credit, that is as readily granted to the spendthrift and pro-

digal, as to the frugal and industrious individual; but to the same extent that it deprived the former of the means of obtaining accommodation, it would extend those of the latter. Nothing short of this — nothing but the placing all small debts beyond the pale of the law — will ever fully impress tradesmen with a conviction of the vast advantages that would result to themselves from their withdrawing their confidence from courts and prisons, and preventing every one from getting upon their books, of whose situation and circumstances they are not fully aware; nor will any thing else be able completely to eradicate the flagrant abuses inherent in the present credit system, and which have gone far to render it a public nuisance.

One of the worst consequences of the present system is the sort of thraldom in which it keeps thousands of labourers and other individuals, whom the improper facilities for obtaining credit originally led into debt. Such persons dare not leave the shops to which they owe accounts; and they dare neither object to the quality of the goods offered to them, nor to the prices charged. Dr. Johnson has truly observed, that "he that once owes more than he can pay, is often obliged to bribe his creditor to patience by increasing his debt. Worse and worse commodities at a higher and higher price are forced upon him; he is impoverished by compulsive traffic; and at last overwhelmed in the common receptacles of misery by debts, which, without his own consent, were accumulated on his head." By taking away all right of action upon small debts, this system of invisible but substantial coercion would be put an end to. The tradesman would take care who got, in the first instance, upon his books; and instead of forcing articles upon him, would cease to furnish him with any unless he found he was regular in making his payments; while the customer, to whom credit was of importance, would know that his only chance of obtaining it would depend upon his character and reputation for punctuality. The abuses of the sort now alluded to, that grew out of what has been denominated the truck system, justly occasioned its abolition; but these were trifling compared with those that originate in the bringing of petty debts within the pale of the law.

When the former edition of this work was published, we were not aware that it had been previously proposed to take away all action for debts under 50*l.* or 100*l.*; but we have since met with a pamphlet, entitled *Credit Pernicious*, published in 1823, in which this plan is proposed and ably supported. There are also some valuable remarks and observations on the topics now treated of, in the *Treatise on the Police, &c. of the Metropolis*, by the author of the "Cabinet Lawyer," pp. 114—134.

CREW, the company of sailors belonging to any ship or vessel. No ship is admitted to be a British ship, unless duly registered and navigated as such by a crew, *three fourths* of which are British subjects, besides the master. — (3 & 4 *Will.* 4. c. 54. § 12.) The master or owners of any British ship having a foreign seaman on board not allowed by law, shall for every such seaman forfeit 10*l.*; unless they can show, by the certificate of the British consul, or of two British merchants, or shall satisfactorily prove, that the requisite number of British seamen could not be obtained at the place where the foreign seaman was taken on board. It is also ordered that the master of every British vessel arriving from the West Indies shall deliver, within 10 days after arrival, to the Custom-house, a list of the crew on board at the time of clearing out from the United Kingdom, and of arrival in the West Indies, and of every seaman who has deserted or died during the voyage, and the amount of wages due to each so dying, under a penalty of 50*l.* — (3 & 4 *Will.* 4. c. 54. § 19.; 3 & 4 *Will.* 4. c. 52. § 16.)

CUBEBS (Ger. *Kubeben;* Fr. *Cubebes;* It. *Cubebi;* Sp. *Cubebas;* Rus. *Kubebü;* Lat. *Piper Cubeba;* Arab. *Kebābeh;* Javan, *Kumunkus;* Hind. *Cubab-chinie*), the produce of a vine or climber, the growth of which is confined exclusively to Java. It is a small dried fruit, like a pepper corn, but somewhat longer. Cubebs have a hot, pungent, aromatic, slightly bitter taste; and a fragrant, agreeable odour. They should be chosen large, fresh, sound, and the heaviest that can be procured. The quantity entered for home consumption, in 1830, amounted to 18,540 lbs., producing a nett revenue of 1,854*l.* 6*s.* Their price in the London market, in bond, varies from 2*l.* 10*s.* to 4*l.* 4*s.* per cwt.

CUCUMBER, a tropical plant, of which there are many varieties, largely cultivated in hothouses in England.

CUDBEAR, a purple or violet coloured powder used in dyeing violet, purple, and crimson, prepared from a species of lichen (*Lichen tartareus* Lin.), or crustaceous moss, growing commonly on limestone rocks in Sweden, Scotland, the north of England, &c. About 130 tons of this lichen are annually exported from Sweden. It commonly sells in the port of London for about 20*l.* per ton; but to prepare it for use it must be washed and dried; and by these operations the weight is commonly diminished a half, and the price, in effect, doubled. Though possessing great beauty and lustre at first, the colours obtained from cudbear are so very fugacious, that they ought never to be employed but in aid of some other more permanent dye, to which they may give body and vivacity. In this country it is chiefly used to give strength and brilliancy to the blues dyed with indigo, and to produce a saving of that article; it is also used as a *ground*

for madder reds, which commonly incline too much to yellow, and are made *rosy* by this addition. The name cudbear was given to this powder by Dr. Cuthbert Gordon, who, having obtained a patent for the preparation, chose in this way to connect it with his own name. — (*Bancroft, Philosophy of Permanent Colours*, vol. i. pp. 300—304.)

CUMMIN SEED (Ger. *Kumin*; Fr. *Cumin*; It. *Comino, Cumino*; Sp. *Comino*; Arab. *Kemun*), the seeds of an annual plant (*Cuminum Cyminum* Lin.), a native of Egypt, but extensively cultivated in Sicily and Malta. They have a strong, peculiar, heavy odour, and a warm, bitterish, disagreeable taste. They are long and slender.

CURRANTS (Fr. *Raisins de Corinthe*; Ger. *Korinthen*; It. *Uve passe di Corinto*; Lat. *Passulæ Corinthiacæ*; Rus. *Korinka, Opoek*; Sp. *Pasas de Corinto*), a small species of grape, largely cultivated in Zante, Cephalonia, and Ithaca, of which islands they form the staple produce; and in the Morea, in the vicinity of Patras. The plant is delicate; and as 6 or 7 years must elapse, after a plantation has been formed, before it begins to produce, its cultivation requires a considerable outlay of capital. The crop is particularly liable to injury from rains in harvest, and is altogether of a very precarious description. After being dried in the sun, the currants are exported packed in large butts. They are in extensive demand in this country; and, when mixed with flour and suet, make a dish that is peculiarly acceptable to the lower classes. But, as if it were intended to put them beyond the reach of all but the richest individuals, they are burdened with the enormous duty of 44*s.* 4*d.* a cwt.! The fact, that in despite of this anti-consumption impost, the entries of currants for home consumption amounted, at an average of the 3 years ending with 1831, to 127,084 cwt. a year, producing an annual revenue of 281,787*l.*, shows that the taste for them is both deeply rooted and widely diffused. With one or two exceptions, they are the most grossly over-taxed article in the British tariff. Their price in bond, in London, varies from 20*s.* to 27*s.* a cwt.; so that the duty amounts to more than 200 per cent. on the importation price! So exorbitant a tax admits of no justification. It is highly injurious to the consumers in Great Britain, to the merchants engaged in the Mediterranean trade, to the producers in the Ionian Islands and Greece, and, we may add, to the revenue: for, considering how highly esteemed the article is by all classes, and that it might be imported in much larger quantities without any considerable rise of price, there can be no manner of doubt that were the duty reduced to 10*s.* or 12*s.* a cwt. the consumption would be so much increased, that in a few years the revenue would be materially greater than at present.

By referring to the article IONIAN ISLANDS, it will be seen that the duty has been peculiarly hostile to their interests. It has, in fact, gone far to countervail all the advantages they have, in other respects, derived from our protection; and has done much to estrange the affections of the inhabitants, and to excite and keep alive a jealousy of this country.

The Mediterranean merchants, in a petition presented to the House of Commons last session, prayed for the repeal of the duty imposed since 1806, being 16*s.* 4*d.* a cwt., leaving a duty of 28*s.* a cwt. A reduction to this extent would, no doubt, be a considerable relief to the growers and importers; but it would be quite inadequate to bring the article fairly into consumption among the mass of the people. To accomplish this most desirable object, the duty ought not to exceed 10*s.* or 12*s.*; and we are well convinced it would yield more revenue at this rate than at 28*s.* A duty of 50 per cent. is surely high enough upon an article fitted to enter largely into the consumption of the labouring classes.

No abatement of duties is made on account of any damage received by currants.

Currants, the produce of Europe, are not to be imported for home use except in British ships, or in ships of the country of which they are the produce, or of the country whence they are imported.—(3 & 4 *Will.* 4. c. 54. §§ 2. 22.)

A Treasury letter of the 30th of March, 1816, directs the following tares to be allowed, with liberty to the merchant and officers to take the actual tare when either party is dissatisfied.

Currants in casks from Zante	-	13 per cent.
Leghorn	-	10 —
Trieste	-	10 —

CUSTOM-HOUSE, the house or office where commodities are entered for importation or exportation; where the duties, bounties, or drawbacks payable or receivable upon such importation or exportation are paid or received; and where ships are cleared out, &c.

For information as to the proceedings necessary at the Custom-house on importing or exporting commodities, see the article IMPORTATION AND EXPORTATION.

The principal British Custom-house is in London; but there are Custom-houses subordinate to the latter in all considerable sea-port towns.

CUSTOMS, are duties charged upon commodities on their being imported into or exported from a country.

Custom duties seem to have existed in every commercial country. The Athenians laid a tax of a fifth on the corn and other merchandise imported from foreign countries, and also on several of the commodities exported from Attica. The *portaria*, or customs

payable on the commodities imported into, and exported from, the different ports in the Roman empire, formed a very ancient and important part of the public revenue. The rates at which they were charged were fluctuating and various, and little is now known respecting them. Cicero informs us, that the duties on corn exported from the ports of Sicily were, in his time, 5 per cent. Under the Imperial government, the amount of the *portaria* depended as much on the caprice of the prince as on the real exigencies of the state. Though sometimes diminished, they were never entirely remitted, and were much more frequently increased. Under the Byzantine emperors, they were as high as $12\frac{1}{2}$ per cent. —(*Supp. to Encyc. Brit.* art. *Taxation.*)

Customs seems to have existed in England before the Conquest; but the king's claim to them was first established by stat. 3 Edw. 1. These duties were, at first, principally laid on wool, woolfels (sheep-skins), and leather when exported. There were also extraordinary duties paid by aliens, which were denominated *parva costuma*, to distinguish them from the former, or *magna costuma*. The duties of tonnage and poundage, of which mention is so frequently made in English history, were custom duties; the first being paid on wine by the tun, and the latter being an *ad valorem* duty of so much a pound on all other merchandise. When these duties were granted to the Crown, they were denominated *subsidies;* and as the duty of poundage had continued for a lengthened period at the rate of 1*s.* a pound, or 5 per cent., a subsidy came, in the language of the customs, to denote an *ad valorem* duty of 5 per cent. The *new subsidy* granted in the reign of William III. was an addition of 5 per cent. to the duties on most imported commodities.

The various custom duties were collected, for the first time, in a book of rates published in the reign of Charles II.; a new book of rates being again published in the reign of George I. But, exclusive of the duties entered in these two books, many more had been imposed at different times; so that the accumulation of the duties, and the complicated regulations to which they gave rise, were productive of the greatest embarrassment. The evil was increased by the careless manner in which new duties were added to the old; a percentage being sometimes added to the original tax; while at other times the commodity was estimated by a new standard of bulk, weight, number, or value, and charged with an additional impost, without any reference to the duties formerly imposed. The confusion arising from these sources was still further augmented by the special appropriation of each of the duties, and the consequent necessity of a separate calculation for each. The intricacy and confusion inseparable from such a state of things proved a serious injury to commerce, and led to many frauds and abuses.

The Customs Consolidation Act, introduced by Mr. Pitt in 1787, did much to remedy these inconveniences. The method adopted was, to abolish the existing duties on all articles, and to substitute in their stead one single duty on each article, equivalent to the aggregate of the various duties by which it had previously been loaded. The resolutions on which the act was founded amounted to about 3,000. A more simple and uniform system was, at the same time, introduced into the business of the Custom-house. These alterations were productive of the very best effects; and several similar consolidations have since been effected; particularly in 1825, when the various statutes then existing relative to the customs, amounting, including parts of statutes, to about 450, were consolidated and compressed into only 11 statutes of a reasonable bulk, and drawn up with great perspicuity. Since then, a few statutes were passed, amending and changing some of the provisions in the consolidated statutes; and these have been again embodied in consolidated acts passed last session.*

The Board of Customs is not to consist of more than 13 commissioners, and they are to be reduced to 11 as vacancies occur. The Treasury may appoint 1 commissioner, and 2 assistant commissioners, to act for Scotland and Ireland.

Officers of customs taking any fee or reward, whether pecuniary or of any other sort, on account of any thing done, or to be done, by them in the exercise of their duty, from any one, except by the order or permission of the commissioners of the customs, shall be dismissed their office; and the person giving, offering, or promising such gratuity, fee, &c. shall forfeit 100*l.*

Any officer of customs who shall accept of any bribe, recompence, or reward, to induce him to neglect his duty, or to do, conceal, or connive at any act whereby any of the provisions of the customs laws shall be evaded, shall be dismissed the service, and be rendered incapable of serving his Majesty in future in any capacity whatever; and the person offering such bribe, recompence, &c. shall, whether the offer be accepted or not, forfeit 500*l.*

Custom duties, like all duties on particular commodities, though advanced in the first instance by the merchant, are ultimately paid by those by whom they are consumed.

* 3 & 4 Will. 4. cap. 51, 52. 56. and 58.

When a government lays a duty on the foreign commodities which enter its ports, the duty falls entirely on such of its own subjects as purchase these commodities; for the foreigners would cease supplying its markets with them, if they did not get the full price of the commodities, exclusive of the tax; and, for the same reason, when a government lays a duty on the commodities which its subjects are about to export, the duty does not fall on them, but on the foreigners by whom they are bought. If, therefore, it were possible for a country to raise a sufficient revenue by laying duties on exported commodities, such revenue would be wholly derived from others, and it would be totally relieved from the burden of taxation, except in so far as duties might be imposed by foreigners on the goods it imports from them. Care, however, must be taken, in imposing duties on exportation, not to lay them on commodities that may be produced at the same, or nearly the same, cost by foreigners; for the effect of the duty would then be to cause the market to be supplied by others, and to put an entire stop to their exportation. But in the event of a country possessing any decided natural or acquired advantage in the production of any sort of commodities, a duty on their exportation would seem to be the most unexceptionable of all taxes. If the Chinese chose to act on this principle, they might derive a considerable revenue from a duty on exported teas, which would fall entirely on the English and other foreigners who buy them. The coal and tin, and perhaps, also, some of the manufactured goods produced in this country, seem to be in this predicament.

The revenue derived from the custom duties in 1590, in the reign of Elizabeth, amounted to no more than 50,000*l.* In 1613, it had increased to 148,075*l.*; of which no less than 109,572*l.* were collected in London. In 1660, at the Restoration, the customs produced 421,582*l.*; and at the Revolution, in 1688, they produced 781,987*l.* During the reigns of William III. and Anne, the customs revenue was considerably augmented, the nett payments into the exchequer in 1712 being 1,315,423*l.* During the war terminated by the peace of Paris in 1763, the nett produce of the customs revenue of Great Britain amounted to nearly 2,000,000*l.* In 1792, it amounted to 4,407,000*l.* In 1815, at the close of the war, it amounted to 11,360,000*l.*; and last year (1832) it amounted to about 17,000,000*l.*, and, including Ireland, to about 18,500,000*l.*!

Astonishing, however, as the increase of the customs revenue has certainly been, it is not quite so great as it appears. Formerly the duties on some considerable articles, such as sugar, brandy, wine, &c. imported from abroad, were divided partly into customs duties charged on their importation, and partly into excise duties on their being taken into consumption. But these duties have now, with the exception of tea*, been transferred wholly to the customs; the facilities afforded, by means of the warehousing system, for paying the duties in the way most convenient for the merchant, having obviated the necessity of dividing them into different portions.

It will be seen from various articles in this work—(see Brandy, Geneva, Smuggling, Tea, Tobacco, &c.)—that the exorbitant amount of the duties laid on many articles imported from abroad leads to much smuggling and fraud; and requires, besides, an extraordinary expense in many departments of the customs service, which might be totally avoided were these duties reduced within reasonable limits. This, however, is the business of government, and not of those entrusted with the management of the customs; and it would be unjust to the latter not to mention that this department has been essentially improved, during the last few years, both as respects economy and efficiency. The following extracts from a letter to the Right Hon. H. Goulburn, ascribed to the present chairman of the Board of Customs (R. B. Dean, Esq.), give a brief but satisfactory view of the improvements that have been effected: —

"As regards the department of customs in 1792, the principal officers engaged in the receipt of the duties in the port of London were patent officers.

"The first Earl of Liverpool was collector inwards.

"The late Duke of Manchester, collector outwards.

"The Duke of Newcastle, and afterwards the Earl of Guilford, comptroller inwards and outwards.

"Lord Stowell, surveyor of subsidies and petty customs.

"These noblemen took no part in the official duties, but merely exercised the right of appointing deputies and clerks.

"Both principals and deputies were remunerated by fees. The patentees received the fees denominated patent, and the deputies retained the fees called the fees of usage for their own use. In addition to these fees, both deputies and clerks received fees for despatch.

"The same system prevailed throughout the whole department. The salaries of the officers were nominal; and the principal proportion of all official income was derived

* From the 22d of April, 1834, the collection of the tea duties by the excise is to cease; and they are to be transferred to the customs. — (See Tea.)

from fees. These fees were constantly varying both in rate and amount, and formed a continual source of dispute and complaint between the merchant and the officer.

"This system (after having been repeatedly objected to by various commissions of inquiry, and finally by the committee of finance in 1797,) was put an end to in the year 1812, by the act 51 Geo. 3. c. 71., by which all patent offices and fees were abolished, and compensation allowances granted to the patent officers, and fixed salaries established.

"The additional salaries granted under this arrangement amounted to about 200,000*l.*, and the temporary compensation allowances to about 40,000*l.* per annum.

"The fees abolished, and from which the public were relieved, amounted to about 160,000*l.* per annum.

"In addition to the amount of fees from which the public were relieved, various allowances made by the Crown to officers for quarantine, coal poundage, poundage on seizures, and many other incidental allowances, which did not appear on the establishment, were also abolished, and the salaries of every officer placed at one view upon the establishment.

"The effect of these salutary measures has been to give a great apparent increase to officers' salaries since 1792; and, upon a mere comparison of the establishment of 1792 with 1830, without the above explanation, it would appear that the pay of the officers had been most materially augmented, whereas, in point of fact, the difference is in the mode of payment: and the incomes of the officers at the present period (as compared with 1792) are in general less; and, consequently, the public are less taxed for the performance of the same duty *now* than in 1792.

"In the year 1792, the warehousing system had not been established. Officers were admitted at all ages, and there was no system of classification or promotion. The officers at the out-ports and in London were generally appointed through local influence; and were too often persons who had failed in trade, or had been in menial service, and who regarded their situations rather as a comfortable provision for their families than as offices for which efficient services were required. The superintendence and powers of the Board were cramped and interfered with by circumstances and considerations which prevented the enforcement of wholesome regulation. The whole system was so imperfect, so far back only as 1818, that a special commission was appointed to inquire into the department; and, upon the recommendation of that commission, various regulations have been adopted.

"The age of admission has been limited; a system of classification and promotion of officers, and a graduated scale of salaries, established throughout the whole department; and, by this means, local interference in the promotion of officers has been abolished; the attendance of officers increased, regulated, and strictly enforced; holidays reduced from 46 in the year to 3; viz. Good Friday, the King's birthday, and Christmas-day; useless oaths, and bonds, and forms of documents of various kinds, discontinued; increased facility and despatch afforded to the merchant's business; the accounts kept in the different offices, and returns of all kinds revised, simplified, and reduced; and various minor regulations of detail established; the whole machinery of the department remodelled, and adapted to the trade and commerce of the country.

"In Ireland, the number of officers employed at all the ports, in the year ended the 5th of January, 1830, and the salaries and charges, did not much exceed the number and expense at the port of Dublin alone in 1818: and, within the space of 11 years, nearly two thirds of the officers employed at the ports in Ireland have been discontinued; the number having been, in 1818, 1755; in 1829, 544: and an annual reduction in salaries and charges has been effected to the extent of 173,724*l.*; the amount having been, in 1818, 285,115*l.*; in 1829, 111,391*l.* (103,813*l.* of that amount having been reduced between the years 1823 and 1828), upon an expenditure of 285,115*l.*; and the receipts were nearly equal, in 1827, to those of 1818 and 1823, notwithstanding the total repeal of the cross Channel duties, amounting to about 340,000*l.* per annum, subsequent to the latter period.

"Already has government relinquished, it may be said, any interference with promotion in the department of the customs, and the road is open to advancement to the meritorious officer.

"Influence is no longer allowed to prevail; and in many cases which have recently occurred, and in which the patronage of government might have been fairly exercised, it has been at once abandoned, in order to give way to arrangements by which the services of some very intelligent and highly respectable officers, whose offices had been abolished, could be again rendered available, with a material saving to the public.

"By a recent order from the Lords of the Treasury, of the 20th of February, 1830, the salaries of the commissioners, and of other officers, have been prospectively reduced, and directions given to revise the whole establishment in the spirit of that order, with a view to every possible reduction."

These are very great improvements, certainly, and reflect much credit on the government, and on the Board by whom its efforts have been zealously seconded; but we are, notwithstanding, satisfied that very great reductions may still be made in the cost of the establishment. These, however, are not to be effected by reducing the salaries of the officers, which, if any thing, are now too low; but by lessening the demand for their services, by reducing and simplifying the duties. The coast guard and coast blockade (the latter is under the orders of the Admiralty), costing together about 400,000*l.* a year, might be wholly dispensed with, were it not for the exorbitant duties on brandy, gin, and tobacco—duties which seem to be intended only to encourage smuggling; and which it is quite certain would be 3 times as productive as they are at this moment, were they reduced to *one third* of their present amount. The duties on a great variety of small articles might also be entirely repealed, without any sensible loss of revenue, and with great advantage to commerce: and were these alterations effected, and the proceedings with respect to the entry and clearing out of ships and goods adequately simplified, a *very great saving* might be made in this department, and the services of a large number of those now employed in it might be dispensed with.

In Scotland, separate Custom-houses seem to be multiplied to an absurd extent. Within these few years, indeed, a very considerable change for the better was effected in the Scotch Custom-house; but it is still susceptible of, and ought to be subjected to, great curtailment.

The reader will find, in the accounts of most imported articles of any consequence given in this work, statements of the customs duty paid on their importation. It may be gratifying, however, to have them all brought together in one point of view, as in the following Table: —

An Account of the Gross Receipt and Net Produce of the Revenue of Customs in Great Britain in the Year ending the 5th of January, 1833; distinguishing the Amount collected on each Article usually producing 1,000*l.* or more per Annum.

List of Articles.	Gross Receipt.			Nett Produce.		
	England.	Scotland.	Great Britain.	England.	Scotland.	Great Britain.
Duties Inwards.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
Acid, boracic	4,183 0 0	- -	4,183 0 0	4,183 0 0	- -	4,183 0 0
Alkanet root	1,733 18 0	57 18 8	1,791 16 8	1,729 6 0	57 18 8	1,787 4 8
Almonds	10,973 16 7	497 1 11	11,470 18 6	10,775 10 8	478 5 0	11,253 15 8
Aloes	2,184 5 5	- -	2,184 5 5	1,810 5 2	- -	1,810 5 2
Angelica	275 2 10	- -	275 2 10	275 2 10	- -	275 2 10
Annotto	671 0 1	- -	671 0 1	671 0 1	- -	671 0 1
Apples, not dried	2,996 12 8	299 15 0	3,296 7 8	2,912 19 7	298 2 0	3,211 1 7
Argol	678 18 5	8 0 1	686 18 6	670 3 6	8 0 1	678 3 7
Arrow root or powder	787 19 9	64 19 4	852 19 1	787 12 4	61 18 8	849 11 0
Ashes, pearl and pot	1,887 14 4	163 2 7	2,050 16 11	1,877 0 11	163 2 7	2,040 3 6
Bacon and hams	1,762 15 5	198 3 6	1,960 18 11	1,761 13 1	198 3 6	1,959 16 7
Balsams	2,490 14 11	57 2 7	2,547 17 6	2,383 6 4	57 2 7	2,440 8 11
Barilla and alkali	15,166 16 7	174 4 9	15,341 1 4	15,156 16 7	172 11 7	15,329 8 2
Bark for tanners' or dyers' use	19,001 0 0	3,340 13 10	22,341 13 10	18,970 2 8	3,280 17 9	22,251 0 5
Baskets	1,043 9 2	1 1 7	1,044 10 9	1,043 6 2	1 1 7	1,044 7 9
Beef, salted	300 19 4	11 12 3	312 11 7	300 19 4	11 12 3	312 11 7
Beer, spruce	5,956 6 3	892 9 10	6,848 16 1	5,950 17 0	890 6 11	6,841 3 11
Berries of all sorts	3,037 11 11	25 0 5	3,062 12 4	3,037 11 11	25 0 5	3,062 12 4
Books	8,843 4 7	86 5 4	8,929 9 11	8,824 1 10	85 8 5	8,909 10 3
Boots, shoes, and calashes	3,748 16 0	3 0 6	3,751 16 6	3,743 4 0	3 0 6	3,746 4 6
Borax	875 6 1	7 9 0	882 15 1	875 6 1	7 9 0	882 15 1
Boxes of all sorts	3,342 1 9	36 7 0	3,378 8 9	3,321 4 9	36 7 0	3,357 11 9
Brimstone	6,256 6 5	1,536 8 4	7,792 14 9	6,253 18 5	1,530 11 10	7,784 10 3
Bristles	25,185 16 1	428 8 3	25,614 4 4	25,184 14 7	428 8 5	25,613 2 10
Bugles	3,075 2 0	0 4 0	3,075 6 0	3,042 16 0	0 4 0	3,043 0 0
Butter	127,773 19 10	556 9 10	128,330 9 8	127,739 16 7	553 19 10	128,293 16 5
Canes of all sorts	3,590 8 2	40 16 4	3,631 4 6	3,569 17 7	40 16 4	3,610 13 11
Cantharides	1,869 18 0	12 9 0	1,882 7 0	1,858 19 4	12 9 0	1,871 8 4
Capers	1,534 4 4	19 1 0	1,553 5 4	1,534 4 4	19 1 0	1,553 5 4
Cassia lignea	1,663 1 10	144 1 0	1,807 2 10	1,663 1 10	144 1 0	1,807 2 10
Cheese	62,367 2 11	6,808 13 7	69,175 16 6	62,248 19 7	6,794 13 11	69,043 13 6
China ware, porcelain, and earthenware	4,369 18 5	12 1 3	4,381 19 8	4,200 17 7	12 1 3	4,212 18 10
Cinnamon	416 16 10	- -	416 16 10	416 16 10	- -	416 16 10
Clocks	5,938 7 11	154 13 9	6,093 1 8	5,868 14 5	154 13 9	6,023 8 2
Cloves	7,643 13 9	66 2 0	7,709 15 9	7,514 16 9	66 2 0	7,580 18 9
Cochineal, granilla, and dust	4,217 18 5	- -	4,217 18 5	4,195 15 1	- -	4,195 15 1
Cocoa, cocoa nut husks, shells, and chocolate	14,501 19 9	44 1 7	14,546 1 4	14,485 15 10	40 8 1	14,526 3 11
Coffee	548,092 8 11	28,165 1 9	576,247 10 8	547,106 13 8	28,158 5 0	575,264 18 8
Coral beads	2,140 18 1	- -	2,140 18 1	2,140 18 1	- -	2,140 18 1
Cordage and cables	22 18 4	1 16 3	24 14 7	22 18 4	1 16 3	24 14 7
Cork, unmanufactured	12,990 14 3	2,876 16 1	15,867 10 4	12,988 18 7	2,869 15 9	15,858 14 4
Corks, ready made	264 19 0	9 9 0	274 8 0	264 19 0	9 9 0	274 8 0
Corn, grain, meal, and flour (including buckwheat)	279,954 7 4	29,956 5 8	309,910 13 0	278,005 9 4	29,910 5 2	307,915 14 6
Cotton manufactures (not otherwise described)	2,930 11 9	6 13 10	2,937 5 7	2,903 1 9	6 13 10	2,909 15 7
Cream of tartar	1,374 12 2	291 10 3	1,666 2 5	1,354 18 9	291 10 3	1,646 9 0
Cubebs	1,208 18 6	35 6 0	1,244 4 6	1,208 18 6	35 6 0	1,244 4 6
Currants	312,749 17 2	2,382 12 4	315,132 9 6	311,948 2 6	2,376 12 4	314,324 14 10
Dye and hard woods; viz.						
Boxwood	1,868 15 7	- -	1,868 15 7	1,868 15 7	(Excess of repayments.)	1,867 17 4
Cedar, under 8 in. square	2,531 10 9	18 9 2	2,549 19 11	2,531 10 9	18 9 2	2,549 19 11
Fustic	913 7 2	8 17 2	922 4 4	905 18 9	8 12 3	914 11 0
Logwood	2,307 15 5	137 8 10	2,445 4 3	2,302 19 0	136 0 0	2,438 19 0
Mahogany	39,543 17 1	5,923 11 6	45,467 8 7	39,501 7 5	5,903 19 6	45,405 6 11
Nicaragua	815 12 8	- -	815 12 8	806 12 5	- -	806 12 5
Rosewood	8,027 11 10	351 4 6	8,378 16 4	8,027 11 10	348 14 6	8,376 6 4

List of Articles.	Gross Receipt.			Nett Produce.		
	England.	Scotland.	Great Britain.	England.	Scotland.	Great Britain.
Duties Inwards—continued.	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.
Eggs	21,565 1 2	- -	21,565 1 2	21,537 2 0	- -	21,537 2 0
Elephants' teeth	2,790 12 3	11 14 1	2,712 6 4	2,679 18 0	10 4 10	2,690 2 10
Embroidery and needlework	5,300 12 11	1 13 0	5,302 5 11	5,195 19 4	1 13 0	5,197 12 4
Essence of bergamot and lemons. (*See* Essential oils.)						
Feathers for beds	4,121 13 2	580 14 0	4,702 7 2	4,116 15 1	572 7 6	4,689 2 7
ostrich	626 5 2	- -	626 5 2	626 5 2	- -	626 5 2
Figs	22,371 15 10	270 18 5	22,642 14 3	22,131 8 5	270 18 5	22,402 6 10
Fish, anchovies	827 2 8	2 3 0	829 5 8	815 6 0	1 15 1	817 1 1
eels	940 10 0	-	940 10 0	940 10 0	- -	940 10 0
oysters	5,846 5 9	- -	5,846 5 9	5,846 5 9	- -	5,846 5 9
Flax, and tow, or codilla of hemp and flax	1,412 1 2	2,703 17 3	4,115 18 5	1,405 12 6	2,669 16 9	4,075 9 3
Flowers, artificial (not of silk)	615 7 9	0 18 3	616 6 0	614 7 9	0 18 3	615 6 0
Furs	34,331 19 2	8 3 9	34,340 2 11	34,071 6 3	8 3 9	34,079 10 0
Ginger, dry	3,450 12 7	63 7 5	3,514 0 0	3,428 13 7	63 7 5	3,492 1 0
Glass; viz. bottles, green or common	9,156 19 10	633 12 3	9,790 12 1	9,145 11 2	631 2 7	9,776 13 9
of all other sorts	4,680 11 7	83 16 6	4,764 8 1	4,674 1 3	83 16 3	4,757 17 6
Grains, Guinea	1,633 10 0	- -	1,633 10 0	1,633 10 0	- -	1,633 10 0
Grapes	1,580 8 1	102 14 7	1,683 2 8	1,559 8 1	102 14 7	1,662 2 8
Gum, animi and copal	1,508 15 8	- -	1,508 15 8	1,496 3 3	- -	1,496 3 3
Arabic	2,657 12 2	114 4 9	2,771 16 11	2,636 13 6	114 4 9	2,750 18 3
Senegal	5,788 0 3	- -	5,788 0 3	5,633 11 5	- -	5,633 11 5
lac dye	1,447 4 8	- -	1,447 4 8	1,447 4 8	- -	1,447 4 8
shellac	2,046 3 8	- -	2,046 3 8	2,046 3 8	- -	2,046 3 8
tragacanth	1,066 0 9	- -	1,066 0 9	986 14 9	- -	986 14 9
Hair, horse	243 18 6	3 12 1	247 10 7	243 18 6	3 12 1	247 10 7
human	701 15 9	- -	701 15 9	700 3 9	- -	700 3 9
Hair or goats' wool, manufactures of	2,482 15 5	31 13 0	2,514 8 5	2,474 19 5	31 13 0	2,506 12 5
Hats of chip and straw	16,707 3 2	- -	16,707 3 2	16,707 3 2	- -	16,707 3 2
Hemp	28,427 19 4	4,325 2 7	32,753 1 11	25,381 4 7	3,181 7 10	26,562 12 5
Hides, not tanned	21,988 0 7	1,984 7 9	23,972 8 4	21,794 6 8	1,963 15 9	23,758 2 5
tanned	1,164 13 2	6 0 0	1,170 13 2	1,164 13 2	6 0 0	1,170 13 2
Horns, horn tips, and pieces	1,715 1 5	54 12 3	1,769 13 8	1,705 12 11	53 3 2	1,758 16 1
Horses	945 0 0	57 0 0	1,002 0 0	937 0 0	57 0 0	994 0 0
Jalap	2,536 4 3	71 5 6	2,607 9 9	2,531 1 7	71 5 6	2,602 7 1
India rubbers	772 16 3	- -	772 16 3	765 0 10	- -	765 0 10
Indigo	30,597 13 10	140 9 6	30,738 3 4	30,539 17 4	130 17 6	30,670 14 10
Iron, in bars	20,338 17 0	1,011 12 0	21,350 9 0	20,233 9 2	1,010 19 0	21,244 8 2
of all other sorts	707 10 4	33 3 0	740 13 4	704 2 1	32 18 3	737 0 4
Isinglass	3,838 0 9	12 9 6	3,850 10 3	3,836 5 2	12 9 6	3,848 14 8
Juice of lemons, limes, and oranges	1,041 13 4	114 10 0	1,156 3 4	1,041 13 4	114 10 0	1,156 3 4
Juniper berries. (*See* Berries.)						
Lace thread	358 10 2	2 9 6	360 19 8	358 10 2	2 9 6	360 19 8
Lacquered ware	1,008 2 0	8 17 0	1,016 19 0	997 8 3	8 17 0	1,006 5 3
Lead, black	2,347 1 9	5 6 0	2,352 7 9	2,292 8 5	4 14 0	2,297 2 5
Leather gloves	27,220 0 5	- -	27,220 0 5	27,105 16 5	- -	27,105 16 3
manufactures of, except boots, shoes, and gloves	1,050 11 8	13 11 2	1,064 2 10	1,050 11 8	13 11 2	1,064 2 10
Lemons and oranges	50,255 11 9	2,315 5 4	52,570 17 1	49,852 17 9	2,305 15 4	52,158 13 1
Linens, foreign	17,429 11 7	43 19 10	17,473 11 5	17,190 2 1	43 19 10	17,234 1 11
Liquorice juice	19,924 7 4	1,888 7 0	21,812 14 4	19,924 7 4	1,888 2 4	21,812 9 8
Mace	2,613 8 11	- -	2,613 8 11	2,613 8 11	- -	2,613 8 11
Madder and madder root	18,976 8 2	2,754 5 3	21,730 13 5	18,856 8 2	2,723 15 6	21,580 3 8
Manna	505 6 6	- -	505 6 6	480 8 7	- -	480 8 7
Mats of Russia	4,119 2 10	700 17 9	4,820 0 7	3,987 17 2	668 3 1	4,656 0 3
other sorts	815 11 2	23 1 5	838 12 7	814 6 9	23 1 5	837 8 2
Melasses	128,216 5 8	126,439 5 11	254,655 11 7	128,089 16 5	125,841 15 3	253,931 11 6
Musical instruments	1,508 14 9	3 9 6	1,512 4 3	1,492 3 11	3 9 6	1,495 13 5
Myrrh	663 17 10	- -	663 17 10	495 4 11	- -	495 4 11
Nutmegs	14,505 8 3	50 2 6	14,555 10 9	14,502 8 5	50 2 6	14,552 10 9
Nuts, chesnuts	2,333 8 10	12 18 0	2,346 6 10	2,310 14 10	10 18 0	2,321 12 10
small	12,679 19 7	57 1 6	12,737 1 1	12,610 5 7	52 17 6	12,663 3 1
walnuts	1,454 12 10	49 5 4	1,503 18 2	1,437 9 4	48 18 4	1,486 7 8
Oil, castor	2,422 6 10	127 7 6	2,549 14 4	2,412 1 1	127 7 6	2,539 8 7
chemical, essential, and perfumed of all sorts	9,061 18 5	91 6 10	9,153 5 3	9,000 13 5	91 6 10	9,092 0 3
olive	42,580 1 10	384 2 5	42,964 4 3	42,505 1 0	383 14 1	42,888 15 1
palm	27,559 2 0	0 5 0	27,559 7 0	27,541 7 3	0 3 4	27,541 10 7
train, spermaceti and blubber	2,277 15 4	429 2 1	2,706 17 5	2,272 5 5	427 2 10	2,699 8 3
Oker	507 17 4	1 4 8	509 2 0	507 17 4	1 4 8	509 2 0
Opium	5,933 7 6	52 0 0	5,985 7 6	5,929 0 6	52 0 0	5,981 0 6
Orchal and orchelia	288 10 6	0 4 9	288 15 3	283 2 11	0 4 9	283 7 8
Paper	801 15 7	- -	801 15 7	801 8 1	- -	801 8 1
of the Isle of Man	969 0 0	- -	969 0 0	969 0 0	- -	969 0 0
for hangings	851 10 10	- -	851 10 10	851 10 10	- -	851 10 10
Pepper of all sorts	91,995 14 4	8,227 8 8	100,223 3 0	91,844 7 2	8,227 8 8	100,071 15 10
Pictures	2,011 2 1	53 15 7	2,064 17 8	2,010 11 1	53 15 7	2,064 6 8
Pimento	5,769 11 4	296 14 7	6,066 5 11	5,767 9 8	287 0 10	6,054 10 6
Pitch	368 13 3	93 17 7	462 10 10	368 13 3	89 18 7	458 11 10
Platting of chip or straw	15,209 7 9	- -	15,209 7 9	15,198 6 9	- -	15,198 6 9
Plums, dried	470 19 1	1 12 5	472 11 6	470 9 6	1 11 3	472 0 9
Prints and drawings	1,309 15 6	9 12 3	1,319 7 9	1,302 1 11	9 12 3	1,311 14 2
Prunes	5,730 14 2	361 7 8	6,092 1 10	5,718 16 0	356 4 9	6,075 0 9
Quicksilver	2,678 2 5	0 12 7	2,678 15 0	2,674 5 11	0 12 7	2,674 18 6
Quills, goose	3,609 14 7	592 16 7	4,202 11 2	3,609 14 7	592 16 7	4,202 11 2
Radix ipecacuanhæ	986 2 11	- -	986 2 11	977 6 11	- -	977 6 11
Rags, &c. for paper	1,401 0 7	318 15 10	1,719 16 5	1,375 4 8	318 4 1	1,693 8 9
Raisins	141,537 17 2	4,177 8 0	145,715 5 2	140,985 2 10	4,057 17 9	144,343 0 7
Rapeseed and other oil cakes	3,232 17 9	388 13 10	3,621 11 7	3,221 0 0	386 1 3	3,607 1 3
Rhubarb	4,213 17 10	- -	4,213 17 10	4,207 2 10	- -	4,207 2 10
Rice	6,508 12 5	237 15 8	6,746 8 1	6,417 2 11	237 13 0	6,654 15 11
in the husk	28,187 7 11	- -	28,187 7 11	20,095 9 8	- -	20,095 9 8
Sago	913 7 4	3 9 8	916 17 0	913 7 4	3 9 8	916 17 0
Saltpetre	5,144 18 4	9 10 8	5,154 9 0	5,123 10 5	9 10 8	5,133 1 1
Sarsaparilla	4,275 4 8	54 4 9	4,329 9 5	4,007 2 4	54 4 9	4,061 7 1
Scammony	1,477 18 10	3 14 5	1,481 13 3	1,384 19 6	3 14 5	1,388 13 11
Seeds of all sorts (including tares)	93,244 5 2	9,887 11 1	103,131 16 3	92,723 4 6	9,838 13 8	102,561 18 2
Senna	6,651 0 11	175 16 6	6,806 17 5	6,505 15 5	175 16 6	6,679 11 9
Ships' hulls and materials	726 7 7	203 1 9	929 9 4	637 10 6	179 1 9	816 12 3
Shumac	5,561 6 8	656 15 5	6,218 2 1	5,311 12 10	622 3 6	5,933 16 4
Silk, raw	14,202 2 2	- -	14,202 2 2	14,159 5 3	- -	14,159 5 3
waste, knubs and husks	294 4 3	- -	294 4 3	293 18 3	- -	293 18 3
thrown	52,013 1 5	- -	52,013 1 5	14,052 6 7	(Excess of drawbacks.)	12,097 18 1

List of Articles.	Gross Receipt.			Nett Produce.		
	England.	Scotland.	Great Britain.	England.	Scotland.	Great Britain.
Duties Inwards—continued.	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.
Silk manufactures, East Indian	19,296 15 8	- -	19,296 15 8	19,262 17 10	- -	19,262 17 10
not do.	149,079 11 4	9 4 8	149,088 15 9	148,667 5 10	9 4 5	148,676 10 3
Skins (not being furs)	16,283 13 11	2,104 0 6	18,393 16 5	16,047 17 7	2,045 15 11	18,093 13 6
Smalts	5,053 3 6	512 4 6	5,565 8 0	5,051 7 10	512 4 6	5,563 12 4
Soap, hard and soft, foreign	1,277 10 6	33 7 9	1,310 18 3	1,277 10 6	33 7 9	1,310 18 3
Spelter	5,578 17 6	125 0 5	5,703 17 11	5,573 17 6	125 0 5	5,698 17 11
Spirits, foreign, viz. rum	1,520,102 1 11	50,411 14 2	1,570,513 16 1	1,518,994 8 1	50,108 2 2	1,569,102 10 3
brandy	1,697,444 16 5	68,799 0 4	1,766,243 16 9	1,697,095 7 2	68,794 2 10	1,765,889 10 0
Geneva	15,577 8 1	7,956 16 8	23,534 4 10	15,567 9 8	7,946 18 9	23,514 8 5
of all other sorts	9,126 16 1	734 2 10	9,860 18 11	9,020 1 11	721 15 11	9,741 17 10
of the manufacture of Guernsey and Jersey	21,071 18 1	- -	21,071 18 1	21,054 0 7	- -	21,054 0 7
Sponge	2,147 11 7	- -	2,147 11 7	2,097 4 1	- -	2,097 4 1
Stones, viz. burrs for millstones	1,315 0 9	31 12 4	1,346 13 1	1,309 15 2	31 12 4	1,341 7 6
marble blocks	688 4 11	50 15 5	739 0 4	665 7 5	50 6 1	715 13 6
Succades	829 8 8	62 14 2	962 2 10	889 4 11	62 14 2	951 19 1
Sugar	4,437,812 6 2	508,660 15 4	4,946,473 1 6	3,571,449 11 1	415,069 1 7	3,986,518 12 8
Tallow	175,848 11 11	9,151 10 11	185,000 2 10	175,484 7 2	9,111 18 5	184,596 5 7
Tamarinds	679 0 11	114 8 0	793 8 11	676 12 8	112 0 2	788 12 10
Tar	5,539 6 1	1,130 11 1	6,669 17 2	5,506 5 8	1,094 4 0	6,600 9 8
Timber; viz. Balks and ufers, under 5 inches square	1,230 5 7	113 2 0	1,343 7 7	1,230 5 7	113 2 0	1,343 7 7
Battens and batten ends	81,366 9 11	28,362 7 4	109,728 17 3	80,140 15 5	28,347 8 10	108,488 4 3
Deals and deal ends	479,819 19 8	9,683 11 [illegible]	489,503 10 8	475,595 16 6	9,664 9 0	485,260 5 6
Firewood	4,518 3 1	39 8 5	4,557 11 6	4,475 12 9	38 4 6	4,513 17 3
Fir quarters	3,429 0 2	14 12 7	3,443 12 9	3,369 9 8	14 12 7	3,384 2 3
Knees of oak	1,356 8 9	518 18 1	1,875 6 10	1,354 13 5	515 5 8	1,869 19 1
Lathwood	25,510 2 3	2,381 13 4	27,891 15 7	24,2 3 11 6	2,346 6 11	26,609 18 5
Masts and spars	13,917 19 10	1,199 11 [illegible]	15,117 10 10	13,868 5 2	1,177 15 5	15,046 1 7
Oak plank	3,658 12 6	3,594 7 9	7,253 0 3	3,656 10 5	3,549 16 9	7,206 7 2
Oars	780 16 2	101 12 7	882 15 9	771 5 0	101 19 7	873 4 7
Staves	43,930 4 2	2,943 13 11	46,873 18 1	43,886 17 10	2,938 15 11	46,825 13 9
Teak	6,696 3 6	665 5 9	7,361 9 3	6,685 3 6	662 9 5	7,347 12 11
Timber, fir, 8 inches square or upwards	362,447 1 2	61,047 11 9	423,494 12 11	314,238 15 0	60,671 11 7	374,910 6 7
oak do.	29,999 10 7	8,174 11 3	38,174 1 10	29,966 7 10	8,082 1 4	38,048 9 2
of other sorts, do.	5,944 12 5	1,387 3 6	7,331 15 11	5,903 4 10	1,561 0 6	7,464 5 4
Wainscot logs, do.	7,453 4 10	353 7 1	7,806 11 11	7,391 17 9	353 1 1	7,744 18 10
Tobacco and snuff	2,146,442 0 9	291,392 5 0	2,437,834 5 9	2,137,242 10 1	291,289 17 6	2,428,532 7 7
Tortoiseshell	458 10 7	0 8 6	458 19 1	457 13 1	0 8 6	458 1 7
Toys	3,456 19 6	50 5 3	3,507 4 9	3,418 16 4	50 5 3	3,469 1 7
Turpentine, common	73,707 11 2	- -	73,707 11 2	73,558 14 3	- -	73,558 14 5
Valonia	6,908 2 10	30 0 0	6,938 2 10	6,907 7 10	30 0 0	6,937 7 10
Verdigris	2,468 4 0	38 9 0	2,506 13 0	2,457 0 0	38 9 0	2,495 9 0
Vermicelli and maccaroni	1,407 7 2	79 4 6	1,486 11 8	1,401 13 10	76 15 6	1,478 9 4
Vinegar	216 13 0	123 9 0	340 2 0	215 10 6	121 16 0	337 6 6
of the manufacture of Guernsey and Jersey	16 0 6	0 14 4	16 14 10	16 0 6	0 14 4	16 14 10
Water, Cologne, in flasks	4,032 11 2	112 7 0	4,144 18 2	4,031 5 2	109 19 0	4,141 4 2
Wax, bees', &c.	778 6 9	49 1 1	827 7 10	774 1 7	49 1 1	823 2 8
Wines of all sorts	1,331,584 16 5	104,259 8 6	1,435,844 4 11	1,277,196 15 5	99,829 2 8	1,377,025 18 1
	142,613 4 7	- -	142,613 4 7	142,613 4 7	- -	142,613 4 7
Wool, cotton	591,435 17 1	37,834 13 10	629,270 10 11	588,449 11 1	37,305 1 7	625,754 12 8
sheep's and lambs'	102,276 19 1	0 1 1	102,277 0 2	102,027 19 4	(Excess of repayments.)	102,027 2 11
Woollen manufactures, not otherwise described, including carpets	11,907 18 9	1 1 9	11,909 0 6	11,879 1 10	1 1 9	11,880 3 7
Yarn, cotton	499 12 5	303 15 2	803 7 7	499 12 5	303 15 2	803 7 7
linen, raw	534 8 0	118 14 9	653 2 9	534 8 0	118 6 7	652 14 7
Yellow berries. (*See* Berries.)						
Zaffre	416 12 10	- -	416 12 10	416 12 10	- -	416 12 10
All other articles	90,833 2 4	3,194 17 11	94,028 0 3	88,852 4 4	3,178 5 9	92,030 10 1
Total duties, inwards, carried forward	16,419,796 6 2	1,467,803 6 6	17,887,599 12 8	15,363,788 2 9	1,364,002 15 10	16,727,790 18 7
Coals and culm exported	51,042 8 0	5,573 14 10	56,616 2 10	48,923 0 5	5,407 14 11	54,330 15 4
British sheep and lambs' wool, woollen yarn, &c. exported	2,905 16 3	38 17 0	2,944 13 3	2,827 4 9	38 17 0	2,866 1 9
Skins, do.	15 2 7	- -	15 2 7	15 2 7	- -	15 2 7
Per centage duty on British goods exported	59,697 5 2	2,553 15 3	62,251 0 5	53,513 6 6	2,523 5 9	56,036 12 3
Total duties outwards, carried forward	113,660 12 0	8,166 7 1	121,826 19 1	105,278 14 3	7,969 17 8	113,248 11 11
Duties inwards, brought forward	16,419,796 6 2	1,467,803 6 6	17,887,599 12 8	15,363,788 2 9	1,364,002 15 10	16,727,790 18 7
outwards, do.	113,660 12 0	8,166 7 1	121,826 19 1	105,278 14 3	7,969 17 8	113,248 11 11
	16,533,456 18 2	1,475,969 13 7	18,009,426 11 9	15,469,066 17 2	1,371,972 13 6	16,840,433 10 8
Canal and dock duty, Isle of Man duties, rent of quays, goods sold for duty, &c.	156,294 15 2	1,944 1 9	158,238 16 11	117,948 6 2	1,648 17 6	120,198 3 8
Total, Great Britain	16,689,751 13 4	1,477,913 15 4	18,167,665 8 8	15,587,015 3 4	1,373,616 11 0	16,960,631 14 4
Ireland	- -	- -	1,516,988 16 2	- -	- -	1,507,249 11 11
Total, United Kingdom	- -	- -	19,684,654 4 10	- -	- -	18,467,881 6 3

Inspector General's Office, Custom House,
London, 25th of March, 1833.

WILLIAM IRVING,
Inspector General of Imports and Exports.

The charges of collection on the customs revenue of the United Kingdom during the same year were —

	Great Britain. £ s. d.	Ireland £ s. d.
Civil department	734,793 10 11¾	130,044 18 7
Harbour vessels	5,187 17 1	233 12 9
Cruisers	135,914 3 2¾	9,860 6 6
Preventive water guard	229,789 12 1½	112,189 1 3¼
Land guard	18,352 0 8	
	£1,124,037 4 1	£252,327 19 1¼

Inspector General of Imports and Exports. Miserable Attempt at Economy in this Department. — The office of inspector general of imports and exports was established in 1696. The accounts of the trade and navigation of the country, annually laid before parliament, are furnished by this office; and, owing to the ability of the officers, the improved manner in which these accounts are now made out, and the practice of giving statements of the quantities of the principal articles exported and imported, and the declared or real value of the former, they have become of great public importance. It is singular, however, that after having existed for about 135 years, and being gradually brought to a high pitch of perfection, this office was, in 1830, rendered nearly useless by a pitiful attempt to *save the salary of a couple of clerks!* Previously to that year, the accounts of the trade and revenue of the two great divisions of the empire were exhibited separately and jointly; so that if any one, for example, wished to know the quantity of sugar entered for home consumption in 1829, in Great Britain and in Ireland, he would have found the results separately stated; and in the same way for the produce of any article or tax. Nothing, it is plain, could be more desirable than an arrangement of this sort; which, indeed, considering the entirely different situation of the two great divisions of the empire, is the only one capable of affording the means of drawing any useful conclusions. But in 1830, ministers, in order to accomplish the miserable object already alluded to, had all the accounts consolidated into one mass (*rudis et indigesta moles*); so that it became impossible to tell what was the consumption of any article, or the produce of any tax, either in Great Britain or in Ireland,— the only information communicated being the general result as to the United Kingdom! Nothing more absurd was ever imagined. On the principle that Ireland is taken into the same average with Great Britain, we might take in Canada; for there is decidedly less difference between the condition and habits of the people of Canada and those of Britain, than there is between those of the British and Irish. But this measure was not objectionable merely from its confounding such dissimilar elements, and laying a basis for the most absurd and unfounded inferences: it rendered all the previous accounts in a great measure useless; and would, had it been persevered in, have effectually deprived statesmen and statisticians of some of the very best means of instituting a comparison between the past and future state of both divisions of the empire. Happily, however, this abortive attempt at economy has been relinquished. The moment Mr. Poulett Thomson attained to office, he took measures for the restoration of that system which had been so unwisely abandoned; and every one in any degree conversant with matters of finance, commerce, or statistics, will agree with us in thinking that the Right Hon. Gentleman could have rendered few more acceptable services. The public accounts for 1830, the only ones made out on the new system, were a disgrace to the country. We are glad, however, to have to add that they have been withdrawn, and replaced by others.

CUTLERY, a term used to designate all manner of sharp and cutting instruments made of iron or steel, as knives, forks, scissors, razors, shears, scythes, &c. Sheffield is the principal seat of the cutlery manufacture; but the knives and other articles made in London are said to be of superior quality.

The act 59 Geo. 3. c. 7. gives the manufacturers of cutlery made of *wrought* steel, the privilege of marking or stamping them with the figure of a hammer; and prohibits the manufacturers of any articles of cutlery, edge tools, or hardware, *cast or formed in a mould*, or manufactured otherwise than by means of a hammer, from marking or impressing upon them the figure of a hammer, or any symbol or device resembling it, on pain of forfeiting all such articles, and 5*l.* for every dozen. A penalty of 10*l.* per dozen, exclusive of forfeiture, is also imposed upon every person having articles of cutlery in his possession for the purpose of sale, marked with the words *London*, or *London made*, unless the articles so marked have been really manufactured within the city of London, or a distance of 20 miles from it.

CYPRESS, a forest tree of which there are many varieties, the species denominated the evergreen cypress (*Cupressus sempervirens*) and the white cedar (*Cupressus Thyoides*) being the most celebrated.

The cypress is indigenous to the southern parts of Europe, to several parts of Asia, and to America. It grows to a great size, and is a most valuable species of timber. It is never attacked by worms; and exceeds all other trees, even the cedar, in durability. Hence the Athenians, when desirous to preserve the remains of their heroes and other great men, had them enclosed in cypress coffins; and hence, also, the external covering of the Egyptian mummies is made of the same enduring material. The cypress is said to live to a great age; and this circumstance, combined with its thick dark green foliage, has made it be regarded as the emblem of death and the grave.

In his *Geography and History of the Western States of America*, Mr. Timothy Flint has given the following account of the cypress trees found in the southern parts of the valley of the Mississippi: — "These noble trees rear their straight columns from a large cone-shaped buttress, whose circumference at the ground is, perhaps, 3 times that of the regular shaft of the tree. This cone rises from 6 to 10 feet, with a regular and sharp taper, and from the apex of the cone towers the perpendicular column, with little taper after it has left the cone, from 60 to 80 feet clear shaft. Very near the top it begins to

throw out multitudes of horizontal branches, which interlace with those of the adjoining trees, and, when bare of leaves, have an air of desolation and death, more easily felt than described. In the season of vegetation the leaves are short, fine, and of a verdure so deep as almost to seem brown, giving an indescribable air of funereal solemnity to this singular tree. A cypress forest, when viewed from the adjacent hills, with its numberless interlaced arms covered with this dark brown foliage, has the aspect of a scaffolding of verdure in the air. It grows, too, in deep and sickly swamps, the haunts of fever, mosquitoes, moccassin snakes, alligators, and all loathsome and ferocious animals, that congregate far from the abodes of man, and seem to make common cause with nature against him. The cypress loves the deepest, most gloomy, inaccessible swamps; and, south of 33°, is generally found covered with sable festoons of long moss, hanging, like shrouds of mourning wreaths, almost to the ground. It seems to flourish best when water covers its roots for half the year. Unpromising as are the places and circumstances of its growth, no tree of the country where it is found is so extensively useful. It is free from knots, is easily wrought, and makes excellent planks, shingles, and timber of all sorts. It is very durable, and incomparably the most valuable tree in the southern country of this valley."—(Vol. i. p. 62.)

D.

DAMAGED GOODS, in the language of the customs, are goods, subject to duties, that have received some injury either in the voyage home or in the bonded warehouses.

It is enacted by the 3 & 4 Will. 4. c. 52., that if any goods rated to pay duty according to the number, measure, or weight thereof (except those after mentioned), shall receive damage during the voyage, an abatement of such duties shall be allowed proportionally to the damage so received; provided proof be made to the satisfaction of the commissioners of customs, or of officers acting under their direction, that such damage was received after the goods were shipped abroad in the ship importing the same, and before they were landed in the United Kingdom; and provided claim to such abatement of duties be made at the time of the first examination of such goods.—§ 30.

It is further enacted, that the officers of customs shall examine such goods, and may state the damage which, in their opinion, they have so received, and may make a proportionate abatement of duties; but if the officers of customs be incompetent to estimate such damage, or if the importer be not satisfied with the abatement made by them, the collector and comptroller shall choose 2 indifferent merchants experienced in the nature and value of such goods, who shall examine the same, and shall make and subscribe a declaration, stating in what proportion, according to their judgment, the goods are lessened in value by such damage, and the officers of customs may make an abatement of the duties according to the proportion of damage declared by such merchants.—§ 31.

Provided always, that no abatement of duties shall be made on account of any damage received by any of the sorts of goods herein enumerated; viz. cocoa, coffee, oranges, pepper, currants, raisins, figs, tobacco, lemons, and wine.—§ 32.

DAMAR, a kind of indurated pitch or turpentine exuding spontaneously from various trees indigenous to most of the Indian islands. Different trees produce different species of resin, which are designated according to their colour and consistence. "One is called *Damar-batu* in Malay, or *Damar-selo* in Javanese, which means hard or stony rosin; and another in common use *Damar-puteh*, or white rosin, which is softer. The trees which produce the damar yield it in amazing quantity, and generally without the necessity of making incisions. It exudes through the bark; and is either found adhering to the trunk or branches in large lumps, or in masses on the ground under the trees. As these often grow near the sea-side, or on the banks of rivers, the damar is frequently floated away, and collected in distant places as drift. It is exported in large quantities to Bengal and China; and is used for all the purposes to which we apply pitch, but principally in paying the bottoms of ships. By a previous arrangement, almost any quantity may be procured at Borneo, at the low rate of ½ dollar per picul."—(*Crawfurd, East. Archip.* vol. i. p. 455., vol. iii. p. 420.)

DAMASK (Ger. *Damasten Tafelzeug*; Du. *Damaskwerk*; Fr. *Venise, Damas*; It. *Tela damaschina*; Sp. *Tela adamascada*; Rus. *Kamtschatniüä salfftki*), a species of table linen.—(See LINEN.)

DANTZIC, one of the principal emporiums of the north of Europe, in West Prussia, in lat. 54° 20′ 48″ N., lon. 18° 38′ E. Population about 56,000. It is situated on the left or western bank of the Vistula, about 4 miles from where it falls into the sea. The harbour is at the mouth of the river, and is defended on each side by pretty strong forts. The town is traversed by the small river Motlau, which has been rendered navigable for vessels drawing 8 or 9 feet water.

Roads, Port, &c.—The road or bay of Dantzic is covered on the west side by a long, narrow, low, sandy tongue of land, extending from Reserhoft Point (on which is a light-house), in lat. 54° 50½′, lon. 19° 23 15″, upwards of 20 miles, in an E. by S. direction, having the small town of Heela, or Heel, near its termination. A light-house, elevated 123 feet (Eng.) above the level of the sea, has been erected within about ½ mile of the extremity of this point. The flashes of the light, which is a revolving one, succeed each other every ½ minute. Dantzic lies about S. ½ W. from the Heel; its port, denominated the Fairwater.

being distant about 4 leagues. There is good anchorage in the roads for ships of any burden; but they are exposed, except immediately under the Heel, to the north and north-easterly winds. There are harbour lights at the entrance to the port. All ships entering the Vistula must heave to about a mile off the port, and take a pilot on board; and pilots must always be employed in moving ships in the harbour, or in going up and down the river. The usual depth of water at the mouth of the river is from 12 to 13 feet (Eng.); in the harbour, from 13 to 14 feet; at the confluence of the Motlau with the Vistula, from 9 to 9½ feet; and in town from 8 to 9 feet. Moles have been erected on both sides the entrance to the harbour: that on the eastern side, which is most exposed, is constructed of granite, but is not yet completed; the other is partly of stone and partly of timber.

Trade of Dantzic. — Next to Petersburgh, Dantzic is the most important commercial city in the north of Europe. It owes its distinction in this respect to its situation; the Vistula, with its important tributaries the Bug, Narew, &c., giving it the command of a great internal navigation, and rendering it the *entrepôt* where the surplus products of West Prussia, Poland as far as Hungary, and part of Lithuania, are exchanged for those imported from the foreigner. The exports of wheat from Dantzic are greater than from any other port in the world. There are four sorts of wheat distinguished here; viz. *white*, *high-mixed*, *mixed*, and *red*, according as the white or red predominates. The quality of the Dantzic wheat is for the most part excellent; for, though small in the berry, and not so heavy as many other sorts, it is remarkably thin skinned, and yields the finest flour. The white Polish wheat exported here is the best in the Baltic. Rye is also very superior, being both clean and heavy; and the exports are very large. The exports of barley and oats are comparatively inconsiderable, and the qualities but indifferent. Very fine white peas are exported. Next to grain, timber is the most important article of export from Dantzic. The principal supply of fir timber, masts, &c. is brought by the River Narew, which, with its branches, rise in Old Prussia and Lithuania, and falls into the Bug near the confluence of the latter with the Vistula. Oak plank, staves, &c. are brought down from the higher parts of the Vistula, and the tributary streams of Dunajetz, Wieprez, &c. Weed ashes, pearl-ashes, bones, zinc, wool, spruce beer, feathers, &c. are also exported.

Money. — Accounts used formerly to be wholly kept in guldens, guilders, or florins of 30 groschen. The rixdollar = 3 florins = 90 groschen = 270 schillings = 1,620 pfennings. The florin or guilder = 9*d.* sterling, and the rixdollar = 2*s.* 3*d.*

A new system was, however, introduced into all parts of the Prussian dominions, conformably to the decrees of the 30th of September, 1821, and of the 22d of June, 1823; but it has not hitherto entirely superseded the method of accounting previously in use.

The Cologne mark (containing 3,609 Eng. grains) is the weight at present used in the Prussian mint in weighing the precious metals. The fineness of the coins is not determined, as previously, by carats or loths, but the mark is divided for this purpose into 288 grains. Accounts are now kept in the public offices in thalers or dollars (R.), silver groschen, and pfennings: 1 dol. = 30 sil. gr.; 1 sil. gr. = 12 pf.

The only silver monies now coined are dollars and ⅙ dollar pieces; but smaller coins are in circulation, of former coinages.

The Prussian silver coins have ½ of alloy; and as the mark is coined into 14 dollars, each should contain 257·68 Eng. grains pure silver, and be worth about 2*s.* 11½*d.* sterling; but the assays do not always strictly coincide with the mint valuation.

The gold coins are Frederick d'ors, double, single, and half pieces. The mark of 288 grains, having 260 grains of fine gold, is coined into 35 Fred. d'ors. The Fred. d'or is worth from 5 dol. 18 sil. gr. to 5 dol. 22 sil. gr., according to the demand.

Weights and Measures. — The commercial weights are,

32	Loths	= 1 Ounce.	20	Pounds	= 1 Small stone.
16	Ounces	= 1 Pound.	33	Pounds	= 1 Large stone.
16⅔	Pounds	= 1 Lispound.			

110 lbs. = 1 centner; 3 centners = 1 shippound (330 lbs.); 100 lbs. of Dantzic = 103·3 lbs. avoirdupois = 46·85 kilog. = 94·7 lbs. of Amsterdam = 96·6 lbs. of Hamburgh.

The liquid measures are, for beer,

5	Quarts	= 1 Anker.	2	Hhds.	= 1 Both.
4	Ankers	= 1 Ahm.	2	Both	= 1 Fuder.
1½	Ahm	= 1 Hhd.	2	Fuder	= 1 Last = 620·4 Eng. wine gallons.

In wine measure, which is less than beer measure, the ahm = 39⅔ Eng. gallons. The pipe = 2 ahms.

The last of corn = 3¾ malters = 60 scheffels = 240 viertels = 960 metzen; and weighs 4,680 lbs. Dantzic weight in rye. The scheffel = ·547 of a hectolitre = 1·552 Winchester bushel. Hence the last of 60 scheffels = 11 quarters 3 bushels; the last of 56½ scheffels = 10 quarters 7 bushels.

The Dantzic foot = 11·3 Eng. inches, or 100 Dantzic feet = 94·16 Eng. feet. The ell is 2 feet Dantzic measure. The Rhineland or Prussian foot = ·3138 French metres, or 12·356 Eng. inches: hence 100 Prussian = 102·8 English feet. The Prussian or Berlin ell has 25⅓ Prussian inches = 26·256 Eng. ditto. 100 Berlin ells = 72·93 Eng. yards; and 137·142 Berlin ells = 100 Eng. yards. 14¾ Prussian miles are equal to 15 geographical miles.

Oak planks, deals, and pipe staves, are sold by the shock of 60 pieces; wheat, rye, &c. are sold by the last of 56½ scheffels. — (*Kelly's Cambist; Nelkenbrecker, Manuel Universel.*)

Imports. — We regret our inability to lay before the reader any account of the quantities of the different articles usually imported into Dantzic. They consist of sugar, coffee, wine, oil, brandy, spices, copper, lead, furs, cotton stuffs and cotton yarn, woollens, hardware, silks, indigo, dye woods, &c.

We subjoin an

Account of the principal Articles exported from Dantzic during each of the Three Years ending with 1831, with their Prices and Values in Sterling Money.

Articles.	1829. Quantity.	1829. Average Prices in Sterling Money.	1829. Value.	1830. Quantity.	1830. Average Prices in Sterling Money.	1830. Value.	1831. Quantity.	1831. Average Prices in Sterling Money.	1831. Value.
		L. s. d.	L. s. d.		L. s. d.	L. s. d.		L. s. d.	L. s. d.
Wheat, Imp. qr. at 10⅓ per last	306,766	2 7 1	722,178 5 10	398,588	2 2 2	840,356 7 4	133,800	2 10 2	335,615 0 0
Rye, ditto	78,475	0 17 4	67,858 6 8	83,774	1 0 3	86,137 8 6	12,530	1 8 6	17,855 5 0
Barley, ditto	6,675	0 13 8	4,561 5 0	7,388	0 15 0	5,526 0 0	11,680	1 1 3	12,410 0 0
Oats, ditto	9,195	0 10 11	5,020 0 7	21,492	0 11 2	11,982 19 0	2,220	0 15 8	1,739 0 0
Peas, ditto	2,812	0 18 8	2,652 10 8	16,916	1 0 8	17,479 17 4	15,850	1 7 7	21,859 15 10
Flour, barrels of 196 lbs.	2,016	1 3 0	2,318 8 0	11,810	1 1 6	12,695 15 0	12	1 2 0	13 4 0
Biscuits, bags of 1 cwt.	3,224	0 10 0	1,612 0 0	10,359½	0 10 0	5,179 15 0	6,932	0 11 0	3,812 12 0
Fir timber, squared, pieces	64,794	1 0 0	64,794 0 0	47,548	1 0 0	47,548 0 0	37,497	1 0 0	37,497 0 0
Fir deals, long, short, and cuts, ditto	290,258	0 4 0	58,051 12 0	270,309	0 4 0	54,061 16 0	179,166	0 4 0	35,833 4 0
Masts and spars, ditto	1,001	1 15 0	1,751 15 0	2,707	1 10 0	4,060 10 0	313	2 0 0	626 0 0
Oak plank, ditto	12,669	0 9 0	5,701 1 0	10,298	0 8 10	4,548 5 8	10,706	0 10 0	5,353 0 0
timber, ditto	2,042	1 3 0	2,548 6 0	1,675	1 3 0	1,926 5 0	1,197	1 3 0	1,376 11 0
staves, shock of 60 pieces	17,464	1 15 6	30,998 12 0	11,018	2 0 0	22,036 0 0	6,210	2 14 6	16,922 5 0
Clapboards, ditto	117	5 0 0	585 0 0	28	5 0 0	140 0 0	52	5 0 0	260 0 0
Treenails, ditto	5,661½	0 1 6	424 12 3	2,855	0 1 6	214 2 6	5,420	0 1 6	406 10 0
Lathwood, fathoms	933	2 0 0	1,866 0 0	1,102½	2 0 0	2,205 0 0	936	2 0 0	1,872 0 0
Weed-ashes, barrel of about 3 cwt.	8,330	1 13 0	13,744 10 0	6,587	1 13 0	10,868 11 0	5,078	1 13 0	8,378 14 0
Pearlashes, cwt.	13,570	1 2 0	14,927 0 0	2,485	1 2 0	2,733 10 0	369	1 3 0	424 7 0
Bones, ditto	5,563½	2 5 0	12,517 17 6	4,232	2 8 0	10,375 4 0	2,867	2 10 0	9,667 10 0
Zinc, ditto	28,510	0 12 8	18,056 6 8	29,767	0 12 8	18,852 8 8	2,946	0 12 4	1,816 14 0
Wool, ditto	1,282½	7 13 6	9,843 4 0	1,855	7 15 2	14,236 10 10	454	8 8 0	3,813 12 0
Feathers, pounds	36,010	0 1 2	2,100 11 8	22,825	0 1 2	1,331 9 2	13,530	0 1 2	789 5 0
Salted provisions, barrel of 200 pounds	157	2 4 0	345 8 0	376	2 4 0	827 4 0	45	2 4 0	99 0 0
Spruce beer, kegs	25,460	0 6 6	8,274 10 0	30,039	0 6 6	9,762 13 6	26,191	0 6 6	8,512 1 6
Total value	-	- -	1,052,511 2 10	-	- -	1,185,085 12 6	-	- -	526,952 10 4

Account, showing the Countries for which the principal Articles exported from Dantzic during the Three Years ending with 1831 were shipped, and the Quantities shipped for each.

Articles.	1829. Britain and her Possessions.	1829. France.	1829. Holland.	1829. Other Countries.	1830. Britain and her Possessions.	1830. France.	1830. Holland.	1830. Other Countries.	1831. Britain and her Possessions.	1831. France.	1831. Holland.	1831. Other Countries.
Wheat, Imp. qr. at 10⅓ per last	214,933	24,169	64,594	3,070	328,982	21,473	43,970	4,163	125,330	- -	7,908	562
Rye, ditto	8,980	9,455	30,866	28,374	8,453	52	28,753	47,816	2,510	- -	4,564	5,456
Barley, ditto	3,648	237	2,118	672	4,128	- -	788	2,452	11,380	- -	- -	300
Oats, ditto	8,923	274	- -	- -	20,997	- -	- -	465	2,220	- -	- -	- -
Peas, ditto	2,444	- -	217	181	14,512	- -	1,768	836	14,780	- -	560	510
Flour, barrels of 196 lbs.	2,016	- -	- -	- -	8,926	- -	2,776	108	10	- -	- -	2
Biscuits, bags of 1 cwt.	3,224	- -	- -	- -	10,287½	- -	- -	72	6,732	- -	- -	200
Fir timber, squared, pieces	31,232	24,013	7,852	1,697	26,639	10,379	8,622	1,908	33,642	2,152	1,115	588
Fir deals, long, short, and cuts, ditto	98,609	92,090	60,724	38,835	85,664	88,913	48,758	46,994	111,347	11,005	18,292	38,522
Masts and spars, ditto	111	750	40	100	132	2,323	171	81	169	60	18	66
Oak plank, ditto	8,128	2,273	- -	2,268	4,746	2,317	- -	3,235	8,724	263	- -	1,719
timber, ditto	1,170	872	- -	- -	97	1,227	- -	351	311	238	- -	648
staves, shock of 60 pieces	7,873	7,786½	864	940½	4,388	3,366	807	2,457	5,462	366	34	348
Clapboards, ditto	107½	- -	5	4½	22	- -	2	4	44	8	- -	- -
Treenails, ditto	5,285½	- -	- -	376	2,288	- -	- -	567	4,712	- -	- -	708
Lathwood, fathoms	929	- -	- -	4	1,096½	- -	6	- -	936	- -	- -	- -
Weed-ashes, barrel of about 3 cwt.	2,073	- -	6,245	12	2,720	- -	3,867	- -	2,581	- -	1,987	519
Pearlashes, cwt.	- -	- -	10,456	3,154	21½	- -	2,251	212½	- -	- -	369	- -
Bones, ditto	5,563½	- -	- -	- -	4,323	- -	- -	- -	3,867	- -	- -	- -
Zinc, ditto	24,629	- -	- -	3,881	25,689	- -	- -	4,078	1,946	- -	- -	1,000
Wool, ditto	1,219½	- -	37	26	1,769	- -	66	- -	454	- -	- -	- -
Feathers, pounds	30,810	- -	5,100	100	21,093	- -	1,402	330	13,530	- -	- -	- -
Salted provisions, barrel of 200 lbs.	157	- -	- -	- -	376	- -	- -	- -	4	- -	- -	- -
Spruce beer, kegs	24,950	- -	80	430	29,320	- -	- -	719	25,846	- -	- -	345

Remarks on Tariff. — The following Table affords a pretty sufficient specimen of the sort of tariff which the Prussian government are so anxious to extend all over Germany; and in furtherance of which object they have displayed equal address and perseverance. Some of the duties are abundantly moderate; but those on cotton goods, wrought iron, and woollen goods, are quite exorbitant. It is obvious too, that from their being imposed according to the weight, they fall principally on the coarser fabrics, or those worn by the mass of the people. The high duties on wrought iron are particularly objectionable. If Prussia wish to become a manufacturing country, she ought to open her ports for the reception of all articles made of iron, from wherever they may be had cheapest. They are the principal instruments by which manufactures are carried on; and if one were to set about contriving methods for depressing the latter, they would not easily find one better fitted to effect their object than by confining the manufacturers in their choice of tools and instruments, and making them adopt those that were bad and dear, because they happened to be made at home. The duties on sugar and coffee are also, in the circumstances of Prussia, quite excessive. We are, indeed, astonished that so liberal and intelligent a government as that of Berlin should, at this late period, become the patron of the exploded errors and absurdities of the mercantile system.

Rates of Duty on the chief Articles imported for Home Consumption into the Eastern Prussian Provinces in 1832.

Articles.	Prussian Currency.	Makes in British Money, per	Makes in British Money, about
	R. s.g. pf.		*L. s.g. d.*
Anise seed, per centner of 110 lbs. Prussian - -	1 0 0	cwt.	0 2 10½
Alum do. do. -	1 10 0	—	0 3 10
Almonds do. do. -	4 15 0	—	0 13 0
Brimstone do. do. -	0 5 0	—	0 0 5¾
Coffee do. do. -	6 15 0	—	0 18 9
Cacao do. do. -	6 15 0	—	0 18 9
Cassia do. do. -	7 10 0	—	1 1 1½
Currants do. do. -	4 15 0	—	0 13 0
Cotton goods do. do. -	55 0 0	—	7 18 0
yarn, sewing, do. do.	6 0 0	—	0 17 3
twist do. do. -	2 0 0	—	0 5 9
Coals do. do. -	0 1 3	—	0 0 1¾
Earthenware do. do. -	0 10 0	—	0 0 11½
Glass do. do. -	3 0 0	—	0 8 8
Ginger do. do. -	7 10 0	—	1 1 1½
Herrings, per barrel - -	1 0 0	brls.	0 2 11
Hardware, per cwt. of 110 lbs. Prussian - -	55 0 0	cwt.	7 18 5
Indigo do. do. -	0 15 0	—	0 1 5
Iron, unwrought, (in bars,) do.	1 0 0	—	0 2 10½
wrought do. -	6 0 0	—	0 17 3
Logwood do. -	0 5 0	—	0 0 5¾
Lead do. -	0 15 0	—	0 1 5
Linen do. -	11 0 0	—	1 11 8
Oil, Provence, in flasks, &c. do.	8 0 0	—	1 3 0½

Articles.	Prussian Currency.	Makes in British Money, per	Makes in British Money, about
	R. s.g. pf.		*L. s. d.*
Oil, Provence, in casks, per cwt. of 110 lbs. Prussian -	1 0 0	cwt.	0 2 10½
green do. -	1 0 0	—	0 2 10½
Orange peel do. -	4 15 0	—	0 13 10
Pimento do. -	7 10 0	—	1 1 1½
Pepper do. -	7 10 0	—	1 1 1½
Porter and ale do. -	2 15 0	—	0 7 2½*
Raisins do. -	4 15 0	—	0 13 0
Rice do. -	3 0 0	—	0 8 8
Rum and brandy do. -	8 0 0	—	1 3 0½†
Sugar, manufactured, do. -	11 0 0	—	1 11 8
raw do. -	5 0 0	—	0 14 5
Syrup do. -	5 0 0	—	0 14 5
Saltpetre do. -	0 10 0	—	0 0 11½
Shot do. -	2 0 0	—	0 5 9
Steel, unwrought do. -	1 0 0	—	0 2 10½
wrought do. -	6 0 0	—	0 17 3
Silk goods do. -	110 0 0	—	15 17 8
Tea do. -	11 0 0	—	1 11 8
Tin, in bars do. -	2 0 0	—	0 5 9
in plates do. -	3 20 0	—	0 10 7
Vitriol do. -	0 0 7½	—	0 0 8½
White lead do. -	2 0 0	—	0 5 9
Woollen goods do. -	33 0 0	—	4 15 0
Wine do. -	8 0 0	—	1 3 0½‡

With the exception of wool and bones, almost all articles of export are duty free.

Corn Trade of Dantzic.—The reader will find, under the head CORN LAWS AND CORN TRADE (pp. 427—430.), a pretty full account of the Polish corn trade. But the importance of the subject will excuse our giving a few additional details. Grain is almost wholly brought to Dantzic by water, in flat-bottomed boats suited to the navigation of the Vistula, Bug, &c. Mr. Consul Gibson estimates the expense of the conveyance of wheat and rye thither, including the duty at Thorn and the charges of turning on the river, till put into the granary, as follows:—

	Per Imp. qr. *s. d.*	*s. d.*
From the upper provinces on the Bug, a distance of from 700 to 500 miles - -	9 2	to 7 10
From the provinces of Cracow, Sendomir, and Lublin, 550 to 350 miles - - -	6 6	- 5 4
From Warsaw and its neighbourhood, about 240 miles - - - -	4 9	- 3 11
From Wlaclaweck and its neighbourhood, about 140 miles - - - -	4 2	to 3 5
From Grandentz, a distance of about 70 miles, no duty at Thorn, and when not turned on the river - - - -	0 10	- 0 9

N. B.—These are the ordinary charges. They are higher when there is any unusual demand for exportation.

The Bug has many windings, and its navigation, which is tedious and uncertain, can only be attempted in the spring, when the water is high. It is the same, though in a less degree, with some of the rivers that fall into the Vistula before it reaches Warsaw; and towards Cracow the Vistula itself is frequently unnavigable, especially in dry seasons, except in spring, and after the midsummer rains, when the snow melts on the Carpathian mountains. The navigation of the Polish rivers in 1832 was more than usually bad. The corn from the upper provinces did not reach Dantzic till from 2 to 4 months later than usual, and was burdened with a very heavy additional expense. In fact, the supplies of grain at Dantzic depend quite as much on the abundance of water in the rivers, or on their easy navigation in summer, as on the goodness of the harvests.

"There are," says Mr. Jacob, "two modes of conveying wheat to Dantzic by the Vistula. That which grows near the lower parts of the river, comprehending Polish Russia, and part of the province of Plock, and of Masovia, in the kingdom of Poland, which is generally of an inferior quality, is conveyed in covered boats, with shifting boards that protect the cargo from the rain, but not from pilfering. These vessels are long, and draw about 15 inches water, and bring about 150 quarters of wheat. They are not, however, so well calculated for the upper parts of the river. From Cracow, where the Vistula first becomes navigable, to below the junction of the Bug with that stream, the wheat is mostly conveyed to Dantzic in open flats. These are constructed on the banks, in seasons of leisure, on spots far from the ordinary reach of the water, but which, when the rains of autumn, or the melted snow of the Carpathian mountains in the spring, fill and overflow the river, are easily floated.

"Barges of this description are about 75 feet long, and 20 broad, with a depth of 2½ feet. They are made of fir, rudely put together, fastened with wooden treenails, the corners dovetailed and secured with slight iron clamps,—the only iron employed in their construction.

"A large tree, the length of the vessel, runs along the bottom, to which the timbers are secured. This roughly cut keelson rises 9 or 10 inches from the floor, and hurdles are laid on it, which extend to the sides. They are covered with mats made of rye straw, and serve the purpose of dunnage; leaving below a space in which the water that leaks through the sides and bottom is received. The bulk is kept from the sides and ends of the barge by a similar plan. The water which these ill-constructed and imperfectly caulked vessels receive, is dipped out at the end and sides of the bulk of wheat.

"Vessels of this description draw from 10 to 12 inches water, and yet they frequently get aground in descending the river. The cargoes usually consist of from 180 to 200 quarters of wheat.

"The wheat is thrown on the mats, piled as high as the gunwale, and left uncovered, exposed to all the inclemencies of the weather, and to the pilfering of the crew. During the passage, the barge is carried along by the force of the stream, oars being merely used at the head and stern, to steer clear of the sand banks, which are numerous and shifting, and to direct the vessel in passing under the several bridges. These vessels are conducted by 6 or 7 men. A small boat precedes with a man in it, who is employed sounding, in order to avoid the shifting shoals. This mode of navigating is necessarily very slow; and during the progress of it, which lasts several weeks, and even months, the rain, if any fall, soon causes the wheat to grow, and the vessel assumes the appearance of a floating meadow. The shooting of the fibres soon forms a thick mat, and prevents the rain from penetrating more than an inch or two. The main bulk is protected by this kind of covering, and, when that is thrown aside, is found in tolerable condition.

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* A cask, or 1⅓ barrel, weighs about 5⅓ cwt.
† A puncheon of 90 to 100 gallons weighs 8 to 9 cwt., according to the degree of strength.
‡ A hogshead weighs about 5¼ cwt.

"The vessels are broken up at Dantzic, and usually sell for about ⅔ of their original cost. The men who conduct them return on foot.

"When the cargo arrives at Dantzic or Elbing, all but the grown surface is thrown on the land, spread abroad, exposed to the sun, and frequently turned over, till any slight moisture it may have imbibed is dried. If a shower of rain falls, as well as during the night, the heaps of wheat on the shore are thrown together in the form of a steep roof of a house, that the rain may run off, and are covered with a linen cloth. It is thus frequently a long time after the wheat has reached Dantzic, before it is fit to be placed in the warehouses.

"The warehouses (*speichers*) are very well adapted for storing corn. They consist generally of 7 stories, 3 of which are in the roof. The floors are about 9 feet asunder. Each of them is divided by perpendicular partitions, the whole length, about 4 feet high, by which different parcels are kept distinct from each other. Thus the floors have 2 divisions, each of them capable of storing from 150 to 200 quarters of wheat, and leaving sufficient space for turning and screening it. There are abundance of windows on each floor, which are always thrown open in dry weather to ventilate the corn. It is usually turned over 3 times a week. The men who perform the operation throw it with their shovels as high as they can, and thus the grains are separated from each other, and exposed to the drying influence of the air.

"The whole of the corn warehouses now left (for many were burnt during the siege of 1814), are capable of storing 500,000 quarters of wheat, supposing the quarters to be large enough to fill each of the 2 divisions of the floors with a separate heap; but as of late years it has come down from Poland in smaller parcels than formerly, and of more various qualities, which must of necessity be kept distinct, the present stock of about 280,000 quarters is found to occupy nearly the whole of those warehouses which are in repair, or are advantageously situated for loading the ships. Ships are loaded by gangs of porters, with great despatch, who will complete a cargo of 500 quarters in about 3 or 4 hours."—(*First Report.*)

We extract from the work of Mr. Oddy, the following additional information with respect to the Dantzic warehouses:—"The warehouses for linens, ashes, hemp, &c., and the extensive granaries, are situated in an island formed by the Motlau. To guard these warehouses, from 20 to 30 ferocious dogs of a large size, amongst which are blood-hounds, are let loose at 11 o'clock at night. To keep the dogs within their districts, as well as to protect the passengers, large high gates run across the end of each of the streets leading to the main one: no light is allowed, nor any person suffered to live on this island. These dogs prowl about the whole night, and create great terror. It would be impossible otherwise to keep property secure amongst the hordes of Poles, Jews, &c. met with here; no punishment would have half the effect that the dread of the dogs produces. In winter, when the water is frozen over, there are keepers placed at particular avenues, with whips, to keep the dogs in their range.

"No fire or robbery was ever known; and the expense to each building, with the immense property they contain, is very reasonable. Vessels, either from the interior, or other quarters, lying alongside these warehouses, are not allowed to have a fire, or light of any kind, on board, nor is a sailor or any other person suffered even to smoke. These regulations partly extend to all shipping lying in the harbour."—(*European Commerce*, p. 249.)

Timber Trade, Brack.—Fir timber is usually brought down in its natural state, and is squared into logs, or sawn into planks, in winter, when the labourers cannot be otherwise employed. The staves shipped here are carefully assorted, and are reckoned superior to those of America.

The expenses of the water conveyance of squared timber, including duty at Thorn, are—

		s.	*d.*		*s.*	*d.*	
From the Bug	from about	6	0	to	5	9	per piece.
— Wieprez (above Warsaw)	—	4	6	-	4	4	do.
— Vistula (above do.)	—	3	0	-	2	4	do.

Being higher when the demand is unusually great, or when hands are scarce.

At Dantzic, as well as at Petersburgh (which see), Riga, and several other Baltic ports, sworn inspectors (*brackers*) are appointed by authority to examine certain articles intended for exportation, and to classify them according to their qualities. Staves and timber of all sorts, with the exception of pine wood, is subjected to the brack. Prime quality is branded *Krohn* or *Crown*; second quality, *Brack*; and the third or lowest quality, *Bracks Brack*. All unmerchantable articles are rejected by the brackers, and are not allowed to be exported.

The gauge for crown pipe staves, which the bracker has always in his hand, is 4½ inches broad, 1¾ thick, and 64 inches in length, which they must be at least; but they are expected to be larger in every respect.

Pipe staves are from 64 to 68 inches long; 6, 5, and 4½, at least, broad; and from 1½ to 3 inches thick.

Brandy staves are at least 54 to 58 inches long, as thick and broad as pipe staves.

Hogshead staves are 42 to 45 inches long, as thick and broad as pipe staves, all English measure.

The quality is ascertained by marks, to distinguish each sort, as follows:—

Crown pipe staves, stamped at the end, K.
— brack, in the middle, I.
— bracks brack, II.
Hogshead crown, at the end, O K.
— brack, in the middle, I.
Hogshead bracks brack, II.
Brandy hogshead crown, at the end, B K.
— brack, in the middle, ✕.
— bracks brack, ✕ ✕.

Oak planks are assorted in the same manner. Crown plank is marked in the middle, C. Brack, in the end and middle, B. Bracks brack, B B.

To distinguish 1½ from 2, and 2½ from 3 inches, the 1½ are marked with I, and 2½ ✕.

At the end, in rough strokes, with coloured paint, brack is yellow I; bracks brack, white II; crown, red III.

Ashes are subjected to the brack. The calcined are opened, and the crust taken off; others are not examined unless there be any suspicion of their quality, or the staves of the hogshead be supposed to be too thick. Every cask of potashes is opened.

Shipping Charges and Duties, exclusive of Commission.

	R. s.gr.	
On Wheat	about 2 22½	per last of about 10⅓ Imp. qrs.
Rye	— 2 20	
Barley		
Peas		
Oats	— 2 12	
Flour	5 per cent.	
Ship biscuit		
Pearlashes	*R. s.gr.* about 0 10	per shippound of 330 lbs.
Weed-ashes	— 0 6	— barrel do.
Fir timber	— 0 10	— load.

	R. s.gr.	
On Deck deals	about 0 23½	per load.
Short deals		
Deal ends		
Lathwood	— 1 0	— fathom.
Clapboards	— 2 0	— shock of 60 pieces.
Oak plank	— 1 10	— load.
Oak ends		
Staves	— 13 10	— mille pipe.
Black or spruce beer	— 0 7½	— last of 11 kegs.
Feathers	— 2 0	— 100 lbs.

N. B.—The Prussian pound is about 3⅓ per cent. heavier than the English pound. The expenses of sending goods down are taken at about an average rate; but if the whole, or the greater part of the cargo, were loaded in the Fairwater or roads, the expenses would be somewhat more.

Shipping. — Account of the Number of Ships, specifying the Countries to which they belonged, with their Tonnage and Crews, that arrived at and departed from Dantzic, in 1831.

Description.	Arrivals.				Departures.			
	Ships.	Tonnage.		Crews.	Ships.	Tonnage.		Crews.
		Tons.	*Lasts.*			*Tons.*	*Lasts.*	
Bremen	2	216	144	12	2	216	144	12
British	108	17,560	11,707	875	107	17,493	11,662	871
Dutch	59	4,341	2,894	253	59	4,341	2,894	253
Danish	29	2,956	1,971	200	29	2,956	1,971	200
French	1	90	60	7	1	90	60	7
Hamburgh	3	310	207	17	3	310	207	17
Hanoverian	22	1,773	1,182	108	23	1,863	1,242	113
Lubeck	16	2,376	1,584	132	16	2,376	1,584	132
Mecklenburg	7	1,005	670	54	7	1,005	670	54
Oldenburg	7	336	224	25	7	336	224	25
Prussian	250	61,555	41,037	2,580	251	58,900	39,267	2,514
Russian	11	2,280	1,520	96	10	2,130	1,420	89
Swedish and Norwegian	59	4,981	3,321	355	60	5,049	3,366	359
	574	99,779	66,521	4,714	575	97,065	64,711	4,646
Lying from 1830	65	Remaining in port			64			
	639				639			

Port Charges. — The charges on a ship of 200 lasts, or about 300 tons burden, are —

	R. s. g. pf.
Harbour money	88 26 8
Ditto in gold (say in Fred. d'ors, reckoned at 5 r., in which this must be paid)	14 6 8
River money	0 0 0
Commercial contribution	3 10 0
Expedition expenses	13 10 0
Captain's allowance for expenses on shore	16 20 0
Tracking the ship into the harbour (Fairwater)	2 0 0
Ballast money, &c.	10 24 0
Pilot to the ballast wharf	4 0 0
Ditto moving the ship in Fairwater	2 15 0
Police passport	3 5 0
Clearing the vessel in and out	16 20 0
Making 25*l.* 6*s.* 6*d.* sterling, at the exchange of 6 r. 28 s. gr.	175 17 4

The charges on the ships of all countries having reciprocity treaties with Prussia (which is generally the case) are the same, only Dantzic captains receive no allowance for shore expenses. River or stream money is only paid by vessels that bring goods to town, or load in the Motlau (above the blockhouse): if a ship remain in the Fairwater or Vistula, the river money is levied on the craft carrying the goods, and falls on the latter.

Dantzic is a favourable place for ships careening and repairing, and for obtaining supplies of all sorts of sea stores at a reasonable rate.

There belong to the port 75 ships, measuring about 16,000 lasts = 24,000 tons, navigated by about 950 men. They are employed in foreign trade. The port has no fishery, and no coasting trade worth mentioning.

Custom-house Regulations. — The shipmaster must, within 24 hours after arrival in port, make a declaration of the cargo on board, and of the ship's provisions, and he incurs a severe penalty if the declaration do not prove correct. The ship's hatches (if goods are on board) are sealed on arrival, and an additional declaration is accepted before they are unsealed; but no *later* declaration, supplementary, or explanatory, of the first, and no submitting the goods to investigation by the officers, is received or allowed. If the shipmaster be unable to make a complete declaration on arrival, a Custom-house officer is put on board, who remains until the ship is unloaded, at an expense to her of about 2*s.* per day and night. The cargo can only be discharged in presence of a customs officer.

The shipmaster, and not the receiver of the goods, is made responsible, if the *contents* of the packages do not correspond with his declaration; and he is only exonerated from this by solemnly averring, on making the declaration, that the contents are unknown to him. An evident mistake or oversight is treated as rigorously as an intentional fraud.

On commencing to *load*, the shipmaster receives a blank loading list, in which he must daily note the articles he takes on board, or he is liable to fine; but this regulation is not very rigidly enforced. On clearing out, this list is compared with the goods entered by the vessel, when the sea passport is given.

Ballast can be discharged only at stated places, on pain of the shipmaster being fined.

It is material, however, to observe, that the whole Custom-house business of the shipmaster is conducted by Custom-house brokers, so that he is never at a loss, being informed by the one he selects what he has to do. Alterations are frequently made in the Custom-house regulations.

The shipmaster receives, on arrival, from the pilot commodore, a copy of the harbour regulations, in his own language, with instructions how to act as to ballast.

Warehousing. — Such goods as pay a higher duty than ½ a dollar per centner (about 1*s.* 5½*d.* for about 113 lbs. English) may be placed in the king's stores (no where else), and remain there for 2 years without payment of duty. No allowance is made for waste or damage in these stores. Other goods, not capable of being changed, may be placed in private stores, under the king's lock; but not elsewhere, without permission. No rent is charged for goods in the king's stores, during the first 3 months; afterwards about 1½*d.* monthly rent is charged for the first, and about 3*d.* monthly for the second year, per centner of about 113 lbs. English.

In private warehouses, the monthly rent for 10 quarters of wheat or other grain is from about 3½*d.* to 7*d.*, or more, according as warehouse room is abundant or otherwise. Other goods do not usually pay by the piece, but part of a store is hired for them, and the rent generally comes somewhat higher in proportion.

The cost of rent and turning grain is from 1*s.* 2*d.* to 1*s.* 6*d.* monthly, for 10 quarters, according to the season of the year and other circumstances; but more when granary room is scarce, and wages high.

Banking Establishments. — There is none such here, excepting a branch of the Royal or Government Bank of Berlin. This was founded partly in the view of receiving deposits of money under litigation in the courts of the province; monies the property of minors and charitable institutions, the former until disposable or placed on good security; and monies belonging to individuals not merchants, and at times, also, those of the latter. Interest is paid on such deposits as follows: viz.

3 per cent. on sums belonging to minors.
2½ do. do. charitable institutions, churches, and sums deposited by the courts of justice, and
2 do all other deposits.

The principal is demandable at pleasure, unless otherwise stipulated. The bank makes advances on grain and some other kinds of goods at 5 per cent. interest; discounts bills with 3 signatures, not having more than 2 months to run, at 6 per cent., and sometimes, when money is plenty, at a lower rate. It also makes advances at 4 per cent. on deposits of Fred. d'ors and certain foreign monies; and it occasionally buys bills for account of, and sells bills on, the Berlin bank. It does not issue notes. The amount of its capital is not fixed; but government guarantees its transactions. It is relieved from the payment of postage on money, and it is not required to use the stamps fixed by law, on bills for its deposit transactions, but only those of 10 s. gr., (about 11½*d.*); while individuals must use stamps for such bills of 5 s. gr. for every 400 r., of not longer date than 3 months, and for every 200 r. of longer date.

On negotiable bills, however, the bank must use the stamps fixed by law, say of 5 s. gr. (about 5¾*d.*) for sums of 50 dol. to 400 dol., and at the same rate for every additional sum between 100 dol. and 400 dol.

Bills from and on foreign places, negotiated at Dantzic, are not subject to the stamp duty.

The affairs of the bank are not made public. Being a government concern, there are no dividends. It is not supposed to be very profitable, at least in the present circumscribed state of trade, although enjoying the advantages of exemption from postage of monies, and paying less stamp duty. It is true, however, that the direct advantage of the lower stamp duty is enjoyed by the borrower.

Credit, Brokerage, &c. — Very few goods are consigned from abroad for sale, for such consignments rarely turn to good account. Imports are seldom sold for cash, but generally at 1, 2, and 3 months' credit, or longer. The discount allowed for cash payments, when sold on time, is usually 6 per cent., but it varies according as money is plentiful or otherwise.

Any person, being a burgher of the town (which any one of good character may become), may transact business as a commission merchant or factor; but brokers must be chosen by the elders of the Corporation of Merchants, approved by the regency of the province, and sworn in by the magistracy of the town.

The usual rates of commission are —

3 per cent. on wood articles } exported,
2 do. other goods }
2 do. goods imported,
with from 1 to 2 per cent. on do. for *del credere*, or guarantee of debts.

The corn factor receives r. 1·7 (about 4*s.* 9*d.* sterling) per last (of 60 scheffels) of all grain, from the buyer, and 1 per cent. from the seller.

The rates of brokerage are —
12½ s. gr. (nearly 1*s.* 2½*d.*) per 100*l.*
7½ — (— 8·7*d.*) per 100*l.*
3¾ — (— 4·3*d.*) per 100 r.
1 per mille for bills on Berlin, Warsaw, and Paris.
½ per cent. on monies placed at interest, for a period not less than 6 months, from the borrower, and
1 per mille from the lender.
1 per mille usually for short discounts, from both parties.
1 per cent. on the actual or the computed amount of transactions in public funds, from both parties.
½ per cent. usually (sometimes more or less) for merchandise.
On grain for exportation, the brokerage is recently fixed at 1

per cent., to be paid by the seller, the buyer refunding to him 5 s. gr. per last of 56½ scheffels.

Burghers being merchants, may act as brokers, without direct authority, in the purchase from, and sale of goods to, Poles, receiving 1 per cent. on goods bought, and 1 to 2 per cent. on goods sold, according to circumstances.

Bankruptcies are not of frequent occurrence here. Their most prevalent sources at present are speculations in grain, and general badness of trade. Bankrupts cannot obtain a discharge except by private composition, without which they always remain responsible to each individual creditor, who can attach them at any time, if he can show that they possess property, although their affairs have been settled by judicial authority. This, and the tediousness of settlements in court, make both debtor and creditor desirous of settling by composition; and hence few insolvents are made bankrupt, by their affairs being brought into court. It is to be observed, that creditors, having claims by bills in force, must by law be paid to the full, before those with only book claims receive any thing; but to avoid the tardiness of the court, bill creditors here generally agree to let book creditors receive half as much in composition as they themselves get. It is, however, difficult to arrange a composition, as each creditor can make his own terms; and those who hold out, generally get more, at least privately, than the ostensible rate of composition offered by the debtor.

If a private composition cannot be effected, and the insolvent is regularly made bankrupt, by his affairs being put into court, the law prescribes that, if a small portion of the creditors will not accept the dividend with which the greater portion are satisfied, the latter can require the former to consent, or become responsible for the estate producing as much finally; but so many objections may be made, that this compulsive measure is very seldom resorted to. A private composition is, however, generally preferred by all parties, more particularly by the debtor, as being the only means by which he can become entirely free, and get a general discharge.

Honest bankrupts, whose affairs are brought into court, may be freed from personal arrest by faithfully delivering up all their property. Dishonest ones, upon conviction, are punished by being sent to the House of Correction; but they often escape punishment, from the too great laxity in enforcing the laws in criminal matters.

The creditors of a bankrupt estate brought into court, rank under 8 different classes, each prior class enjoying a precedency of claim over those following, to the full amount. The two most considerable classes, in general, are the 6th and 7th, the former being that of the bill, the latter that of the book, creditors.

Tares, &c. — The duties are in general payable on the gross weight; a fixed allowance being made, in many cases, according to the packages; in others, there is no allowance. The tariff specifies the particular regulations on this point. The tare on goods in single sacks is 4 lbs. per centner (about 113 lbs. English), it being left to the option of the receiver to have the nett weight ascertained.

In trade there are fixed rates of tare only on the following goods; viz.

Potashes, 6 per cent., when sold by a merchant.
Dye wood, ground, 8 to 11 per bale.
Currants 14 per cent. - - in whole butts.
—— 16 — - - half do.
—— 18 — - - ¼ and 1-8th do.
Figs and raisins 10 — - casks.
Olive oil 16 — - - whole and half butts.
—— 18 to 20 - - ¼ and 1-8th.
—— 16 — - pipes.
Seed oil, latterly the tare is ascertained.
Pepper, English, in double bags, 7 lbs.
— Danish, in bags and mats, 11 lbs.
Orange and lemon peel, 6 per cent., or tare ascertained.
Rice from England or Hamburgh, the tare as on the casks, less 2 lbs. per cask on that from England, and in proportion to the weight on that from Hamburgh. Danish should give 10 per cent. tare, but the buyers are in general not satisfied with this.
Tallow, 10 per cent., or nett tare.
Tea, Danish bohea, 78 lbs. if in linen and mats.
— 24 lbs. in chests above 100 lbs.
— 22 lbs. — of about 80 lbs.
Most frequently the tare is ascertained.
Vitriol, 10 per cent.
Raw sugar, 12 to 16 per cent. according to the size of the chests.
Candied sugar, tare by invoice, adding in that proportion for the difference in the weight usually heavier.
Syrup in whole casks, 10 per cent.
— in ½ ditto, and barrels, 12 per cent.
On the sale of imports, 1 per cent. on the nett weight (called good weight) is allowed in favour of the buyer.

Insurance. — There are no insurance companies nor private insurers here; but there are agents of insurance companies in Hamburgh for ships, and of those of London and other places for houses and lives.

Wages of common Labourers in Dantzic vary from 9*d.* to 11*d.* a day, and those of carpenters, masons, &c., from 1*s.* 6*d.* to 2*s.* Wages in all the large Prussian towns are higher than in the small towns of the country, from the price of flour, bread, and butcher's meat being higher in them. This is occasioned partly by the latter being subject to *octrois* or excise duties on entering the great towns, from which the country districts and smaller towns are exempted. The king receives 2-3ds of these duties, and the towns the other 1-3d. This duty is a great obstacle to the free intercourse with the country.

(We have derived these details from different sources, but principally from the valuable *Answers* made by the *Consul* to the *Circular Queries*.)

PRUSSIAN SHIPPING. — Summary Statement of the Arrivals of Ships at, and of their Departures from, the different Prussian Ports, in 1830. — (From a Work (p. 182.) of C. W. Ferber, Privy Councillor to his Prussian Majesty, Berlin, 1832.)

Names of the Ports.		Ships.	Burden in Lasts of 4,000 lbs.	Laden.		In Ballast.		Foreign Vessels comprised in the previous Columns.					
				Ships.	Lasts.	Ships.	Lasts.	Ships.	Burden in Lasts of 4,000 lbs.	Laden.		In Ballast.	
										Ships.	Lasts.	Ships.	Lasts.
Memel	arr.	697	81,445	144	14,210	553	67,235	485	53,191	85	6,661	400	46,530
	dep.	700	81,377	697	81,190	3	187	487	53,113	485	52,963	2	150
Pillau	arr.	1,033	61,965	296	19,428	737	42,537	870	42,663	212	10,001	658	32,662
	dep.	1,052	63,779	1,021	60,638	31	3,141	874	42,543	857	41,616	17	927
Dantzic	arr.	1,182	113,192	296	21,306	886	91,886	766	50,548	208	9,864	558	40,684
	dep.	1,171	112,564	1,149	111,476	22	1,088	767	51,703	746	50,668	21	1,035
Stolvemünde	arr.	108	3,166	47	1,352	61	1,814	20	731	1	32	19	699
	dep.	106	3,078	84	2,357	22	721	20	731	19	699	1	32
Rügenwalde	arr.	140	4,619	19	477	121	4,142	67	2,395	1	45	66	2,350
	dep.	137	4,401	118	3,677	19	724	68	2,432	65	2,297	3	135
Colberg	arr.	98	3,551	41	1,347	57	2,204	16	641	6	229	10	412
	dep.	95	3,383	86	2,898	9	485	16	641	14	542	2	99
Swinemünde	arr.	930	64,055	783	51,190	147	12,865	318	19,561	273	17,047	45	2,514
	dep.	842	61,796	639	44,800	203	16,996	320	19,649	257	15,059	63	4,590
Wolgast	arr.	93	5,381	42	2,131	51	3 250	27	890	20	666	7	224
	dep.	107	6,506	80	4,979	27	1,527	32	1,242	13	410	19	832
Griefswalde	arr.	143	10,434	41	1,382	102	9,052	27	986	13	311	14	675
	dep.	137	9,335	107	4,931	30	4,404	33	1,213	25	721	8	492
Stralsund	arr.	347	17,984	146	6,605	201	11,379	111	4,140	78	2,921	33	1,219
	dep.	351	18,620	258	12,110	93	6,510	112	4,289	60	1,606	52	2,683
Arrivals		4,771	365,792	1,855	119,428	2,916	246,364	2,707	175,746	897	47,777	1,810	127,969
Departures		4,698	364,839	4,239	329,056	459	35,783	2,729	177,556	2,541	166,581	188	10,975
Total		9,469	730,631	6,094	448,484	3,375	283,147	5,436	353,302	3,438	214,358	1,998	138,944

Countries to which Foreign Vessels belonged. — Of the foreign vessels that entered and were despatched from Prussian ports in 1830, there were —

	Arrivals.	Departures.	Tonnage (in Lasts).
British	740	745	155,755
Netherlands	697	680	74,186
Danish	584	584	49,294
Hanoverian	238	254	25,607
Swedish	142	147	18,476
Norwegian	152	149	13,309

Then follow the ships of the Hanseatic cities, Russia, Mecklenburg, &c.

Ships belonging to Prussia. — M. Ferber gives the following Table of the shipping of Prussia: —

Summary Indication of the Vessels belonging to Prussian Owners, in the Years 1825, 1826, 1827, 1828, 1829, 1830, and 1831. — (*Ferber*, p. 174.)

Ports.	1825.		1826.		1827.		1828.		1829.		1830.		1831.	
	Ships.	Lasts.	Ships.	Lasts.	Ships.	Lasts.	Ships.	Lasts.	Ships.	Lasts.	Ships.	Lasts.	Ships.	Lasts.
Königsberg -	13	1,617	16	2,368	16	2,539	17	2,738	18	3,026	20	3,008	11	3,228
Pillau - -	11	1,767	12	2,026	16	2,670	14	2,468	15	2,602	15	2,660	14	2,589
Memel - -	36	4,229	36	4,278	35	4,076	36	4,377	36	4,815	38	5,095	38	4,543
Elbing - -	12	1,430	15	2,178	17	2,650	19	3,175	18	2,941	19	3,106	20	3,154
Dantzic - -	67	12,309	72	14,934	73	15,386	76	15,999	78	16,095	76	16,058	76	15,934
Stettin - -	220	20,559	230	22,808	241	25,024	238	25,057	235	25,014	244	25,460	252	26,398
Cöslin - -	32	1,724	28	1,637	34	2,764	35	2,792	39	3,045	39	2,909	41	3,181
Stralsund - -	82	6,235	78	5,983	80	6,324	81	6,186	76	6,001	75	6,310	81	7,248
Griefswalde -	41	2,957	42	3,069	52	3,928	54	4,070	52	4,103	52	4,185	52	4,179
Wolgast - -	21	1,626	19	1,540	18	1,586	20	1,788	22	1,992	21	1,919	23	2,164
Barth - - -	41	3,554	41	3,572	41	3,784	41	3,784	41	3,784	44	4,369	44	4,369
Total -	576	58,007	589	64,393	623	70,731	631	72,434	630	73,418	643	75,079	652	76,987

Influence of Reciprocity Treaties. — This Table is important, as exhibiting the utter groundlessness of the clamour raised in this country as to the reciprocity treaty with Prussia. Taking the last at 1½ ton, the total increase of Prussian shipping, from 1825 to 1831 inclusive, will be 76 ships and 28,470 tons, which is very little more than the increase, during the same period, of the shipping belonging to the port of Newcastle! It will be observed, too, that the increase since 1827 has only amounted to 29 ships and 9,384 tons. If, therefore, our shipping be distressed, it is quite impossible it should have been occasioned by the increase of shipping in Prussia. Considering, indeed, the extent of sea coast now in possession of that kingdom, the tranquillity she has enjoyed since the peace, and her rapid progress in manufactures and commerce, the small increase of her shipping is not a little surprising. It could not well have been less, though the reciprocity treaty had never been heard of. Indeed, many of the Prussian ship owners think, and, perhaps, justly, that it would have been greater had that treaty not been entered into. It must also be kept in view, that this trifling increase in the shipping of Prussia is the only increase that has taken place in the shipping of any country of the north of Europe since 1825. The mercantile navies of Sweden, Denmark, and Russia, have undergone little or no change; but it is a fact, that the shipping of Norway has fallen off even more rapidly than that of Prussia has increased, and yet we have a reciprocity treaty with her! Is not this sufficient to show that the influence of these treaties has been grossly exaggerated by our ship owners? and that they cannot really have done them any injury?

DATES (Ger. *Datteln;* Fr. *Dattes;* It. *Datteri;* Sp. *Datiles*), the fruit of the palm tree (*Phœnix dactylifera* Lin.). This tree is abundant in Egypt, Barbary, Arabia, Persia, and the adjacent countries, particularly on the confines of the desert, and wherever there is sufficient moisture. It is a tall majestic tree; and repeated references are made to it in the sacred writings (Ecclus. xxiv. 14.), and in the Koran. Mohammed, in one of his sayings, beautifully compares the upright and generous man to the palm tree. "He stands erect before his Lord; in his every action he follows the impulse received from above, and his whole life is devoted to the welfare of his fellow-creatures." But the veneration in which the palm tree is held in the East is to be ascribed more to its utility than to its beauty. Dates form the principal part of the subsistence of the inhabitants of many parts of Arabia and Barbary, and they are held in the highest estimation wherever they are met with. "They are," says Burckhardt, "by far the most essential article of food for the lower classes of Medina; their harvest is expected with as much anxiety, and attended with as much general rejoicing, as the vintage in the south of Europe; and if the crop fails, which often happens, as those trees are seldom known to produce abundantly for 3 or 4 successive years, or is eaten up by the locusts, universal gloom overpreads the population, as if a famine were apprehended." — (*Travels in Arabia*, vol. ii. p. 214.)

There is an endless variety of dates. Generally, however, they may be described as being somewhat in the shape of an acorn, but usually larger, consisting of a thick fleshy substance, including and freely separating from an oblong stone or kernel, having a furrow on the one side. Their taste is agreeably sweet, accompanied with a slight astringency. The new fruit is called by the Arabs *ruteb*. When the dates are allowed to remain on the tree till they are quite ripe, and have become soft and of a high red colour, they are formed into a hard solid paste or cake called *adjoue*. This is formed by pressing the ripe dates forcibly into large baskets, each containing about 2 cwt. "In this state," says Burckhardt, "the Bedouins export the adjoue: in the market it is cut out of the basket, and sold by the pound. It forms part of the daily food of all classes of people: in travelling it is dissolved in water, and thus affords a sweet and refreshing drink. During the monsoon, the ships from the Persian Gulf bring adjoue from Bussorah to Djidda for sale in small baskets weighing about 10 lbs. each; this kind is preferred to every other. Ships bound from Arabia for India take with them a considerable quantity of adjoue, which is readily disposed of amongst the Mohammedans of Hindostan." —(*Travels in Arabia*, vol. i. p. 57.)

The Arabians and Egyptians use the leaves of the tree in the preparation of bags and baskets; the boughs, the outer and inner bark of the trunk, and the fleshy substance at the root of the leaves, where they spring from the trunk, have all their respective uses;

and besides this, the kernels of the fruit, notwithstanding their hardness, are used as food for cattle; they are soaked for two days in water, when they become softened, and are given to camels, cows, and sheep, instead of barley: they are said to be much more nutritive than that grain. There are shops at Medina in which nothing else is sold but date kernels; and the beggars are continually employed in all the main streets in picking up those that are thrown away. — (*Burckhardt*, vol. ii. p. 212.)

All the refinements of Arabian cookery are exhausted in the preparation of dates; and the Arabs say that a good housewife will daily supply her lord, for a month, with a dish of dates differently dressed.

Palm trees are raised by shoots; and Dr. Shaw mentions that they arrive at their vigour in about 30 years, and continue so 70 years afterwards, bearing yearly 15 or 20 clusters of dates, each of them weighing 15 or 20 lbs.: after this period, they begin to decline. — (*Travels in the Levant*, p. 142. 4to ed.)

The best dates imported into Great Britain are said to come from Tunis, but they are most commonly brought from Smyrna and Alexandria. They should be chosen large, softish, not much wrinkled, of a reddish yellow colour on the outside, with a whitish membrane betwixt the flesh and the stone. Those that are dry and hard are of little value.

DEALS, OR DEAL BOARDS (Ger. *Dielen;* Du. *Deelen;* Da. *Dæler;* Sw. *Tiljor;* Fr. *Planches minces;* It. *Tavole, Piane;* Rus. *Doski;* Pol. *Tarcice*), a thin kind of fir planks, much used in carpentry: they are formed by sawing the trunk of a tree into longitudinal divisions, of greater or less thickness, according to the purposes they are intended to serve. They are imported from Dantzic, Petersburgh, Narva, and many other ports in the Baltic, and from North America; but those from Christiania, the capital of Norway, are the best, and bring the highest price. They are distinguishable from those produced in the contiguous provinces of Norway; their superiority has been said to depend principally on their being more perfectly sawed; but it really depends on the greater care with which the sap-wood and other defective portions of the timber is cut away, and on the quality of the timber.

A Russian standard deal is 12 feet long, 11 inches wide, and 1½ inch thick; 400 feet of 1½ inch plank make a load.

A Christiania standard deal is 11 feet long, 9 inches wide, and 1¼ inch thick. There is another standard of Norway deals at Dram, 10 feet long, 9 inches wide, and 1½ inch thick. — (See CHRISTIANIA.)

DEBENTURE, a term used at the Custom-house to signify the *certificate* subscribed by the customs officers, and given to the exporter of goods on which a bounty or drawback is allowed, bearing that the exporter has complied with the required regulations, and that he is entitled to such bounty or drawback.

It is enacted by 3 & 4 Will. 4. c. 52. § 86., that no drawback or bounty shall be allowed upon the exportation of any goods, unless entered in the name of the real owner thereof, or of the person who had actually purchased and shipped the same, in his own name and at his own risk, on commission.

Such owner or commission merchant shall make and subscribe a declaration on the debenture that the goods have been actually exported, and are not to be relanded in any part of the United Kingdom, &c.; and if such owner or commission merchant shall not have purchased the right to such drawback or bounty, he shall declare under his hand in the entry, and in his oath upon the debenture, the person who is entitled thereto; and the name of such person shall be inserted in the cocket, and in the debenture, and his receipt on the latter shall be the discharge of such drawback or bounty. — § 87.

For these and the other clauses in the act relating to debentures, see IMPORTATION AND EXPORTATION.

All debentures must be on 5*s.* stamps.

Debentures or certificates for bounty on the exportation of linens or sailcloth exempted from duty.

DELFT, OR DELF (Ger. *Fayence, Unächtes Porzellän;* Du. *Delfs porcelyn;* Fr. *Faience*), a coarse species of porcelain originally manufactured at Delft, whence its name. It is now rarely used in this country.

DEMURRAGE, in commercial navigation, is an allowance made to the master or owners of a ship by the freighter, for detaining her in port longer than the period agreed upon for her sailing. It is usually stipulated in charterparties and bills of lading, that a certain number of days, called running or working days, shall be allowed for receiving or discharging the cargo, and that the freighter may detain the vessel for a further specified time, or as long as he pleases, on payment of so much *per diem* for such over-time. When the contract of affreightment expressly stipulates that so many days shall be allowed for discharging or receiving the cargo, and so many more for over-time, such limitation is interpreted as an express stipulation on the part of the freighter, that the vessel shall in no event be detained longer, and that if detained he will be liable for demurrage. This holds even in cases where the delay is not occasioned by any fault on the freighter's part, but is inevitable. If, for example, a ship be detained, owing to the crowded state of the port, for a longer time than is allowed by the contract, demurrage is due; and it is no defence to an action for demurrage, that it arose from port regulations, or even from the unlawful acts of the Custom-house officers. Demurrage is not, however, claimable for a delay occasioned by the hostile detention of the ship, or the hostile occupation of the intended port; nor is it claimable for any delay wilfully occasioned by the master, or owners, or crew of the vessel. The claim for demurrage

ceases as soon as the ship is cleared out and ready for sailing, though she should be detained by adverse winds, or tempestuous weather. — (*Chitty's Commercial Law*, vol. iii. pp. 426—431.)

DENARIUS, a Roman coin, estimated by Dr. Arbuthnot to have been worth $7\frac{3}{4}d.$; but its value differed at different periods.

DENIER, a small French coin, of which there were 12 to a sol.

DIAMOND (Ger. Du. Da. and Fr. *Diamant;* Sw. *Demant, Diamant;* It. Sp. and Port. *Diamante;* Rus. *Almas;* Pol. *Dyamant;* Lat. *Adamas;* Hind. *Hira*), a precious stone, which has been known from the remotest ages. Pliny has described it (*Hist. Nat.* lib. 37. § 4.); but his account is, in many respects, inaccurate. It is found in different parts of India, and in Borneo; it is also found in Brazil, on which, indeed, Europe may be said to be at present entirely dependent for supplies of diamonds. Hitherto, however, it has not been met with any where except within the tropics. It is the most beautiful and most valuable of precious stones. Its most common colours are white and grey of various shades. It occurs also red, blue, brown, yellow, and green. The colours are commonly pale. It is always crystallised, but sometimes so imperfectly that it might pass for amorphous. It is the hardest body in nature. External lustre from splendid to glimmering; internal always splendid. It is brittle; its specific gravity is 3·5. When rubbed, it becomes positively electric, even before it has been cut by the lapidary, which is not the case with any other gem. — (*Thomson's Chemistry.*)

According to Mr. Milburn (*Orient. Com.*), the colour should be perfectly crystalline, resembling a drop of clear spring water, in the middle of which you will perceive a strong light playing with a great deal of spirit. If the coat be smooth and bright, with a little tincture of green in it, it is not the worse, and seldom proves bad; but if there be a mixture of yellow with the green, then beware of it — it is a soft, greasy stone, and will prove bad.

Tests of Diamonds. Cutting, &c. — To ascertain whether any specimen is a true diamond or not, a fine file may be used; and if the surface of the stone be the least abraded or scratched by its action, it is not a diamond. The difference will also appear upon close examination without this instrument; the rays of light easily pass through other gems, but in the diamond they are refracted to the surface, which occasions its superior brilliancy. If the specimen under examination be very minute, it may be placed between 2 half-crowns, or other flat metallic surfaces, and pressed with the thumb and finger; if a diamond, it will not be injured, but if otherwise, it will break and fall to powder. On account of the extreme hardness of the diamond, the art of cutting and polishing it was for a long time unknown in Europe. But, in 1456, a young man of the name of Louis Berghen, a native of Bruges, is said to have constructed a polishing wheel for the purpose, which was fed with diamond powder instead of *corundum*, which the Chinese and Hindoos had been long accustomed to employ. Berghen was led to this discovery by observing the action produced by rubbing 2 rough diamonds together. Diamonds are cut into brilliants and rose diamonds; the former being, for the most part, made out of the octahedral crystals, and the latter from the spheroidal varieties. — (*Joyce's Practical Mineralogy; Rees's Cyclopædia, &c.*)

" *Commercial Value of Diamonds.* — In the great or wholesale trade there is but little fluctuation in the price of those diamonds which may be termed *stones in general demand.* I will begin with brilliants from 1 grain to $2\frac{1}{2}$ grains each. — Such brilliants, double cut, and what may be termed fine, are worth from 7*l.* to 8*l.* per carat. Needy sellers may take 10 per cent. less for cash; but this is the general average price for a lot of 10, 20, or 50 carats of well-made stones, if the quality be good.

" Brilliants, from 2 grains to 3, may be bought in lots, at from 7*l.* 7*s.* to 8*l.* per carat. It is to be understood, that diamonds in a lot are never all quite free from faults; hence there may arise a difference of 10 per cent. in the price. Stones of 3 grains, if fine and perfect, are always in demand, at 8*l.* or 9*l.* per carat.

" Brilliants, from 3 grains to 4, if very fine and well proportioned, are worth from 8*l.* to 9*l.* per carat. Those of a carat each, if very fine and well selected, are worth 9*l.* or 10*l.* Three years ago I offered 12*l.* each for 8, and could not obtain them.

" Brilliants, from 5 grains to 6, if pure, are worth from 13*l.* to 14*l.*; if perfectly fine, and of the full weight of 6 grains, they are worth from 17*l.* to 18*l.* each: I have, for such, paid 20*l.*

" Brilliants, of 2 carats each, are worth from 27*l.* to 30*l.* Stones of this weight, if well proportioned, are considered of a fine size, and well calculated for pins, or the centre of clusters; indeed, well proportioned diamonds, from 6 grains to 2 carats each, are always in demand, and are retailed at from 20*l.* to 35*l.* each, according to their degree of perfection, or as the retailer may think fit to charge them.

" For brilliants of 3 carats, if fine and well formed, from 70*l.* to 80*l.* may be obtained. Stones of this size, and larger, are more liable to capricious fluctuations of price than the smaller ones before named, being chiefly required for the centre stones of saleable necklaces.

" Brilliants of 4 carats, if fine, are worth from 100*l.* to 130*l.* I have sold stones, single cut, a little *off colour*, of this weight, at 80 guineas. I possessed one of 17 grains, perfectly white, having a surface as large as that of a 7 carat stone ought to be; it was, consequently, very thin, but being much in request, on account of its great *spread*, or surface, it was sold for 160*l.*

" Brilliants of 5 carats are not frequently met with in general trade, and are valuable in price; as the dealers exact more if they know that such stones are wanted, than they would in the regular course of business. The prices may be said to vary from 180*l.* to 200*l.*

" Brilliants of 6 carats, as before stated, are not common: they are suitable for centre stones of expensive necklaces, and single stone rings; if perfect and well shaped, they sell for 230*l.* to 250*l.* or more.

" For estimating the value of peculiarly fine diamonds, there is no fixed standard. Rough diamonds, selected as fine, and well formed for cutting, may be estimated as follows: — Square the weight of the stone, multiply the product by 2, and the result will be the value in pounds sterling. Brilliants, if fine, may be estimated by squaring the weight in carats, and multiplying the product by 8, which will give the amount in pounds sterling.

" As a very large property, both in this kingdom and in other countries of Europe, is vested in diamonds, it may be interesting to be informed, that not only the price of these gems has for several years been, upon the whole, gradually rising, but that it is likely to continue on the advance. At the present time, indeed, and for the last few years, there has been a dull sale of diamonds in England, nor did the coronation occasion a demand worth notice; but on the Continent the trade has been steady, and rough diamonds have been constantly rising in price. That this advance will be progressive, may be assumed

from the fact, that the best diamond ground now known, the Serro do Frio in Brazil, has assuredly passed the zenith of its prosperity. I went over the greater part of what is yet reserved, and still remains to be worked, and I conceive that there would be no difficulty in calculating the length of time in which the present number of workmen may reduce it to a state of exhaustion, like that of the far-famed Golconda. The average annual produce of future years may be estimated by the amount obtained from that portion which has been already worked. Brazil may be said to furnish Europe with 25,000 or 30,000 carats *per annum* of rough diamonds; which, if reduced to brilliants, may make an influx into the market of 8,000 or 9,000 carats annually."—(*Mawe's Treatise on Diamonds*, 2d ed. pp. 9—14. and p. 60.)

The rule stated by Mr. Mawe, and adopted by the jewellers, for estimating the value of diamonds (multiply the square of the weight in carats by 2, and the product is the value in pounds sterling), can only hold in the case of those that are of a small size, or do not weight more than 20 carats. The value of the largest diamonds, which are exceedingly rare, (*non nisi regibus, et iis admodum paucis cognitus*, Pliny,) can, it is clear, depend upon nothing but the competition of the purchasers. The diamond belonging to the Emperor of Brazil is the largest in the world. It is still uncut, and weighs 1,680 carats; so that, according to the jewellers' rule, it must be worth the enormous sum of 5,644,800*l.*! It may, however, be doubted, whether his Imperial Majesty would have any disinclination to part with it for the odd sum of 644,800*l.* The famous diamond belonging to the Emperor of Russia, which the jewellers tell us is worth 4,804,000*l.*, did not cost 150,000*l.*

Diamonds are not used exclusively as articles of ornament or luxury. They are frequently employed with great advantage in the arts. "Bad, discoloured diamonds," says Mr. Mawe, "are sold to break into powder, and may be said to have a more extensive sale than brilliants, with all their captivating beauty. In many operations of art they are indispensable; the fine cameo and intaglio owe their perfection to the diamond, with which alone they can be engraved. The beauty of the onyx would yet remain dormant, had not the unrivalled power of the diamond been called forth to the artist's assistance. The carnelian, the agate, or cairngorm, cannot be engraved by any other substance; every crest or letter cut upon hard stone is indebted to the diamond. This is not all; for without it, blocks of crystal could not be cut into slices for spectacles, agate for snuff-boxes, &c."

Diamonds may be landed without report, entry, or warrant. — (3 & 4 *Will.* 4. c. 52. § 2.)

The carat grain used in weighing diamonds is different from the Troy grain, 5 diamond grains being only equal to 4 Troy grains.

DIAPER (Ger. *Drell*; Du. *Drel*; Fr. *Linge ouvré*; It. *Tela tessuta a opere*; Sp. *Manteles alemaniscas*; Rus. *Salfetotsschnoe*), a sort of fine flowered linen, commonly used for table-cloths, napkins, &c., brought to the highest perfection in the manufactories in the north of Ireland, in Germany, and Scotland.

DICE (Ger. *Würfel*; Du. *Taarlingen*; Fr. *Dés* (*à jouer*); It. *Dadi*; Sp. *Dados*; Rus. *Kosti*), cubical pieces of bone or ivory, marked with dots on each of their sides, from 1 to 6, according to the number of the face. The regulations as to the manufacture and sale of dice are the same as those with respect to Cards (which see). Every pair of dice is to pay a duty of 20*s.* All pieces of ivory, bone, or other matter, used in any game, having letters, figures, spots, or other marks denoting any chance, marked thereon, to be adjudged dice; and if more than 6 chances are signified on any one piece, then such piece to be charged with the full duty of a pair of dice. — (9 *Geo.* 4. c. 18.)

DIMITY (Fr. *Basin*; It. *Dobletto*; Sp. *Dimite*), a species of cross-barred stuff entirely composed of cotton, similar in fabric to fustian.

DISCOUNT, an allowance paid on account of the immediate advance of a sum of money not due till some future period. It is usually said to be of two kinds; viz. discount of bills, and discount of goods; but they are essentially the same.

When a bill of exchange is presented at a banker's for discount, it is the practice to calculate the simple interest for the time the bill has to run, including the days of grace, which interest is called the *discount*; and this being deducted from the amount of the bill, the balance is paid over to the presenter of the bill. This is the method followed by the Bank of England, the London and provincial bankers, and by commercial men in general. But it is, notwithstanding, inaccurate. The true discount of any sum for any given time is such a sum as will in that time amount to the interest of the sum to be discounted. Thus, if interest be *five* per cent., the proper discount to be received for the immediate advance of 100*l.* due 12 months hence is not 5*l.*, but 4*l.* 15*s.* 2½*d.*; for this sum will, at the end of the year, amount to 5*l.*, which is what the 100*l.* would have produced. Those, therefore, who employ their money in discounting, make somewhat more than the ordinary rate of interest upon it; for a person discounting 100*l.* due at the end of a year, advances, supposing interest to be 5*l.* per cent., only 95*l.*; so that, as this 95*l.* produces 100*l.* at the period in question, the interest received has really been 5*l.* 5*s.* 3*d.* per cent.

The rule for calculating discount on correct principles is as follows: —

> As the amount of 100*l.* for the given rate and time
> Is to the given sum or debt;
> So is 100*l.* to the present worth, or
> So is the interest of 100*l.* for the given time
> To the discount of the given sum.

Mr. Smart has calculated, on this principle, a Table of the discount of 1*l.* for any number of days, at 2, 2½, 3, 3½, &c. to 10 per cent., to 8 decimal places. But the simple interest of the sum being the only thing looked to in practice, such Tables are hardly ever referred to.

Bills in the highest credit are discounted on the lowest terms; the discount increasing according to the suspicions entertained of the punctuality or solvency of the parties subscribing the bills. During the war, the rate of interest, or, which is the

same thing, of discount, was comparatively high; but since 1818, the rate of discount upon good bills has seldom been above 4, and has often been as low as 3 and even $2\frac{1}{2}$ per cent.

Discount on merchandise takes place when, after making a purchase of goods at a fixed term of credit, the buyer finds means to make his payment before the expiration of that term, receiving from the seller a discount or allowance, which is commonly a good deal above the current rate of interest. The discount on goods varies, of course, according to the interest of money. During the late war, the loans to government were so large, and the facility of investing money was such, that the discount on goods was often as high as 5 per cent. for 6, and 10 per cent. for 12 months. Now, however, the discount on goods has fallen, with the fall in the rate of interest, to 7 or $7\frac{1}{2}$ per cent. for 12 months; being about double the current interest arising from funded property, or the discount of good mercantile bills.

Long credits and discounts upon goods have, for a lengthened period, been usual in England. This arose from a variety of causes, but principally, perhaps, from the magnitude of our exports to the United States, Russia, and other countries where there is a great demand for capital; but in whatever causes it originated, it has latterly been carried to what seems to be an injurious extent. — (See CREDIT.) In France and Germany, the manufacturers, in general bare of capital, are obliged to stipulate with the merchants for short credits. In Holland, the *usage* of the exporting merchants has been to pay either in ready money, or at so short a date as to put discounting out of the question, the manufacturer setting at once the lowest price on his goods.

DIVIDEND, the name given to the payment made to creditors out of the estate of a bankrupt, and to the annual interest payable upon the national debt, and other public funds.

DJIDDA, a town of Arabia, on the Red Sea, about 21 miles from Mecca, of which it is the sea-port, in lat. 21° 29′ N., lon. 39° 14′ E. It is well built; the streets are unpaved, but spacious and airy; the houses high, and constructed, for the most part, of madrepores and other marine fossils. The supply of water is scanty, and its quality indifferent. Small vessels approach close to the quays; but large vessels are obliged to anchor in the roads, about 2 miles off, loading and unloading by means of lighters. The entrance to the roads is difficult, and should not be attempted without a pilot. Djidda is a place of considerable commercial importance. It is the *entrepôt* in which is centred the greater part of the commerce between India, Egypt, and Arabia. Many of its merchants possess large capitals; some of them as much as from 150,000*l.* to 200,000*l.* The trade in coffee brought from Mocha, and other ports in Yemen, is the most considerable, but it is said also to be the most hazardous. The returns are principally made in cash. The trade with India and the Gulf of Persia is safer than the coffee trade, and is very considerable. Djidda has also a good deal of intercourse with the ports of Cosseir, Souakin, and Massouah, on the opposite coast of the Red Sea. The imports from the last two principally consist of slaves, gold, tobacco, dhourra or barley, hides, butter (of which immense quantities are made use of in Arabia), mats, &c.; in return for which the Africans receive Indian goods suitable for their markets, dresses and ornaments for their women, dates (which are not produced in any part of Nubia), iron, &c. The principal article of import from Cosseir is wheat; and not only Djidda, but the whole Hedjaz, or Holy Land of Arabia, is almost entirely dependent upon Egypt for corn. Coffee is the principal article sent in return. Business is transacted at Djidda with ease and expedition. The number of ships belonging to the port is estimated at 250. Owing to the scarcity of timber, none of them are built at Djidda; those belonging to it being either purchased at Bombay or Muscat, or at Mocha, Hodeida, or Suez. For a considerable period each year, before and after the feast of Ramadhan, when pilgrims come from all quarters to visit Mecca, the town is thronged with strangers, and a great deal of mercantile business is transacted. Djidda is at present, and has been for a number of years, under the government of Mohammed Ali, pacha of Egypt. The *moneys, weights,* and *measures* of the latter country (for which, see ALEXANDRIA), are now generally used in Djidda, the commerce of which has been much improved and extended in consequence of the comparative security and good order enforced by the pacha. — (We have gleaned these details from the different works of Burckhardt, particularly from his *Travels in Arabia*, vol. i. pp. 1—100.)

DOCKS are artificial basins for the reception of ships. The term has been supposed by some to be derived from the Greek δεκομαι, to receive; but it is obviously no other than the Teutonic *dock*, originally perhaps derived from *dekken*, to cover, enclose, or protect.

Docks are of 2 sorts — *wet* and *dry*. Wet docks are generally constructed with gates to retain the water. Ships are admitted at high water; and the gates being shut, they are kept constantly afloat. A dry dock is intended for the building, repairing, or examination of ships. The ships to be repaired or examined are admitted into it at high water; and

the water either ebbs out with the receding sea, or is pumped out after the gates are shut.

Utility of Docks. — The construction of wet docks has done much to facilitate and promote navigation. A large vessel, particularly if loaded, could not be allowed to come to the ground, or to lie on the beach, without sustaining considerable injury, and perhaps being destroyed; and even the smaller class of vessels are apt to be strained, and otherwise hurt, if they are left dry, unless the ground be very soft. Hence, when large vessels have to be loaded or unloaded where there are no docks, and where the water close to the shore or quay is not sufficiently deep, the work can only be carried on during a particular period of each tide; it being necessary, in order to keep the vessel afloat, that she should leave the shore with the ebbing tide. Attempts have sometimes been made to obviate this inconvenience, by running jetties or piers to such a distance into the sea, that there might always be a sufficient depth of water at their heads: but this can only be done in peculiar situations; and it requires that the ship's position should be frequently changed. It is in most cases, too, impossible properly to protect the cargoes of ships loading or unloading at quays, or on the beach, from depredation. Previously to the construction of the wet docks on the Thames, the property annually pillaged from ships was estimated to amount to 500,000*l.* a year, though this is probably much exaggerated.

I. Docks on the Thames.

1. *West India Docks.*
2. *London Docks.*
3. *East India Docks.*
4. *St. Katherine's Docks.*
5. *Commercial Docks.*
6. *London Port Dues. — Charges on Account of Lights, Pilotage, &c. in the Thames. — Shipping, &c. of London.*

II. Liverpool Docks, Shipping, etc.
III. Bristol Docks, Shipping, etc.
IV. Hull Docks, Shipping, etc.
V. Goole Docks, Shipping, etc.
VI. Leith Docks, Shipping, etc.

I. Docks on the Thames.

It is singular that, notwithstanding the obvious utility of wet docks, and the vast trade of the metropolis, there was no establishment of this sort on the Thames till nearly a century after a wet dock had been constructed at Liverpool. The inconvenience arising from the crowded state of the river, at the periods when fleets of merchantmen were accustomed to arrive, the insufficient accommodation afforded by the legal quays and sufferance wharfs, the necessity under which many ships were placed of unloading in the river into lighters, and the insecurity and loss of property thence arising, had been long felt as almost intolerable grievances: but so powerful was the opposition to any change, made by the private wharfingers and others interested in the support of the existing order of things, that it was not till 1793 that a plan was projected for making wet docks for the port of London; and 6 years more elapsed before the act for the construction of the West India Docks was passed.

1. *West India Docks.*—These were the first, and continue to be the most extensive, of the great warehousing establishments formed in the port of London. Their construction commenced in February, 1800, and they were partially opened in August, 1802. They stretch across the isthmus joining the Isle of Dogs to the Middlesex side of the Thames. They originally consisted of an Import and Export Dock, each communicating, by means of locks, with a basin of 5 or 6 acres in extent at the end next Blackwall, and with another of more than 2 acres at the end next Limehouse; both of these basins communicate with the Thames. To these works the West India Dock Company have recently added the South Dock, formerly the City Canal, which runs parallel to the Export Dock. This canal was intended to facilitate navigation, by enabling ships to avoid the circuitous course round the Isle of Dogs. It was, however, but little used for that purpose, and is now appropriated to the wood trade, for the greater accommodation of which, a pond of 19 acres has been recently formed on the south side for the reception of bonded timber. The Export Dock, or that appropriated for ships loading outwards, is about 870 yards in length, by 135 in width; so that its area is near 25 acres: the North, or Import Dock, or that appropriated for ships entering to discharge, is of the same length as the Export Dock, and 166 yards wide; so that it contains nearly 30 acres. The South Dock, which is appropriated both to import and export vessels, is 1,183 yards long, with an entrance to the river at each end; both the locks, as well as that into the Blackwall Basin, being 45 feet wide, or large enough to admit ships of 1,200 tons burden. At the highest tides, the depth of water in the docks is 24 feet; and the whole will contain, with ease, 600 vessels of from 250

to 500 tons. The separation of the homeward bound ships, which is of the utmost importance for preventing plunder, and giving additional security to the revenue and the merchant, was, for the first time, adopted in this establishment. The Import and Export Docks are parallel to each other, being divided by a range of warehouses, principally appropriated to the reception of rum, brandy, and other spirituous liquors. There are smaller warehouses and sheds on the quays of the Export and South Docks, for the reception of goods sent down for exportation. The warehouses for imported goods are on the four quays of the Import Dock. They are well contrived, and of great extent, being calculated to contain 160,000 hhds. of sugar, exclusive of coffee and other produce. There have been deposited, at the same time, upon the quays, under the sheds, and in the warehouses belonging to these docks, 148,563 hhds. of sugar, 70,875 casks and 433,648 bags of coffee, 35,158 puncheons of rum and pipes of Madeira wine, 14,021 logs of mahogany, 21,350 tons of logwood, &c. The whole area occupied by the docks, warehouses, &c. includes about 295 acres; and the most effectual precautions are adopted for the prevention of fire and pilfering.

This spacious and magnificent establishment was formed by subscription, the property being vested in the West India Dock Company, the affairs of which are managed by 21 directors, as a body corporate. The right of voting is vested in those shareholders only who hold 500*l.* of the Company's stock. The Company's capital is 1,380,000*l.*

The West India Docks have proved a very successful undertaking, and have been highly beneficial to the original shareholders. All West India ships frequenting the Thames were obliged to use them for a period of 20 years from their completion. The dividend on the Company's stock was limited to 10 per cent.; and, after making dividends to the full amount, with the exception of the first half year, they had, in 1819, an accumulated fund of near 400,000*l.* But they then diminished their charges, at the suggestion of the committee of the House of Commons on the foreign trade of the country, so as to give the trade using the docks the benefit of the surplus fund, which was to be reduced to 100,000*l.* before the 30th of January, 1826. Latterly the Company have been obliged, in consequence of the competition of the other Companies, to make further reductions of dividend. It now amounts to 5*l.* per cent. At present, the Company's stock sells at about par.

The nearest dock gate at Limehouse is about 3 miles from the Exchange; and the other, next Blackwall, about $\frac{1}{2}$ a mile more. This distance has the disadvantage of increasing the expense of cartage, and of being inconvenient to the merchants and others using the docks. On the other hand, however, ships entering the West India Docks avoid a considerable extent of troublesome, if not dangerous, navigation, that must be undertaken by those bound for the St. Katherine's and London Docks.

[*Contrivance for clearing Water in the West India Docks.* — In almost all docks and harbours, a serious evil is felt from the constant accumulation of mud, and the consequent expense of preserving the proper depth of water. In various situations, provision has been made for scouring out or raising mud and silt by means of back-water, dredgers, &c., according to local circumstances; but, in the West India Docks, the evil has been entirely obviated: a brief notice of the manner in which so important an object has been accomplished, may be both interesting and useful.

The water of the Thames is generally very muddy, and when it is admitted into the basins and docks in large quantities, to replace the water lost by evaporation, leakage, locking vessels in and out, &c., the deposit is very great. In the West India Docks, the accumulation of mud, from this cause, was most considerable in the Eastern or Blackwall Basin; and the annual cost of clearing out the same was between 3,000*l.* and 4,000*l.*

And yet the process by which that basin was cleared, was probably the most economical which could be adopted. A floating dredger, of the usual description, raised the mud, which was thrown into barges; and these, when loaded, were emptied by a stationary engine, working an endless chain of buckets, similar to those of the dredger. But the field where the mud was deposited having become full, additional expense was likely to be incurred by removing the mud to a greater distance, so that the subject called for and received more attention; and the result will show, that the Company have at length provided the most effectual remedy.

All the gates of the locks point inwards, to sustain the water of the docks; as long as the level of the water within, is higher than the level of the river, those gates remain closed; but as soon as the river rises above the level of the Blackwall Basin, the gates of the outer lock are thrown open: while the gates of the two locks at the west end of that basin remain closed, the influx from the river would not be considerable; but when the tide has risen above the level of the Import and Export Docks, those gates would also be thrown open, and then the river would flow in with considerable force; the muddy water discolouring that of the docks, and of course depositing the silt or mud held in suspension.

These facts showed that the exclusion of the river water was the only effectual cure for the evil; but the loss or waste of water from the docks was equal, on an average, to 5 inches over the whole surface in 24 hours, and this loss had to be supplied; and not only that, but to keep the river out, it was necessary at all times to keep the water of the docks and basins up to a higher point than that to which the river would rise at the highest spring tides.

After long consideration, the following plan was matured for effecting this object: —

The Company's spare land on the north side of the Blackwall Basin lay below high water mark, and there three reservoirs were formed: the two next the basin receive the water from the river by a culvert with sluices, which are closed as soon as they are filled; from these the water is pumped by an engine of 36 horse power, after having had time to deposit the silt into the elevated reservoir, from whence it flows by a conduit into the basin, and thence into the dock, and thus the level of the whole is kept up to the highest point which can be desired, and the river Thames with its mud is no longer admitted.

The great body of water in the docks is thus constantly maintained, and is at all times clear and sweet, and no mud will hereafter be deposited; great advantage arises, however, from the depth of water, which is preserved from fluctuating with the level of the neap and spring tides, as the deepest laden ship can at all times be transported,—the depth throughout being from 23 to 26 feet.

RULES AND REGULATIONS TO BE OBSERVED, AND RATES TO BE PAID, BY THE SHIPPING FREQUENTING THE WEST INDIA DOCKS.

RULES AND ORDERS to be observed by Masters, Pilots, and other Persons having the Charge of Ships, Vessels, Lighters, or Craft, coming into, lying in, and going out of, the West India Docks, pursuant to Act 1 & 2 Will. 4. c. 52.

The Company's Moorings. — The moorings in the river, within 200 yards of each of the entrances at Blackwall, and that into Limehouse Basin, and within 150 yards of the Limehouse entrance of the South Dock, are reserved for the exclusive use of vessels entering into, or which have recently come out of, the docks.

Every master or person in charge of any ship, lighter, barge, boat, or other vessel, of any description whatsoever, lying within the above distance, shall immediately remove the same, when required by the dock masters or their assistants. Penalty 5*l.* for every hour which such vessel may remain.

Pilots shall not attempt to place ships inside the buoys, if other ships have previously brought up, but shall bring them to their berths in due succession on the outside, unless they shall be expressly ordered by the dock master to take a berth inside the tier for the convenience of docking.

All parties creating obstructions will be prosecuted, and the penalties will be rigidly enforced.

Vessels about to enter the Docks, &c. Signals. — The *red* flag on the flag-staff at the entrance is the signal for ships to prepare. A *blue* flag will be kept flying the whole time proper for docking; when the tide has reached high water mark, that flag will be struck, after which no ship can be taken in.

Declaration Book. — When ships have brought up properly at the moorings, an officer will deliver the Company's regulations, and the commander or pilot of every vessel exceeding 100 tons must certify in the Declaration Book her draught of water; that she is provided with all necessary and sufficient warps, ropes, and tackle, to remove and moor her in safety; and that her anchors are (or shall be before leaving the moorings) so secured and stowed as not to endanger the works, the ships therein, or the vessel herself.

Preparing Ships for Admission. — Every master or pilot, in charge of a ship, should lose no time in making the following preparations, viz. her anchors to be properly secured and stowed; her sails all furled; all quarter boats lowered down, guns unloaded, gunpowder put out, fires extinguished, and such other precautions taken as the dock master may direct: when these preparations are completed, a flag must be hoisted at the fore, as a signal that the ship is ready.

All ships are required to send down top-gallant yards and strike top-gallant masts, and to have their jib and mizen booms rigged close in, bomkins, martingales, and all out-riggers unshipped, if time will permit, and at all events immediately after entering. Vessels will, however, be exempted from striking lower yards and top-masts, upon the master certifying that the same may be safely dispensed with, and engaging to be answerable for all consequences; but before being placed at the quay, the yards must be topped well up, and the yard-arms lashed close in to the rigging.

Docking Tickets and Order of Admission. — In fixing the order of admission, and issuing the docking tickets, regard will be had to the state of the tides, and the size and draught of water of each vessel, as well as the time of arrival: the largest ships must necessarily be taken in when the tides are highest, although they may have arrived subsequent to smaller vessels. Loaded vessels must always have the preference over light ships.

No ship can be admitted, if neither the master nor pilot are on board.

The docking ticket will only remain in force for the tide for which it is granted.

At the proper time for the admission of each ship, notice will be given by hoisting her ticket number at the pier head, provided she has made the signal for being properly prepared.

If any vessel shall attempt to gain admittance before her number is hoisted, the owners, and the master, pilot, or other person in charge, must be responsible for all consequences of such misconduct.

Entering. — When a ship's number is hoisted, she must drop up to the entrance, and have good and sufficient warps ready to send to each pier, when ordered by the dock masters. If the ship shall not so come to the entrance, she shall forfeit her turn.

When within the piers, proper ropes will be sent on board to guide and check the vessel through the lock: the master and pilot will be held responsible for making these, as well as the ship's warps, properly fast on board: the vessel must be hauled ahead by her own warps, and they are on no account to be cast off, unless ordered by the dock master, until the ship is in the basin.

Every pilot must bring his boat into the basin, or South Dock, as it is a most essential part of his duty to moor the ship.

The owners must be answerable for all ships' boats, and none can be admitted into the Import Dock except such as are conveniently stowed on deck. All other boats must be sent out of the docks.

The boats of ships in the South Dock which cannot be securely stowed on deck, must be hauled up on the north bank, or secured afloat in such manner as the dock master may direct, after the ship is moored. Ships, however, which are not lying at a jetty, will be allowed to employ 1 boat during the legal hours of business, which boat must be chained by the Company's officers to the north bank as soon as that time has expired.

Any boats found afloat in any of the docks or basins, contrary to these regulations, will be removed by the dock master, and will be detained until the charges occasioned by such removal shall be paid.

The hatches of all loaded ships are to be locked down, and the keys delivered to the officer appointed to receive the same.

Import Dock. — No person whatever can be allowed to remain in this dock after the established hours of business: nor can any person be permitted to have access to vessels therein, excepting the owner, master, or chief officer, without a pass.

Passes will be given on the application of the captain or chief mate, to admit the ship's apprentices, or other persons, to prepare the ship for discharging, or to do any other work which may be unavoidably necessary; but, to prevent the abuses which sometimes occur, it is strongly recommended that the Company's labourers be employed.

Ships discharging. — Previously to any ship being quayed, the decks must be cleared, and every thing prepared to begin working out the cargo. If, through want of proper tackle, or any neglect, a ship be not in readiness to take her turn, another will be quayed in the mean time.

It is desirable that all baggage or presents should be sent, as promptly as possible, to the Company's baggage warehouse, where an authority from the master for the delivery thereof must be lodged. Masters are particularly cautioned against signing such authorities in blank, or allowing themselves to be influenced by the importunity of brokers; and it is most desirable that one agent only should be appointed for each ship.

Packages of bullion or specie (whether cargo or private property) must be delivered by the captain, under his own responsibility, unless from their being liable to examination or other circumstance he may be desirous of placing the same in the Company's charge, in which case such packages, or any other of considerable value, should be particularly specified, and, if bills of lading have been granted for them, inserted in the regular manifest of the ship. The delivery of goods overside will also rest with the master, and he must take such steps as he may think necessary to protect his owners in respect to their freight.

An officer of the revenue is authorised to forward all despatches for the departments of government; packets so addressed will therefore be delivered into his charge, unless the Company receive express directions to the contrary.

When a ship is finally discharged and moored in the Export Dock, or either of the basins, for the purpose of going out to the river, all the services provided for in the import rate are completed.

For the more expeditious discharge of vessels, or despatch in reloading, every assistance will be given in clearing the decks, or stiffening them; coopering water casks, and shipping them, when filled; clearing the hold after discharge; shipping and stowing the outward cargo, under the directions of the ship's officers; and any other services which can be reasonably required. — Should the Company's movable machinery be desired, it will be lent upon application to the principal dock master. — The following charges will be made for such services: —

	s.	d.
For labourers hired to work under the directions of the commanding officer of the ship, each man per day, of the regulated hours of attendance - - (and not less than ½ day to be charged. Over-time will be charged in proportion.)	3	6
Articles loaded, shipped, or struck down by the dock cranes or jiggers, under 2 tons, per ton - -	1	0
Two tons, and under 5 tons - - (and not less than 1 ton to be charged.)	1	8
Movable machinery lent, each jigger with its gear, per day - - - - -	10	0
The use of the floating engine for washing ships, including the attendance of the man in charge, per day (and not less than 1 day to be charged.)	20	0

Conditions to be observed by Ships taking in Cargoes from the Import Warehouses. — 1. The taking the ship in and out of dock, or to and from the quay, to be performed by the master and crew, as directed by the dock masters.

2. The goods to be taken from the slings, and to be stowed away by the crew, under the orders of the master.

3. If a sufficient crew be not on board to receive and stow away the goods as delivered, or to transport the vessel, a further number of men shall be provided by the Company, at the charge of 3*s.* 6*d.* per man per day, to work under the direction and responsibility of the master and his officers.

4. The vessel to be hauled into the basin or Export Dock after the usual hours of business, by her own officers and crew, and to continue in their charge.

Ships, from the Export or South Docks, will be allowed to go into the Import Dock to load, without any addition to the rate to which they may be liable for the use of the docks.

Goods sent by land carriage will be shipped in either of the docks, on payment of the usual charges.

To prevent delay in loading export vessels, the shippers should pay up the rent and charges upon the goods; or where the amount cannot be ascertained without weighing, &c., make a deposit to cover the same.

Export and South Docks. — All vessels entering or lying in these docks are in charge of the masters and owners; and it is the duty of the pilots, or officers and crews, to transport their respective vessels, under their own responsibility, as directed by the dock master, to or from the river, and to or from any part of the docks or basins.

Light ships on entering from the river must be provided with sufficient hands to dock and transport them, and should move in due time into the dock; otherwise they will be removed by the dock master, and the owners charged with the expense.

Vessels discharged of their inward cargoes by the Company in these docks will be regarded as privileged ships, and all transporting within the docks will be performed by the dock master, assisted by the crew, gratuitously; but unless there are sufficient crew on board to assist in transporting the outward-bound ships, they will not be moved.

Whenever assistance is required by other vessels, it will be furnished by the dock master on the following terms: viz. —

A boat with warp and 2 hands	- -	10*s.* 0*d.*
— and 4 hands	- -	15*s.* 0*d.*

And for every additional hand employed, either on board or in the boats, 6*d.* per hour.

The warps are only lent in aid of the ship's warps.

Ships taking in cargoes will be moored at the quays in due rotation. Light ships not taking in goods shall be moored in either of the docks or basins, as the dock masters may judge convenient.

While ships are lying at, or moving to or from the quay, all out-riggers should be got in and made snug; and sails are by no means to be loose while so moving.

No ship must be removed from her berth without notice being given to the dock master, and his assent as to the time of removal being obtained.

Craft must be fastened to the ships from which they are receiving, or to which they may be delivering goods: the charge upon craft which shall not be *bonâ fide* so engaged, will be the same as the rent upon sloops and craft coastwise, and, as usual, not less than 1 week's rent will be charged. To obviate any doubt as to the time for which they may be fairly entitled to exemption, 24 hours will be allowed, from the time of entering the dock, for receiving goods, and 24 hours after being loaded or discharged, for going out of the docks.

Convenient receptacles on the quays and craft are provided, wherein all dust, ashes, &c. are to be deposited, and which shall be cleared by the persons appointed by the Company, and by no one else.

No vessel shall be permitted to take in ballast after daylight, or before daybreak.

Ships' provisions or stores cannot be permitted to pass the gates without an order signed by the captain or owner.

No repair or caulking can be permitted without the special permission of the court of directors, to whom application should be made through the principal dock master.

The Jetties. — Ships landing cargoes in the South Dock, or taking in goods by land, shall have the preferable use of the jetties.

Ships which are fitting out, but have not commenced loading, shall be accommodated as far as possible; but such ships must be removed to make room for vessels about to discharge or take in cargo by land.

In other respects, preference will be given to ships intended for sale, over those which are merely lying up; and as between ships which are similarly circumstanced, the priority of their entering the dock shall determine the preference.

The captains or commanding officers of ships are cautioned to be attentive and careful to boom off when the ship is fast loading down in the water, or on the approach of neap tides.

Fire and Candle. — Vessels in these docks shall be considered as forming 3 classes: viz. —

I. Vessels actually discharging, having their crews on board, or loading outwards.

II. Vessels rigging or fitting out, but which shall not have commenced taking in goods.

III Vessels for sale or lying up.

To each of these classes special licences will be granted.

Every such licence will express the place in which fire may be kept, and the circumstances under which it may be used: upon the slightest infringement of the conditions, the penalty prescribed by law will be rigidly enforced.

Every application for a licence must be made by the master or owner, specifying the names and capacity of the persons in charge of the ship, and engaging to be responsible for their attention to the regulations.

Opening and shutting the Gates. — The gates of the Export and South Docks will be opened at 6 o'clock in the morning and shut at 8 o'clock in the evening, from the 1st of March to the 10th of November; and, from the 11th of November to the last day of February, opened at 8 in the morning and shut at 7 in the evening.

Captains and mates may be furnished with tickets upon applying at the police office, at the Import Dock, which will entitle them to admission till 9 o'clock P. M., but no person whatever can be allowed to go out after the hour for closing the gates.

Vessels about to leave the Docks. — Export vessels should be hauled out in sufficient time to be at the River Locks, at Blackwall, at low water; to prevent the inconvenience of hauling down the Blackwall Basin or South Dock during the time that other vessels are requiring admission, which must have the preference.

Vessels can only be let out after high water, upon the special request of the officers in charge of them.

Ships going into the river must use their own ropes, as they are out of the dock master's charge when clear of the outer gates.

NOTICE. — Two true copies of the manifest of the cargo must be delivered into the General Office, at the West India Dock House, within 12 hours after every vessel shall enter the docks, or after the cargo shall have been reported at the Custom-house, which shall first happen. Penalty for refusal or neglect, any sum not exceeding 5*l.* — (1 & 2 *Will.* 4. c. 52. § 84.)

No manifests will be required for ships discharging by their own crews.

No ships can receive their rotation, or be allowed to break bulk until their cargoes are duly entered; and such cargoes will be landed in due succession, according to the strict order in which the manifests are delivered and entries completed.

If such manifest, or bill of lading, or copy, shall be false; or if any bill of lading be uttered by any master, and the goods expressed therein shall not have been *bonâ fide* shipped on board such ship; or if any bill of lading uttered or produced by any master shall not have been signed by him; or any such copy shall not have been received or made by him previously to his leaving the place where the goods expressed in such bill of lading, or copy, were shipped; penalty 100*l.* — (3 & 4 *Will.* 4. c. 52. § 11.)

Hours of Attendance are, from the 10th of May to the 9th of November inclusive, 8 in the morning to 4 in the afternoon; from the 10th of November to the 9th of May inclusive, 9 in the morning to 4 in the afternoon; and there is to be no intermission of business during these hours.

No holidays are to be kept, except Sundays, Christmas-day, Good Friday, fast days appointed by royal proclamation, and the King's or Queen's birthdays.

In all cases not specified or provided for in the foregoing rules and orders, application must be made to the principal dock master. CHARLES C. PARISH, Principal Dock Master.

The foregoing regulations approved and confirmed by the Court of Directors of the West India Dock Company. H. LONGLANDS, Secretary.

West India Dock House, September 24th, 1833.

N. B. — Ships entering the West India Docks are permitted to retain their crews on board, when required by the owners; and the directors have fitted up the ship Waterloo, in the South Dock, for the accommodation of junior officers and apprentices, while their ships are discharging their cargoes in the Import Dock.

The captains, officers, and crews of ships are requested not to give either wine, spirits, or grog, to the servants of the Company, as, by so doing, they expose them to the certain and immediate forfeiture of their situations.

No fee, perquisite, or reward, of any kind or denomination whatsoever, is to be taken by the Company's officers, or any persons who shall be employed in the service of the Company, for any act done within the docks. Penalty, forfeiture of the sum taken, and any sum not exceeding 5*l.* for each offence.

Dock Rates. — Import Vessels, when discharged by the Company, including docking, mooring, and removing within the docks until discharged, ships' cooperage or mending, and the use of the docks, if from Hamburgh or the Mediterranean, for 6 weeks from the date of entrance; if from any other port or place, for 4 weeks from the final discharge; viz.

	Per Ton reg. s. d.
Ships laden entirely, or in part, with hogsheads and tierces of sugar or molasses	2 6
laden entirely, or in part, with chests of sugar above 5 cwt.	2 0
entirely, with chests under 5 cwt., or bags of sugar, coffee, spirits, wine, iron, copper, brass, lead, spelter, or other metal, in pigs, bars, rods, plates, or similar pieces, rice, or other goods, (except oil, tallow, or ashes,) packed in bales, bags, serons, casks, cases, chests, or similar packages, or wood in planks or billets, such as dye wood, staves, &c.	1 6
laden entirely or in part, with mahogany, timber, or other wood in logs	2 6
entirely with hemp, or entirely or in part with goods in bulk	1 9
laden entirely or in part with tobacco or oil, not including ship's cooperage	1 6
entirely with tallow, not including ship's cooperage	1 3
laden entirely with mixed cargoes of hemp and tallow, or ashes, not including ship's cooperage; viz.	

	s. d.	
For every ton of hemp	2 0	The number of tons charged not to exceed the register tonnage.
For every ton of tallow or ashes	1 3	

Ships Wood laden from Europe, or the North American Colonies, when discharged by the Company, including docking, mooring, and removing within the docks, until discharged; unloading the cargoes, and the use of the docks for any period not exceeding 4 weeks from the date of the final discharge.

	Per Ton reg. s. d.
Laden entirely with deals, planks, staves, or wood in billets	1 6
principally with ditto, and bringing hard wood or pine timber (for every load of hard wood and pine timber 6*d.* in addition)	1 6
entirely with hard wood or pine timber	2 0

Ships discharged in either of the Docks or Basins by their own Crews, the expense of docking, mooring, unmooring, and removing, not included.

	Per Ton reg.
For the use of the docks for any period not exceeding, if from the Mediterranean, 6 weeks, from other ports or places 4 weeks, from the date of entrance	0 9
Vessels from any port in the United Kingdom, or European port, outside the Baltic, between the North Cape and Ushant, with cargoes for trans-shipment, for delivery on board ships, or for landing in either dock (except when wood laden), not remaining beyond, if from Hamburgh, 6 weeks, if from any other port or place, 4 weeks, from the date of entrance	0 6
Sloops and craft coastwise, with bricks for delivery on board ships and vessels with broken granite or paving-stones, not remaining beyond 1 week	0 3
Vessels entirely corn laden (in lieu of tonnage rate), of 100 tons and upwards, each	21 0
Under 100 tons, each	10 6

Rent to commence after 1 clear day from final discharge.

Vessels two thirds laden with corn, will be charged the usual tonnage rates in proportion to the other part of their cargoes.

Vessels entering to load from the Import Warehouses only.

	Per Ton on gr. wt. shipped. s. d.
For the use of the dock for 1 week	0 6

Light Vessels, the expense of docking, mooring, unmooring, and removing, not included.

	Per Ton reg. s. d.
Not having discharged in either of the docks, for any period not exceeding 4 weeks from the date of entering	0 6

Dock Rent.

For remaining over the periods specified, per week - 0 1

Vessels which re-enter after having been out for repair, will be allowed their privilege without reckoning the time they remained out.

TABLE FOR IMPORTED GOODS.

The Prime Rate includes all expenses for landing, wharfage, weighing, or gauging at landing, coopering, marking, sampling, housing, weighing for actual delivery, and delivering; furnishing landing and delivery weights or gauges, surveying and furnishing certificates of damage, and rent for 12 weeks from the date of the ship's commencement of discharge.

This rate will be charged on all goods imported from the East or West Indies, the Mauritius, Mexico, or South America, and upon wood, spirits, or wine, and tobacco, from whatever place of importation, unless notice be given by the importers, of their desire to have them placed under the landing rate, or their intention to remove them without housing or piling. If such notice is given before housing or piling, the rate in the second column will be discharged.

The Landing Rate includes landing, wharfage, and housing, or delivering from the quay, and furnishing landing accounts.

This rate will attach to all other merchandise than as above specified, which may be imported; to East India cotton, to hides and skins, hair, horns and tips, to manufactures returned, and to every description of goods relanded, or removed in bond or coastwise into the docks, unless the importers signify their wish that they should be warehoused under the prime or consolidated rates.

The Rates for Unhousing and Loading, or Unloading and Housing, when not otherwise specified, are each one third of the landing rate; and that for unhousing, wharfage, and shipping, is the whole rate, as stated in the second column. When the prime rate has not been paid, those charges will be made, together with reasonable charges for coopering, sampling, and other operations contingent on housing.

The Charges for Weighing and Rehousing are each one third of the rate in the second column. For repiling or weighing wood, one fourth of that rate is charged.

Goods sold from the Landing Scale, or not intended to be warehoused, will be allowed 4 clear days from the final weighing of the parcel for removal; in default of which, they will be housed or piled. If intended for immediate trans-shipment, they may remain on the quay, subject to the same regulations as goods prepared for shipment, paying rent as if housed at landing.

Warehouse Rent, on goods to which the prime rate does not attach, will be charged from the date of the ship's breaking bulk; but when goods sold from the landing scale are housed, the rent will be charged from the final weighing of the parcel.

A week's rent will be charged for all fractions of a week.

Before the transfer by the Company, or delivery of any goods can take place, the charges on the quantity to be transferred or delivered must be paid either to the collector, at the General Office in London, or to the comptroller, at the General Office at the docks.

Rates on Goods imported.

N. B. — All sorts of goods may be imported into and warehoused at the West India Docks, on about the same terms as at the other docks. We have given, under the head *London Docks*, a Table of the dock dues, &c. on most articles commonly imported, which may be applied, with very trifling modifications, either to the West India or St. Katharine's Docks. The following Table includes merely the dock charges on the importation, warehousing, &c. of the principal articles of West India produce: —

Articles.	Prime Rate.	Landg. Rate.	Rent per Week.
	Nett per	s. d.	s. d.	*Gross per*	s. d.
Annotto - - ton	21 0	7 0	ton - 0 7
bask. and pack. under 1 cwt.	0 0	1 7½	100 pckgs. 4 2
Arrow root - - ton	20 0	7 6	ton - 0 7
Canella alba - - cwt.	1 8	0 6	cwt. - 0 0¾
Chocolate - - box	0 0	0 9	box - 0 2
Cochineal - - cwt.	3 0	0 9	cwt. - 0 1½
Cocoa and coffee, casks —	1 6	0 6	ton - 0 6
bags - - —	1 2	0 6	— - 0 6
Cotton wool, press packed - —	0 9	0 3	— - 0 5
not press packed - —	1 0	0 4½	— - 0 6
Ginger, casks - - —	1 6	0 6	— - 0 6
bags - - - —	1 2	0 6	— - 0 6
preserved. *See* Succades.			
Jalap - - —	0 0	0 10½	bale, 3 cwt. 0 1
Indian rubber - hhd. or pipe	0 0	1 6	hhd. or pipe - 0 4
case 2 to 4 cwt.	0 0	1 6	case 1 to 2 cwt. 0 1
case 1 to 2 cwt.	0 0	1 0	barrel - 0 0½
bag or barrel	0 0	0 6	in bottle 0 1
loose, cwt.	0 0	1 0	ton - 0 10
Ipecacuanha - - cwt.	0 0	0 10½	pun. - 0 2½
Molasses - - —	0 7	0 3	hhd. or trc. 0 1½
			bar. or keg 0 0¾

Articles.	Prime Rate.	Landg. Rates.	Rent per Week.
	Nett per	s. d.	s. d.	*Gross per*	s. d.
Mother-o'-pearl shells - ton	18 6	7 6	ton - 0 4
ware - - chest	0 0	1 6	chest - 0 2
box	0 0	1 0	box - 0 1
Piccaba - - cwt.	0 0	0 6	ton - 0 4
Pickles, cases - doz. bottles	0 0	0 2½	doz. botts. 0 0½
barrels - - gallon	0 0	0 0½	barrel 0 1
Pimento, casks - - cwt.	1 6	0 6	ton - 0 6
bags - - —	1 2	0 6	— - 0 6
Snake root - - —	0 0	0 10½	barrel or ½ bale 0 1
			trc. or bale 0 2
			hhd. - 0 3
Succades, under 28 lbs. package	0 6	0 3	cwt. - 0 0¾
28 lbs. to 1 cwt. —	1 0	0 6	— - 0 0¾
1 cwt. and upwards cwt.	1 0	0 6	— - 0 0¾
Sugar, casks - - —	0 8	0 3	ton - 0 5
chests above 5 cwt., or baskets - - —	0 7	0 3	— - 0 5
chests und. 5 cwt., or bags —	0 6	0 3	— - 0 4
candy - - —	0 0	0 4½	cwt. - 0 0½
Tobacco. *See London Docks.*			
Wood. See separate Table, p. 482.			

Rates on Sugar.

	Wharfage and Porterage.	Rent per Week.
	s. d.	s. d.
Sugar, 4 to 5 cwt. bag or basket	0 8	0 1
about 2 cwt. do. or mat	0 4	0 0½
boxes or chests - ton	3 4	0 5
bastards, 14 cwt. and upwards, cask	1 8	0 5 ton
12 and not exceeding 14 cwt. cask	1 2	
under 8 - - tierce	0 8	0 2
not exceeding 2½ - barrel	0 5	0 1
refined, 18 cwt. to 24 cwt. cask	2 0	0 7

	Wharfage and Porterage.	Rent per Week.
	s. d.	s. d.
Sugar, refined, 14 and under 18 cwt. - - cask	1 0	0 6
12 and under 14 cwt. do.	1 0	0 4
Do. packed in hhds. or vats, to be housed for exportation.	Vat.	Hhd.
Housing - - -	1 0	0 6
Weighing or re-weighing -	1 0	0 6
Unhousing, wharfage, and shipping - - -	3 0	1 8
Rent - per week	0 6	0 3

Crushing Sugar. — The following charges include all expenses for receiving, delivering, coopering, and rent, for two weeks; viz.

	s. d.
Crushed fine by the mill and packed into Havannah cases - - - ton	21 0
partly crushed and packed with lumps —	16 0
crushed rough - - —	19 0
crushed fine - - - —	22 0
ground by the mill - - —	16 0
broken and packed, rough and not to particular weights - - ton	14 0
broken small and rammed with entire lumps - - - ton	14 0
broken large and rammed with entire lumps - - - - ton	12 0
Transferring - - - —	0 2
Rent per week - - - —	0 7
Sampling - - - cask	0 6
Papering - - - —	0 6

Rates on Dye Woods.

		Prime Rate, viz. Landing, Wharfage, Piling, 12 Weeks' Rent, & Delivering.	Landing, Wharfage, Weighing, and Delivering.	Rent per Week, after the first 12 Months.
Dyers' wood, &c.		s. d.	s. d.	s. d.
Bar wood - -	ton - under cover	6 6	4 6	0 1
Box wood - -		7 0	—	0 1½
Brazil wood, large				
Cam wood - -				
Cocus wood - -				
Ebony - -				
Fustic - -				
Lignum vitæ -				
Logwood - -				
Nicaragua, large -				
Quassia - -				
Sanders wood -				

	Prime Rate, viz. Landing, Wharfage, Piling, 12 Weeks' Rent, & Delivering.	Landing, Wharfage, Weighing, and Delivering.	Rent per Week, after the first 12 Months.
Dyers' wood, &c.	s. d.	s. d.	s. d.
Brazileto - - ton	8 0	5 6	0 2
Brazil wood, small - - —	8 0	5 6	0 2
Fustic, young - - —	8 0	5 6	0 3
Nicaragua wood, small - —	8 0	5 6	0 2
Sapan - - - —	8 0	5 6	0 2
Sassafras - - - —	8 0	5 6	0 3
Sandal - - - - —	8 0	5 6	0 3
Other wood, charged with duty, at per ton.			
Mahogany, cedar, jacaranda, rose wood, satin wood, tulip, zebra, &c.	7 0	5 0	0 1½

Wood Rates. — The West India Dock Company having appropriated the South Dock to the timber trade, and afforded other facilities for carrying it on with ease and expedition, we subjoin a Table of the dock rates on wood imported. *N. B.* — For the rates on ships laden with wood, see *antè*, p. 480.

Goods imported.	Prime Rate, viz. Landing, Wharfage, Piling, One * Quarter's Rent, and Delivering.	Rent per Quarter.
	s. d.	s. d.
Deals,		
American, Russian, and Prussian deals, and deal ends, per standard hundred		
12 feet long and 1½ thick - -	9 6	3 0
Spruce deals from Quebec, 12 + 3 + 9 per 120	14 6	4 6
Swedish deals from ports in the Baltic,		
2½ and 3 inches thick, 14 feet long 120	18 0	6 0
1½ and 2 do. do. —	12 0	4 0
Norway and Swedish, from ports in the North Sea,		
¾ and 1 in. thick, under 10 ft. long 120	5 0	1 6
— — 10 to 12 - —	6 0	1 10
— exceeding 12 to 14 - —	7 0	2 2
— — 14 to 16 - —	8 0	2 6
— — 16 to 18 - —	9 0	2 10
— — 18 to 20 - —	10 0	3 2
— — 20 to 21 - —	10 6	3 6
1¼ inch thick, under 10 feet long - —	7 0	2 2
— — 10 to 12 - —	8 6	2 8
— exceeding 12 to 14 - —	9 0	3 2
— — 14 to 16 - —	11 6	3 8
— — 16 to 18 - —	13 0	4 2
— — 18 to 20 - —	14 6	4 8
— — 20 to 21 - —	15 3	5 2
1½ and 2 in. thick, under 10 ft. long	9 0	2 8
— — 10 to 12 - —	11 6	3 4
— exceeding 12 to 14 - —	13 0	4 0
— — 14 to 16 - —	15 6	4 8
— — 16 to 18 - —	17 0	5 4
— — 18 to 20 - —	19 0	6 0
— — 20 to 21 - —	20 0	6 8
2½ and 3 in. thick, under 10 ft. long	11 6	3 0
— — 10 to 12 - —	14 6	4 5
— exceeding 12 to 14 - —	17 6	5 6
— — 14 to 16 - —	20 6	6 6
— — 16 to 18 - —	23 6	7 6
— — 18 to 20 - —	26 6	8 6
— — 20 to 21 - —	28 6	9 0
Deal ends, 6 feet and under - —	6 0	2 0
Deck deals,		
3 inches thick, 30 to 45 feet long each	1 0	0 4
2½ — — - —	0 10	0 3
2 — — - —	0 8	0 2½
2½ and 3 22 to 30 - —	0 8	0 3
2 — — - —	0 6	0 2
Battens from all ports,		
¾ and 1 inch thick, under 10 ft. long 120	3 6	1 2
— — 10 to 12 - —	4 2	1 4
— exceeding 12 to 14 - —	4 10	1 6
— — 14 to 16 - —	5 8	1 10
— — 16 to 18 - —	6 4	2 2
— — 18 to 20 - —	7 4	2 6
— — 21 - —	7 10	2 8
1¼ inch thick, under 10 feet long	5 0	1 8
— — 10 to 12 - —	5 8	1 11
— exceeding 12 to 14 - —	6 4	2 2
— — 14 to 16 - —	7 0	2 5
— — 16 to 18 - —	7 8	2 8
— — 18 to 20 - —	8 8	2 11
— — 21 - —	9 2	3 2
1½ and 2 in. thick, under 10 ft. long	6 7	2 0
— — 10 to 12 - —	7 4	2 4
— exceeding 12 to 14 - —	8 8	2 8
— — 14 to 16 - —	10 0	3 4
— — 16 to 18 - —	11 4	4 0
— — 18 to 20 - —	13 4	4 8
— — 21 - —	14 0	5 0
2½ and 3 in. thick, under 10 ft. long	8 0	2 3
— — 10 to 12 - —	10 0	3 0
— exceeding 12 to 14 - —	12 0	3 9
— — 14 to 16 - —	14 0	4 6
— — 16 to 18 - —	16 0	5 3
— — 18 to 20 - —	18 0	6 0
— — 21 - —	19 0	6 6
— — 22 to 30 - each	0 6	0 2
Batten ends - - - 120	4 0	1 4
Paling boards, not exceeding 7 feet —	5 0	2 0
Fir, thick stuff and plank - load	5 0	1 8
Fir boards, 1½ inch thick and under - —	7 0	2 6
Lathwood, under 5 feet - fm.	10 0	3 6
5 feet and not exceeding 8 feet - —	15 0	5 0
Firewood - - - —	7 6	2 6
Balks above 24 feet and under 5 inch —	42 0	14 0
under 24 feet and under 5 inch - —	32 0	11 0
Norway timber in balks - - load	4 0	1 0
Spars under 6 and above 4 inches - 120	40 0	12 0
Lancewood - - - —	30 0	9 0
Rickers, under 4 inch, 24 feet long and upwards - - 120	20 0	7 0
under 24 feet long - - —	10 0	3 0
Ufers, under 24 feet long - - —	20 0	7 6
24 to 32 ditto - - - —	55 0	10 0
above 32 ditto - - - —	30 0	15 0
Sparholtz and 10 ells, one third more than Ufers.		

Goods imported.	Prime Rate, viz. Landing, Wharfage, Piling, One Quarter's Rent, and Delivering.	Rent per Quarter.
	s. d.	s. d.
Oak, African and other timber charged with duty at per load - { square, per load of 50 ft. round, per load of 40 ft. }	6 6	1 0
Black birch - - under cover	5 0	1 0
Wainscot logs, 14 feet long (greater length in proportion) - - each	7 0	1 6
7 feet long - - - —	2 0	0 8
Oak and other planks (except fir planks) - - load	0 8	0 2
Clap boards, 6 feet long - - each	7 0	1 6
3 feet long - - —	0 3	0 1
Handspikes - - 120	0 1	0 0½
Spokes - - 1,200	6 0	2 0
Oars, under 24 feet long - - 120	15 0	6 6
above 24 feet long - - —	15 0	5 0
Treenails, 2 feet and under - ,200	20 0	7 0
above 2 feet - —	8 0	2 6
Staves,	12 0	4 0
Quebec, pipe - - 3 to 4 each pr. 1,200	80 0	15s. per 1,200, pipe 1½ inch.
2 to 2½ — —	55 0	
hogshead - { 1 to 1½ — —	35 0	
{ 3 to 4 — —	70 0	
{ 2 to 2½ — —	45 0	
{ 1 to 1½ — —	30 0	
barrel and heading 3 to 4 — —	50 0	
2 to 2½ — —	40 0	
1 to 1½ — —	30 0	
North American,		
puncheon and hogshead, 1 inch and under - - —	18 0	6 0
barrel and heading ditto - - —	12 0	4 0
Hamburgh and Baltic, pipe - - —	40 0	15 0
hogshead - - - —	35 0	15 0
barrel - - - —	30 0	10 0
heading - - - —	27 6	10 0
pipe, thin 1 to 1½ inch thick - —	25 0	10 0
hogshead ditto - - —	22 0	10 0
barrel and heading ditto - —	16 0	10 0
Billet staves, oak or ash,		
exceeding 3½ inch { not exceeding 4 ft. long }	48 0	20 0
1½ to 3½ — { not exceeding 4 ft. long }	35 0	15 0
under 1½ — { not exceeding 4 ft. long }	22 0	10 0
Pipe boards 3½ inches thick - —	60 0	22 6
Packs,	under cover	
pipe - - each	1 0	0 6
half pipe - - - —	0 8	0 4
quarter pipe - - - —	0 4	0 2
The Company will be answerable for the *number of pieces only* of lathwood, and cannot be responsible for the dimensions of Quebec or billet staves.		
Fir staves - - - fm.	15 0	5 0
Heading and stave ends,		
not exceeding 20 inches long 1,200	12 0	4 0
Floated Timber.		
Rafting, including ropes, staples, laying up or towing to the dock gates, or to the pond: —		
East Country, Swedish and American timber and masts, per load	1 6	1 0
Norway timber - —	2 3	1 6
Spars, 6 inch and upwards —	4 6	2 0
Rafted timber floated from the river	0 3	1 0
Delivering stored timber at the dock gates†		
East Country, Swedish, and American timber and masts - per load	0 3	
Norway timber and spars —	0 4	
Rent on stored goods to commence from the final discharge of the ship, and to be charged likewise on goods not stored, unless they are removed within 14 days after delivery from the ship.		
Repairing floats for delivery: —		
No charge to be made during the 1st and 2d quarter's rent, but at the commencement of the 3d quarter the charge to be - - per load	0 3	
And at the commencement of every succeeding quarter - per load	0 1	
Round masts to be reckoned at 40 feet to the load.		

Special Charges.	s. d.
Rummaging timber and other measured wood, as usual per ton or load - - -	1 0
Delivering into decked vessels - -	0 6
Sticking deck deals, *when required* - each	0 1
— oak plank and fir thick stuff per load	0 4
Sorting Quebec and billet staves for freight per 1,200	7 0
Turning to measure for sale at landing, oak, black birch, African, and other timber - per load	1 0
Marking lots of American and other timber piled in tiers (one lot to a tier), or floated timber, per lot	0 4

* The quarter to be calculated from the date of the ship's breaking bulk.

† If not removed within 2 tides after being brought for delivery, to be charged per tide per load 2*d*.

Memoranda for the information of the consignees and proprietors of goods imported in ships which discharge their cargoes in the West India Docks.

No ship is allowed to break bulk until her cargo is duly entered; it is therefore important that consignees should give directions for the entry of their respective consignments at the Custom-house as soon as the ship is reported.

Baggage and presents may be cleared at the baggage warehouse at the docks, after examination by the revenue.

The original bills of lading must be deposited, when required, except where a part of the goods are intended to be placed under the East India Company's care; in that case the original bill must be exhibited, and a true copy thereof deposited. Should the original bill have been previously delivered at the East India House, a certified copy must be obtained from the accountant general of the Honourable Company.

Particular attention is necessary to the regularity of the indorsements, as the Company's officers cannot pass any bill of lading, on which the authority from the shipper to the holder is not deduced by a complete and accurate chain of indorsement.

Every bill of lading should be specially indorsed, so as clearly to designate the party to whose order the contents are to be delivered.

In all cases of informality in bills of lading, from want of indorsement, &c., or of their being lost, application must be made to the court by letter, stating the circumstances, and enclosing any documents which will show the title to the goods; in every such case the applicant must engage to indemnify the Company by bond, or otherwise, as the Court may direct.

When bills of lading are produced, which are at variance with the manifest, as to the original consignee, the Company will not pass any delivery order founded thereon, until 3 clear days shall have elapsed.

The delivery of goods afloat will be the act of the captain or officer in charge of the vessel.

No order can be received until the manifest of the cargo, duly certified by the captain, has been deposited at the West India Dock House; but the orders of the importers of all goods entrusted to the West India Dock Company's management may then be passed.

When parties holding orders for delivery from the quays wish the goods housed in their own names or in the names of other parties, they must lodge the order indorsed to that effect, and warrants will be granted accordingly.

All merchandise warehoused under the care of the West India Dock Company is deliverable in the ordinary course of business by warrant, with the exception of muscovado sugar, wood*, returned manufactures, and articles imported in bulk, of which the weight or measure is liable to increase or decrease from natural causes, and goods which are not to be warehoused, or are intended for immediate shipment; in the latter case, the importers must state on their orders that "warrants are not required."

All goods entrusted to the management of the East India Company, although deposited in the West India Docks, will be delivered in the usual course of the Honourable Company's business by East India warrants.

To facilitate passing orders and paying the charges due upon the goods, the Company will open deposit accounts upon request from the merchants as herein-after noticed.

That the course of business, as respects the West India Dock Company, may be fully understood, the attention of importers and purchasers of produce is particularly requested to the following memoranda:—

The West India Dock warrants for goods which are usually sold without lotting, will be made out for such quantities as have been found generally convenient to the importers. Warrants or cheques for smaller quantities, or single packages, may, however, be granted, on paying for the extra number, at the rates herein fixed.

For goods which are lotted, made merchantable, &c., the warrants will be made out as soon as the operations are performed. When directions from the importer are required, notice will be given on the landing accounts; it is desirable that particular and early attention should be paid to such notices, and that the importers of cotton, pepper, or other articles which usually require being made merchantable, should lodge a general order directing that operation to be performed to all their importations.

The first warrants of the West India Dock Company will be issued to the order of the importers or their assigns (provided there is no stop upon the goods for freight or otherwise), upon payment of the prime rates or landing charges.

Such payments must include all charges to the time of housing, and those for lotting or making merchantable for the importer, but, if the goods are deliverable by warrant, are not to include rent;—charges accruing subsequently, and the rent, must be paid by the holders of the warrants before delivery of the goods. The proprietors of goods may, however, clear the rent and incidental charges to any desired date, and have new warrants or cheques accordingly.

When the assignment or removal of part of the goods only is intended, the warrants or cheques should be divided at the dock house in London, as hereafter provided.

If the delivery of the whole of the contents is directed and the goods are not removed within 2 days, a new warrant or cheque for the remainder of the parcel must be taken out.

In the case of casks of liquids used to fill up others, the warrant must be lodged, and the proprietor may either have a new warrant for the remainder, or it may be delivered (if not required again to be used in the same way) to his order.

When the holders of warrants or cheques are desirous of assigning part of their contents, without delivery, reweighing, rehousing, &c., new documents will be given in exchange, on lodging the originals, duly indorsed. The indorsement should specially direct the manner in which the contents are to be divided, and state the names of the parties in whose favour the new warrants or cheques are to be issued, in the following form:—"Please to divide the within;" or when part is to be delivered, "Deliver to bearer (state how many packages), and grant new one for (state how many packages) in favour of or for," &c.

Warrants may be exchanged or divided without assigning the goods, when desired by the holder, at the same rate of charge.

The original warrant is not charged for; but the charges for dividing or issuing new documents, or transferring, are—For each warrant or transfer,

	d.		d.
1 or 2 packages or quantities	1	26 to 30 packages or quantities	8
3 or 4 do.	2	31—35 do	9
5 to 7 do.	3	36—40 do.	10
8—10 do.	4	41—45 do.	11
11—15 do.	5	46 and upwards	12
16—20 do.	6	Goods in bulk, per ton	2
21—25 do.	7	Every new cheque granted	2

If from the nature of the contract between the seller and buyer, reweighing, &c. may be necessary, the warrants should be deposited indorsed with directions to that effect, and new warrants will be issued, containing the landing weights and reweights, as soon as the operations are completed.

When any alterations, such as repacking, &c., are to be made (except when preparatory to immediate delivery), the warrants must be lodged; and others, representing the goods correctly, issued in the same manner.

The warrants must likewise be lodged on giving orders to vat, but if immediate shipment is not intended, new warrants will be issued as soon as the casks are refilled.

In the 3 last-mentioned cases the charges for performing the operations include the expense of the new warrants.

When warrants or cheques are lost or mislaid, the Company require that they should be advertised in the *Public Ledger*, the paper containing the advertisement, and an engagement to indemnify the Company, by bond or otherwise, to be enclosed with the application for duplicates. The new documents not to be issued (unless the original shall be found and delivered up) until 7 clear days shall have elapsed from the date of notice by advertisement. Upon notice of the loss, the goods will be stopped; and the original document can on no account be acted upon. When East India warrants are lost, the notice should be given to the Honourable Company's warehouse keeper.

Irregularities in the indorsements lessen the security of the proprietors of goods, and render the documents incomplete as authorities. The attention of the holders is therefore particularly called to that point, to prevent the impediments which must otherwise arise to the regular despatch of business.

Any attempt to remove such impediments by indorsing any warrant, order, or cheque without due authority, even although no fraud may be intended, will be invariably noticed in the most serious manner by the directors of the West India Dock Company.

Forms on which persons may be authorised to sign for others, may be obtained in the general office at the dock house; and as no signature but that of the party named on the warrant, delivery order, or cheque, can be acted upon, when goods are made deliverable to order, persons so authorised should adhere to the following form:—"For (name or firm.)
(Signature of the person authorised.)"

Deposit Accounts may be opened with such deposits as the merchants think proper; when the balance is reduced below 10*l*., a further deposit must be made, 10*l*. being the smallest sum which can be received at a time.

Parties having deposit accounts with the Company, must transmit a note of advice on the proper form with each deposit, and it will be necessary that they should invariably state on their orders or warrants whom the charges are to be paid by, thus:—

"Charges to the (date) to our account. (Signature.)"
Or, "Charges to be paid by the holder. (Signature.)"

By opening such accounts, the business of merchants with the Company, particularly where goods are upon rent, is much facilitated. The proper forms and pass books may be obtained on application at the dock house.

Orders for Extra Work.—The charges for repacking, or preparing for exportation, and all work not comprised in these Tables, will be fixed from time to time, with reference to the cost of labour and materials. No such work, however, can be done but by the order of the proprietors of goods, or parties duly authorised by them. The warrants, or other documents, must therefore be produced, to show their authority, except for tasting of wine, and sampling wine and spirits; in these cases the number of the warrant must be inserted on the order.

The charges under this head must be paid by the parties giving the order or clearing the goods.

Goods prepared for Shipment.—When goods housed in the import warehouses are prepared for shipment, and are not taken away within the fixed number of days, they will be rehoused at the expense of the proprietor, and the charge for such rehousal, and any additional rent which may have accrued, must be paid before delivery.

The time allowed to elapse before rehousing, or restowing, is as follows: mahogany and other measured wood, 4 days; dye woods, and all other goods, 7 clear days: when the export vessel loads in the docks, the time will be extended to the date of her departure.

2. *London Docks.* — These were the next undertaking of this sort set on foot in the Thames. They are situated in Wapping, and were principally intended for the reception of ships laden with wine, brandy, tobacco, and rice. The western dock covers a space

* Warrants will be granted, however, at the desire of the proprietor, for dye wood imported from the East Indies, or any article that can be separated into distinct and corresponding parcels, on his paying the expenses of making such allotment.

of above 20 acres; and the new or eastern dock covers about 7 acres. The tobacco dock lies between the above, and exceeds 1 acre in extent, being destined solely for the reception of tobacco ships. The entire space included within the outer dock wall is 71 acres and 3 roods. The warehouses are capacious and magnificent. The great tobacco warehouse, on the north side of the tobacco dock, is the largest, finest, and most convenient building of its sort in the world. It is calculated to contain 24,000 hhds. of tobacco, and covers the immense space of near *five* acres! There is also a very large tobacco warehouse on the south side of the tobacco dock. These warehouses are wholly under the management of the officers of customs; the Dock Company having nothing whatever to do with them, save only to receive the rent accruing upon the tobacco deposited in them. The vaults are under the tobacco and other warehouses; they include an area of about 18¼ acres, and, after allowing for gangways, &c., have stowage for 66,000 pipes of wine and spirits! These docks were opened in 1805. All ships bound for the Thames, laden with wine, brandy, tobacco, and rice (except ships from the East and West Indies), were obliged to unload in them for the space of 21 years: but this monopoly expired in January, 1826; and the use of the docks is now optional.

The only entrances to the London Docks were, until lately, by the basins at Hermitage and Wapping. Recently, however, another entrance has been completed from old Shadwell Dock, through what was formerly Milkyard, to the eastern dock. This new entrance is ¾ of a mile lower down than Wapping entrance, and is a most material improvement.

The capital of the Company amounts to 3,238,310*l.* 5*s.* 10*d.* A considerable portion of this vast sum, and of a further sum of 700,000*l.* borrowed, was required for the purchase of the houses, about 1,300 in number, that occupied the site of the docks. The present dividend is 2½ per cent., and a 100*l.* share is worth about 55*l.* 10*s.* The Board of directors consists of 25 members, of whom the Lord Mayor, as conservator of the river Thames, is one.

The Regulations to be observed by Ships in the different Docks being very much alike, as are also the regulations as to loading and unloading, working hours, &c., it seems unnecessary, having already given those issued by the West India Dock Company, to do more than refer to them.

Tonnage Rates.

Vessels are not permitted to leave the dock until the tonnage dues and other expenses have been paid; for which purpose the register must be produced at the superintendent's office, if British, or a certificate of admeasurement by the proper officer of the customs, if foreign; when a pass will be granted, which must be lodged with the dock master on leaving the dock.

First Class. — Vessels *arriving* from any port in the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, Sark, or other European ports outside the Baltic, between the North Cape and Ushant (Hamburgh excepted, see *Second Class*), with liberty to reload for any port, for every register ton of the vessel 6*d.*; and rent, after 4 weeks from date of entrance, if cargo discharged by own crew; from the date of final discharge, if cargo discharged by the Dock Company, 1*d.* per register ton per week. If with part of their cargoes, for every ton of goods landed, 6*d.*; and rent, after 1 week from date of entrance, 1*d.* per register ton per week.

Vessels *loading* for any of those places, not having previously discharged their cargoes in the docks, for every register ton of the vessel, 6*d.*; and rent, after 4 weeks from date of entrance, 1*d.* per register ton per week.

Second Class. — Vessels *arriving* from Hamburgh, with liberty to reload, for every register ton of the vessel, 6*d.*; and rent, after 6 weeks from date of entrance, 1*d.* per register ton per week.

Vessels *loading* for Hamburgh, not having previously discharged their cargoes in the docks, for every register ton of the vessel, 6*d.*; and rent, after 4 weeks from date of entrance, 1*d.* per register ton per week.

Third Class. — Vessels *arriving* from any port in the Mediterranean, with liberty to reload for any port, for every register ton of the vessel, 9*d.*; and rent, after 6 weeks from date of entrance, 1*d.* per register ton per week.

Vessels *loading* for any port in the Mediterranean, not having previously discharged their cargoes in the docks, for every register ton of the vessel, 9*d.*; and rent, after 4 weeks from date of entrance, 1*d.* per register ton per week.

Fourth Class. — Vessels *arriving* from any other port or place whatsoever (with the exception of those hereafter enumerated), with liberty to reload, for every register ton of the vessel, 9*d.*; and rent, after 4 weeks from date of entrance, if cargo discharged by own crew; from date of final discharge, if cargo discharged by Dock Company, 1*d.* per register ton per week.

Vessels *loading* for any other port or place whatsoever (with the exception of those hereafter enumerated), not having previously discharged their cargoes in the dock, for every register ton of the vessel, 9*d.*; and rent, after 4 weeks from date of entrance, 1*d.* per register ton per week.

Exceptions. — Vessels from Spain, laden with cork or wool, for every register ton of the vessel, 6*d.*, and rent, after the expiration of 3 weeks, 1*d.* per register ton per week.

Vessels to or from the whale fisheries, for every register ton of the vessel, 1*s.*; and rent, after the expiration of 6 weeks, 1*d.* per register ton per week; for every tun of oil delivered into craft, 6*d.*

Vessels (excepting coasters, for which see *First Class*), landing part of their cargoes, for every ton of goods landed, 9*d.*; and rent, after 1 week from date of entrance, 1*d.* per register ton per week.

Vessels loading part of their cargoes, for every ton of goods taken on board from the quays or by craft, 9*d.*; and rent, after 1 week from date of entrance, 1*d.* per register ton per week.

Vessels two thirds laden with corn will be charged dock dues on the proportion which the other part of the cargo bears to the register tonnage.

No tonnage rates will be charged on vessels wholly corn-laden, but they will be charged for docking and undocking as under: —

Vessels of 100 tons and upwards, 1*l.* 1*s.*
Do. under 100 tons, 10*s.* 6*d.*

with liberty to remain in the dock, without further charge, for 24 hours after final discharge. Rent, after the expiration of that period, 1*d.* per register ton per week. Should the vessel load outwards, the usual tonnage rates, according to the port of destination, will be charged, instead of the rate for docking and undocking.

Vessels coal laden, for docking and undocking, 21*s.* each; for every ton of coals landed, 6*d.*; for every ton of coals transhipped, 6*d.*; and rent, after 1 week, 1*d.* per register ton per week.

Vessels which enter the docks light, and load out, pay dues according to their ports of destination, instead of those on light vessels.

Light vessels entering the dock to lie up, for every register ton of the vessel, 6*d.*; and rent, after 4 weeks from date of entrance, 1*d.* per register ton per week.

Whenever required, the Company will discharge the cargo of a vessel upon the following terms; viz.

Cargoes consisting, either in the whole or in part, of hogsheads or tierces of sugar (including ship cooperage), 1*s.* 9*d.* per register ton.

Cargoes consisting of sugar in chests, 5 cwt. and upwards (including ship cooperage), 1*s.* 3*d.* per register ton.

Cargoes consisting of sugar in bags or chests, under 5 cwt., or other goods (not being oil direct from the fisheries, tallow, hemp, ashes, corn, wood goods, pitch, tar, hay, or straw), contained in casks, bales, serons, chests, cases, bags, baskets, mats, bundles, or similar packages; also, spelter or metal in pigs, bars, rods, plates, &c., 9*d.* per register ton.

Cargoes consisting of mahogany timber, or other wood, in logs, 1*s.* 9*d.* per register ton.

Blue gum wood, or large timber, additional for every load delivered, 6*d.*

Cargoes consisting of hemp only, or merchandise, in bulk, 1*s.* per register ton.

Cargoes consisting of tallow only, 6*d.* per register ton.

Mixed cargoes; hemp, 1*s.* 3*d.* per ton of goods; tallow, 6*d.* per ditto; ashes, 6*d.* per ditto.

Mixed cargoes, part being in bulk, on the latter, 1*s.* per ton of goods.

(No charge made for excess beyond the register tonnage.)

Vessels which leave the docks for repairs are not charged rent while absent.

Memoranda. — Registers of ships inwards and outwards are kept in the superintendent's office.

The wicket gates at the north-west principal entrance, at Wapping, and on the east side of the eastern dock, are opened and closed as under: —

From 22d Sept.	to 20th Oct.,	both inclusive,	opened at	6	o'clock, closed at	6 o'clock
21st Oct.	20th March	—		7	—	6 —

Visiters are not admitted on Sundays.

No person is permitted to quit a vessel after the wicket gate is closed.

The hours for the commencement of business, and opening and closing the barrier gate, are,

From 1st March	to 31st Oct.,	both inclusive,	opened at	8	o'clock, closed at	4 o'clock.
1st Nov.	28th Feb.	—		9	—	4 —

Lodgment of Manifest. — Masters of ships are required to deliver at the superintendent's office, within 12 hours after the arrival of the vessel in the dock, or reporting at the Custom-house, (which shall first happen,) a true copy of the manifest or report of the cargo, signed by themselves.

Discharge of Vessels. — Vessels are not to break bulk, without the permission of the superintendent, until the whole of the cargo has been entered at the Custom-house.

Upon application of the master, the Company will pass a warehousing entry for such goods as the owners or consignees may have neglected or refused to enter within 48 hours; and will also land goods not entered within 7 days; both periods to be computed from the date of the report.

Labourers or lumpers are not allowed to work on board vessels, on the quays, or in the warehouses, unless engaged by the Company; but may be hired of the Company, to work under the direction and responsibility of the master, the charge being 3*s.* 6*d.* per day for each man: and should not a sufficient number be employed for the timely discharge of the cargo, additional hands will be provided by the Company, at the expense of the vessel.

The decks are to be speedily cleared of such articles as may impede the discharge; and the master, mate, or some person duly authorised by the owners, is to remain on board during the unloading.

Stops for Freight. — Goods landed will be detained for the freight, on due notice in writing, by the owner, master, or other person interested therein; and will not be delivered, nor warrants granted for them, until orders shall have been given for the release of the goods, or the freight deposited with the Company; nor can a stop be received after the goods have been transferred in the Company's books, or a warrant has been granted for them.

Goods delivered into craft to be landed elsewhere, cannot be detained for freight.

Vessels leaving the dock for repairs are not charged rent whilst absent; nor is any charge made for ballast, chalk, or flints, received from or delivered into craft.

Water is supplied from the reservoir, and delivered into the ships' boats, at 1*s.* per tun, on application to the dock master.

Abstracts of cargoes, for the purpose of making up freight accounts, will be supplied on application at the comptroller's office, at the following charge: —

		s.	*d.*
If the goods have	10 marks or under	2	0
—	11 to 20 marks	3	0
—	21 and upwards, 2*d.* each mark or parcel.		

Steam boats are furnished by the Company, in certain cases, to vessels (not laden with corn or timber) proceeding to these docks, arriving from North and South America, the West India Islands, the Cape of Good Hope, and all ports to the eastward thereof, upon application to the secretary, the superintendent, or the agent of the Company.

Regulations regarding Goods and the Rates and Charges thereon.

Rent is charged on goods from the day on which the importing vessel breaks bulk. If goods be landed by a duty paid, a sight, or a warehousing entry, and taken away within 3 days, no rent is payable; but if they remain on the quay after that time, quay rent or watching is charged for such longer period.

Goods landed by Dock Order. — Before goods which have been landed by the Company for want of entry, can be delivered or transferred, the bill of lading must be lodged at the warehouse, and the goods entered at the Custom-house: and such goods are subject to an additional charge for porterage.

Orders for transfer or delivery (the forms of which may be obtained at the comptroller's office), unless the goods are to be delivered from the landing scale, cannot be accepted until the goods have been landed.

Neither can orders for transfer be received, until the charges due on the goods composing the whole of the entry have been paid; goods landed under the consolidated rate, and wines and spirits, excepted.

Orders for delivery cannot be acted upon, unless signed by the party in whose name the goods stand in the Company's books, or by a person duly authorised to sign them: and should any interlineation, erasure, or alteration have been made in an order, it can only be accepted with the initials of the party set against such alteration.

Payment of Charges and Deposit Accounts. — The only persons authorised to receive money are, the collectors at the superintendent's office, and wine and spirit department; the deputy warehouse-keeper at the tobacco warehouse; the dock master (for water furnished to vessels in the dock); and the warehouse-keeper at the eastern dock; except for consolidated rates, which may be paid at the London Dock House, in New Bank Buildings.

Deposit accounts may be opened at the superintendent's office.

If the order does not specify the party by whom the charges due at the date of the order or transfer are to be paid, the amount thereof will be placed to the deposit account of the party transferring.

Warrants and Transfers. — Warrants for goods in general, are granted on written application at the dock, in favour of such person as the party in whose name they stand in the Company's books may direct. The first are issued free of charge; on all subsequent warrants and transfers, the charges are as follow: —

For each warrant or transfer containing	s.	d.	For each warrant or transfer containing	s.	d.
1 or 2 packages	0	1	26 to 30 packages	0	8
3 — 4	0	2	31 — 35	0	9
5 to 7	0	3	36 — 40	0	10
8 — 10	0	4	41 — 45	0	11
11 — 15	0	5	46 and upwards	1	0
16 — 20	0	6	and for goods in bulk, per ton	0	2
21 — 25	0	7			

The contents of one warrant may be divided into warrants for smaller quantities, at the will of the holder.

Whenever housing, taring, weighing, dipping, rehousing, or counting of goods is required, the operation must be performed before a warrant can be issued; and if reweighing, &c. be required, a new one must be obtained.

Applications for duplicate warrants, in consequence of the originals being lost or mislaid, must be addressed to the secretary, at the London Dock House, who will make known the conditions on which the Company will issue them.

Weights of Goods. — Duplicates are furnished, upon reasonable cause for requiring them being assigned.

Second Samples of Goods. — Orders for second samples, if the goods are for "exportation only," are issued at the comptroller's office, the proprietor paying the customs' duty thereon.

Empty Casks and Packages. — If not removed from the dock within 7 days, are sold by the Company, and the proceeds paid to the owners, after deducting the sale charges and other expenses.

Explanation of the following Table of Rates and Charges on Goods imported into the London Docks.

The consolidated rate is charged upon the nett weight, and includes landing, wharfage, and housing, or piling on the quay, coopering, sampling, weighing for delivery, delivery, and 12 weeks' rent from the date of the importing ship breaking bulk; which may be paid on each mark separately, and will attach unless notice be given to the contrary, prior to final weighing or gauging.

The import rate is charged upon the gross weight, and includes landing, wharfage, and housing, or piling on the quay, or loading from the landing scale, and furnishing the landing weights or tales; to be paid before the delivery of any part of an entry can take place.

The charges for reweighing, rehousing, unhousing and loading, or repiling, are each one third of the import rate; those for unhousing or unpiling, wharfage and shipping, the same as the import rate; when not otherwise specified.

TABLE OF RATES AND CHARGES ON GOODS IMPORTED INTO THE LONDON DOCKS.

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per	s. d.	Per
Alkanet root -	cwt.	0 6	0 1	cwt.
Almonds, from Africa,	ton	4 6	0 4	ton
in boxes and barrels,	cwt.	0 6	2 0	100 boxes
			1 3	100 half boxes
			0 2	brl. 2 cwt. 2 qrs. to 3 cwt.
			0 0½	¼ barrel
shell - -	cwt.	0 9	0 2	large bale
			0 1½	small bale
			0 1	half bale or seron ¾ to 1½ cwt.
Aloes, in gourds -	ton	8 0	0 ¾	score gourds
or a consolidated rate of 30s. per ton nett.				
in chests or casks -	ton	6 0	0 1	package under 3 cwt.
or a consolidated rate of 20s. per ton nett.			0 1½	ditto 3 & under 5 cwt.
			0 2	ditto 5 & under 8 cwt.
			0 3	ditto 8 cwt. & upwards
Alum - -	ton	3 6	0 3	ton
Alva marina,				
in bales press-packed,	ton	3 0	0 4	ton
in bags not press-packed,	ton	5 0	0 6	ton
Amber and beads,	package	1 6	0 1	box or case
Ambergris, in boxes or kegs	package	1 6	0 3	package
Anchovies - -	cwt.	0 9	2 6	100 brls. or double brls.
			1 3	100 kegs
			0 0½	cask under 1½ cwt.
Angelica root -	ton	5 0	0 1	barrel
			0 2	tierce
			0 3	hogshead
Aniseed - -	cwt.	0 3	0 6	ton
star - -	cwt.	0 4½	0 10	ton
Annotto - -	ton	7 0	0 7	
or a consolidated rate of 21s. per ton nett in casks				
in baskets or small packages - -	cwt.	1 7½	0 2	cask 3 to 8 cwt.
			0 0½	mat or basket 1 cwt. and under
Antimony - -	ton	5 0	0 4	ton
ore - -	ton	5 6	0 2	ton
if loose, filling and weighing, 2s. per ton.				
Apples	basket or barrel	0 6	0 0½	basket or barrel
	tierce	1 0	0 1½	tierce
	hogshead	1 6	0 3	hogshead
Argol - -	ton	5 0	0 4	ton in casks
			1 6	100 cases under 2 cwt.
			2 6	100 bags or cases 2 cwt. and under 4 cwt.
Arrow root - -	ton	7 6	0 7	ton
or a consolidated rate of 2[illegible]s. per ton nett in casks, or 30s. in boxes or chests.				

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per	s. d.	Per
Arsenic - -	ton	5 0	0 4	ton
Asafœtida - -	cwt.	0 6	0 0½	cwt.
Ashes, from America,	ton	3 0	0 0½	cask
Russia - -	ton	3 0	0 2	cask
Odessa - -	ton	3 0	0 3	ton
Unhousing, wharfage, and shipping, 2s. per ton.				
Asphaltum - -	ton	5 0	0 6	ton
				Unhousing, Wharfage, and Shipping.
Bacon - -	hogshead	2 0	0 3	1 6
	bale	0 6	0 1	0 6
	side	0 2½	0 0½	0 1½
middles, 3 cwt.	tierce	0 8¼	0 1	0 6
ditto, 1 to 2 cwt. -	cask	0 6	0 0½	0 4
Baggage, including delivery and one week's rent.				
presents, samples, parcels of papers, and other small articles,	package	0 6	0 1	package
cases, trunks, boxes, bundles of bedding, and wearing apparel,	package	1 to 1 6	0 1½	package
middle-sized ditto, and chests -	package	2 0	0 2	package
larger packages in proportion.				
Bags, empty - -	score	0 2	0 0½	score
Balsam capivi, in jars,	cwt.	1 1½	0 0½	jar
in barrels - -	cwt.	0 6	0 1	barrel, under 2 cwt.
			0 2	barrel, 3 cwt. & upwards
Peru, in jars -	cwt.	1 1½	0 0½	jar
Cooper's attendance at landing and delivery is a separate charge.				
Canada - -	package	1 6	0 1	package
Bamboos. See *Canes*.				
Bark, oak, in bags or loose - -	ton	5 0	0 4	ton
in casks - -	ton	3 0	0 4	ton
in cases about 1 cwt. 2 qrs. - -	cwt.	0 6	0 1	case
Jesuits' or Peruvian,	cwt.	1 0	0 1	chest
			0 0¾	½ chest or seron
			0 0½	¼ seron
Barilla, loose - -	ton	3 6	0 2	ton
Unhousing, wharfage, and shipping, 3s. per ton.				
Filling and weighing, 2s. per ton.				
in serons - -	ton	3 3	0 2	ton
Unhousing, wharfage, and shipping, 2s. 6d. per ton.				

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Baskets - - bale	3 0	0 3	bale
½ bale	1 6	0 1½	½ bale
large bundle	1 0	0 1	large bundle
small bundle	0 6	0 0½	small bundle
Beads, jet, or other kinds, not described package	1 6	0 1	package
Beans, in bags - bag	0 6	0 1	bag
castor - - cwt.	0 3	0 6	ton
Beef and pork - tierce	0 8¼	0 0½	tierce
barrel	0 5¼	3 0	100 barrels
tub, kit, or half barrel	0 3¾	2 0	100 barrels
Berries, juniper - ton	8 0	2 6	100 bags under 2 cwt.
		5 0	100 bags 2 to 4 cwt.
yellow or bay - ton	5 0	0 4	ton
Betel nuts - - ton	5 0	0 5	ton
Biscuits - - cwt.	0 3	0 0¼	keg
		0 0½	bag or barrel
Bones - - 1,000	3 0	0 2	1,000
in bags - - bag	0 6	0 0½	bag
Books - - cwt.	1 0	0 2	bale or box
		0 3	package or chest
Boracic acid - - ton	5 0	0 4	ton
Borax, rough or refined, ton	5 0	0 10	ton
Bottles, empty glass gross	3 0	0 1	gross
Brass - - ton	5 0	0 2	ton
Brimstone, loose - ton	3 6	0 2	ton
Unhousing, wharfage, and shipping, 3*s.* per ton.			
Filling and weighing, 2*s.* per ton.			
in casks or cases - ton	3 3	0 3	ton in casks
Unhousing, wharfage, and shipping, 2*s.* 6*d.* per ton.		8 4	100 cases of about 2 cwt.
		4 2	100 boxes about 1 cwt.
		2 1	100 boxes about 56 lbs.
Bristles, in packages above 5 cwt. - - ton	7 0	0 6	ton
under 5 cwt. - ton	6 8½	0 6	ton
Bronze - case	1 6	0 2	case
case	1 0	0 1	box
Bucco leaves - cwt.	1 0	0 1½	case or barrel 2 cwt.
		0 2	case 3 to 5 cwt.
Bugles - - ton	5 0	0 9	ton
Bullion - cask or case	1 6		
small package	1 0		
smaller packages, not exceeding 5*l.* in value.	0 6		
Burr stones. See *Stone.*			
Butter, foreign, Friesland or Holstein, landing, wharfage, and housing, or loading, and furnishing landing weights to the importers - - ¼ cask	0 3	4 0	100
the like - half qr. cask	0 3	2 0	100
Loading from the warehouse, 1*d.* per cask.			
Weighing on delivery, if required, and furnishing delivery weights to the buyer, 1*d.* per cask.			
Emden or Holland, landing, wharfage, and housing or loading, and furnishing landing weights - firkin	0 3	2 0	100
Loading from the warehouse, ¾*d.* per firkin.			
Weighing on delivery, when required, ¾*d.* per firkin.			
Irish - score firkins	3 0	2 0	10
Weighing upon delivery, 1*d.* per cask or firkin.			
Unhousing, wharfage, and shipping, 1½*d.* per cask or firkin.			
Cables, iron - - ton	5 0	0 3	ton
hempen - - ton	10 0	0 4	ton
coir - - ton	12 6	0 5	ton
Cambric - - package	2 6	0 4	package
Camels' hair - - cwt.	0 10½	0 2	bale or case
Camphor - - cwt.	0 6	0 10½	ton
or a consolidated rate of 1*s.* 8*d.* per cwt. nett.			
Canes, common rattan, 1,000	1 6	0 1½	1,000
or a consolidated rate of 3*s.* 6*d.* per 1,000.			
ground - - 1,000	4 0	0 3	1,000
reed, in bundles, 25 each 100 bundles	6 3	1 6	100 bundles
whanghee, bamboo, and Jumbo - 1,000	5 0	0 2	1,000
Canilla alba - cwt.	0 6	0 0¾	cwt.
or a consolidated rate of 1*s.* 8*d.* per cwt. nett.			
Cantharides - - cwt.	1 0	0 3	case or cask under 4 cwt.
		0 4	case or cask 4 and under 8 cwt.
		0 6	case or cask 8 cwt. and upwards
Capers - cwt.	0 3	0 6	butt
		0 4	puncheon
		0 3	hogshead
		0 1	barrel
Cards, playing package	1 6	0 2	package
small package	1 0	0 1	small package
Cardamoms - - cwt.	0 6	0 1½	chest
bag		0 1	bag

No rent or watching will be charged if taken away from the quay within six working days from the period of the importing ship breaking bulk.

Watching on the quays, after the expiration of one week, per night, on any number of casks or firkins, *s. d.*

Not exceeding
25 - - - 0 6
26 & not 50 0 9
51 — 75 1 0
76 — 100 1 6
On any number above 100, in like proportion.

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Carpets, bale above 70 square yards	2 0	0 4	bale
ballot, under 70 square yards	1 4½	0 2	ballot
Carraway seed - ton	5 0	0 5	ton
Cashew nuts - cwt.	0 6	0 0½	cwt.
Casks landed empty, or cask cases, if not delivered within 6 days (and includes delivery)			
butt, pipe, or puncheon	0 8	0 1	butt, pipe, or puncheon
smaller cask or case -	0 4	0 0½	smaller cask or case
N. B. — If taken away within 6 days, half the above charges, and no rent.			
wine or spirit, small ullages (including turning over the contents, storing and delivery) each	1 0	0 1	each
Cassia lignea - cwt.	0 6	1 0	ton
buds - - cwt.	0 6	1 0	ton, in chests
or a consolidated rate of 1*s.* 6*d.* per cwt. nett.		5 0	100 bags
fistula - - cwt.	0 6	0 0¾	cwt.
Castor beans - - ton	0 3	0 6	ton
Castorum, keg or small box	1 0	0 1	keg or small box
Catlings - case or chest	1 0	0 2	case or chest
Caviare - - package	0 6	0 1	package
Chaises or carriages, with 2 wheels - - each	7 6	1 0	each
4 ditto - - each	10 6	1 6	each
Chalk, French - ton	5 0	0 6	ton
Chassum - - bale	1 6	0 1	bale
Cheese, foreign - ton	4 0	1 0	ton
Landing, wharfage, and housing, or loading, and furnishing landing weights to the importers.			To be housed in a well lighted and ventilated warehouse, with the use of scaffolding, upon which the cheese will be stowed, so as to admit of separate and convenient examination; and the rent to commence after one week from the day of landing. *N. B.* — By this mode of stowage and well regulated ventilation, the loss in weight usually sustained upon housing will be materially diminished.
Turning, each time, per ton, 9*d.*			
On delivery, weighing, per ton, 1*s.* 4*d.*			
Unhousing and loading, per ton, 1*s.* 4*d.*			
in tub or case - cwt.	0 6	0 1	tub or case
		1 6	100 small ditto
Chesnuts - bushel	0 2¼	4 0	100 sacks
		2 0	100 bags
		4 2	100 barrels
Chicoree, under 1 cwt. 2 qrs. case or cask	0 6	0 0½	case or cask
under 3 cwt. case or cask	0 9		
3 and under 5 cwt. case or cask	1 0	0 1	case or cask
5 cwt. *and above*, cask	1 6	0 2	case or cask
Chillies - - cwt.	0 6	0 7	ton
or a consolidated rate of 1*s.* per cwt. nett.			
China root - - cwt.	0 6	0 0½	cwt.
China ware or porcelain, case	1 6	0 3	case
small case	1 0	0 2	small case
box	1 0	0 1	box
Chirayeta - cwt.	0 8¼	0 3	cask or case
Chocolate - box	0 9	0 2	box
Cinnabar - - cwt.	2 4½	0 10	ton
or a consolidated rate of 4*s.* 6*d.* per cwt. nett.			
Cinnamon - - cwt.	1 8¼	0 1	cwt.
or a consolidated rate of 3*s.* per cwt. nett.			
Citron, in salt - - pipe	1 6	0 4	pipe
hogshead	1 0	0 3	hogshead
Cooper's attendance is a separate charge.			
preserved. See *Succades.*			
Clocks, wooden - chest	2 0	0 2	chest
Cloth, woollen, case or large bale	2 0	0 3	case or large bale
from 8 to 12 pieces, ordinary bale	1 6	0 2	ordinary bale
under 8 pieces, small bale	1 0	0 1½	small bale
Cloves - - cwt.	0 8¼	0 1	cwt.
or a consolidated rate of 2*s.* 3*d.* per cwt. nett.			
Cobalt - - ton	5 0	0 5	ton
Cochineal - - cwt.	0 9	0 1½	cwt.
or a consolidated rate of 3*s.* per cwt.			
dust - - -	- -	4 2	100 bags
Cocoa and coffee, all kinds, cwt.	0 6	0 6	ton
or a consolidated rate, in casks, 1*s.* 6*d.* per cwt. nett; in bags, 1*s.* 2*d.* per cwt. nett.			
Cocque de perle chest	1 0	0 2	chest
Coculus Indicus - cwt.	0 6	0 0½	cwt.
or a consolidated rate of 1*s.* 6*d.* per cwt. nett.			

Goods imported.	Import Rate.	Rent. Per Week.	Quantities, &c.
	Per s. d.	s. d.	*Per*
Coir, unwrought, press-packed - - ton	3 0		
rope, under 6 inches girth, ton	6 3	0 4	ton
yarn - - ton	5 0		
Coker nuts - - 100	1 6	0 3	100
or a consolidated rate of 3s. 4d. per 100.			
Coloquintida - - cwt.	0 10½	0 1	case or cask under 1 cwt.
		0 2	case or cask 1 and under 3 cwt.
		0 3	case or cask 3 cwt. and upwards.
Columbo root - cwt.	0 6	0 0½	cwt.
Copper - - ton	5 0	0 2	ton
Wharfage and shipping copper slabs, when piled on the quay, 3s. 4d. per ton.			
Copperas - - ton	5 0	0 6	ton
Coquilla nuts - 1,000	1 3	0 1	1,000
Counting the whole parcel is a separate charge.			
Coral, fragments - cwt.	0 7½	0 3	case or cask
beads - - case	1 6	0 2	case
box	1 0	0 1	box
Cordage, hempen, under 6 inches - - ton	5 0	0 4	ton
Cork - - - ton	6 0	0 7	ton on quay
Unhousing, wharfage, and shipping, 4s. per ton.		1 0	ton under cover
Corks - - cwt.	2 0	0 1	bag 1 cwt.
		0 0½	bag 56 lbs.
		0 2	hogshead
Cornelians and beads, chest	1 6	0 2	chest
box	1 6	0 1	box
Corpses - - each	15 0		
Cortex Winteranus - cwt.	0 6	0 0¾	
or a consolidated rate of 1s. 6d. per cwt. nett.			
Cotton goods - bale	1 6	0 2	bale
box or case	1 0	0 1½	box or case
trunk	0 9	0 1	trunk
Cotton wool, press-pckd.cwt.	0 3	0 5	ton
not press-packed - cwt.	0 4½	0 6	ton
or a consolidated rate on press-packed, 9d. per cwt. nett; not press-packed, 1s. per cwt. nett.			
Cotton yarn - cwt.	0 5½	0 1	bale
Cowhage - - cwt.	0 6	0 0½	cwt.
Cowries - - ton	5 0	0 3	ton
Cows - - - each	10 0		
Cranberries - - keg	0 6	0 1	keg
barrel	0 9	0 1	barrel
Cream of tartar - ton	3 0	0 6	ton
		0 2	cask under 13 cwt.
Cubebs - cwt.	0 6	0 0¾	cwt.
Cummin seed - cwt.	0 6	0 0¾	cwt.

	Unhousing and Loading. s. d.
Currants, 25 cwt. and upwards - - butt	4 6 — 1 0
15 to 23 cwt. - butt	3 0 — 0 8
9 to 15 cwt. - pipe	2 3 — 0 6
5 to 9 cwt. - carotel	1 6 — 0 4

Deals. See *Wood Goods.*			
Deer - - - each	5 0		
Diamonds - - package	1 6	0 3	package
Dragons' blood - cwt.	0 6	0 0¼	cwt.
Dripstones - - each	0 9	0 0½	each
Dye flower - - ton	5 0	0 6	ton
or a consolidated rate of 14s. 6d. per ton nett.			
Eau de Cologne - case	1 3	0 4	case
small case	1 0	0 2	small case
Eggs - - - box	0 6	0 1	box
Elephants' teeth. See *Ivory.*			
Emery stone. See *Stone.*			
Essences, 1 cwt. and upwards - - case	2 0	0 4	case
under 1 cwt. - case	1 6	0 2	small case
Extract from oak bark, cwt.	0 3	0 1	cask about 4 cwt.
		0 1½	cask above 6½ cwt.
rhatania - - cwt.	0 9	0 1	cwt.
Jesuits' bark - cwt.	0 9	0 1	cwt.
Fans - - - case	1 0	0 1½	case
box	1 0	0 1	box
Feathers, bed - cwt.	0 10½	0 1	small bale
		0 1½	bag 1½ and under 2 cwt.
		0 2	bag 2 and under 3 cwt.
		0 3	bale 3 and under 5 cwt.
from Ireland - -	- -	0 2	bale
ostrich - - package	1 6	0 2	package
vulture, not exceeding 2 cwt. - - package	1 6	0 2	package
not exceeding 50 lbs. bag	0 6	0 0½	bag not exceeding 50 lbs.

	Unhsg and Ldg. s. d.	Rent per Week. s. d.	
Figs, 3 qrs. to 1 cwt. 1 qr., chest	0 3	0 0½	100 chests
about 56 lbs. ½ chest	0 3	0 0½	100 half chts.
¼ chest — 28 lbs. score	2 6	0 6	
drums - - score	2 6	0 6	
½ and ¼ drums - score	1 6	0 6	1 5 ton
half ... drums - score	1 6	0 6	
tapn... - - score	1 6	0 6	

Goods imported.	Import Rate.	Rent. Per Week.	Quantities, &c.
	Per s. d.	s. d.	*Per*
Fish, cod - - ton	4 6	0 4	ton
herrings - - tierce	1 0	3 0	100 tierces
mackerel - - barrel	0 6	1 6	100 barrels
salmon - - tierce	0 6	5 0	100 tierces
kit	0 1½	1 6	100 kits
stock, or sturgeon 1,000	6 0	0 4	1,000 stock
		1 0	100 kegs sturgeon
		2 6	100 barrels stock or sturgeon
not otherwise described, tierce	1 0	5 0	100 tierces
barrel	0 6	2 6	100 barrels
box	0 3	1 6	100 boxes
roes - - barrel	0 9	3 0	100 barrels
Flax (including weighing), ton	5 0	0 5	ton
If sold from landing scale, to importer, per ton, 3s. 6d.; to buyers, ditto, 1s. 6d.			
Unhousing, wharfage, and shipping, 4s. 6d. per ton			
Flour - - - ton	4 9	0 2¼	ton
including delivery by land or water.			
Reeling, 1s. per ton.			
Weighing on delivery, if required, 1d. per barrel or chest.			
Flowers, artificial - case	1 0	0 1	case
box	0 9	0 0½	box
Forest seeds, nuts and acorns - - barrel	0 9	0 1	barrel
Frankincense - - chest	0 8½	0 10	ton
Fruit. See the species of fruit.			
Furniture, very large case	4 6	0 4	large case
ordinary case	3 0	0 3	ordinary case
middling case	2 0	0 2	middling case
intermediate package	1 0	0 1½	intermediate package
small case	0 6	0 1	small case
Furs. See *Skins.*			
Galangal - - cwt.	0 6	0 0½	cwt.
Galbanum - - cwt.	0 6	0 0½	cwt.
Galls - - cwt.	0 3¾	0 10	ton
Gamboge - - cwt.	0 6	0 0½	cwt.
Gentian root - - ton	5 0	0 10	ton
Ginger - - cwt.	0 6	0 6	ton
or a consolidated rate of, in casks, 1s. 6d. per cwt. nett; in bags, 1s. 2d. do.			
Ginseng root - - ton	5 0	0 1	barrel
Glass - - cask or chest	1 6	0 3	cask or chest
case	1 0	0 2	case
box	1 0	0 1	box
Glue - - - ton	5 0	0 4	ton
Granilla - - cwt.	0 9	0 2	barrel
or a consolidated rate of 3s. per cwt. nett.			
Grapes - - box	0 6	5 0	100 boxes
jar	0 3	2 6	100 jars
Grease - - - ton	5 0	0 3	ton
Greaves - - ton	4 6	0 3	ton
Guinea grains - cwt.	0 6	0 10	ton
Gum, in serons, bags, or in cases, chests or casks, from Africa - - ton	4 6	0 4	ton
in cases, chests, or barrels, from other places cwt.	0 6	0 1½	chest or case
		0 0½	barrel
loose or in hogsheads ton	5 0	0 4	ton
Guns, carronades, 6 cwt. and upwards - - each	2 0	0 1	no rent if taken away in 7 days
Other sizes are charged in proportion.			
Hair, horse, ox, or cow, cwt.	0 6	0 1	bale under 3 cwt.
		0 1½	bale 3 and under 5 cwt.
		0 2	bale 5 cwt. and upwards
		0 0½	cwt. loose
human - cwt.	1 0	0 2	bale

	Unhsg. Whfge. and Shipg. s. d.	
Hams - - hogshead	2 0 — 0 3	1 6 hogshead
tierce	1 6 — 0 1	0 8 tierce
barrel or basket	0 6 — 0 1	0 4 barrel or basket

loose - - - each	0 0¾	0 0½	each
Hats, Leghorn - 10 doz.	0 6	0 1	10 dozen
		0 2	middling case or package
		0 4	large case or package
chip - tub of 80 doz.	1 6	0 2	tub of 80 dozen
Hellebore root - cwt.	0 6	0 10	ton
Hemp (including weighing) ton	4 6	0 5	ton
If sold from landing scale: to importer, ton 3s. 6d.; to buyer, ton 1s.			
Weighing in the warehouse, ton, 2s.			
Loading, ton, 2s.			
Unhousing, wharfage, and shipping, 4s. per ton.			

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Hemp — *continued.*			
press-packed - ton	4 0	0 4	ton
codilla, hemp or flax ton	6 0	0 6	ton
If sold from landing scale:			
to importer, ton 5*s.*			
to buyer, ton 1s.			
Weighing, 2*s.* per ton.			
Loading, 3*s.* per ton			
Unhousing, wharfage, and shipping, 5*s.* per ton.			
Consolidated rate, on East India, press-packed, 11*s.* per ton.			
Hides, horse - bale or chest	2 8½	0 3	containing 150 or under, larger bale in proportion
loose - - - each	0 0¾	0 6	100
from Hambro', dry 100	7 6	0 8	100
bundle of 2 hides	0 3	0 10	100
horse, ox, cow, or buffalo, wet salted - each	0 1½	0 10	100 hides
ox, cow, or buffalo, with short horns - each	0 2	2 6	100
other hides, not enumerated, dry, or dry salted, averaging more than 22 lbs. - - each	0 1½	0 10	100
do. averaging 12 lbs. and not exceeding 22 lbs. 100	9 0	0 10	100
do. 7 lbs. and under 12 lbs. 100	6 3	0 6	100
do. under 7 lbs. - 100	4 2	0 6	100
in bales, about 8 cwt. bale	3 0	0 3	bale
about 4 cwt. bale	1 6	0 1½	bale
small bale	1 3	0 1	small bale
Iosh - bale or chest	2 0	0 3	bale or chest
Honey - - cwt.	0 6	0 1	barrel
		0 0½	keg or jar
Hoofs - - cwt.	0 6	0 10	ton
Hops - - - cwt.	0 4½	0 2	bag
		0 1	pocket
Horns, and horn tips, or plates, including counting cwt.	0 10½	0 10	ton horns
		0 5	ton tips
in packages - - cwt.	0 6	0 0½	bag
hart, stag, or deer, 100 pair	3 0	0 3	100 pair
in bales under 2 cwt. bale	1 0	0 1	bale
2 cwt. and above bale	1 6	0 1½	bale
Horses - - - each	12 6		
Jalap - - cwt.	0 10½	0 1	bale about 3 cwt.
		0 0¾	bale about 1½ cwt.
Jewellery - - package	1 6	0 3	package
box	1 6	0 2	box
ndian rubber, hhd. or pipe	1 6	0 4	hogshead or pipe
2 to 4 cwt. case	1 6	0 1	case
1 to 2 cwt. case	1 0	0 1	case
barrel	0 6	0 0½	barrel
loose - - cwt.	1 0	0 1	cwt. in bottle
		0 0¾	cwt. solid
Indian corn - - bag	0 3	0 0½	bag
ndigo, not East India, cwt. or a consolidated rate of 1*s.* 6*d.* per cwt. nett.	0 9	0 1	seron
East India, in chests cwt. or a consolidated rate, including all operations incident on tarring, raising, repacking, stowing, and attendance whilst on show, nailing down, lotting, and piling away, of 17*s.* 6*d.* per chest.	0 8¼	0 1½	chest
Ink - - - cwt.	0 9	0 2	cask
Inkle - - - cwt.	1 0	0 1½	case
		0 1	box or keg
Ipecacuanha - - cwt.	0 10½	0 10	ton
Iron (including weighing), ton	3 4	0 1	ton
if landed for transit, and not weighed - ton	2 6	0 1	ton
when shipped from landing scale (including delivery) - - ton	4 2	none	if shipped within one week from the last day of landing.
Unpiling, wharfage, and shipping, without weighing, 2*s.* 6*d.* per ton.			
When weighed on board, (including use of scales and weights), 2*s.* per ton.			
old - - ton	3 4	0 2	ton
ore - - ton	3 0	0 2	ton
steam engines, boilers, cylinders, and other heavy machinery, ton	7 6	0 1	ton
if discharged from the vessel into craft, without landing or weighing - - ton	6 0		
Isinglass - - cwt.	0 10½	0 10	ton
Ivory - - cwt.	0 10½	0 1	cwt.
Junk, or old rope - ton	3 6	0 3	ton
Jute, press-packed - ton	4 0	0 4	ton
or a consolidated rate of 11*s.* per ton nett.			

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Kelp - - - ton	3 6	0 2	ton
Filling and weighing, 2*s.* per ton.			
Knives - - package	1 6	0 2	case
		0 1	barrel
		0 0½	box
Lac dye or lake - chest	1 0	0 1	chest
Lace - - case or box	2 6	0 6	case or box
Lacquered ware - chest	1 6	0 2	chest
box	1 0	0 1	box
Lard - - bladder	0 0¾	0 6	100 bladders
Lead - - - ton	2 6	0 1	ton
Unpiling, wharfage, and shipping, 1*s.* 8*d.* per ton.			
ore - - ton	3 0	0 2	ton
black - - ton	3 9	0 4	ton
white - - ton	5 0	0 4	ton
Leather, foreign (tanned) bale	1 6	0 2	bale
demi - - - bale	1 0	0 1½	bale
loose - - ton	5 0	0 9	ton
Irish (tanned) bale, under 1 cwt.	0 9	0 0¾	bale under 1 cwt.
bale, 1 cwt. to 2 cwt.	1 0	0 1	bale 1 to 2 cwt.
bale, 2 cwt. to 4 cwt.	1 6	0 1½	bale 2 to 4 cwt.
small or middling crate	2 0	0 1½	small or middling crate
large crate	2 6	0 2	large crate
Lemons. See *Oranges.*			
Lexia - - - ton	5 0	0 4	ton
Limes - - barrel	0 8¼	0 1	barrel
Lime juice - 100 gallons	2 1	0 5	puncheon
Laying up to gauge, and cooper's attendance at landing and delivery, form a separate charge.		0 3	hogshead
		0 2	barrel
Linen, German - - bale	2 3	0 4	bale
½ bale	1 3	0 2	½ bale
¼ bale	0 8½	0 1	¼ bale
loose or in bags - roll	0 1½	1 0	100 rolls
chest	2 6	0 4	chest
½ chest	1 3	0 2	½ chest
¼ chest	0 8½	0 1	¼ chest
Russia - - bale	1 2¾	0 2	bale
½ bale, containing 10 pieces, or boarded bale	0 9	0 1	½ bale
¼ bale	0 7½	0 1	¼ bale
crash - - bale	1 2¼	0 3	bale
½ bale	0 9	0 2	½ bale
¼ bale	0 7½	0 1	¼ bale
sail cloth - bolt or roll	0 1½	1 0	100 bolts or rolls
mats, 2 pieces - each	0 3	2 0	100 mats (2 pieces)
Irish - - case or bale	1 6	0 3	case or bale
box or bundle	0 9	0 2	box or bundle
sample box	0 6	0 1	sample box
Linseed. See *Wheat.*			
cakes - - ton	3 6	0 3	ton
Liquorice - - cwt.	0 5¾	0 1	case or barrel
root - - cwt.	0 6	1 0	loose, ton
		0 1	bale under 2 cwt.
Mace - - cwt.	1 0	0 1½	chest
or a consolidated rate of 3*s.* per cwt.		0 1	cask about 1 cwt.
Madder - - ton	3 4½	0 6	ton
roots - - cwt.	0 4½	0 1	bale under 3 cwt. 2 qrs.
		0 1½	bale 3 cwt. 2 qrs. and under 5 cwt.
		0 2	bale 5 cwt. and upwards
Maiden hair - - bale	1 0	0 1	bale
Manna - - cwt.	0 10½	0 1	chest or cask
Marbles - - ton	5 0	0 4	ton
Marble baths - - each	6 0	0 6	each
mortars - - ton	5 0	0 6	ton
sculptured works of art: import rate according to the size and value -	- -	0 3	case
		0 2	small case
rough, in cases cwt.	0 6	0 2	case

	Delivered into Craft, per Ton of 25 Palms or 12 Cubic Feet. s. d.	Wharfage and Shipping. s. d.
blocks, under 2 tons, ton	6 0	0 3	3 0	4 6
above 2 tons - ton	10 0	0 3	5 0	7 6
above 10 tons - ton	20 0	0 3	10 0	15 0

Mastic - - cwt.	0 6	0 1	case or chest abt. 3 cwt.
Mats - - 100	1 8½	0 6	100 bundles
Indian - - chest	1 0	0 2	chest
box	0 9	0 1	box
from corn vessels, bundle of 10	0 2	0 6	100 bundles
Delivery by land, ½*d.* per bundle; by water, 1*d.* per bundle.			
Melting pots - - cask	4 0	0 4	cask
Minerals - - case	1 0	0 2	case
Mohair yarn - - cwt.	0 7½	0 1	bale
Molasses. See *West India Produce Charges.*			
Moss, rock or Iceland, ton	7 6	0 9	ton, in bags
		1 6	100 casks about 84 lbs.
		3 0	100 casks about 2 cwt.
Mother-of-pearl shells, ton	7 6	0 4	ton
or a consolidated rate of 18*s.* 6*d.* per ton nett.			
ware - - chests	1 6	0 2	chest
box	1 0	0 1	box

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Munjeet, in bales	cwt. 0 6	0 0½	cwt.
in a consolidated rate of 1s. 6d. per cwt. nett.			
in bundles	cwt. 0 9	0 0¾	cwt.
or a consolidated rate of 2s. per cwt. nett.			
Musk	chest 1 6	0 2	chest
	box 1 0	0 1	box
Myrabolans	cwt. 0 4½	0 0½	cwt.
Myrrh	cwt. 0 6	0 0½	cwt.
Nails	cwt. 0 3	0 0½	barrel or bag
Nankeen	chest 1 3	0 1	chest
Natron, loose	ton 3 6	0 3	ton
Filling and weighing, 2s. per ton.			
Nutmegs	cwt. 0 6	0 10	ton
or a consolidated rate of 1s. 6d. per cwt. nett.			
Nuts	bushel 0 2½	4 0	100 sacks
	barrel 0 1½	0 1	barrel
	bag or sack 0 4½	2 0	100 bags
castania	bushel 0 2½	1 0	100 bushels
Nux vomica	cwt 0 4½	0 0½	cwt.
Oakum	ton 5 0	0 4	ton
Oatmeal, about 2½ cwt., including delivery	ton 4 9	0 2½	ton, if not cleared within 14 days of breaking bulk.
Weighing for delivery, 1d. per sack or barrel.			
Ochre	ton 3 9	0 4	ton
Oil, bay	cask 1 0	0 1	cask
castor	cwt. 0 6	0 3	puncheon or hhd.
		1 3	ton, in jars or duppers
		0 2	tierce
		0 1	barrel under 2 cwt.
		0 1½	barrel above 2 cwt.
		0 0½	case 12 bottles
chemical, 1 cwt. and upwards	package 2 0	0 4	large case
under 1 cwt.	package 1 6	0 2	small case

Per Tun of 252 Imp. Gals.	Olive in Casks.	Fish.	Newfoundland.
	s. d.	s. d.	s. d.
Landing, wharfage, and laying up to gauge	4 6	3 0	3 0
Cooper's attendance, if delivered from the quay	2 0	2 0	2 0
Searching and filling up (if done)	1 0	1 0	1 0
Loading or housing	1 6	1 6	1 2
Cooper's attendance at housing, and at delivery from the vault	1 0	1 0	1 0
Unhousing and loading	1 6	1 6	1 6
Unhousing, wharfage, and shipping	4 6	3 0	3 0
Rent per week	0 6	0 4	0 4

N.B. — Fourteen days allowed from final day of landing previous to the commencement of rent; but the Company are at liberty to house 6 days after gauging, unless detained by written order previously.

Rent on the quantity remaining will be charged from the day of the vessel breaking bulk.

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	s. d.	s. d.	
olive, in jars:			
common jars	cwt. 0 8½	0 3	common jar
½ jars	cwt. 0 8¼	0 2	½ jar
large jars	cwt. 0 6	0 6	large jar
cases containing 30 quart bottles	case 1 0	0 3½	score cases
salad, ½ chest of 30 bottles	0 6	0 2½	score ½ chests
palm and cocoa nut, ton in large casks, for every cwt. above 30 cwt.	3 9	0 4	ton
	0 9		
seed	tun 6 0	0 6	tun
Oil cake. See *Linseed Cakes.*			
Olibanum. See *Gum*, in cases or chests.			
Olives, about 12 galls.	½ brl. 0 4	0 1	½ barrel
— 6 —	¼ brl. 0 3	0 0½	¼ barrel
— 2¾ —	keg 0 2¼	0 0¾	keg
about 5 quarts small keg,	score 1 6	0 2	score
3 pint jars	score 0 9	0 1	score
in larger packages, gallon	0 0¼	0 3	tierce
		0 2	barrel, 30 gallons
		0 1	½ barrel
Onions	bushel 0 6	0 1	basket or barrel
Opium	cwt. 0 10½	0 1½	chest under 3 cwt.
Oranges and lemons,	chest 0 7½	0 1	chest
	box 0 5¾	0 0¾	box
Oranges in cases	case 1 0	0 1½	case
Orange buds	cwt. 0 4½	0 2	tierce
		0 3	hogshead
Orchal weed	cwt. 0 5¼	0 1	bale
Orpiment	ton 5 0	0 4	ton

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Orrice root	cwt. 0 3	0 3	hogshead
		0 2	tierce
		0 1	barrel or seron
Orsidew	package 1 6	0 3	large case
		0 2	small case
Otto of roses	package 2 6	0 4	package
middling package	1 6		
small package	1 0		
Oxen	each 10 0		
Paddy, in bulk	quarter 0 10	0 1	quarter
Paper	cwt. 0 6	0 10	ton
Pearl barley	keg 0 3	0 0¼	keg
	barrel 0 6	0 0½	barrel
Peas	tierce or barrel 0 9	0 1	tierce or barrel
	bag 0 4½	2 6	100 bags
Pepper (unsifted)	ton 3 0	0 6	ton
or a consolidated rate of 9d. per cwt. nett; or of 2s. 3d. per cwt. nett, including ordinary sifting and bagging		0 1	bag of 317 lbs. nett
long or Cayenne	cwt. 0 6	0 7	ton
or a consolidated rate of 1s. per cwt. nett.			
Piano-fortes	each 4 6	0 6	each
Piccaba	cwt. 0 6	0 4	ton
Pickles	dozen bottles 0 2½	0 0½	dozen bottles
in barrels	gallon 0 0½	0 1	barrel
large bottles or jars, under 2 gallons	gallon 0 1½	0 0¼	bottle or jar
2 and under 5 do.,	gallon 0 1	0 0½	bottle or jar
5 and upwards	gallon 0 0¾	0 0¾	bottle or jar
Pictures, large bale or case	4 6	0 6	large bale or case
middling bale or case	3 0	0 4	middling bale or case
small bale or case	1 6	0 3	small bale or case
Piece goods	bale 1 3	0 1½	bale
Pill boxes	large vat 4 6	0 6	large vat
	small vat 3 0	0 4	small vat
Pimento	cwt. 0 6	0 6	ton
or a consolidated rate, in bags	1s. 2d. cwt.		
in casks	1s. 6d. cwt.		
Pink root	cwt. 0 6	0 2	bale
Pitch	ton 2 6	3 0	100 barrels
Plaster of Paris	ton 3 0	0 2	ton
Plums, Portugal, in boxes,	dozen 0 9	1 0	100 boxes
Porcelain	case 1 6	0 3	case
	small case 1 0	0 2	small case
Potatoes	ton 3 6	0 3	ton
Potash. See *Ashes.*			
Preserves, under 28 lbs.	package 0 3	0 0¾	cwt.
28 to 112 lbs.	package 0 6		
1 cwt. & upwards,	package 0 6		
or a consolidated rate, under 28 lbs. package,	6d.		
28 to 112 lbs. do.	1s.		
112 lbs. and upwards, package,	1s. per cwt. nett.		

	Unhsg and Ldng.	Rent per Week.	
	s. d.	s. d.	
Prunes or French plums, about 8 cwt., hhd. or pun.	1 6	0 6	0 2 hhd. or pun.
5 to 7 cwt.	barrel 1 0	0 3	0 1½ barrel
2 to 5 cwt.	½ barrel 0 9	0 2	0 1 ½ barrel
under 2 cwt.	¼ barrel 0 6	0 2	4 2 100
about 1 cwt., containing boxes or cartoons	case 0 6	0 2	0 1 case
about 50 lbs.	box 0 2	0 6	1 3 100
		score	
about 28 lbs.	¼ chest 0 1½	0 6	1 0 100
		score	

	Rent per Week.	
	s. d.	
Prussiate of potash	ton 4 6	0 4 ton
Puree	chest 0 6	0 1 chest
Pyrolignate of lead	ton 5 0	0 5 ton
Quassia	cwt. 0 6	0 0¾ cwt.
Quicksilver, in bottles,	bott. 0 3	0 0¼ bottle
containing 1 skin	case 0 6	0 0½ case
Quills	vat 4 6	0 4 vat
small vat	3 0	0 3 small vat
hogshead or barrel	1 6	0 3 hogshead or barrel
case	2 0	0 3 case
bale	0 6	0 2 bale
Quinine, sulphate of, containing about 3 quarts,	case 0 9	0 1 case
Radix contrayervæ	cwt. 0 9	0 2 case
senekæ	barrel 0 6	0 0½ barrel
Rags or old ropes	ton 3 0	0 3 ton

	Unhsg and Ldng.	Rent per Week.	
	s. d.	s. d.	
Raisins, 12 to 20 cwt.,	butt 3 0	0 8	0 4 butt
9 to 12 cwt.	pipe 2 3	0 6	0 3 pipe
5 to 9 cwt.	carotel 1 6	0 4	0 2 carotel
2 cwt. 2 qrs. to 4 cwt. 2 qrs.	barrel 0 9	0 2	0 0¾ barrel
1 cwt. 2 qrs. to 2 cwt. 2 qr.	½ barrel 0 6	0 2	0 0½ ½ barrel
under 1 cwt. 2 qrs.,	¼ barrel 0 3	0 0½	2 0 100
Weighing do. 1s. score.			
Cape, casks under 3 cwt.,	cask 0 9	- -	0 0¾ cask
3 cwt to 5 cwt.,	cask 1 6	- -	0 2 100
boxes, about 60 lbs.,	score 3 0	- -	1 8

Goods imported.	Import Rate.	Unhouse. and Loading.	Rent. Per Week.	Rent. Quantities, &c.
Per	*s. d.*	*s. d.*	*s. d.*	*Per*
Raisins — *continued.*				
Denia and Valencia, boxes, score	2 6	0 6	1 3	100
Weighing do. 8*d.* score.				
½ and ¼ boxes - score	1 6	0 6	1 0	100
frails or baskets - score	1 8	0 5	1 0	100
Weighing do. 6*d.* score.				
⅛ and ½ frails or baskets, score	1 0	0 4	1 0	100
Weighing do. 4*d.* score.				
Malaga, boxes - score	2 0	0 6	1 0	100
½ and ¼ boxes - score	1 6	0 6	0 10	100
Weighing do. 8*d.* score.				
Smyrna, drums - score	2 6	0 6	1 0	100
Weighing do. 10*d.* score				
½ and ¼ drums - score	1 6	0 6	1 0	100
Weighing do. 6*d.* score.				
		Rent per Week.		
Rhatania extract - cwt.	0 9	0 1		cwt.
root - - cwt.	0 10½	0 0½		cwt.
Rhubarb - - cwt.	0 10½	0 10		ton
A consolidated rate on East India, including also starting into bulk, taring, repairing, re-taring, refilling, nailing down, reweighing, and piling away, of 5*s.* per chest.				
Rice - - - cwt.	0 2¼	0 4		ton
or a consolidated rate of, in casks - 13*s.* 4*d.* ton				
in bags - 10*s.* 6*d.* ton				
Roots, sassafras or winters cwt.	0 9	0 2		cask or case
Rosin - - ton	2 6	0 6		ton, loose
		3 0		100 barrels
Rugs - - bale	1 6	0 3		bale
½ bale	1 0	0 1½		½ bale
Rushes - - load	1 6	0 3		load
for polishing - bundle	0 1½	1 0		100 bundles
Sac Saturni - cwt.	0 3	0 3		chest
Saffron - - cwt.	2 0	0 2		bale or case
Safflower - - ton	5 0	0 6		ton
or a consolidated rate of 14*s.* 6*d.* per ton nett.				
Sago - - - cwt.	0 6	0 6		ton
Sal ammoniac - ton	5 0	0 6		ton
Salop - - package	1 6	0 2		package
Saltpetre - - ton	5 0	0 3		ton
Salts - - cwt.	0 3	0 4		ton
Samples which are by law exempted from duty, free.				
Saphora - - package	0 6	0 1		package
Sarsaparilla - - cwt.	1 6	0 1		cwt.
		0 10		100 bundles
or a consolidated rate of 4*s.* 6*d.* per cwt. nett.				
Reweighing bales 4 cwt. and upwards 1*s.* 6*d.* per bale.				
under 4 cwt., 1*s.*				
Scaleboards - 100 bundles	3 0	0 4		100 bundles
Scammony - - cwt.	3 0	0 0½		drum
Seed, agricultural (or not otherwise rated),				
in bags - - ton	3 9	0 3½		ton
in casks - - ton	4 6	0 3½		ton
Seed lac - - cwt.	0 9	0 0½		cwt.
or a consolidated rate of 2*s.* per cwt. nett.				
Senna - - cwt.	0 6	0 7½		ton
Shawls - small box or bale	2 0	0 1½		small box or bale
large box or bale	3 0	0 2		large box or bale
Shaya root, press-packed, ton	4 0	0 4		ton
Shellac - - cwt.	0 9	0 0½		cwt.
or a consolidated rate of 2*s.* per cwt. nett.				
Ships' stores warehoused, consolidated rate, 2 cwt.				
and upwards - cwt.	1 6	0 1		package
under 2 cwt. - package	1 0	0 0½		package
under 28 lbs. - package	0 6	0 0½		package
if liquids - gallon	0 1	0 5		tun
Shot - - - ton	3 0	0 1½		ton
Shurf - - - ton	5 0	0 2		ton
Silk, raw or thrown, cwt.	1 0	0 2		bale above 2 cwt.
		0 1½		bale under 2 cwt.
manufactured, 1 cwt. and upwards - bale or case	1 6	0 1½		bale or case
under 1 cwt., small bale or case	1 0	0 1½		small bale or case
waste, 4 cwt. & upwards, bale	2 6	0 1		bale
2 and under 4 cwt. bale	2 0	0 1		bale
1 and under 2 cwt. bale	0 9	0 0½		bale
Silk ribands - - case	2 0	0 1		case
Skins, calf or kip, 4 cwt.				
and upwards - bale	1 6	0 1½		bale
about 2 cwt.				
middling bale	1 0	0 0½		middling bale
small bale	0 9	0 0½		small bale
salted, wet - dozen	0 4½	0 4		120
loose, dry - dozen	0 3	0 0½		dozen
dry salted - dozen	0 4	0 4		120 skins
Weighing and loading, 1*d.* per dozen each charge.				

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
Per	*s. d.*	*s. d.*	*Per*
Skins — *continued.*			
Mogadore, dry salted, loose - - dozen	0 3	0 0½	dozen
cat or fitch, cask or case	1 6	0 3	cask or case
chinchilli, bale, cask, or case	1 6	0 3	bale, cask, or case
deer, pun., hhd., or bale	1 6	0 2	pun., hhd., or bale
case or pack	1 0	0 1	case or pack
bundle	0 9	0 0½	bundle
dog fish - - bale	0 9	0 1	bale
elk, loose - - 120	3 0	0 4	120
furs, large bale, case, or cask	1 6	0 6	large bale, case, or cask
middling bale, case, or cask	1 0	0 3	middling ditto
small bale, case, or cask	0 9	0 2	small ditto
goat, Trieste, bale about 8 cwt.	2 0	0 3	bale
Hamburgh, bale of 100 skins and under	1 0	0 1	bale
bale above 100 skins	1 6	0 1½	bale
Mogadore, above 100 skins - - bale	1 6	0 2	120 skins
above 60 to 100 skins, bale	0 9	0 2	120 skins
above 30 to 60 skins, bale	0 6	0 2	120 skins
of 30 and under, bale	0 3	0 2	120 skins
loose - - dozen	0 2	0 3	120 skins
hare and coney, 500 skins, bale	1 6	0 3	bale
under 500 skins, bale	1 0	0 2	bale
large cask	2 0	0 6	large cask
middling cask	1 6	0 4	middling cask
small cask	1 0	0 3	small cask
kangaroo - - dozen	0 0½	0 2	bale
kid or lamb, hhd., pun., or bale	1 6	0 3	hhd., pun., or bale
tierce	1 0	0 2	tierce
barrel	0 6	0 1	barrel
large bundle	1 0	0 2	large bundle
ordinary bundle	0 9	0 1	ordinary bundle
small bundle	0 6	0 1	small bundle
lamb, Hamburgh or Copenhagen, under 200 skins - - bale	1 0	0 1	bale
above 200 skins, bale	1 6	0 1½	bale
leopard, lion, and tiger, each	0 1½	0 0½	each
nutria - - hogshead	1 6	0 4	hogshead
barrel	1 0	0 1	barrel
about 150 dozen skins, bale	1 6	0 4	bale of 150 dozen
about 100 dozen skins, bale	1 0	0 3	bale of 100 dozen
about 50 dozen skins, bale	0 9	0 2	bale of 50 dozen
opossum, about 50 skins, bundle	0 6	0 1	bundle
Quebec or Hudson's Bay, case, bale, or puncheon	1 6	0 3	case, bale, or puncheon
large bundle	1 0	0 2	large bundle
ordinary bundle	0 9	0 1	ordinary bundle
small bundle or keg	0 6	0 1	small bundle or keg
seal - - pipe	2 0	0 3	pipe
puncheon or hogshead	1 6	0 2	puncheon or hogshead
barrel	1 0	0 1	barrel
loose - - 120	1 6	0 3	120
South Seas, wigs - 120	1 9	0 6	120
middlings - 120	1 9	0 4	120
smalls and pups - 120	1 6	0 3	120
Greenland, loose - 120	1 6	0 2	120
sheep, Hamburgh bale	1 6	0 2	bale
sheep or goat,			
Cape - bale, 100 skins	2 0	0 2	bale
75 skins	1 6	0 1½	bale
50 skins	1 0	0 1	bale
25 skins	0 6	0 0½	bale
loose, dry - dozen	0 3	0 3	120
salted - - dozen	0 4½	0 4	120
India, loose - 120	1 0	0 2	120
about 4 cwt. large bale	2 0	0 3	bale
small calf, Russia, 100 skins, bundle	0 9	0 1½	bundle
swan, bale contg. 150 skins	1 6	0 2	bale
100 skins	1 0	0 1	bale
Vicienia, loose - 120	1 6	0 3	120
Smalts - - - ton	5 0	0 5	ton
Snake root - - cwt.	0 10½	0 1	½ bale or barrel
		0 2	tierce
		0 2	bale
		0 3	hogshead
Soap - - - cwt.	0 6	0 1	case under 6 cwt.
Soda - - - ton	3 0	0 4	ton
Soy - - - chest	0 1	0 2	chest
in casks - gallon	0 1	0 5	puncheon
		0 3	hogshead
		0 2	kit or barrel
Spectacles - - case	1 0	0 1	case
Spelter - - ton	3 0	0 1	ton
Wharfage and shipping, 2*s.* per ton, when piled on the quay.		0 2	ton, in casks
			2 qrs.
Sponge - - cwt.	0 9	0 2	case or bale under 1 cwt.
		0 3	large case or cask
Squills - - ton	5 0	0 3	ton
dried, about 4 cwt. - case	1 6	0 1½	case
about 2 cwt. - case	1 0	0 1	case
in bags - cwt.	0 6	0 0½	bag

Goods Imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Starch - - ton	5 0	0 6	ton
Steel - - - ton	4 6	0 2	ton
Stick lac - - cwt. or a consolidated rate of 2*s.* per cwt. nett.	0 9	0 0½	cwt.
Sticks, walking - 1,000	5 0	0 2	1,000
Stock fish. See *Fish*.			
Stone, burr - - each	0 1½	0 0	100
emery - - ton	3 6	0 1	ton
Filling and weighing, 2*s.* per ton.			
lithographic - - ton	5 0	0 6	ton
pumice - - ton	7 6	0 8	ton
		0 4	ton in bricks
Turkey - - cwt.	0 3	0 1	cask 3 to 5 cwt.
Straw, manufactured,			
under 1 cwt. - case	0 8	0	case
1 and under 2 cwt. case	1 0	0 1	case
2 — 3 cwt. case	1 6	0 1½	case
3 — 4 cwt. case	1 9	0 2	case
4 cwt. and upwards, case	2 0	0 2	case
unmanufactured,			
1 to 2 cwt. - - case	1 0	0 2	case
2 to 3 cwt. - - case	1 6	0 3	case
3 cwt. and upwards, case	2 0	0 4	case
Sugar, in casks - cwt.	0 3	0 5	ton
in chests, 5 cwt. and above, or in baskets of any size, cwt.	0 3	0 5	ton
chests, mats, or bags under 5 cwt. - - cwt.	0 3	0 4	ton
or a consolidated rate of— in casks, 8*d.* cwt. nett; in chests, 5 cwt. and above, or in baskets of any size, 7*d.* cwt. nett; in chests, mats, or bags, under 5 cwt., 6*d.* cwt. nett.			
candy - - cwt.	0 4½	0 0½	cwt.
Sulphate of zinc - ton	5 0	0 5	ton
Sumach - - ton	3 9	0 2	ton
Tallow, in casks - ton	3 6	0 3	ton
if sold from the landing scale to the importer, ton	2 4		
also to the buyer, - ton	1 2		
Unhousing, wharfage, and shipping, 2*s.* 6*d.* per ton. Wharfage and shipping, 2*s.* 1*d.* per ton.			Three working days from the last day of weighing at the landing scale, will be allowed to clear tallow from the quays; no rent will be charged for that period, if so cleared: when not so cleared, rent will be charged from vessel breaking bulk.
in skins - - ton	3 9	0 3	
Mediterranean, Cape, or American, packages under 5 cwt. - ton	5 0	0 0½	package under 3 cwt.
		0 1	package above 3 cwt.
Tamarinds. See *Preserves*.			
Tapes - - bale	1 6	0 2	bale
Tapioca - - cwt.	0 8½	0 0½	barrel
Tar - barrel of 32 gallons	0 3	3 0	100 barrels
Tares - - quarter	1 0	0 1	quarter
Working out and delivering into craft, 3*d.* per qr.			
Terra japonica - ton	5 0	0 3	ton
sienna - - ton	5 0	0 3	ton
verde - - - ton	5 0	0 3	ton
umbra and Pozzolani, ton	3 6	0 3	ton
Weighing Pozzolani on board, 1*s.* per ton.			
Thread - - bale	1 6	0 2	bale
Timber. See *Wood*.			
Tin - - - ton	4 0	0 2	ton
ore - - - ton	5 0	0 4	ton
Tobacco, a consolidated rate, see page 494.			
Tongues, about 2 doz., bale	0 6	0 1	bale
loose - - dozen	0 3	0 0½	dozen
5 cwt. - - tierce	0 8½	0 1	tierce
1 to 2 cwt. - cask	0 6	0 0½	cask 1 to 2 cwt.
Tonquin beans - chest	1 6	0 1½	chest
in casks - - cwt.	1 0	0 1	cwt.
Tortoiseshell - cwt.	1 0	0 2	case
or a consolidated rate of 4*s.* 6*d.* per cwt. nett.		0 1	cwt. in casks
Tow, in bales - cwt.	0 4½	0 1	bale 4 cwt. and under
		0 1½	bale above 4 and under 6 cwt.
		0 2	bale 6 cwt. and upwards
Toys - large case or vat	4 6	0 6	large case or vat
middling case or vat	3 0	0 4	middling case or vat
small case or vat	2 0	0 3	small case or vat
Trees, live plants, &c.			
large case	1 6	0 1	large case
small case	1 0	0 1	small case
Turmeric - - cwt.	0 3	0 5	ton
or a consolidated rate of 1*s.* per cwt. nett.		0 0½	chest 1 cwt. 2 qrs.
Turpentine - - ton	2 6	3 6	100 tierces
		3 0	100 barrels
		5 0	100 casks, from France
Tutenag - - cwt.	0 4½	0 1	mat or bundle
Valonia - - bale	1 6	0 2	bale
Valonia - - - ton	4 6	0 3	ton
rising and weighing, 2*s.* ton.			

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Vanelloes, case or canister	1 6	0 1½	case or canister
Verdigris - - ton	5 0	0 6	ton
Vermilion - - cwt.	2 4½	0 10	ton
Vermicelli, case under 1 cwt.			
cwt.	1 0	0 0½	box under 56 lbs.
1 to 2 cwt. - - case	1 0	0 1	case under 2 cwt.
2 cwt. and upwards, cwt.	0 6	0 2	case 2 and under 4 cwt.
		0 4	case 4 and under 6 cwt.
		0 6	case 6 cwt. and upwards
Vinegar, pun. of 100 galls.	2 1	0 4	puncheon
hogshead	1 2	0 2	hogshead
tierce or barrel	1 0	0 2	tierce or barrel
¼ cask	0 6	0 1½	¼ cask
Cooper's attendance in addition. See *Wines* and *Spirits*.			
If housed, including attendance at delivery, puncheon 2*s.*; hhd. 1*s.* 6*d.*; tierce 1*s.*			
Walnuts - - bushel	0 2½	4 0	100 sacks
		2 0	100 bags
Water, mineral, doz. bottles	0 3	0 0½	dozen bottles
Wax - - ton	5 0	0 6	ton
sealing - cwt.	0 9	0 1	cwt.
Weld - - ton	7 6	0 9	ton
Whalebone - ton	7 6	0 4	ton
Whale fins - - ton	7 6	0 6	ton

Goods imported.	Landing, Wharfage, Housing, and Delivering. In a Ship.	Landing, Wharfage, Housing, and Delivering. In a Barge.	Rent per 100 Qrs. per Week.	
	s. d.	s. d.	s. d.	
Wheat, &c.				
Seed, heavy grain, &c. qr.	0 9	0 6	4 9	Rent commences from the last day of landing. Risk from fire for account of proprietors.
Oats, light grain, &c. qr.	0 8	0 6	3 10	
		s. d.		
Filling and porterage at landing, qr.		0 2		
Ditto at delivery, qr.		0 2		
Turning each time 100 qrs.		2 6		
Screening, 100 qrs.		6 6		
One turning to be charged on screening.				
Transferring 100 sacks		0 6		
Peeling over heavy grain - qr.		0 5		
Ditto light - qrs.		0 4½		
If imported in bags, an additional charge of ½*d.* per bag, for cutting open and shooting out.				
Collecting empty bags and packing into bundles, bdle.		0 1		
Loading or shipping, bdle.		0 1		
Working out and delivering into craft, 3*d.* per quarter.				

Goods imported.	Impt. Rate.	Rent per Week.	Quantities, &c.
	s. d.	s. d.	
Whetstones - cwt.	0 3	0 1½	cask 3 to 5 cwt.
		0 0½	case or cask 1 cwt.
Whisks for brooms, 100 bundles	3 0	0 3	100 bundles
loose - - 1,000	3 0	0 4	1,000
bale	1 10½	0 3	bale
½ bale	1 0	0 1½	½ bale
¼ bale	0 9	0 1	¼ bale
one eighth of a bale	0 6	0 0½	one eighth of a bale
manufactured - 100	1 6	0 2	100
Wine in casks, see consolidated rate, p. 494.			
in cases, see p. 494.			
Wire, iron - - cwt.	0 4½	0 0½	cwt.
plated or gilt - cwt.	0 8½	0 0¾	cwt.
Woad. See *Weld*.			
Wool, sheep or lamb,	0 4½	0 0¾	bale under 3 cwt.
German - - cwt.		0 1	bale 3 to 4 cwt.
or a consolidated rate of 5*s.* per bale of about 4 cwt.		0 1½	bale 4 to 6 cwt.
		0 2	bale 6 cwt. and upwards
Unhousing or loading by land or water, and mending at delivery, when charged under consolidated rate, per bale of about 4 cwt., 1*s.*			
Australian - - cwt.	0 4½	0 0¾	bale under 3 cwt.
or a consolidated rate of 4*s.* per bale of about 2½ cwt., including landing, wharfage, housing, and 12 weeks' rent from the date of the ship breaking bulk, landing weight,		0 1	bale 3 to 4 cwt.
		0 1½	bale 4 to 6 cwt.
		0 2	bale 6 cwt. and upwards

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Wool — *continued.* original warrants, certificate of damage, or survey after landing, mending at landing, taring, lotting, sampling, unpiling for show, showing, repiling, mending, and filling in, reweighing, and any other usual operation performed by order of the importer. Unhousing and loading by land, or direct into ship or lighter, and mending, 8*d.* per bale of about 2½ cwt.			
goats' - - cwt.	0 6	0 1	bale about 2 cwt.
		0 2	bale above 2 cwt.
hair or beards - cwt.	0 10½	0 2	case
Spanish - - cwt.	0 4½	0 1	bale 2 cwt. 2 qrs.
or a consolidated rate of		0 0¾	bale about 2 cwt.
4*s.* per bale of about 2 cwt., and 3*s.* per half bale, including the same operations as to Australian wool.		0 0¾	bale about 1 cwt.
Unhousing, &c., 6*d.* per bale, 4*d.* per half bale.			
Vigonia - - cwt.	0 4½	0 3	bale
Woollen cloth. See *Cloth.*			
Wood. For consolidated rate on staves, deals, &c. see below.			
Barwood - -			
Boxwood - -			
Brazil, large -			ton; if under cover, 1½*d.* per ton
Camwood - -			
Cocus wood -			
Ebony - - ton	4 6	0 1	Black ebony, from the East Indies, and lignum vitæ, rent after 1 year from vessel breaking bulk, 1*d.* per ton per week.
Fustic, large -			
Lignum vitæ -			
Logwood - -			
Nicaragua, large			

Goods imported.	Import Rate.	Rent. Per Week.	Rent. Quantities, &c.
	Per s. d.	s. d.	*Per*
Wood — *continued.* Unhousing or unpiling, wharfage, and shipping, 2*s.* 6*d.* per ton. or a consolidated rate of 6*s.* 6*d.* per ton. If under cover, 7*s.* per ton.			
Braziletto - - ton	5 6	0 2	ton
Brazil wood, small - ton	5 6	0 2	ton
Fustic, young - ton	5 6	0 3	ton
Nicaragua, small - ton	5 6	0 2	ton
Sandal - - ton	5 6	0 3	ton
Sassafras - - ton	5 6	0 3	ton
Sapan - - ton	5 6	0 2	ton
or a consolidated rate of 8*s.* per ton.			
Jaccaranda - -			
Mahogany - -			
Maple - -			
Rosewood - -			
Satin - -			
Tulip - -			
Zebra - - ton	5 0	0 1½	ton
Bird's-eye - -		0 1	ton, after 1 year from vesse breaking bulk.
Cedar and other woods charged with duty, or sold at - -			
or a consolidated rate of 7*s.* per ton.			
Rummaging mahogany timber, or other measured woods, 1*s.* per ton			
Delivering into decked vessels, 6*d.* per ton extra			
Yarn, in vats not above 20 cwt. - - ton	5 0	0 4	ton
above 20 cwt. - ton	5 3	0 4	ton
additional for every cwt above 1 ton - -	0 3		
	0 4½	0 1½	bale
in bales - - cwt.	5 0	0 5	ton
Zaffres - - ton			
Zinc. See *Spelter.*			

Consolidated Rates on Wood Goods. — Transferring, One Penny per Load.

Goods imported.	Landing, Wharfage, Piling, Delivery, and One Quarter's Rent.	Landing, Wharfage, and Delivery.	Rent per Quarter after the first Quarter.
	s. d.	s. d.	s. d.
Staves, *Per*			
from America,			
pipe - - - 1,200	24 0	12 0	5 0
hogshead - - - - —	20 0	10 0	4 0
barrel or heading - - —	14 0	7 0	3 0
barrel logs - - - —	88 0	44 0	14 8
double barrel - - - —	44 0	22 0	7 4
from Quebec,			
pipe logs - - 3 to 4 inches thick —	120 0	60 0	20 0
double pipe - 2 — 2½ — —	64 0	32 0	10 8
single - - 1 — 1½ — —	36 0	18 0	6 0
hogshead logs - 3 — 4 — —	100 0	50 0	16 8
double hogshead 2 — 2½ — —	50 0	25 0	8 4
single - - 1 — 1½ — —	30 0	15 0	5 8
barrel logs - 3 — 4 — —	88 0	44 0	14 0
double barrel - 2 — 2½ — —	44 0	22 0	7 4
single - - 1 — 1½ — —	26 0	13 0	4 4
heading logs - 3 — 4 — —	88 0	44 0	14 8
double heading 2 — 2½ — —	44 0	22 0	7 4
single - - 1 — 1½ — —	26 0	13 0	4 4
from Hambro' and Dantzic,			
pipe - - - - —	40 0	20 0	15 0
hogshead - - - - —	37 6	18 9	12 6
barrel - - - - - —	35 6	17 9	10 0
heading - - - - —	32 0	16 0	10 0
thin pipe - 1 to 1½ inch thick —	27 0	13 6	10 6
hogshead - — —	25 0	12 6	10 0
barrel and heading — —	20 0	10 0	8 0
sorting, per 1,200 - - 7*s.*			
Deals, standard hundred of 120			
Russia and Prussia deals and deal ends,			
1½ inch thick and 12 feet long - —	12 6	6 3	4 0
Swedish deals from ports in the Baltic,			
2½ and 3 inches thick, 14 feet long —	20 0	12 6	7 0
1½ and 2 — 14 — —	16 8	8 4	5 6
Quebec, Norway, and Swedish deals from ports in the North Sea,			
2½ and 3 in. thick, 10 and 12 feet long —	16 0	8 0	5 6
to 14 — —	19 0	9 6	6 6
— 16 — —	22 0	11 0	7 6
— 18 — —	25 0	12 6	8 6
— 20 — —	28 0	14 0	9 6
Battens from all ports,			
2½ and 3 in. thick, 10 and 12 feet long —	12 0	6 0	4 0
to 14 — —	14 3	7 0	4 9
— 16 — —	16 6	8 3	5 6
— 18 — —	18 9	9 0	6 3
— 20 — —	21 0	10 6	7 0
2½ and 3 inch half deals - - —	9 0	4 6	3 0
deal ends - - - - —	7 0	3 6	2 4
batten ends - - - —	5 0	2 6	2 0
paling boards - - - —	6 0	3 0	2 6

Goods imported.	Landing, Wharfage, Piling, Delivery, and One Quarter's Rent.	Landing, Wharfage, and Delivery.	Rent per Quarter after the first Quarter.
	s. d.	s. d.	s. d.
Deck deals, *Per*			
3 in. thick, 30 to 40 feet long each	1 0	0 6	0 4
2½ — 30 — 40 — —	0 10	0 5	0 3½
2 — 30 — 40 — —	0 8	0 4	0 3
3 — 20 — 30 — —	0 9	0 5	0 3
2½ — 20 — 30 — —	0 7½	0 4	0 2½
2 — 20 — 30 — —	0 6	0 3	0 2
Dunnage boards - - - 120	12 6	6 3	4 0
Norway timber and balks - - load	6 0	3 6	3 0
Spars under 6 and above 4 inches - 120	40 0	20 0	13 4
Rickers, under 4 inches, and 24 feet long and upwards - - - —	25 0	12 6	8 4
under 24 feet long - - —	12 0	6 0	4 0
Handspikes - - - —	6 0	3 0	2 0
Ufers, under 24 feet long - - —	25 0	12 6	8 4
from 24 to 32 — - - - —	40 0	20 0	13 4
32 feet long and upwards - - —	66 0	33 0	20 0
Sparholtz and 10 ells to add one third to the rates on ufers.			
Oars under 24 feet long - - —	12 6	6 3	4 2
from 24 to 32 — - - - —	20 0	10 0	6 8
32 feet long and upwards - - —	30 0	15 0	16 0
Lancewood spars - - - —	30 0	15 0	9 0
Gun stocks - - - - —	6 0	3 0	2 0
Lathwood under 5 feet long - fathom	9 0	4 6	3 0
from 5 to 8 — - - - —	12 0	6 0	4 0
Fir staves - - - - —	15 0	7 6	5 0
Treenails, large, above 2 feet long - 1,200	12 0	6 0	4 0
small, under 2 — - - —	8 0	4 0	2 6
Wainscot logs, 7 feet long - - each	0 9	0 5	0 3
14 — - - - —	2 0	1 0	0 8
Clap boards 3 — - - - —	0 3	0 1½	0 1
6 — - - - —	0 6	0 3	0 2
Oak and other timber charged with duty by the load,			
square, per load of 50 feet } round, per load of 40 feet } - -	6 6	4 0	1 0
including under cover, per load - -	7 0	-	1 6
Deal plank and boards - - —	7 0	3 6	2 6
Firewood - - - fathom	7 0	3 6	2 6
Spokes, American - - - 1,200	20 0	10 0	4 0
Teakwood, planks of, not under cover - load	7 0	4 0	1 6
under cover - —	7 6	-	2 6

Turning to measure for sale at landing, oak or other timber, 1*s.* per load.

Sorting staves for freight, 7*s.* per 1,200.

Marking lots on timber piled in tiers, 4*d.* per lot.

Charges on Cigars and Tobacco.

Cigars.	Chests containing from 500 to 600 lbs.	Boxes containing Above 300 and not exceeding 400 lbs.	Above 200 and not exceeding 300 lbs.	Above 100 and not exceeding 200 lbs.
	s. d.	s. d.	s. d.	s. d.
Import rate; including landing, wharfage, housing, weighing *gross*; and examining, or sampling, one side	8 0	4 0	2 9	2 3
both sides	10 0	5 0	3 9	3 0
Unpacking, weighing nett, repacking (when in bundles *), and coopering	10 6	4 0	2 9	2 0
* If loose, an extra charge is made. Garbling, or sorting, is also an extra charge.				
Examining, or resampling, one side	4 0	1 0	1 0	1 0
both sides	6 0	2 6	2 0	2 0
Unhousing, wharfage, and shipping	3 0	2 0	2 0	1 6
Ditto, and loading	1 0	1 0	0 9	0 6
Transferring	0 2	0 2	0 2	0 2
Boxes or chests, not of the above specified weights, charged in proportion.				

Tobacco.	s. d.		s. d.
Landing charges and coopering, weighing, sampling, and making merchantable at landing scale, per 100 lbs. nett	0 6	Warrant, 1 hogshead	0 6
On delivery for exportation, including coopering, per 100 lbs. nett	0 2½	2 —	0 9
Ditto, if resampled, ditto	0 3	3 —	1 0
Unhousing and loading, per hogshead	1 0	Any quantity exceeding 3 hogsheads, 2*d.* per hogshead additional	
Resampling	2 0	Transfer, per hogshead	0 2
Weighed gross when an average tare is taken, importer's charge	2 6		

Rates on Wines and Spirits.

Consolidated Rate on Wines, when delivered from the Quay within Six working Days after Gauging.

	Pipe.	Hhd.	Third.	Quarter Cask.	Double Aum.	Single Aum.	Half Aum.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Home consumption	3 6	1 9	1 6	1 2	2 6	1 6	1 0
Exportation or coastwise, and shipping	4 2	2 1	1 10	1 5	3 0	1 10	1 2

The consolidated rate on wines in oak casks landed under a warehousing entry, with the standard number of iron hoops — (see *note*), is chargeable on the 6th working day after gauging (unless previously detained on the quay by a written order), and comprises landing, wharfage, housing, cooper's attendance, coopering, 13 weeks' rent from the day the vessel began working, and delivery from the vault.

	Pipe.	Hhd.	Third.	Quarter Casks.	Double Aum.	Single Aum.	Half Aum.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Port, Lisbon, Sherry, Malaga, Spanish red, and Rhenish wine	15 3	7 8	6 6	5 1	11 6	5 9	4 0
Madeira, Teneriffe, Cape, and Sicilian	14 6	7 3	6 0	4 10	-	-	3 10
Claret and other French wines	-	8 9	7 0	5 6			
Rent after three months	0 4	0 2	0 2	0 1½	0 3	0 2	0 1
Ditto, twelve months	0 5	0 2½	0 2½	0 2	0 4	0 2½	0 1½

Note. — The standard number of iron hoops is as follows; viz. port and Lisbon pipes, 10; sherry butts, 8; Spanish red, brandy, and geneva puncheons, 6; double aums, hogsheads, and smaller casks, 6. If the casks be landed with a less number, the charge is 4½*d.* per hoop.

Consolidated Rates on Spirits landed under a Warehousing Entry, exclusive of Rent.

	Pun.	Hhd.	Third.
	s. d.	s. d.	s. d.
Brandy and geneva	8 6	4 3	3 6
Rent from the day the vessel begins landing — first year	0 4	0 2	0 2
Rent from the day the vessel begins landing — second	0 5	0 2½	0 2½

Note. — When any quantity not exceeding one fifth of an entry is required to be delivered or transferred, the "consolidated rate" is to be paid on one fifth: when any further quantity is to be delivered or transferred, the "the consolidated rate" must be paid on the whole.

Unsizeable casks in proportion, at the rate of 210 gallons for 2 pipes or 4 hogsheads.

The Company engage to make good the following deficiencies, from whatever cause arising, if the casks are of oak timber, but not otherwise; provided they be claimed within 6 months of delivery, and established by the customs' gauge at landing and delivery, viz. —

Exceeding 1 gallon on each cask, for any period not exceeding 1 year: 2 gallons, if more than 1, and not exceeding 2 years: and in like proportion for each succeeding year.

Wines and spirits landed under a dock order, are charged with the consolidated rate, if not taken away, or detained on the quay by a written order, within 6 working days after landing.

Wines and spirits landed under a prime entry, cannot be housed until the whole of the duty has been paid, but are chargeable with quay rent and watching, after the 6th working day from the landing, agreeably to the Table.

	s. d.
Wine in cases, in lieu of rent for 3 months, and all other charges (except tasting), on condition that the proprietors make their election prior to the second day after examination; the Company being responsible for all deficiencies, per dozen bottles	1 4
Ditto, on which the consolidated rate is not charged: —	
Import rate, per dozen bottles	0 3
Examining and coopering, ditto	0 3
Smaller cases than 3 dozen, per case, extra	0 1
Rent per week, per dozen bottles	0 0½
Wine and spirits, in cases, when landed for immediate exportation, including delivery and 1 week's rent, per dozen	0 3

Rates on Wines and Spirits, where those in the foregoing Tables do not apply, viz.

	Pipe or Pun.	Hhd.	Third.	Quarter Cask.	Double Aum.	Single Aum.	Half Aum.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Landing	1 0	0 6	0 4	0 3	0 8	0 4	0 3
Wharfage	0 8	0 4	0 3	0 3	0 6	0 3	0 2
Cooper's attendance at landing and loading	1 0	0 6	0 6	0 4	0 8	0 6	0 6
Laying up to gauge in numerical order	0 3	0 1½	0 1	0 1	0 2	0 1	0 1
Loading	0 8	0 4	0 4	0 3	0 6	0 4	0 3
Housing	1 0	0 6	0 4	0 3	0 8	0 4	0 3
Unhousing and loading	1 4	0 8	0 6	0 6	1 0	0 6	0 4
Cooper's attendance at landing and housing	1 6	0 10	0 8	0 8	1 3	0 8	0 6
Cooper's attendance at delivery from vault	1 0	0 6	0 6	0 4	0 9	0 4	0 4
Unhousing, wharfage, and shipping	2 0	1 0	1 0	0 9	1 6	0 9	0 6
Shipping from the quay	0 8	0 4	0 4	0 3	0 6	0 3	0 3
Bouging off	1 6	0 9	0 9	0 9	1 0	0 9	0 6
Trimming and replacing wood hoops	2 0	1 0	1 0	0 9	1 6	1 0	0 9
Driving	0 10	0 5	0 5	0 4	0 6	0 4	0 3
Iron hoops, each	0 8	0 8	0 8	0 6	0 8	0 6	0 4
Pieces of lead, —	9*d.*						
Rivets —	1*d.*						
Chimes —	6*d.*						
Pitching and turning	0 3	0 1½	0 1½	0 1	0 2	0 1	0 1
Uncasing, and porter's work	1 6	0 9	0 9	0 6	1 0	0 9	0 6
Casing ditto	1 6	0 9	0 9	0 6	1 0	0 6	0 4
Casing and new cases	19 6	12 0	11 0	7 6	14 0	8 6	5 0
Racking *	2 6	1 3	1 0	0 10	1 6	1 0	0 8
Breaking out for coopering and filling	0 6	0 3	0 3	0 2	0 4	0 3	0 2
Ditto for delivery and laying up again	1 0	0 6	0 6	0 4	0 8	0 4	0 3
Gauging, per cask	6*d.*						
Cellar rent, for the first 3 months, per week	0 2	0 4	0 2	0 1½	0 3	0 1½	0 1
Ditto, after 3 months	0 5	0 2½	0 2½	0 2	0 4	0 2	0 1½

Casks, when necessary, are supplied by the Company at the market price; and the proceeds of the racked casks, when sold, are paid to the proprietor, after deducting expenses.

	Pipe or Pun.	Hhd.	Third.	Quarter Cask.	Double Aum.	Single Aum.	Half Aum.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Fining	0 6	0 6	0 6	0 6	0 6	0 6	0 6
Racking from the lees	3 6	2 0	1 9	1 6	2 6	1 9	1 6
Racking and repairing casks	15 0	12 6	10 6	9 0	12 6	9 0	6 0
Bark hoops	1 9	1 4	1 4	1 0	1 6	1 4	1 0
Painting casks	4 0	2 6	2 0	1 9	3 0	2 0	1 6
Spirits brought forward for inspection or re-dipping	1 0	0 6	0 6	0 4			
Tasting † in store, each time	0 2	0 2	0 2	0 2	0 2	0 2	0 2
Ditto, at public sale	0 1	0 1	0 1	0 1	0 1	0 1	0 1
Sampling in vault, or second sampling on the quay	0 6	0 6	0 6	0 6	0 6	0 6	0 6

N. B. — No charge for tasting is made to the proprietor, or clerk (if fully authorised to sign all orders), when not accompanied by another person.

Quay Rent, if detained by Order beyond the Sixth Working Day after Gauging or Examination.

	Pipe, Butt, or Puncheon.	Double Aum, Hogshead, or Third.	Single Aum, or Quarter Cask.	Cases of Wine. — (Dozens.)		
				One to Three.	Four to Six.	Seven and upwards.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Per day each	0 4	0 2	0 1½	0 1	0 1½	0 2

Watching, per Night, if detained by Order beyond the Sixth Working Day after Gauging or Examination. If Cases of Wine are intended to be detained on the Quay, Notice must be given on the Day of Examination.

	Pipe, Butt, or Puncheon.	Double Aum, Hogshead, or Third.	Single Aum, or Quarter Cask.	Cases of Wine. — (Dozens.)		
				One to Three.	Four to Six.	Seven and upwards.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1 to 5	0 4	0 3	0 2	0 1½	0 2	0 3
6 — 10	0 6	0 4	0 3	0 2	0 3	0 4
11 — 20	1 0	0 8	0 6	0 4	0 6	0 8
21 — 30	1 6	1 0	0 10	0 8	0 10	1 0
31 — 40	2 0	1 6	1 4	1 0	1 4	1 6
41 — 50	2 6	2 0	1 8	1 4	1 8	2 0

	Per Certificate. £ s. d.
Surveys and certificates thereof, as follows: —	
On 1 to 5 casks	0 2 6
6 to 20 ditto	0 5 0
21 and upwards	0 7 6
an entire cargo	1 1 0
Duplicate or copy of certificate	0 1 0

Scotch and Irish Spirits.

	Per Pun. s. d.
Landing, wharfage, loading, laying up to gauge, cooper's attendance, and weighing when required	4 0
Rent, to commence 21 days after the date of the ship's report, per week	0 4

* Racking in the vaults is not charged until the expiration of 6 months from the period of the "consolidated rate" attaching; those for exportation excepted.

† Tasting not permitted without a written order.

Bottling Wine.	Magnum.	Quarts.	Pints.
	s. d.	s. d.	s. d.
Consolidated rate for bottling wine, per dozen, including removing, housing, fining, bottling, corking, straw, packing, sealing, marking, nailing down, weighing, bagging the lees, and vent on the empty bottles	1 6	1 0	0 10
Unhousing, wharfage, and shipping, per dozen	0 4	0 3	
Rent, to commence the day after bottling, per 6 dozen per week	0 6	0 3	0 1½

Rum.

		s.	d.
Consolidated rate	per 100 gallons	10	0
Rent, per week	per butt	0	6
	per puncheon	0	4
	per hogshead	0	2½
	per barrel	0	1½
Cooper's attendance after 12 weeks, per week	per puncheon or hogshead	0	1
	per barrel	0	0½

Vatting and Refilling.

	s.	d.
Unhousing, racking, the use of the vat, remaining one night, refilling, and bunging up, per 100 gallons drawn from the vat	2	8
Ditto, for government contracts, ditto	2	6
Remaining in the vat more than one night, per 100 gallons	0	6
For each additional night	0	3
Water for reducing the strength, per puncheon	1	0
Spirits brought in for vatting, for receiving, and delivering, 100 gallons	2	4

RATES ON GOODS SENT TO THE LONDON DOCKS FOR EXPORTATION.

Which, if cleared, may be shipped on board until *sunset.*

If goods be not shipped at the expiration of 3 weeks, rent is charged upon them. Goods not enumerated in the following Table, are charged by the package, see *post.*

Goods for Exportation.	Wharfage and Shipping.	Rent after Three Weeks. Per Week.	Quantities, &c.
	Per s. d.	s. d.	Per
Acids - middling case	3 0	0 9	middling case
small case	2 0	0 6	small case
Almonds, in serons ton	3 4	0 8	ton
in boxes or barrels cwt.	0 4	4 0	100
		2 0	100 half ditto
		0 3	barrel about 2 cwt. 2 qrs.
		0 1	½ or ¼ barrel
shell - - cwt.	0 6	0 4	large bale
		0 3	small ditto
		0 2	½ bale from 3qrs to 1 cwt. 2 qrs.
Alum - - ton	2 6	0 6	ton
Anchors or grapnels, ton	3 4	0 3	ton
Anchovies, case containing 8 barrels	0 8	0 1	case
double barrel	0 2	0 0 5	score
keg or single barrel	0 1		
Aniseed - - chest	0 9	0 1	chest
½ chest	0 6	0 1½	½ chest
Annotto - small basket	0 4	0 1	small basket
Axle trees - - each	0 6 to 1 6	0 1 to 0 2	each
Bacon - - bale	0 6	0 1	bale
side	0 2	0 0¼	side
Baggage - package	0 6 to 2 0	0 1 to 0 6	package
Bagging, about 2 qrs., roll	0 2	2 6	100 rolls
Bark - - - chest	1 0	0 3	chest
½ chest or seron	0 8	0 2	½ chest or seron
Barley - - tierce	1 0	0 3	tierce
small cask	0 8	0 1½	small cask
sack	0 6	0 1	sack
jug or barrel	0 2 to 0 4	0 5 to 0 10	score
Barrows - - each	0 2	0 5	score
Bedsteads, according to size - - each	0 6 to 1 6	0 1 to 0 3	each
Beef and pork - tierce	0 6	8 0	100 tierces
barrel	0 4	6 0	100 barrels
Beer - - kilderkin	0 4	0 1	kilderkin
barrel	0 4	0 1½	barrel
hogshead	0 8	0 2	hogshead
butt or puncheon	1 4	0 4	butt or puncheon
bottled, in casks, doz. bott.	0 1	0 0¼	dozen bottles
in cases, bottles, or hampers, doz. bottles	0 2	0 0½	dozen bottles
Bees' wax, in casks - ton	3 4	0 10	ton
5 to 6 cwt. bale	1 4	0 4	bale
about 4 cwt. bale	1 0	0 3	bale
Bellows, smiths' - pair	0 8 to 2 6	0 2 to 0 6	pair
Billiard tables - each	2 6 to 5 0	0 6 to 1 0	each
Blacking - - firkin	0 4	0 0¾	firkin
barrel	0 6	0 1	barrel
small cask	0 8	0 1½	small cask
from 5 to 7 cwt. cask	1 0	0 2	cask
about 8 cwt. cask	1 2	0 2½	cask
9 cwt. cask	1 4	0 3	cask
from 10 to 15 cwt. cask	1 6	0 3½	cask
15 and under 20 cwt. cask	2 6	0 4	cask
about 20 cwt. cask	3 0	0 6	cask

Goods for Exportation.	Wharfage and Shipping.	Rent after Three Weeks. Per Week.	Quantities, &c.
	Per s. d.	s. d.	Per
Bottles, empty glass, containing from 15 to 20 dozen - - crate	0 8	0 2	crate
from 21 to 29 dozen, crate	1 0	0 2½	crate
30 to 44 dozen, crate	1 4	0 3	crate
45 to 50 dozen, crate	2 0	0 4	crate
small basket or box	0 1 to 0 2	0 0¼	sm. basket or box
Bran - - - sack	0 4	0 1	sack
Bread - - - bag	0 4	0 0½	bag
Bricks - - 1,200	7 6	0 6	1,200
if shipped by crew, 1,200	2 6	0 6	1,200
Brooms, birch, 1 doz. bundle	0 1	0 0¼	bundle
2 dozen bundle	0 2	0 0½	bundle
hair or house bundle	0 2	0 0½	bundle
Bullion - large package	1 0		
small package	0 8		
Butter - tub or firkin	0 2	3 0	100 firkins or tub
¼ cask	0 4	6 0	100 quarter casks
Cables, hemp - ton	3 4	0 8	ton
chain - - ton	3 4	0 3	ton
Camphor - - chest	0 8	0 1½	chest
Candles, less than 28 lbs. box	0 2	0 0½	box
28 lbs. to 1 cwt. box	0 3	0 1	box
above 1 cwt. box	0 4	0 1½	box
Canes, common rattan, 1,000	1 0	0 3	1,000
Cannons, under 2 tons, each	3 0	0 4	
under 4 tons* - each	6 0	0 6	each
* Larger in proportion.			
Canvass - - - bolt	0 1	1 3	100 bolts
Carts, according to size, each	2 0 to 5 0	0 3 to 0 6	each
Cart wheels - pair	0 4 to 1 0	0 1 to 0 2	pair
Casks, empty sugar hhd.	0 6	0 1½	sugar hogshead
butt or puncheon	0 4	0 1	butt or puncheon
hogshead	0 2	0 0¾	hogshead
barrel	0 1	0 3	score
Cassia - - chest	0 8	0 2	chest
under 1 cwt. - ½ chest	0 4	0 1	½ chest
Cement - - barrel	0 6	0 1	barrel
½ barrel	0 4	0 0¾	¼ barrel
Chaff cutters according to size - each	1 6 to 2 6	0 2 to 0 3	each
Chairs, single or mahogany each	0 2	0 0½	each
common, bundle containing 2 - - -	0 4	0 0½	bundle
other bdls. in proportion.			
Chaises with 4 wheels, each	6 0	0 10	each
2 wheels, each	5 0	0 6	each
Chalk, in casks - ton	2 6	0 6	ton
Chariots - each	8 6	1 0	each
Cheese, loose - cwt.	0 3	0 0½	cwt.
hamper	0 4	0 1	hamper
about 1 cwt. basket	0 4	0 1	basket
2 qrs. basket	0 2	0 0½	basket
Cider - - pipe	1 6	0 4	pipe
hogshead	0 9	0 2	hogshead
Cinnamon - single bale	0 8	0 2	single bale
double bale	1 0	0 3	double bale
3 or 4 bolts, package	1 6	0 4	package
6 bolts, package	2 6	0 8	package
case or chest	1 4	0 3	case or chest
½ chest	0 8	0 2	½ chest

Goods for Exportation.	Wharfage and Shipping.	Rent after Three Weeks. Per Week.	Quantities, &c.
	Per	*s. d.*	*Per*
Clocks in cases, according to size - - each	1 0 to 2 0	0 2 to 0 4	each
Cloves - - small bag	0 4	0 1	small bag
about 2 cwt. bag	0 8	0 2	bag
5 or 6 cwt. cask	2 0	0 6	cask
Coaches, stage - each	15 0	1 6	each
private - each	10 0	1 0	each
Coals - - hogshead	1 6	0 3	hogshead
Coffee - bag	0 4		
small bale	0 6	1 0	ton
3 cwt. 2 qrs. to 4 cwt. bale	0 8		
5 cwt. bale	1 0		
fans - - each	3 0 to 5 0	0 6 to 0 8	each
engines or shellers, each	2 6 to 5 0	0 6 to 0 8	each
Coke - - chaldron	4 0	1 0	chaldron
Colours, in casks - ton	3 4	0 8	ton
Copper, in casks, 4 to 6 cwt. ton	3 4	0 4	ton
in cases, 5 to 7 cwt. case	1 4	0 6	ton
7 to 8 cwt. case	2 0		
9 to 10 cwt. case	2 6		
bottoms, 1 cwt. bottom	0 4	1 0	ton
½ cwt. bottom	0 8	1 0	ton
bolts - 2 cwt. bundle	0 8	0 1	bundle
sheets, loose ton	4 0	1 0	ton
cakes - - ton	3 4		including weighing
Coppers, about 14 cwt. each	5 0	1 0	ton
Cordage - - - ton	3 4	0 8	ton
Cork - - - ton	4 0	1 0	ton
Corks - bag or cask	0 2 to 0 8	0 1 to 0 2	bag or cask
Corn, in sacks - each	0 6	0 1	each
Cotton, East India - bale	0 8	0 1½	bale
½ bale	0 4	0 1	½ bale
American - - - bale	1 0	0 2	bale
twist, under 2 cwt. 2 qrs. bale	0 8	0 2	bale
presses, wooden - each	10 0	1 0	each
iron - - each	20 0	1 6	each
Cows, shipped by machine each	8 6		
Cowries - - - ton	3 4	0 6	ton
Currants - - butt	2 0	0 6	butt
pipe	1 6	0 3	pipe
carotel	1 0	0 2	carotel
Dampers, iron - each	0 4 to 0 8	0 3	ton
Dogs - - each	0 6		
Drips and pots - 1,000	10 0	1 6	1,000
Drugs, under 2 cwt. 2 qrs. chest	0 8	0 2	chest
2 cwt. 2 qrs. to 5 cwt. chest	1 0	0 3	chest
Earthenware - crate	0 6 to 1 4	0 2 to 0 3	crate
Engines, fire - each	5 0 to 10 0	0 6 to 0 9	each
garden - - each	2 6	0 3	each
Felt - - - bale	0 8 to 1 0	0 2 to 0 3	bale
Fire-arms - large chest	1 4	0 3	large chest
case or chest	0 8 to 1 0	0 2 to 0 3	case or chest
Fire or flagstones - ton	3 4	0 3	ton
Fish, loose - - ton	5 0	0 8	ton
barrel or box	0 3 to 0 4	0 0½ to 0 1	barrel or box
Flax - - - ton	3 0	0 8	ton
1 cwt. 2 qrs. bag	0 4	0 0¾	bag
Flints, under 1 cwt. keg	0 2	0 0½	keg
Flour - - - barrel	0 4	0 10	score barrels
Furniture in packages, according to size.			
Ginger - - - ton	5 0	1 0	ton
Glass - box or ½ box	0 4	0 1	box or ½ box
crate	0 8	0 2	crate
¼ crate	0 8	0 1	¼ crate
butt or hogshead	1 6	0 4	butt or hogshead
pipe or puncheon	1 2	0 3	pipe or puncheon
tierce	1 0	0 3	tierce
small cask	0 4 to 0 8	0 1 to 0 2	small cask
plate - small case	0 8	0 2	small case
middling case	1 4	0 4	middling case
large case	2 0	0 6	large case
Grates and stoves each	0 6 to 1 0	0 2 to 0 3	each
Grindstones, for every six inches in diameter -	0 2	0 0½	
Gritts - - - firkin	0 2	0 5	ton
Gum - - - seron	0 6	0 1	seron
chest	1 0	0 3	chest
Guns. See *Fire-arms.*			
great. See *Cannons.*			

Goods for Exportation.	Wharfage and Shipping.	Rent after Three Weeks. Per Week.	Quantities, &c.
	Per	*s. d.*	*Per*
Gypsum - - hogshead	1 6	0 4	hogshead
puncheon	1 2	0 2	puncheon
Hams, loose - each	0 1	0 5	score
in casks - - cask	0 6 to 1 6	0 1 to 0 4	cask
Hardware, 5 to 8 cwt. cask	1 0	0 2½	cask
8 to 9 cwt. cask	1 4	0 3	cask
9 to 12 cwt. cask	1 6	0 4	cask
12 to 15 cwt. cask	2 0	0 5	cask
15 to 17 cwt. cask	2 6	0 6	cask
Harps or harpsichords, according to size, each	2 6 to 5 0	0 6 to 0 9	each
Harrows - - pair	2 0	0 4	pair
Hats - - case	1 0	0 3	case
Hat boxes - - each	0 2		
Hay - load of 36 trusses	4 0		
bale of 3 trusses	0 4	0 3	score trusses
truss	0 2		
Hemp - - ton	3 0	0 8	ton
screws - each	0 4	0 1	each
Herrings - - barrel	0 4	0 0½	barrel
Hides or skins, East India, 5 to 7 lbs. - 100	2 0	0 6	100
10 to 12 lbs. - each	0 0½	0 6	100
ox and cow - 100	6 0	1 6	100
Hoops, wood - bundle	0 1	0 3	score bundles
truss - - bundle	0 2	0 5	score bundles
Hops - - - bag	0 8	0 2	bag
pocket	0 6	0 1	pocket
Horn, tips and plates, hhd.	1 4	0 4	hogshead
Horses - - - each	10 0		
cob or pony - each	5 6		
Indian rubber - barrel	0 6	0 1½	barrel
Indigo - - seron	0 6	0 1½	seron
about 3 qrs. ½ chest or box	0 6	0 1½	½ chest or box
chest	0 8	0 2	chest
Iron, bars and unmanufactured - - ton	2 6	0 3	ton
hoops - 1 cwt. bundle	0 4		
3 qrs. bundle	0 3	0 6	ton
2 qrs. bundle	0 2		
pots - - - 100	4 0	0 9	100
tire - bundle	0 2 to 0 4	0 0½	bundle
heavy manufactured machinery, mill work, &c. &c., pieces above 1 ton ton	6 0	0 6	ton
under 1 ton - ton	5 0	0 6	ton
*scrap, loose - ton	4 0	0 6	ton
in bags - - ton	3 0	0 6	ton
hurdles - - each	0 1	0 5	score
* Weighing 1*s.* 6*d.* per ton.			
Ivory - - - - cwt.	0 3	0 1	cwt.
Knives, Malay - small cask	0 8	0 2	small cask
Lac dye - 3 cwt. chest	1 0	0 2	chest
about 1 cwt. 2 qrs. chest	0 8	0 1½	chest
Lace - - package	0 9 to 1 6	0 4 to 0 9	package
Laths - - bundle	0 1	1 6	100 bundles
Lead, in pigs - - ton	2 0	0 3	ton
black - 40 lbs. cask	0 2	0 0½	cask
shot, bars, or rolls, ton	3 4	0 3	ton
Lime - - puncheon	1 2	0 3	puncheon
hogshead	1 6	0 4	hogshead
small cask	0 4 to 0 8	0 1 to 0 2	small cask
Logwood - - - ton	2 3	0 6	ton
Mace and nutmegs, small cask	0 8	0 2	small cask
Mangles - - each	5 0	0 6	each
Manure, about 1 ton cask	2 6	0 4	cask
Melting pots - - ton	5 0	0 6	ton
Mill cases - - each	1 0 to 2 0	0 3 to 0 4	each
gudgeons - - each	1 0	0 3	each
stones, about 1 ton each	4 0	0 6	each
Mineral brown (in turpentine casks) - 3 cwt. barrel	0 6	0 6	ton
Molasses - - puncheon	1 2	0 3	puncheon
Mother-o'-pearl shells, ton	5 0	0 8	ton
Mules - - - each	2 6		
Musk - - - box	0 8	0 2	box
Mustard - - keg	0 4	0 1	keg
not exceeding 28 lbs. keg	0 2	0 0½	keg
Nails - - 2 qrs. keg	0 2	3 0	100 kegs
1 cwt. 2 qrs. keg	0 4	0 0¾	keg
1 cwt. 2 qrs. to 2 cwt. cask	0 6	0 1	cask
ton	5 0	0 6	ton
Nankeens, not exceeding 1 cwt. case or chest	0 6	0 1½	case or chest
Negro clothing, puncheon	1 0	0 3	puncheon
Nutria skins - 4 cwt. bale	0 8	0 2	bale
5 cwt. bale	1 0	0 3	bale
Oakum - 2 qrs. bundle	0 2	0 0½	bundle
Oil cake - - ton	3 6	0 6	ton
hogshead	1 6	0 4	hogshead
puncheon	1 2	0 3	puncheon
Oil - - - tun	3 6	0 8	tun
under 3 gallons, jug	0 2		
3 to 7 gallons, jug	0 4	0 0¾	gallon
8 to 10 gallons, jug	0 6		

Goods for Exportation.	Wharfage and Shipping.	Rent after Three Weeks. Per Week.	Quantities, &c.
	Per	*s. d.*	*Per*
Oil — *continued.*			
11 to 12 gallons, jug	0 8	0 0½	gallon
chest	0 8	0 0½	chest
½ chest	0 4	0 0¼	¼ chest
Organs - - each	2 0 to 5 0	0 6 to 1 0	each
Osnaburgs, loose - piece	0 1	0 0¼	piece
Ox bows or yokes, 1 dozen bundle	0 3	0 0½	bundle
Oxen - - - each	10 0		
Paint, in small kegs - ton	8 0	1 0	ton
in casks containing do., ton	3 4	0 6	ton
Paper - - - bale	0 8	0 2	bale
small bale	0 6	0 1½	small bale
Pearl barley, 1 cwt. barrel or keg	0 4	0 1	barrel or keg
Pepper - - bag	0 4 to 0 6	0 0¾ to 0 1	bag
Perry - - - butt	1 6	0 4	butt
Piano-fortes, grand, each	4 0	1 0	each
cabinet - - each	3 0	0 9	each
square - - each	2 0	0 6	each
Pickles - large package	1 0	0 2	large package
middling package	0 6	0 1	middling pckge.
small package	0 3	0 0½	small package
Pigs - - - each	0 6		
Pipeclay, loose - ton	3 4	0 3	ton
hogshead	1 6	0 2½	hogshead
puncheon	1 2	0 2	puncheon
small cask	0 4 to 0 8	0 1 to 0 1½	small cask
Pipes, empty - each	0 4	0 1	each
Pitch - - - barrel	0 4	6 0	100 barrels
Plants, about 5 cwt. package	1 6	0 4	package
middling package	1 0	0 3	middling pckge.
small package	0 8	0 2	small package
Ploughs - - each	1 0	0 3	each
Potatoes, about 1 cwt. basket	0 3	0 0½	basket
3 bushels, sack	0 6	0 1	sack
ton	3 0	0 4	ton
Quicksilver - iron bottle	0 2	0 0½	each
Rags - - 3 cwt. bag	0 4	0 1	bag
Rice - - - bag	0 3	0 4	ton
Rigging - - - cwt.	0 4	0 0½	cwt.
Rosin - - barrel	0 4	6 0	100 barrels
Safflower, under 2 cwt. 2 qrs. - - bale	0 8	0 2	bale
above 2 cwt. 2 qrs. bale	1 0	0 3	bale
Sago, in boxes about 1 cwt. box	0 4	0 1	box
Sail-cloth - - bolt	0 1	0 3	score
Saltpetre, rough, in bags, ton	3 0	0 6	ton
refined, 1 cwt. barrel	0 4	0 0½	barrel
above 1 to 2 cwt. cask	0 6	0 1	cask
10 cwt. - - cask	1 2	0 3	cask
Saws - - - bundle	0 6	0 10	score bundles
Seed, clover or other bale	0 8	0 1½	bale
Seed lac, 2 cwt. to 2 qrs. bag	0 8	0 2	bag
Sheep - - each	0 6		
Shellac, in bags or bundles, ton	5 0	1 0	ton
Skins - 18 to 20 cwt. cask	3 0	0 7	cask
15 cwt. cask	2 6	0 6	cask
vat	1 6	0 6	vat
hoshead	1 2	0 4	hogshead
tierce	1 0	0 3	tierce
goat and Mogadore, about 2 cwt. 2 qrs. - bale	0 4	0 1½	bale
large bale	0 6	0 2	large bale
Slates - - hogshead	2 0	0 4	hogshead
puncheon	1 6	0 3	puncheon
Soap, 56 lbs. and under, small box	0 2	0 0½	small box
57 and under 112 lbs. box	0 4	0 1	box
1 and under 2 cwt. chest	0 6	0 1½	chest
2 and under 3 cwt. chest	0 8	0 2	chest
3 to 5 cwt. - - chest	1 0	0 3	chest
Sofas - - each	1 0 to 1 6	0 3 to 0 4	each
Spades - 1 doz. bundle	0 4	0 1	bundle
2 doz. bundle	0 8	0 2	bundle
Spelter - - - ton	2 0	0 4	ton
Spirits, see *Wines.*			
Starch - 1 cwt. box	0 6	0 1	box
under 1 cwt. box	0 4	0 1	box
Staves, wine hogshead, pack	0 2	0 0½	pack
pipe, leager, or sugar hogshead - pack	0 4	0 0½	pack
Steel, in bars - - ton	3 4	0 4	ton
in bundles, 1 cwt. bundle	0 4	0 6	ton
Stoves and grates each	0 6 to 1 0	0 2 to 0 3	each
Straw - - - truss	0 1	0 3	score tru ses

Goods for Exportation.	Wharfage and Shipping.	Rent after Three Weeks. Per Week.	Quantities, &c.
	Per	*s. d.*	*Per*
Sugar - - mat or bag	0 4	0 0½	mat or bag
4 or 5 cwt. mat or bask.	0 8	0 1	mat or basket
boxes or chests - ton	3 4	0 5	ton
bastard, not exceed. 2 cwt. 2 qrs. - - barrel	0 5	0 1	barrel
under 8 cwt. - tierce	0 9	0 2	tierce
12 and under 14 cwt. cask	1 6	0 5	ton
14 cwt. and upwards, cask	2 0		
refined - hogshead	1 2	0 3	hogshead
12 and und. 14 cwt. cask	1 6	0 4	cask
14 — 18 cwt. cask	2 0	0 6	cask
18 — 24 cwt. cask	2 6	0 7	cask
Refined, packed in hogsheads or vats, to be housed for exportation.	Per hhd.	Per hat, 16 cwt. & upwards.	
Housing - - -	0 6	1 0	
Weighing or re-weighing -	0 6	1 0	
Unhousing, wharfage, and shipping	1 8	3 0	
Rent - - per week	0 3	0 6	
	Whfg. and Shipg.	Rent per Week.	
	s. d.	*s. d.*	
Tallow - - ton	2 6	0 6	ton
Tar - - - barrel	0 4	6 0	100 barrels
Tea - - chest	1 0	0 3	chest
½ chest	0 8	0 2	½ chest
¼ chest	0 6	0 1½	¼ chest
small box	0 4	0 1	small box
Tiles, Welch, about 1 foot square - - 100	2 0	0 6	100
Tin - - - box	0 4	0 0½	box
barrel	0 6	0 1	barrel
block	0 2	0 6	score
Tombstones - each	5 0	0 6	each
Tripe - - - keg	0 2	0 0¼	keg
Turmeric - - bag	0 0½ to 0 2	1 0	ton
Turpentine - carboy	0 6 to 1 0	0 1 to 0 3	carboy
Varnish - - barrel	0 6	0 1	barrel.
Vermilion, 2 to 3 cwt. chest or package	2 0	0 4	chest or package
Vinegar - - puncheon	1 4	0 4	puncheon
hogshead	0 8	0 2	hogshead
barrel or ½ hogshead	0 6	0 1½	barrel or ½ hhd.
* Vitriol, carboys - gallon	0 4	0 1	gallon
middling case	3 0	0 9	middling case
small case	2 0	0 6	small case
Wagons - - each	7 6 to 10 0	1 0 to 1 6	each
Whalebone - 5 cwt. bale	1 0	0 4	bale
ton	5 0	1 0	ton
Wheels, according to size, pair	0 4 to 1 0	0 1 to 0 2	pair
Wheelbarrows - each	0 2	0 0½	each
Wine, bottled, in casks, dozen bottles	0 1	0 0½	dozen bottles
in cases - dozen bottles	0 2	0 0½	dozen bottles
Spirits, pipe, puncheon, or butt	2 0	0 6	pipe, pun. or butt
hogshead	1 0	0 3	hogshead
No charge is made for wharfage of wines and spirits landed at the docks, and carted to the export quay, except for "striking and shipping," viz. pipe, butt, and puncheon - - 8*d.* hogshead - - 4*d.*			
Wire, iron, 1 cwt. 2 qrs. bundle	0 6	0 1	bundle
Wood - - ton	2 3	0 3	ton
When not cleared the same day as sent down, piling is charged.			
Wood hoops - bundle	0 1	0 3	score bundles
truss bundle	0 2	0 5	score bundles
Wool, English, 3 cwt. to 3 cwt. 2 qrs. - bale	0 9	0 2¾	bale
3 cwt. 2 qrs. to 5 cwt. bale	1 0	0 3	bale
Spanish - 1 cwt. bag	0 5	0 1	bag
2 cwt. bag	0 8	0 2	bag
2 cwt. 2 qrs. bag	0 9	0 2⅓	bag
German, under 4 cwt. bag	0 8	0 2	bag
4 to 6 cwt. bag	1 0	0 3	bag
6 cwt. and upwards, bag	1 4	0 4	bag

* *N. B.* — "Persons sending to the dock, for shipment, aqua fortis, oil of vitriol, or other goods of a dangerous quality, and neglecting to distinctly mark, or state, the nature of such goods on the outside of the package, or otherwise give due notice thereof to the superintendent, are subject to a penalty of 20*l.*" — (See act 9 Geo. 4. c. 116. § 132.)

WHEN CHARGED BY THE PACKAGE.

Goods for Exportation.	Wharfage and Shipping.	Rent after Three Weeks. Per Week.	Rent after Three Weeks. Quantities, &c.
	Per	s. d.	Per
Bags, small - -	each	0 1	each
Bales, small - -	each	0 2	each
middling - -	each	0 3	each
large, 5 and under 7 cwt.	each	0 3	each
7 and under 8 cwt.	each		
8 and under 12 cwt.	each		
12 and under 14 cwt.	each		
14 and under 16 cwt.	each	0 0½	cwt.
16 cwt. and upwards	each		
E. I. goods, single,	each	0 2	each
double - -	each	0 3	each
half bales repacked,	each	0 1½	each
Barrels - - -	each	0 1½	each
Baskets, small -	each	0 0½	each
middling - -	each	0 1	each
large - -	each	0 1½	each
Bottles or jars, 1 to 3 gallons,	each		
4 to 7 gallons -	each	0 0½	gallon
7 to 10 gallons -	each		
11 to 12 gallons -	each		
Boxes - -	each	0 2 to 0 8	0 0½ to 0 2 each
Bundles, large -	each	1 0	0 3 each
middling -	each	0 9	0 2¼ each
small - -	each	0 6	0 1½ each
Cases, small - -	each	0 8	0 2 each
middling - -	each	1 0	0 3 each
large, 5 to 6 cwt. -	each	1 4	0 3 each
6 to 7 cwt. -	each	1 6	0 0½ cwt.

Goods for Exportation.	Wharfage and Shipping.	Rent after Three Weeks. Per Week.	Rent after Three Weeks. Quantities, &c.
	Per	s. d.	Per
Cases — *continued.*			
extra large, 7 to 8 cwt.	each	2 0	
9 to 12 cwt. -	each	2 6	0 0½ cwt.
above 12 cwt. -	each	3 0	
Casks, butts - -	each	1 6	0 4 each
hogshead -	each	1 2	0 3 each
pipe or puncheon -	each	1 4	0 4 each
tierce or wine hhd.	each	0 8	0 2 each
small - -	each	0 4 to 0 6	0 1 to 0 1½ each
Chests, small -	each	0 8	0 2 each
middling - -	each	1 0	0 3 each
large - -	each	1 4	0 4 each
Hogsheads, not exceeding 8 or 9 cwt. -	each	1 2	0 3 each
Jars, see *Bottles.*			
Kegs - -	each	0 2 to 0 4	0 0½ to 0 1 each
Packs, vats, &c. -	bale	0 9 to 1 0	0 1 to 0 2 bale
Pipes - - -	each	1 4	0 4 each
Portmanteaus, ord. size	each	0 6	0 1½ each
Other sizes will be charged in proportion, and rent one fourth of the rate for wharfage and shipping.			
Puncheons - -	each	1 4	0 4 each
Tierces - -	each	0 8 to 1 0	0 2 to 0 3 each
Trunks - -	each	0 6	0 1½ each
Trusses - -	each	0 6 to 1 0	0 6 to 0 1½ each

Goods not included in the foregoing Tables pay in proportion to the rates therein contained, according to weight or size.

3. *East India Docks.* — These docks, situated at Blackwall, were principally intended for the accommodation of the ships employed by the East India Company. There are 2 docks; 1 for ships unloading inwards, and 1 for those loading outwards. The Import Dock contains about 18 acres, and the Export Dock about 9 acres. The entrance basin, which connects the docks with the river, contains about $2\frac{3}{4}$ acres; the length of the entrance lock is 210 feet, the width of the gates 48 feet clear. Having to receive vessels of great burden, the depth of water in the East India Docks is never less than 23 feet. Most of the merchandise imported into these docks is conveyed, without loss of time, to warehouses in the city; so that the extent of warehouses belonging to them is comparatively small.

The discharging of ships in the Import Dock is wholly performed by the servants of the Company; and the regulations as to fire, cooking, &c. are stricter than in the other docks.

The East India Docks are at the greatest distance from town. The Company's tea and other goods are conveyed to the warehouses in the city in locked wagons of a peculiar description.

The capital of the Company is under 500,000*l.*, and the dividend is 4 per cent. A 100*l.* share of the Company's stock is at present worth about 50*l.* The management is confided to 13 directors, 4 of whom must be directors of the East India Company, and they must each hold at least 20 shares of the Company's stock.

RATES *charged on Ships from the East Indies using the East India Docks.*

The rate for receiving and unloading ships or vessels under 800 tons, in the East India Docks, and for the use of the same for 28 days from the date of the final discharge, is 1*s.* 6*d.* per ton register.

Dock rent, if the 28 days be exceeded, 1*d.* per register ton per week, which is also the rate for light ships laying up in the dock.

The rate for such ships and vessels as are loaded outwards by the Dock Company will be 2*s.* per ton register, should the packages or articles laden not exceed 2 tons each by measurement or weight; but on such as exceed 2 tons, and up to 10 tons, 3*s.* per ton additional will be charged on the quantity laden; packages or articles exceeding 10 tons the Dock Company decline lading, except by special agreement. The rate for ships and vessels loaded by their owners will be 1*s.* per ton register only, for the use and accommodation of the dock. Ships and vessels loading outwards to be allowed 28 days for the purpose, from their commencement of receiving cargo.

Dock rent, if the 28 days be exceeded, 1*d.* per register ton per week.

Coasters, or other vessels, loading from the import warehouses, will be charged 6*d.* per ton on the gross weight they take on board; to be allowed 1 week for such purpose.

Dock rent, if the 1 week be exceeded, 1*d.* per register ton per week.

Mem. — These docks receive no other than ships or vessels in the East India trade, or coasters to load from the warehouses.

RATES *charged for Wharfage, Storehouses, &c., and for sundry Work done by the East India Dock Company.*

	s.	d.
Wharfage of guns above 20 cwt. each - -	2	6
above 15 cwt. and under 20 cwt. do. - -	2	0
10 - - 15 - - -	1	6
under 10 - - - - -	1	0
of gun carriages belonging to the guns of the above scale, 1*s.* 3*d.*, 1*s.*, 9*d.*, and 6*d.*		
of anchors, per cwt. - - -	0	3
of kentledge, per ton - - -	1	6
of other articles deposited on the wharfs or quays, do. - - - -	2	6

These rates of wharfage are for the season the ship may remain at home; or for a period not exceeding 12 months: if the 12 months be exceeded, the same rate of charge will be made as if a new season had been commenced, and this rate of wharfage be considered an annual charge. — *N. B.* By the present existing agreement between the East India Company and the Dock Company, the guns and anchors of ships whilst in the Company's service are free of wharfage.

Landing guns from craft, and stowing them on skids, 2*d.* per cwt. — Ditto carriages of guns, above 10 cwt., 1*s.*; under ditto, 6*d.* each. — Shipping of ditto into craft, the same rate. — Getting guns on board ship and mounting them, 2*s.* 6*d.* per ton. — Getting on board gun carriages, of guns above 10 cwt., 6*d.* each; under ditto, 4*d.* each. — Landing anchors from craft and placing them at racks, 3*d.* per cwt. — Shipping off ditto into craft, the same rate. — Placing anchors for unstocking or for stocking, 1½*d.* per cwt. — Discharging kentledge from ships, and stacking it on the wharf, 1*s.* 2*d.* per ton. — Discharging ditto from ships into craft, 1*s.* per ton. — Shipping off kentledge from the wharf, and stowing it in the hold, 1*s.* 2*d.* per ton. — Shipping off ditto into craft, 10*d.* per ton. — Discharging shingle or stone ballast into craft or on the quay, 1*s.* 3*d.* per ton. — Water supplied to outward-bound ships, as well as what is used for seasoning their casks, 1*s.* per ton Imperial measure.

	s.	*d.*
Admission of loaded wagons, conveying cargo, or passengers' baggage, in lieu of wharfage, each	5	0
Do. of carts, with do., do.	2	6
Do. of trucks, with do., do.	1	0

N. B. — Ships' stores, and commanders' and officers' baggage, admitted free to outward bound ships.

Storehouses (for ships' stores) may be hired at 1*l.* 1*s.* per week; if rented annually, large storehouses, 40*l.* a year — smaller ditto, 35*l.* a year; or if taken permanently, large storehouses, 35*l.* a year — smaller ditto, at 30*l.* a year.

Use of the rigging shed for fitting rigging, viz.

	L.	*s.*
For ships of 800 tons and upwards	5	5
500 to 800 tons	4	4
300 - 500	3	3
under 300	2	2

N. B. — Time for this operation limited to 1 month.

Every ship using the docks, outwards or homewards, and making fast alongside the hulk, of 500 tons burden, or upwards, to pay 1*l.* 1*s.*, and ships and vessels under that burden, 10*s.* 6*d.* for every 24 hours, *for the first 3 days*; should this period be exceeded, to pay for every 24 hours beyond the same, 5*l.* 5*s.*, unless such detention is caused by special circumstances, such as the by-laws provide for.

The charge for any description of labour or service performed by the Dock Company, and not specified in this Table, will be made on moderate terms.

Note. — In loading ships outward, the Dock Company engage to get on board all goods and stores from craft, or the wharf, without extra charge, except the following, viz. kentledge, anchors, guns and carriages, sails, standing and running rigging, booms, and boats.

Charges for Masting or Dismasting at the Mast-Building.

	Main Mast.			Fore Mast.			Mizen Mast.			Bowsprit.		
For ships of	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
1,000 to 1,500 tons	10	0	0	9	0	0	4	0	0	5	0	0
800 - 1,000 -	7	10	0	7	0	0	3	10	0	4	0	0
650 - 800 -	5	0	0	4	10	0	2	10	0	2	10	0
500 - 650 -	4	0	0	3	10	0	2	0	0	2	0	0
300 - 500 -	3	10	0	3	0	0	1	15	0	1	15	0
under 300 -	2	10	0	2	5	0	1	10	0	1	10	0

For putting on and taking off Tops.

	Main.			Fore.			Mizen.		
For ships of	*L.*	*s.*	*d.*	*L.*	*s*	*d*	*L.*	*s.*	*d.*
1,000 to 1,500 tons -	1	0	0	1	0	0		12	6
800 - 1,000 - -	0	16	0	0	16	0	0	10	0
500 - 800 - -	0	12	6	0	12	6	0	8	0
under 500 - -	in proportion.								

The prices in the above Tables are for each operation, which includes the use of masting-fall and slings.

N. B. — Owners in ships may purchase not less than half a fall, at 15 per cent. under the ready money cost price.

4. *St. Katharine's Docks.* — The Company for the construction of these docks was incorporated by the act 6 Geo. 4. c. 105. (local), and they were partially opened on the 25th of October, 1828. They are situated immediately below the Tower, and are consequently the most contiguous of any to the city, the Custom-house, and other places where business is transacted. The capital raised by shares amounts to 1,352,800*l.*; but an additional sum of 800,000*l.* has been borrowed, on the security of the rates, for the completion of the works, and the purchase of a freehold property possessing river frontage from the Tower to the corner of Lower East Smithfield, of the value of upwards of 100,000*l.*, but not required for the immediate purpose of the act. A portion of this property has been appropriated as a steam packet wharf, where passengers embark and land without the aid or risk of boat conveyance. The purchase of the numerous houses that stood upon the ground occupied by the docks proved, as in the case of the London Docks, a heavy item of expense. The space included within the outer wall is about 24 acres, nearly 11 of which are water. There are 2 docks, communicating by a basin. The lock leading from the river is 180 feet long, and 45 broad: it is so constructed, that ships of upwards of 600 tons burden may pass in and out 3 hours before high water, so that outward-bound ships have the opportunity of reaching Blackwall before the tide begins to recede. Ships of upwards of 800 tons register are docked and undocked without difficulty, and the depth of water at the entrance exceeds that of any other wet dock in the port of London. Vessels are also docked and undocked by night as well as by day, — an advantage peculiar to this establishment. A clear channel of not less than 300 feet in width is at all times to be kept in the pool; and vessels drawing 18 feet water may lie afloat at low water at the principal buoy off the dock entrance. The warehouses and vaults are upon a very large scale; far more so than one might be disposed to infer from the extent of water. The warehouses are exceedingly well contrived and commodious; and, owing to their being built partly on pillars (within which what is called the quay work of the other docks is transacted), close to the water's edge, goods are hoisted direct from the hold of the vessel, without its being necessary, as in the West India and London Docks, to land them on quays; so that there is in this way a great saving both of room, time, and labour. The whole establishment is exceedingly complete, and reflects the greatest credit on the public spirit, enterprise, and skill, of those by whom it was projected and executed.

The regulations to be observed by vessels using the St. Katharine's Docks are similar to those enforced in the West India Docks, to which, as in the case of the London Docks, we beg to refer.

Table of Tonnage Rates chargeable on Vessels entering the St. Katharine Docks, and also of the Rates for discharging Cargoes landed by the Company, subject to such Revision, from Time to Time, as shall be found expedient.

Vessels Inwards.

On Vessels laden, arriving from	Per Ton Register.	Privilege.
	s. d.	*Vessels whose cargoes are discharged by the Dock Company.* Use of the Docks to vessels arriving from Hambro', or from any port in the Mediterranean, for 6 weeks from the date of entrance; if arriving from any other port, 4 weeks from the date of final discharge, with liberty to load outwards for any port or place, and to quit the docks for repairs, and re-enter; the period of absence from dock for such purposes not to affect the privilege.
First Class. — Any port of the United Kingdom, Isle of Man, Jersey, Guernsey, Alderney, Sark, or other European ports outside the Baltic, between the North Cape and Ushant -	0 6	
Second Class. — Any other port - -	0 9	*Vessels whose cargoes are discharged by their crews.* The like privilege, but to commence from the date of entrance.

	Per Ton Register.
	s. d.
Rent, in each case, after the expiration of the privilege, per week - - - -	0 1
For partial remissions and exemptions on vessels partly laden, or arriving from Spain or Portugal, wool or cork laden, or vessels with corn, see annexed Table.	
Rates for discharging Cargoes by the Company.	
Cargoes, consisting, in the whole or in part, of sugar in hogsheads or tierces, including ship cooperage - - -	1 9
Cargoes, consisting of sugar in chests of 5 cwt. and upwards, including ship cooperage -	1 3
Cargoes, consisting of sugar in bags, mats, or chests under 5 cwt., or other goods (not being hemp, tallow, ashes, wood goods, corn, pitch, tar, hay, or straw), contained in casks, bales, serons, chests, cases, bags, baskets, or similar packages; also spelter, or metal in pigs, bars, rods, plates, &c. -	0 9
Cargoes, consisting of hemp only, or merchandise in bulk, wholly or in part - -	1 0
tallow only - -	0 6
	s. d.
Mixed cargoes of { hemp - -	1 3
tallow - -	0 6
ashes - -	0 6 }
Blue gum wood, or large timber, additional for every load delivered	0 6
No charge upon excess landed beyond a ship's register tonnage.	
Oil, additional for every tun delivered into craft - - - - -	0 6

Per ton of goods, charge in no case to exceed the register tonnage of the vessel.

Vessels Outwards,
entering the Docks without Cargoes.

	Per Ton Register.	Privilege.
	s. d.	
Loading for any port enumerated in the Import Table in first class -	0 6	Use of dock to load 4 weeks from date of entrance - -
Do. do. 2d do.	0 9	
Vessels loading in part, on quantity taken on board according to their port of destination, as above classified - -	as above	Use of dock to load 1 week from entrance - -

Rent after expiration of the privilege, 1*d.* per ton register per week.

TABLE *of special Regulations, Remissions, and Exemptions, and Miscellaneous Charges applicable to Vessels inwards, not being fully laden, or laden with the Articles enumerated, or entering the Docks light, &c.*

No tonnage rate will be charged on vessels wholly corn laden, whose cargoes shall be landed in the docks; but a charge will in such case be made for docking and undocking, as under:

	L. s. d.
Vessels of 100 tons and upwards - - -	1 1 0
Vessels under 100 tons - - - -	0 10 6

with liberty to remain in dock without further charge for 24 hours after final landing. Rent, after expiration of that period, 1*d.* per ton register per week. Should the vessel load outwards, the usual tonnage rates, according to the port of destination, will be charged, instead of the rate for docking and undocking. The Dock Company reserve the power of refusing the admission of ships laden entirely with corn.

Other vessels, not being fully laden at the time of entering the docks, will be charged tonnage rate only, on the proportion of cargo brought in; the amount of rate to be determined by the port from whence the vessel has arrived; and if discharged by the Company, rates for unloading in addition, according to the description of the cargo and quantity so discharged. Rent, after 1 week, 1*d.* per ton register per week.

Vessels laden with cork or wool from Spain or Portugal will be charged only 6*d.* per ton register. Rent, after 3 weeks from date of entrance, 1*d.* per ton register per week.

	L. s. d.
Light vessels entering the dock to lie up, will be charged, for any period not exceeding 4 weeks, per ton register - - - - -	0 0 6
Rent per week, after the expiration of the 4 weeks, on the register tonnage, per ton - - -	0 0 1

Vessels two thirds laden with corn will be charged tonnage rate only on the proportion which the other part of the cargo bears to the register tonnage.

Vessels chiefly laden with wood goods, pitch, tar, hay, straw, or intending to discharge the whole of their cargoes into lighters, will only be permitted to enter or depart the docks, subject to such terms as shall be first mutually agreed upon between the owners and the Dock Company.

Miscellaneous Charges.	s. d.
For labourers hired of the Company, to work on board, and who shall be under the directions and responsibility of captains or owners of vessels, both or either (which rule applies to all over-board deliveries), a charge will be made for each man per day, of - -	3 6
Thames water supplied to vessels by the Company, per tun - - - - - -	1 0

For an abstract of a ship's cargo inwards, and weights thereof, for the purpose of making up freight accounts, the following charge will be made:—

	s. d.	
If the goods have 10 marks, or under -	2 0	
11 marks to 20 marks -	3 6	
21 marks and upwards -	0 2	each mark or parcel.

N. B. — The dock-dues, rent, &c. of most articles landed, warehoused, or shipped at the different docks, being, in general, nearly identical, the reader is referred for an account of the same to the Table under the head *London Docks*.

5. Commercial Docks. — Exclusive of the previously mentioned docks, which are all on the north side of the river, there are on the south side the *Commercial Docks*, opposite to the west end of the West India Docks. These docks are of large extent; the space included within the outer wall being about 49 acres, of which nearly 38 acres are water. They are principally intended for the reception of vessels with timber, corn, and other bulky commodities. They have but little accommodation for warehousing; and their establishments are not constructed so as to entitle them to bond all goods. The Surrey Canal Company also admit vessels to be docked in the basin of their canal.

6. London Port Dues; Charges on Account of Lights, Pilotage, &c. in the Thames; Shipping, &c. of London.

It is highly desirable that expert pilots, brilliant lights, and every other means that it is possible to devise, should be afforded to render navigation safe and expeditious. But to secure these advantages, it is indispensable that the charges on their account should be moderate. If they be otherwise, navigators are not unfrequently tempted to resort to what

are less expensive, though less secure, channels. This principle has not, however obvious, been always kept sufficiently in view either in this or in other countries. During the latter years of the war, and down to 1825, the charges on account of docks, lights, pilotage, &c. on ships in the Thames, and most other British ports, were exceedingly heavy; and would, no doubt, had they been maintained, have materially injured our commerce. Instead, also, of encouraging the resort of foreign ships to our ports, a contrary policy was adopted; the charges laid on them being usually about double those laid on British ships. This regulation was intended to promote the employment of the latter; but, as it led to reprisals in other countries, its real influence is believed to have been quite different; while by driving away foreigners, it injured the trade of the country, and prevented our ports from becoming, what they are so well fitted to be, the emporiums of the world. We are glad, however, to have to state that the circumstances now alluded to have been materially changed within the last dozen years. In 1825, the various dock monopolies expired; and a very great reduction has been made in the charges on account of the docks, which, as already seen, are now very moderate indeed.

Exclusive of the dock duties, certain *port* or *tonnage duties* were imposed on ships frequenting the port of London, by the acts 39 Geo. 3. c. 69., 43 Geo. 3. c. 124., &c., partly to pay the harbour masters, provide mooring chains, &c., and partly to create a fund for the improvement of the port, and in particular for defraying the cost of making a navigable canal across the Isle of Dogs. But this canal having been sold (*ante*, p. 476.) for 120,000*l.* to the West India Dock Company, under the 10 Geo. 4. c. 130., and the sums advanced by the public for the improvement of the port having been repaid, it was judiciously resolved to reduce the port duties to the lowest rates capable of defraying the necessary expenses. This was effected by the 4 & 5 Will. 4. c. 32., which imposes the following tonnage duties on vessels in the port: —

	Per Ton. d.
1st Class. — For every ship or other vessel trading coastwise between the port of London and any port or place in Great Britain, Ireland, the Orkneys, Shetland, or the Western Islands of Scotland, there shall be paid for every voyage in and out of the said port - - -	½
2d Class. — For every ship, &c. entering inwards or clearing outwards from or to Denmark, Norway, or Lapland (on this side of the North Cape), or from Holstein, Hamburgh, Bremen, or any other part of Germany bordering on or near the Germanic Ocean, or from or to Holland or any other of the United Provinces, or Brabant, Antwerp, Flanders, or any other part of the Netherlands, or from or to France (within Ushant), Guernsey, Jersey, Alderney, Sark, or the Isle of Man, there shall be paid for every, &c., as above - - - - -	½
3d Class. — For every ship, &c. entering inwards or clearing outwards from or to Lapland (beyond the North Cape), Finland, Russia (without or within the Baltic Sea), Livonia, Courland, Poland, Prussia, Sweden, or any other country or place within the Baltic Sea, there shall be paid for every, &c., as above - - - - -	½
4th Class. — For every ship, &c. entering inwards or clearing outwards from or to France (between Ushant and Spain), Portugal, Spain (without the Mediterranean), or any of the Azores, Madeira, or Canary Islands, or any of the United States of America, or of the British colonies or provinces in North America or Florida, there shall be paid for every, &c., as above - -	¾
5th Class. — For every ship, &c. entering inwards or clearing outwards from or to Greenland, Gibraltar, France, or Spain (within the Mediterranean), or any country, island, port, or place within or bordering on or near the Mediterranean or Adriatic Sea, or from the West Indies, Louisiana, Mexico, South America, Africa, East India, China, or any other country, island, port, or place within or bordering on or near the Pacific Ocean, or from any other country, island, port, or place whatsoever to the southward of 25 degrees of north latitude, there shall be paid, &c., as above	¾

Exemptions. — Ships of war, and ships the property of his Majesty or any of the royal family. — Any vessel coming to or going coastwise from the port of London, or to any part of Great Britain, unless such vessel shall exceed 45 tons. — Any vessel bringing corn coastwise, the principal part of whose cargo shall consist of corn. — Any fishing smacks, lobster and oyster boats, or vessels for passengers. — Any vessel or craft navigating the Thames above and below London Bridge, as far as Gravesend only. — Any vessel entering inwards or outwards in ballast.

N. B. — The *port* or *tonnage duties* paid by ships in the port of London, as stated in the accounts on the opposite page, were those payable previously to the act 4 & 5 Will. 4. c. 32., which only took effect on the 25th of July, 1834; and were, at an average, from 4 to 6 times as high as at present.

Owing to the distance of London from the sea, and the rather intricate navigation at the mouth of the river, the charges on account of lights and pilotage must necessarily be pretty heavy. They have, however, been very materially reduced of late years. The charges on account of the lights under the management of the Trinity House have been diminished, in almost every instance, at least one third; and in many instances as much as a half, and sometimes even more, since 1823. — (See LIGHT-HOUSES.) The illiberal and impolitic practice of imposing discriminating light and pilotage dues on foreign vessels is still kept up; but owing to the general establishment of reciprocity treaties with foreign powers, the grievance thence arising has become rather nominal than real, and at present affects very few of the foreign vessels coming to our ports.

The act 6 Geo. 4. c. 125. made a reduction of 8 per cent. in the charges authorised to be demanded by the pilots licensed by the Trinity House for the port of London; and foreign vessels, privileged as British vessels, have been relieved from the additional or surplus rate of 25 per cent. payable to the Trinity pilots, as well as to those licensed by the Lord Warden of the Cinque Ports. — (See PILOTAGE.)

The oppressive and troublesome charges in the port of London, imposed on alien goods under the names of package, scavage, &c. — (see PACKAGE) — were put an end to during last session (1833). At present, therefore, we believe we are warranted in affirming that, considering its distance from the sea, the public charges on shipping in the port of London are quite as reasonable as in any other port of the empire, or of the world.

But we are inclined to think that further reductions may still be effected, particularly in the article pilotage.

The following accounts show the nature and amount of the various charges that are at present incurred by vessels in the port of London: —

Pro formâ Account of Charges on a Ship of about 480 Tons, entering and departing the Port of London, laden both Ways, supposing every thing to be conducted with strict Economy, and excluding any Charge on account of extraordinary Despatch or superior Accommodation.

	£	s.	d.
Reporting the ship and appointment	1	1	0
Pilotage from the Downs	14	0	4
Boarding the pilot at sea	2	0	0
Waterman, boat, and kedge, from Gravesend	1	11	6
London port dues inwards, 5*d.* per ton	10	0	0
Do. do. outwards, do.	10	0	0
N. B.—This duty is of a temporary character, and will cease in about 5 years.			
Trinity dues and lights inwards	11	0	0
Dock dues in and out, 9*d.* per ton	12*	0	0
Trinity dues and lights outwards	8	18	6
Dungeness light in and out	2	5	0
Clearing outwards, and victualling bill	2	12	6
Steam-boat to Blackwall, *optional*	10	0	0
Pilotage to the Downs	12	8	6
Putting the pilot on shore, unless landed in the ship's boat	0	10	0
	£98	7	4

Charges on a British Vessel of 285 Tons, entering and departing the Port of London, laden both Ways.

	£	s.	d.
Reporting, appointing, &c.	2	10	6
Tonnage duty inwards (with cargo)	5	18	6
Do. outwards (do.)	5	18	6
Putting pilot on board at Deal	2	10	0
Pilotage, Downs to London, draft 15 feet 6 inches	16	8	7
Do. outwards, draft about 14 feet	9	15	0
Boat and men up and down, 3 guineas each	6	6	0
Trinity lights, inwards	6	13	2
Do. outwards	5	6	6
Private do. in and out	9	10	0
Dungeness do.	1	9	0
Dock duty, 9*d.* per ton	10	13	9
Clearing outwards	2	7	0
	£85	6	6

Charges actually paid on the President, American Packet Ship of from 470 to 480 Tons, in the River Thames, in October, 1833.

	£	s.	d.
Reporting and appointing	2	10	6
Tonnage duty inwards, and entry	10	6	6
Do. outwards	10	10	6
Trinity lights and pilotage inwards	15	12	0
Do. do. outwards	28	10	0
Private and Foreland, in and out	5	18	0
Pilot from Dungeness	15	12	0
Boat and men up and down	6	0	0
Dock charges	21	2	0
Clearing and victualling bill	2	12	6
Printing bills and cards	3	13	6
Advertisements in bills of entry	0	10	6
	£122	18	0

In this case, the pilotage inwards and outwards, lights, &c. are charged from Cowes, so that a considerable portion of these items cannot be considered as an expense peculiar to the Thames. A part of the dock charges might also have been avoided, by employing the crew; the last two items are not properly port charges.

Amount of Shipping, &c. belonging to the Port of London. — According to the official accounts, there belonged to this port, in 1832, besides boats and other vessels not registered, 2,669 ships, of the burden of 565,174 tons, manned by 32,786 men and boys. In 1819, the gross customs' duty collected in the port of London amounted to 7,749,463*l.*, the expenses of collection being 277,913*l.*, or at the rate of 3*l.* 11*s.* 8½*d.* per cent. In 1832, the gross duty had risen to 9,434,854*l.*, while the expenses of collection had sunk to 243,678*l.*, being at the rate of only 2*l.* 11*s.* 7¾*d.* per cent. — (*Parl. Paper*, No. 414. Sess. 1833.) So vast an amount of shipping and commerce was never previously concentrated in any single port. London may be truly said to be *universi orbis terrarum emporium*. May her prosperity be as lasting as it is great!

* If discharged by the Dock Company, there would be an additional charge of 12*l.* on that account.

The following tabular statement will serve to illustrate the progress of the foreign trade and navigation of London : —

Number and Tonnage of Vessels entering the Port of London from Foreign Parts, distinguishing between British and Foreign Ships.

Years.	British		Foreign		Years.	British		Foreign	
	Ships.	*Tons.*	*Ships.*	*Tons.*		*Ships.*	*Tons.*	*Ships.*	*Tons.*
1700	839	80,040	496	76,935	1820	3,354	655,239	856	122,619
1750	1,498	198,023	184	36,546	1821	3,000	585,994	571	89,073
1790	2,254	431,890	1,116	149,265	1822	3,230	603,167	597	106,099
1791	2,184	419,574	1,256	149,053	1823	3,031	611,451	865	161,705
1792	2,489	451,188	1,186	152,243	1824	3,132	607,106	1,643	264,098
1793	2,548	478,105	1,193	177,019	1825	3,989	785,565	1,743	302,122
War.					1826	3,495	675,026	1,586	215,254
1814				269,834	1827	4,012	769,162	1,534	221,008
1815				275,375	1828	4,084	767,212	1,303	195,929
1816				115,463	1829	4,108	784,070	1,300	215,605
1817				131,647	1830	3,910	744,229	1,268	207,500
1818				272,656	1831	4,140	780,988	1,557	269,159
1819				158,882	1832	3,268	639,840	884	154,142

N. B. — The temporary falling off in 1832 is to be ascribed to the prevalence of cholera, and the unfortunate misunderstanding with Holland.

Account of the Number and Tonnage of the Ships that have entered the Port of London, with Cargoes, from Foreign Parts, distinguishing the Countries whence they came, during the Years 1830, 1831, and 1832. — (*Papers published by the Board of Trade*, part ii. p. 112.)

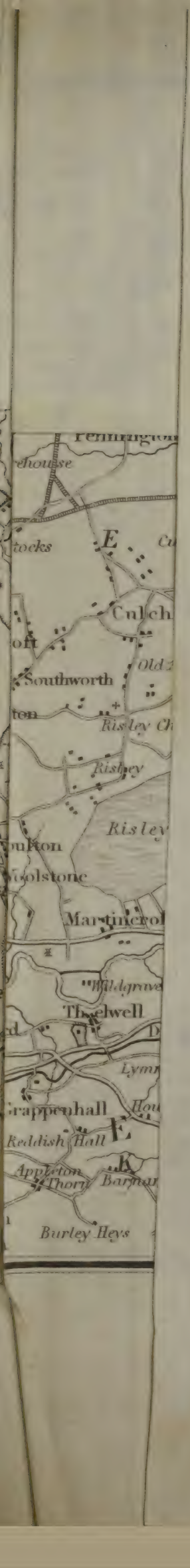
Countries.	1830.				1831.				1832.			
	British		Foreign		British		Foreign		British		Foreign	
	Ships.	Tonn.	Ships.	Tonn.	Ships.	Tonn.	Ships.	Tonn.	Ships.	Tonn.	Ships.	Tonn.
Russia	479	105,260	26	10,359	642	133,202	51	14,050	381	81,582	34	11,276
Sweden	19	3,865	62	14,056	20	3,118	86	21,864	3	513	34	9,864
Norway	2	377	89	30,116	4	445	134	40,065	1	78	81	26,427
Denmark	56	6,144	147	11,522	44	4,498	178	16,992	23	2,806	80	8,726
Prussia	237	33,509	293	61,471	122	21,258	280	61,633	113	16,445	117	27,901
German States	286	46,648	185	16,776	234	37,124	146	16,525	210	37,074	72	9,180
Netherlands	442	49,902	283	27,653	433	50,563	253	24,907	318	35,790	184	16,314
France	193	20,966	66	7,263	206	19,991	198	19,241	159	18,104	146	11,860
Portugal, Azores, and Madeira	275	26,477	5	572	338	31,518	15	1,774	248	24,820	8	906
Spain and Canaries	241	27,075	29	3,045	332	38,223	50	5,658	180	19,295	24	2,669
Italian States	127	18,089	5	842	163	25,659	30	7,280	101	13,811	4	614
Ionian Islands	18	2,535	- -	- -	31	4,645	- -	- -	26	3,575		
Turkey and Continental Greece	47	6,781	- -	- -	72	10,105	- -	- -	67	9,339		
Morea and Greek islands	4	562	- -	- -	10	1,285	- -	- -	13	1,985		
Egypt	6	1,509	- -	- -	15	3,341	- -	- -	5	862		
Tripoli, Barbary, and Morocco	10	960	- -	- -	12	1,178	- -	- -	9	957		
Foreign possessions in Asia	11	4,106	1	370	9	3,261	- -	- -	6	1,831	1	370
China	22	27,782	- -	- -	21	27,889	- -	- -	20	25,237		
United States of America	10	2,911	56	19,374	21	5,776	93	32,981	23	7,362	50	19,794
Foreign West Indies	32	6,053	9	2,508	39	7,676	9	2,226	43	8,934	14	4,124
Foreign Continental colonies in America	83	15,545	1	270	105	20,778	1	162	76	14,916	2	500
Totals	2,600	406,856	1,257	206,295	2,872	451,533	1,524	265,358	2,025	325,299	851	150,425

II. Liverpool Docks, Shipping, etc.

The first wet dock in the British empire was constructed at Liverpool, in pursuance of an act of parliament obtained in 1708. At this period Liverpool was but an inconsiderable town; and the accommodation she has derived from her docks is one of the circumstances that has done most to promote her extraordinary increase in commerce, population, and wealth. A second wet dock was opened about the middle of last century; and since that period many more have been constructed, some of them on a very magnificent scale, and furnished with all sorts of conveniences. When those now in progress are completed, the total area of water in the docks will exceed 90 acres.

The entrance to the port of Liverpool is a good deal incommoded with sand banks; through which, however, there are several channels which, when the proper precautions are observed, afford an easy and safe access to the port. Being anxious to contribute all the information in our power as to this great and growing emporium, we have annexed to this edition, a chart of the entrance to the Mersey, and of part of that river, with a map of the country from Liverpool to Manchester, exhibiting all the great lines of communication between these and the adjacent towns. The recently opened, or at least recently discovered, channel (now called the South Channel), leading through the banks to Liverpool, is laid down in the chart. In compiling it, we have availed ourselves of Lieutenant Evans's large and valuable chart of the Mersey and contiguous coasts. In spring tides, the water rises in the Mersey about 30 feet, and in neap tides about 15: but the height depends much on the state of the winds, and other circumstances.

The following Table gives the annual amount of the Liverpool dock duties since 1757, the number of vessels entering the docks since that period, and the tonnage of the same since 1800. It exhibits an increase of commerce unequalled in any other port.


Southworth
Risley
Risley
Martincroft
Thelwell
Burley Heys

Amount of Dock Duties at the Port of Liverpool, from the Year 1757, ending the 24th of June each Year.

Year.	No. of Vessels.	£	s.	d.	Year.	No. of Vessels.	£	s.	d.
1757	1,371	2,336	15	0	1779	2,374	4,957	17	10
1758	1,453	2,403	6	3	1780	2,261	3,528	7	9
1759	1,281	2,372	12	2	1781	2,512	3,915	4	11
1760	1,245	2,330	6	7	1782	2,496	4,249	6	3
1761	1,319	2,382	0	2	1783	2,816	4,840	8	3
1762	1,307	2,526	19	6	1784	3,098	6,597	11	1
1763	1,752	3,141	1	5	1785	3,429	8,411	5	3
1764	1,625	2,780	3	4	1786	3,228	7,508	0	1
1765	1,930	3,455	8	4	1787	3,567	9,199	18	8
1766	1,908	3,653	19	2	1788	3,677	9,206	13	10
1767	1,704	3,615	9	2	1789	3,619	8,901	10	10
1768	1,808	3,566	14	9	1790	4,223	10,037	6	2½
1769	2,054	4,004	5	0	1791	4,045	11,645	6	6
1770	2,073	1,142	17	2	1792	4,483	13,243	17	8¼
1771	2,087	4,203	19	10	1793	4,129	12,480	5	5
1772	2,259	4,552	5	4	1794	4,265	10,678	7	0
1773	2,214	4,725	1	11	1795	3,948	9,368	16	4
1774	2,258	4,580	5	5	1796	4,738	12,377	7	7
1775	2,291	5,384	4	9	1797	4,528	13,319	12	8
1776	2,216	5,064	10	10	1798	4,478	12,057	18	3
1777	2,361	4,610	4	9	1799	4,518	14,049	15	1
1778	2,292	4,649	7	7					

Year.	No. of Vessels.	Tonnage.	£	s.	d.	Year.	No. of Vessels.	Tonnage.	£	s.	d.
1800	4,746	450,060	23,379	13	6	1806	4,676	507,825	44,560	7	3
1801	5,060	459,719	28,365	8	2½	1807	5,791	662,309	62,831	5	10
1802	4,781	510,691	28,192	9	10	1808	5,225	516,836	40,638	10	4
1803	4,791	494,521	28,027	13	7	1809	6,023	594,601	47,580	19	3
1804	4,291	448,761	26,157	0	11	1810	6,729	734,391	65,782	1	0
1805	4,618	463,482	33,364	13	1	1811	5,616	611,190	54,752	18	5

Year.	No. of Vessels.	Tonnage.		£	s.	d.	£	s.	d.
1812	4,599	446,788	- - - -	20,260	3	5	44,403	7	11
			Duties on goods - -	24,143	4	6			
1813	5,341	547,426	- - - -	24,134	18	8	50,177	13	2
			Duties on goods - ..	26,042	14	6			
1814	5,706	548,957	- - - -	28,630	11	3	59,741	2	4
			Duties on goods - -	31,110	11	1			
1815	6,440	709,849	- - - -	36,310	1	9	76,915	8	8
			Duties on goods - -	40,605	6	11			
1816	6,888	774,243	- - - -	43,765	6	3	92,646	10	9
			Duties on goods - -	48,881	4	6			
1817	6,079	653,425	- - - -	35,186	8	0	75,889	16	4
			Duties on goods - -	40,703	8	4			
1818	6,779	754,690	- - - -	43,842	16	6	98,538	8	3
			Duties on goods - -	54,695	11	9			
1819	7,849	867,318	- - - -	50,042	7	8	110,127	1	8
			Duties on goods - -	60,084	14	0			
1820	7,276	805,033	- - - -	44,717	17	10	94,412	11	10
			Duties on goods - -	49,694	14	0			
1821	7,810	839,848	- - - -	43,131	6	2	94,556	9	1
			Duties on goods - -	51,425	2	11			
1822	8,136	892,902	- - - -	47,229	10	4	102,403	17	4
			Duties on goods - -	55,174	7	0			
1823	8,916	1,010,819	- - - -	52,837	5	5	115,783	1	6
			Duties on goods - -	62,945	16	1			
1824	10,001	1,180,914	- - - -	60,878	9	7	130,911	11	6
			Duties on goods - -	70,033	1	11			
1825	10,837	1,223,820	- - - -	59,446	7	8	128,691	19	8
			Duties on goods - -	69,245	12	0			
1826	9,601	1,228,318	- - - -	60,411	9	11	131,000	19	0
			Duties on goods - -	70,589	9	1			
1827	9,592	1,225,313	- - - -	61,601	0	6	134,472	14	3
			Duties on goods - -	72,871	13	9			
1828	10,703	1,311,111	- - - -	62,969	7	10	141,369	15	7
			Duties on goods - -	78,400	7	9			
1829	11,383	1,387,957	- - - -	66,128	18	10	147,327	4	11
			Duties on goods - -	81,198	6	1			
1830	11,214	1,411,964	- - - -	68,322	9	11	151,329	17	10
			Duties on goods - -	83,007	7	11			
1831	12,537	1,592,436	- - - -	81,039	11	11	183,455	4	3
			Duties on goods - -	102,415	12	4			
1832	12,928	1,540,057	- - - -	74,530	4	11	170,047	6	11
			Duties on goods - -	95,517	2	0			
1833	12,964	1,590,461	- - - -	79,558	3	11	182,980	16	4
			Duties on goods - -	103,422	12	5			

Dock Office, Liverpool, 24th of June, 1833.

Dock Dues. — The following dues are payable upon all vessels entering inwards, or clearing outwards at the port of Liverpool, for dock rates and harbour lights: —

	s.	d.
From between the Mull of Galloway and St. David's Head, Isles of Man and Anglesea, the ton - - - - - - - - - - - -	0	3¾
From between the Mull of Galloway and Duncan's Bay Head, Orkney Isles, and islands on the western coast of Scotland; between St. David's Head and the Land's End, the Scilly Islands		

	s.	d.
From the east and southern coast of Great Britain, between Duncan's Bay Head and the Land's End, the islands of Shetland, the west coast of Ireland, from Cape Clear to Malling Head, including the islands on that coast, the ton	0	8½
From Europe, north of Cape Finisterre, and westward of the North Cape, and without the Cattegat and Baltic Sea, the islands of Guernsey, Jersey, Alderney, Sark, the Faro Isles, and Iceland, the ton	1	3
From within the Cattegat and Baltic, the whole of Sweden, the White Sea, eastward of the North Cape, Europe, south of Cape Finisterre, without the Mediterranean, Newfoundland, Greenland, Davis's Straits, Canaries, Western Islands, Madeira, and Azores, the ton	1	7
From the east coast of North America, the West Indies, east coast of South America, north of Rio Plata, the west coast of Africa, and islands north of the Cape of Good Hope, all parts within the Mediterranean, including the Adriatic, the Black Sea, and Archipelago, the islands of St. Helena, Ascension, and Cape de Verd Islands, the ton	2	3
From South America, south of Rio Plata, the Pacific Ocean, Africa and Asia, eastward of the Cape of Good Hope, the ton	3	4
Note. — Vessels remaining longer than six months in dock, to pay in addition to the above rates, per month	0	2

All vessels arriving at or clearing from the said port, are to pay the said rates from or for the most distant port or place from or for which they shall trade; but vessels arriving from any parts in ballast do not pay dockage on entering inwards; and should such vessels proceed to sea again in ballast, then only one half of the dock rates are due, with the whole of the lights; but taking a cargo outwards subjects such vessels to full dock dues.

N. B. — New vessels built in Liverpool are subject only to half the above rates on the first outward clearance.

Floating Light, at the Entrance of the River Mersey. — Towards this light, the following rates are payable: —

All vessels sailing to or from Liverpool, to any port or place between Duncan's Bay Head and the Land's End, on the west side of Great Britain, and between Malling Head and Cape Clear on the east side of Ireland, ½*d.* per ton.

All vessels sailing to or from Liverpool, to any port or place between Duncan's Bay Head and the Land's End, on the east and southern coast of Great Britain, and between Malling Head and Cape Clear on the west coast of Ireland, ½*d.* per ton.

All vessels sailing to or from Liverpool, to any port or place not being within the United Kingdom of Great Britain and Ireland, or the adjacent islands to the northward of the Cape of Good Hope, and the northward of Cape Horn, 1*d.* per ton.

All vessels sailing to and from Liverpool, to any port or place to the eastward of the Cape of Good Hope, and the westward of Cape Horn, 2*d.* per ton.

☞ In the day time, from sunrise to sunset, a blue flag, with the letters N.W. in white, will be hoisted at the main-mast head, and in thick and foggy weather, either by night or day, a bell will be kept constantly ringing, to prevent vessels from running foul of the light-vessel.

Dock Regulations. Extracts from Acts of Parliament. — Any owner, or master, or any person having the command, agency, or consignment of any vessel chargeable with dock duties, refusing to pay the same, is liable to have such vessel or goods seized.

Any person throwing any ballast or rubbish from out of any vessel upon any of the quays, &c., shall immediately cart or carry away the same: penalty 40*s.*

Every ship shall, before she comes within any of the piers, take down all her sails: penalty 5*l.*

Any person having the charge of any vessel in any of the docks, refusing to remove the same, after 24 hours' notice in writing, shall forfeit 20*l.*, and pay the expenses of removal by the water bailiff.

Any person having the command of any vessel moored in the river, refusing to remove the same, when ordered by the water bailiff, shall forfeit 20*l.*

The master, or other person having the command of any vessel from which any cannon or gun shall be fired whilst in the port, shall forfeit 10*l.*

Any person making payment of dock duties, who refuses to answer such questions as shall be put to him by the collector, or give a false or untrue answer, shall forfeit 10*l.*

Any master, &c. evading payment of the duties, shall forfeit and pay double the duties evaded; and by 53 Geo. 3. a sum of 20*l.* in addition thereto.

Whenever it shall be necessary, for the purpose of cleaning or repairing the docks, to remove the vessels lying therein, the master, mate, or other person taking the command of such vessel, shall, within 3 days after notice given, remove such ship from such dock, on pain of forfeiting 10*l.*

Any master, &c. refusing to moor and remove the same in docks, according to the direction of the dock master, will forfeit 5*l.*, together with the costs of removal by the dock master.

Any master, &c. acting contrary to the direction of the dock master, will forfeit 20*l.*

Any master, &c. entering and giving false information of the draught of water of any ship to any of the dock masters, will forfeit 20*l.*

Any master, &c. bringing the same into the entrance basins, when a signal is hoisted on the pier, at the entrance of such basin, signifying that such dock is full of vessels, will forfeit 20*l.*

Any master, &c. bringing his vessel into any of the docks, contrary to the directions of the dock master, will forfeit 20*l.*

Every master, or other person, damaging any of the dock gates, bridges, piers, quays, &c. is liable to have the ship seized, and sold to compensate for damage done.

Any person opening or shutting any of the dock gates, sluices, or clews, is liable to forfeit 100*l.*; or opening or shutting any drawbridge, 20*l.*

Any owner, &c. leaving gunpowder, pitch, tar, &c., or combustible matter of any kind, on the quays of the docks, &c., or upon the deck of any vessel lying in any of the docks, for above 48 hours after passing the Custom-house officers, is liable to a penalty of 5*s.* an hour; on neglecting to watch such goods in the night time, to a penalty of 5*l.*

Any master, or other person, having the command of any ship, suffering any fire, candles, or lamp to be lighted and burning on board: penalty 10*l.*

Any owner, &c., landing, or causing to be landed and laid, any pumps, boats, anchors, cables, lime-stones, &c., or other things whatsoever, upon any of the dock quays, shall within 48 hours wholly remove the same from off such quay, or shall forfeit 5*s.* per hour above the 48.

Any person wilfully cutting, damaging, or destroying any cables, &c. by which any vessel in the river or in any of the docks shall be fastened: penalty, 50*l.*

Any person damaging or breaking any lamp, &c. set up near the docks: penalty for each lamp, 5*l.*

Any master, or other person, having the command of any vessel about which any offence shall have been committed, in relation to any of the docks, &c., is liable to the penalty imposed for such offence.

Any owner or master of any ship or vessel giving or offering a bribe to any officer employed in pursuance of the dock acts: penalty 20*l.*

Any owner, consignee, or master of any vessel arriving and departing in ballast without payment of dock duties, is liable to a sum equal to double the amount of dock duty which should have been paid, and the master liable to the penalty of 20*l.* in addition.

Every master, &c. wilfully throwing, casting, or putting any earth, stones, rubbish, &c. out of any ship, &c. into any part of the port: penalty 50*l.*

Any owner, &c. of any vessel laid up for sale, or which shall not be actually employed for two months, not removing the same within 24 hours' notice in writing from the harbour master, or left on board: penalty 5*l.*, and costs of removal.

Any person discharging timber in any dock without having obtained the consent in writing of the chairman or deputy chairman of the dock committee, or of some justice of the peace: penalty 10*l.*

Any person having consent, not removing the same therefrom within 24 hours, liable to a fine of 5*s.* an hour.

Any person damaging any ship, &c. in any of the docks, &c., or in the river, and refusing to make compensation, liable to have his goods, or the tackle of the ship, &c. doing the damage, seized.

Any justice of the peace for the county of Chester or borough of Liverpool, upon complaint made to them, may summon persons to appear before him, and may fix the amount to be paid to boatmen, and persons finding and taking possession of anchors, &c. in any part of the port of Liverpool.

Any person throwing, casting, or emptying any ballast, ashes, &c. out of any ship, &c. into the river Mersey, the Rock or Horse Channel, or Formby Channel, to the eastward of the Floating Light, or from any of the piers into the docks or basins, or into the river Mersey: penalty 10*l.*

That every vessel laden with a cargo consisting solely of limestones, paving-stones, flintstones, grave, and chalk, shall be charged tonnage rates, as if coming in ballast.

Every owner or master, &c. of any vessel arriving at or departing from the said port, shall produce to the collector, upon demand, at the time of making entry, all books, accounts, &c. in relation to such vessel, or which show the weights and quantities of the goods, &c. In case of dispute, such owner, &c. shall produce a statement in writing, to be verified by oath, and showing the actual weights and quantities of such goods, &c., or the accuracy of the said books, &c.

In case the master, &c. of any vessel from which rubbish, ballast, dirt, or other refuse of any kind shall be landed, shall permit or suffer the same to be so landed, or laid within 3 yards from the margin of any such dock or basin, or of the river Mersey, and shall not cause such rubbish, &c. to be wholly removed from off such quays, &c. within 24 hours after the same shall be so landed or laid: penalty 5*l.*

Any owner, &c. of any boat or vessel, permitting gunpowder, exceeding 10 pounds in weight, to be brought into any of the docks or basins, or any vessel or boat lying therein, without the previous consent in writing of a justice of the peace of the borough of Liverpool: penalty 100*l.*

That upon due proof, on oath, to the satisfaction of any justice of the peace of the borough of Liverpool, or county of Lancaster, that any dealer in marine stores, within the said borough, or Toxteth Park, shall have been guilty of receiving stolen goods, or purchasing or receiving, &c., every such person shall forfeit 20*l.* for the first offence, 30*l.* for the second offence; and after conviction for such second offence, shall not carry on business as such dealer in marine stores within 200 yards from the margin or side of any dock or basin (exclusive of 40 yards prohibited by a former act) on pain of forfeiting the sum of 10*l.* for every day he, she, or they shall carry on such trade or business.

In case any person or persons giving or accepting any bribe to or from any water bailiff, harbour master, &c. give information thereof, he or they shall be excused from the penalty of 20*l.* imposed by the 51 Geo. 3. for such offence, provided such information be given before any proceeding for punishing the said offence shall have commenced, or any information laid before any justice of the peace against such person in respect of the same.

Justices of the peace may, upon complaint made, summon parties and ascertain and award the amount of recompence, for any services rendered by boatmen, &c. to vessels in the said docks or basins, and, in case of non-payment, may levy the sum so awarded by distress.

By-laws.—1. That the master, &c. who shall permit or suffer any pitch or tar, or any other combustible matter, to be boiled or heated for the use of such ship or vessel, either on board of such vessel, or within 5 yards of the same, shall forfeit 40*s.* for every offence.

2. That the master, &c. discharging or loading any cotton or other combustible goods on or from any of the quays, who shall permit or suffer any person or persons to smoke or burn tobacco, shall for each offence forfeit 20*s.*; and any other person or persons who shall burn or smoke tobacco, or any other thing, amongst cotton or any other combustible goods, lying and being on the quays, shall for each offence forfeit the like penalty of 20*s.*

3. That if the master, &c. shall bring the same into any of the docks, basins, or entrances, with loaded cannon or guns, with gunpowder on board, or, when driven in by stress of weather, shall neglect immediately to discharge the same, or who shall take gunpowder on board, until clear of the docks and pier heads, shall forfeit 5*l.*

4. That the master, &c. of any vessel, or any other person or persons whomsoever, who shall permit or suffer any rope from such vessel to be made fast to any chain-post or quay-fender, or any rope, chain, or tackle of any description, to be made fast to any of the pillars of any iron or other shed on any of the quays, or to the roof or any other part of such shed, shall for every offence forfeit 40*s.*

5. That the master, &c. of any vessel lying within or up to any of the docks, basins, &c., who shall suffer any ballast, &c. to be taken on board such vessel, or thrown, discharged, or carried out of the same, without having a canvass nailed to the ship's side, or some other safeguard from falling into any such docks or basins, shall for every offence forfeit the sum of 40*s.*

6. That the master, &c. of any ship or vessel lying in any of the said docks or basins, or the entrances to the same, who shall suffer any repairs to be done to the outsides of such vessels, without having a canvass or some other safeguard secured from the side of such vessel, and placed or fixed so as to prevent any chips or pieces of wood from falling into the said docks or basins during the whole of such work or repairs, shall for every offence forfeit 40*s.*

7. That the master, &c. of any vessel lying or being within any of the docks, &c. who shall not cause all ballast, &c. discharged from or to be laden on board of any vessel, to be thrown at least 5 feet from the edge of the quay, or on the outsides of the cart or chain-posts of the said quay, and taken away immediately, shall for every offence forfeit 40*s.*

8. That the master, &c. or other person having the charge or command of every vessel lying within any of the docks or basins, shall have a ship-keeper on deck to attend the vessel every tide, at least 2 hours before the time of high water, and 1 hour after high water, under the penalty of 10*s.*

9. That the master, &c. of any vessel, when hauling into or out of the docks or basins, &c., shall (except when any such vessel be driven by stress of weather) have the yards a-peak, and the sprit-sail yard fore and aft, and the jib-boom run in, within 3 feet from the cap, if practicable; and, after any such vessel shall be brought into any dock or basin, shall have the anchors got in on the forecastle or deck, and shall have the steering-sail booms and irons taken off from the yards, and shall have the main or mizen booms, and the stern or quarter davits rigged in, within 24 hours, under the penalty of 40*s.*

10. That the master or other person having the command of any vessel, who shall, by negligence or otherwise, leave an anchor in the entrance to any of the docks, or upon the strand of the river, without a buoy, for a longer period than one tide, shall for every offence forfeit 5*l.*

11. That the owner, &c. of any vessel who shall refuse to strike the top-gallant masts and yards of every such vessel entering any of the repairing or graving docks, shall forfeit 5*l.*

12. That the owner or driver of any cart, &c., or any other person or persons who shall draw, or cause, or permit, or suffer to be drawn upon or over any of the dock bridges, any anchors, balks, &c. shall for every offence forfeit 40*s.*

Every day, 2 hours before high water, a bell will be rung for 1 minute at each dock, when every ship-keeper is to make his appearance on the deck of his vessel, or incur the penalty of 40*s*.

All merchants and other owners or agents of ships and vessels trading to the port of Liverpool, will be required to enter the names of such vessels, their draught of water, and the date of their arrival at the port of Liverpool, together with the name of the dock into which they are intended to be brought, in a book kept for that purpose, in the office of the harbour master, in Trentham Street. And all vessels will thereafter be admitted into the said docks or basins in the order only in which they shall be so entered; except when vessels are prevented entering the docks in their regular turn by want of sufficient water; in which cases lighter vessels will be allowed to enter the docks out of their regular turn, provided space be reserved for the accommodation of such heavier vessels when the tides will admit of their entrance.

LIVERPOOL DOCK RATES.—The following is a Table of the dock duties on goods imported, exported, or brought coastwise into the port of Liverpool:—

☞ The Duties Outwards are for Foreign, British, or Irish Goods, except those marked thus (*) which are for British or Irish Goods only.

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards.
	s. d.	*s. d.*	*s. d.*
Acorns - - - ton (10 bus.)	2 0	1 0	0 8
Alabaster - - - ton	1 0	0 6	0 4
Ale, beer, and porter - 100 gallons	0 5	0 4	0 6
hogshead	0 6	0 6	0 5
bottled, the punch. or cask	0 4	0 4	0 4
tierce	0 3	0 3	0 3
barrel	0 1½	0 1½	0 1½
hamper	0 1	0 1	0 1
Alkanet root, amber, and aloes - cwt.	0 3	0 1½	0 1
Almonds - - - ton	2 0	1 0	0 8
Alum, roche - - - —	1 0	0 6	0 4
Anchor palms - - - —	1 0	0 6	0 8
Anchovies, angelica, and annotto cwt.	0 3	0 1½	0 1
Aniseeds, antimony - - —	0 3	0 1½	0 1
Apples - - - bushel	0 1	0 0½	0 0½
Aquafortis, and arsenic - cwt.	0 3	0 1½	0 1
Argol - - - - ton	2 0	1 0	0 8
Arrow root and powder - cwt.	0 3	0 1½	0 1
Ashes — barilla - - ton	1 6	0 9	0 6
pearl and pot - - —	2 0	1 0	0 8
*Ashes — black, soda weed and wood —	1 0	0 6	0 4
bleaching - - —	2 0	1 0	0 8
common Irish - —		0 6	
Bacon - - - - —	2 0	1 0	0 8
Bagging - - - piece	0 0½	0 0½	0 0½
Ballast of paving and other stones that may be used for making or repairing roads - - - - ton	0 2	0 1	0 1
Bark, angustura, eleutheriæ, Jesuits', cascarilla, or Winteranus - cwt.	0 6	0 3	0 2
oak, cork tree, birch, and larch, ton	1 6	0 9	0 6
quercitron - - - —	2 0	1 0	0 8
sassafras - - - cwt.	0 3	0 1½	0 1
Basket rods - - - bundle	0 0½	0 0½	0 0½
1,000	0 5	0 2½	0 2½
Bass mats - - - 120	0 3	0 1½	0 1
Bast rope - - - ton	1 0	0 6	0 4
Beef or pork - - hogshead	1 0	0 6	0 5
puncheon	0 8	0 4	0 4
tierce	0 4	0 2	0 1½
barrel	0 3	0 1½	0 1
½ barrel and smaller package	0 1½	0 0½	0 0½
Beer, spruce - - 32 gallons	0 5	0 2½	0 1½
Bees' wax, or bell metal - cwt.	0 2	0 1	0 1
Bellows, smiths' - - each	-	0 3	0 1
Berries, bay, juniper, yellow - ton	2 0	1 0	0 8
Blacking - - - hogshead	-	0 6	0 5
puncheon or cask	-	0 4	0 4
tierce	-	0 3	0 3
barrel	-	0 1½	0 1½
smaller package	-	0 1	0 1
Bladders containing lard, &c. - each	-	-	0 0½
Blocks, heel - - gross	-	0 1	
last - - - 1,000	-	0 6	
ship - - - 100	1 0	0 6	0 3
Blubber - - - ton	1 6	0 9	0 6
Blue - - - package	0 3	0 1½	0 1
Boats - - - each	1 0	0 6	0 6
Bobbins - - - cask	-	0 6	0 4
Bone dust and bones of cattle, and bran, ton	1 0	0 6	0 4
Books - - - package	0 4	0 2	0 3
Borax or tincal - - - cwt.	0 3	0 1½	0 1
*Bottles - - - crate	-	-	0 3
of green or common glass, not less than pints - gross	0 3	0 1½	0 3
Boulder stones - - - ton	0 8	0 4	0 2
Bowls of wood - - dozen	-	0 0½	0 0½
Bows for cattle - - —	-	0 0½	0 0½
Brass - - - - cwt.	0 2	0 1	0 1
old - - - - ton	1 8	0 10	0 6
Bread - - - - cwt.	0 2	0 1	0 1
bag or sack	-	-	0 0½
Bricks, bearers, and tiles - 1,000	1 0	0 6	0 4
Bristles - - - - cwt.	0 6	0 3	0 2
Broom and brush handles - bundle	-	0 0½	0 0½
1,000	-	0 9	
Brooms - - - dozen	0 0½	0 0½	0 0½
load (48 bundles)	-	1 0	
Brown powder - - ton	2 0	1 0	
Brush heads and stocks - - bag	0 1	0 0½	0 0½
1,000	-	0 6	
Brushes - - bundle or box	0 6	0 3	0 2
cask	-	-	0 4
Buckets of wood - - dozen	-	0 0½	0 0½
Bugle - - - - ton	2 0	1 0	0 8
Bullion - - package	0 6	0 3	0 2

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards.
	s. d.	*s. d.*	*s. d.*
Bullrushes - load (63 bundles)	1 0	0 6	0 4
Burr stones - - - 100	1 0	0 6	0 4
Butter - - cask or firkin	0 1	0 0½	0 0½
½ firkin or keg	0 0½	0 0½	0 0½
Cables or cordage - - ton	2 0	1 0	0 8
Cakes, linseed or rape - - —	1 0	0 6	0 4
Calamine, calaminaris lapis - —	0 6	0 3	0 2
Cambrics - - - piece	0 1	0 0½	0 0½
Camphor, canella alba - - cwt.	0 3	0 1½	0 1
*Candles, and candlewick - —	0 2	0 1	
package	-	-	0 0½
Cane reeds - - - 1,200	0 6	0 3	0 2
Cantharides, caoutchuc, and capers, cwt.	0 3	0 1½	0 1
Carpets. *See Woollens.*			
Carriages, cars, and carts - each	-	1 0	1 0
for guns - - —	-	0 3	0 3
handcarts - - —	-	0 6	0 6
Cassia buds - - - cwt.	0 6	0 3	0 2
fistula and lignea - - —	0 3	0 1½	0 1
Cattle, asses and mules, bulls, cows, and oxen - - - - each	0 6	0 3	0 6
calves - - - —	0 3	0 1	0 3
horses - - - —	1 0	0 6	1 0
lambs, sheep, and swine - —	0 1	0 0½	0 1
Caviare - - - - ton	3 0	1 6	1 0
Cement - - - - - —	1 0	0 6	
Chalk - - - - - —	0 4	0 2	
Charcoal - - - - —	1 4	0 8	
*Cheese - - - - - —	1 0	0 6	0 4
hamper	-	-	0 0½
box or other package, not described	-	-	0 1
if loose, cwt.	-	-	0 0½
Cheese boards - - - dozen	-	0 0½	0 0½
Chesnuts - - - bushel	0 1	0 0½	0 0½
Chint. *See Earthenware.*			
Chirt stones - - - ton	0 8	0 4	0 3
British or Irish - —	-	-	0 2
Chocolate and cocoa paste - cwt.	0 3	0 1½	0 1
Cider - - tun (252 gallons)	2 4	1 2	0 9
Cinnabar - - - - cwt.	0 6	0 3	0 2
Cinnamon - - - - —	1 0	0 6	0 4
Citron, preserved - - - —	0 6	0 3	0 2
Clay, Cambria and pipe - - ton	0 6	0 3	
China, stone, and firebrick —	0 8	0 4	
*Clocks - - - - - case	-	-	0 5
Cloves, cobalt, cochineal - - cwt.	1 0	0 6	0 4
*Coals - (Winchester meas.) chal.	-	-	0 4
- - - ton	0 4	0 2	
Cocoa, coffee, cork - - ton	2 0	1 0	0 8
Cocoa nuts - - - - 100	0 3	0 1½	0 1
Colouring for porter, &c. - 100 gallons	0 8	0 4	0 5
*Combs - - - package	-	0 6	0 2
Copper, British or Irish - *box or tub	-	-	0 2
*case	-	-	0 5
*cask	-	-	0 4
*tierce	-	-	0 3
*barrel	-	-	0 1½
*bag or keg	-	-	0 1
ton	2 0	1 0	0 8
old - - - —	1 8	0 10	0 6
ore - - - —	0 6	0 3	0 2
dross and slag - - —	0 4	0 2	0 2
Copperas - - - —	1 0	0 6	0 4
Coral - - - - cwt.	0 6	0 3	0 2
Cork - - - ton	2 0	1 0	0 8
Corks - - - bag	0 4	0 2	0 1
Corn — Barley, bere, and big beans, Indian, peas, or rye - - quarter	0 3	0 1½	0 1
Meal, barley meal or oat meal, ton	2 0	1 0	0 8
Malt, also wheat - quarter	0 4	0 2	0 -
Oats - - - —	0 2	0 1	0 1
Wheat flour - - cwt.	0 1	0 0½	0 0½
Cotton seed - - - bushel	0 1	0 0½	0 0½
twist, thread, and yarn - cwt.	0 4	0 2	
waste, also cotton wool 100 lbs.	0 3	0 1½	0 1
Cottons, manufactured - package	1 0	0 6	0 3
Cream of tartar, also currants - ton	2 0	1 0	0 8
Crystal - - - package	0 3	0 1½	0 1
Culm - - - ton	0 4	0 2	0 2
Curiosities, natural or artificial, package	0 6	0 3	0 2
Drapery, linen or woollen - piece	-	0 0½	0 0½
Earth, black, brown, red, or yellow, ton	2 0	1 0	
fullers' - - - —	1 0	0 6	
Earthenware - crate or other package	0 4	0 2	0 2
load	3 0	1 6	1 0
Ears - - - 1,200	0 6	0 3	0 2
Emery stones - - - cwt.	0 1	0 0½	0 0½

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards.
	s. d.	s. d.	s. d.
Empty bags, baskets, crates, hampers, and sacks - - - score	0 2	0 1	0 1
barrels - - - —	0 10	0 5	0 10
½ barrels and smaller packages - - - —	0 5	0 2½	0 5
boxes - - - each	0 0½	0 0¼	0 0¼
load	2 0	1 0	
crates - - - each	0 2	0 1	0 1
cases, chests, half quarter crates, tierces, and trunks - each	0 1	0 0½	0 0½
Feathers - - - - cwt.	0 6	0 3	0 2
ostrich - - 100 lbs.	2 0	1 0	0 8
Felt - - - package	-	0 2	
Figs - - - - ton	2 0	1 0	0 8
Filtering stones - - - each	0 1	0 0½	0 1
Fish, dry salted - - - ton	1 0	0 6	0 4
herrings, fresh - - 1,200	0 3	0 1½	
pickled and salted of all descriptions - - - barrel	0 2	0 1	0 1
firkin, ½ barrel, or kit	0 1	0 0½	0 0½
pipe, puncheon, cask	0 4	0 2	0 2
hogshead	0 6	0 3	0 3
tierce	0 3	0 1½	0 1
British cured - *hogshead	-	-	0 6
*puncheon	-	-	0 4
*tierce	-	-	0 1½
*barrel	-	-	0 1
*½ brl. and smaller package	-	-	0 0½
Flagstones, also freestone - ton	0 6	0 3	0 3
Flax, rough - - - - - —	2 0	1 0	0 8
Flint, ground or dried - - ton	0 8	0 4	0 4
stones - - - —	0 4	0 2	0 2
Floor-cloth (containing 1 roll), box, bag, or mat	-	0 1	0 1
Furniture, household - - load	1 0	0 6	1 0*
*package	0 3	0 0	0 1½
box, bundle, mat, or *truss	-	-	0 2
case, chest, or trunk	-	-	0 5
Galangal, galbanum, galls, gamboge, cwt.	0 3	0 1½	0 1
Gentian root, granella (cochineal refuse) cwt.	0 2	0 1	0 1
Gigs - - - - each	-	1 0	
Ginger, Glauber salts, or glue - ton	2 0	1 0	0 8
preserved - - - cwt.	0 3	0 1½	0 1
Ginseng - - - - ton	3 0	1 6	1 0
Glass - - - - - cwt.	0 1	0 0½	
broken - - - - —	0 0½	0 0¼	
crown - - - package	-	-	0 1*
flint - - - —	-	-	0 3*
Grapes - - - - - —	0 1	0 0½	0 0½
Grease or greaves - - ton	1 0	0 6	0 4
*Groats - - - barrel	-	-	0 1½
cask	-	-	0 4
jar or jug	-	-	0 0½
tierce	-	-	0 3
Grinding stones - - - each	0 1	0 0½	0 0¼
Gum. Ammoniac, animi, Arabic, cashew, copal, elemi, guaiacum, Senegal, and tragacanth - - - ton	3 0	1 6	1 0
Gunpowder - - - cwt.	1 0	0 6	
*barrel	-	-	0 1½
*½ barrel	-	-	0 1
*¼ barrel and keg	-	-	0 0½
Haberdashery - - package	1 0	0 6	0 3
Hair, bull, cow, and ox, goats' and horse cwt.	0 2	0 1	0 1
Hairpowder - - - package	0 3	0 1½	0 1
Hammocks - - - dozen	0 2	0 1	0 1
Hams - - - - ton	2 0	1 0	0 8
Handcoops - - - 100	0 1	0 0½	
Hardens - - - package	1 0	0 6	0 3
(loose) - - - piece	-	0 0½	0 0½
Hardware - - - bundle	0 2	0 1	0 0½
keg	0 2	0 1	0 1
all other packages	0 6	0 3	0 3
Harrows, also hats - - each	0 6	0 3	0 2
Hay - - - - ton	0 6	0 3	0 3
rakes - - - - dozen	0 1	0 0½	0 0½
Hemp, rough - - - ton	2 0	1 0	0 8
Hides, dry - - - - cwt.	0 3	0 1½	0 1½
wet - - - —	0 1½	0 0¾	0 0½
pieces of, or glue pieces - ton	2 0	1 0	0 8
Honey - - - - cwt.	0 2	0 1	
Hoops, mast, and truss - - 120	0 9	0 4½	
set	-	-	0 0½*
wood - - - 1,200	1 6	0 9	0 6
Hoofs of cattle - - ton	1 0	0 6	0 4
Hops - - - cwt.	0 2	0 1	0 1
bag or pocket	-	-	0 1
Horns and horn tips - 1,200	1 0	0 6	0 4
hogshead	-	-	0 5
tierce	-	-	0 3
shavings, also slugs - ton	1 0	0 6	
Hurdles (containing 1 dozen) - mat	0 2	0 1	0 1
Jackscrews - - - pair	0 6	0 3	0 2
*Jars and jugs containing barley, oatmeal, groats, peas, or other articles of British or Irish growth, produce, or manufacture, not otherwise rated, each	-	-	0 0½
Iceland moss, or lichen Islandicus, cwt.	0 3	0 1½	0 1
Indigo - - - - —	1 0	0 6	0 4
Ipecacuanha root - - —	0 3	0 1½	0 1
Iron, viz. bar, bolt, or rod - ton	1 0	0 6	0 8
broken or old - - —	0 9	0 4½	0 4
cast, or pig - - —	0 6	0 3	0 8
hoops and sheet - - —	1 6	0 9	0 8
*plate and sheet - - box	-	-	
nails - - - package	-	-	
ore - - - - ton	0 4	0 2	

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards.
	s. d.	s. d.	s. d.
Iron — *continued.*			
wire, or wrought - - ton	2 0	1 0	0 8*
*cask	-	-	0 4
Isinglass - - - cwt.	0 3	0 1½	0 1
Juice, lemon, lime, and orange - tun	2 4	1 2	0 9
Junk - - - - ton	1 0	0 6	0 4
Ivory - - - cwt.	0 6	0 3	0 2
Kelp - - - - ton	1 0	0 6	0 4
Lac, gum, stick, seed, and shell - cwt.	0 3	0 1½	0 1
Lace - - - package	1 0	0 6	0 3
Lampblack, latton black, and lard, ton	2 0	1 0	0 8
Laths - - - - bundle	0 1	0 0½	0 0½
Lead, and lead ore - - ton	1 0	0 6	0 8
black, red, white, and powder —	2 0	1 0	0 8
Leather (tanned) - - - cwt.	0 3	0 1½	0 1
wrought - - package	-	0 6	0 3
Leeches - - - - —	0 6	0 3	0 2
Lemons - - case or chest	0 3	0 1½	0 1
box or other package	0 2	0 1	0 1
Lime - - - hogshead	-	0 6	0 3
*keg	-	0 0½	0 0½
*puncheon or cask	-	-	0 3
*tierce	-	-	0 3
Limes - - - package	0 3	0 1½	0 1
Limestones - - - ton	0 2	0 1	0 1
Linen cloth - - package	1 0	0 6	0 3
piece	0 1	0 0½	0 0½
*rags - - crate	-	-	0 3
thread yarn - - cwt.	0 4	0 2	
*manufactured - package	-	-	0 3
Liquorice paste, also litharge - ton	2 0	1 0	0 8
Maccaroni - - - cwt.	0 6	0 3	0 2
Mace - - - - —	1 0	0 6	0 4
*Machines, bark mills, binnacles, brewing, coffee fanners, and cooking apparatus - - - each	0 6	0 6	0 6
copying - - —	0 6	0 2	0 2
corn, also filtering - —	-	0 6	0 6
fire engines - - —	-	0 9	0 9
gins, linseed cribbles, malt mills, mangles, packing presses, paper moulds, sawing, sedans, and shower baths - - each	-	0 6	0 6
soap cutters - - —	-	0 3	0 3
straw cutters, also tin —	-	0 6	0 6
turning lathes - - —	-	0 3	0 3
turning drills - - —	-	0 2	0 2
all other packages of machinery - - -	-	0 6	0 6
Machinery (loose) - - ton	2 0	1 0	0 8
Madder - - - - —	2 0	1 0	0 8
roots - - - - —	1 6	0 9	0 6
Manganese, also marble - —	1 0	0 6	0 4
Manure - - - - —	0 2	0 1	
Marble, sculptured, loose pieces —	2 6	1 3	0 10
package	1 0	0 6	
Marmalade - - - cwt.	1 0	0 6	0 4
Mastich, and mother-of-pearl shell —	0 3	0 1½	0 1
Matchets - - package	-	-	0 3*
Millboards - - - 120	-	0 6	
stones - - each	1 0	0 6	0 4
Mineral waters - - package	0 6	0 3	0 2
Molasses - - - ton	1 6	0 9	0 6
cask or puncheon	-	-	0 4*
Mum - - - - tun	2 4	1 2	0 9
Muriate of lime, potash, and soda ton	1 0	0 6	0 4
Musical instruments - - package	1 0	0 6	
*Muskets - - case or chest	-	-	0 5
Mustard - - - cwt.	0 2	0 1	
package	-	-	0 2*
Natron, also nixon sal - - ton	2 0	1 0	0 8
Nests of trunks - - each	-	-	0 5
Nutmegs - - - cwt.	1 0	0 6	0 4
Nuts - - - bushel	0 1	0 0½	0 1
Oakum - - - ton	1 0	0 6	0 4
Oatmeal shudes, or dust - —	-	0 2	
Ochre, or oker - - —	2 0	1 0	0 8
Oil, castor - - - cwt.	0 3	0 1½	0 1
cod - - - tun	1 9	0 10	0 7
dubbing, linseed, also olive - —	2 4	1 2	0 9
in flasks - - - chest	0 6	0 3	0 2
box or ½ chest	0 3	0 1½	0 1
palm, seal, train, or whale - tun	1 6	0 9	0 6
rape, also spermaceti - - —	2 4	1 2	0 9
of vitriol - - - —	3 0	1 6	1 0
*Oils of all kinds boiled or manufactured since their importation - butt or pipe	-	-	0 6
puncheon or cask	-	-	0 4
hogshead	-	-	0 2
barrel	-	-	0 1½
bottle, jar, jug, or can	-	-	0 0½
Onions - - - package	0 2	0 1	0 1
loose - - bushel	0 1	0 0½	0 1
Opium, also orange peel - cwt.	0 3	0 1½	0 1
Oranges - - case or chest	0 3	0 1½	0 1
box or other package	0 2	0 1	0 1
Orchella weed - - - ton	3 0	1 6	1 0
Orrice root - - - cwt.	0 3	0 1½	0 1
Packing boards - - dozen	0 0½	0 0¼	
Paint and painters' colours and materials - - - ton	2 0	1 0	
case, chest, or hogshead	-	0 6	0 5
tierce	-	0 6	0 3
cask or puncheon	-	0 4	0 4
barrel	-	0 2	0 1½
		0 2	0 2
		0 0½	0 0½
		0 0½	C 0½

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards.
	s. d.	s. d.	s. d.
Paper - - bale, case, chest	0 8	0 4	
½ bale, bundle, box	0 4	0 2	
ream	0 0½	0 0¼	0 0¼
Paving stones - - - ton	0 2	0 1	0 1
Pearl and cleeled barley, pepper, white or black, pewter, or pimento - ton	2 0	1 0	0 8
Pears, pistachio nuts - - bushel	0 1	0 0½	0 0½
Pickles - - - gallon	0 0½	0 0½	
*box, case, or chest	-	-	0 3
*barrel	-	-	0 1½
*keg, jar, or jug	-	-	0 0½
Pink root - - - cwt.	0 3	0 1½	0 1
Pitch - - last of 12 barrels	1 6	0 9	0 6
Plaster of Paris - - - ton	1 0	0 6	0 4
Plate and plated ware - package	1 0	0 6	0 3
Ploughs - - loose, each	-	0 4	0 2*
Potatoes - - - ton	0 6	0 3	0 3
exported in packages - barrel	-	-	0 1*
hamper	-	-	0 0½*
Preserved ginger - - cwt.	0 3	0 1½	0 1
Preserves - - - —	0 4	0 2	
Printers' liquor - - 100 gallons	0 7	0 3½	0 3½
Prints or pictures - case or box	0 6	0 3	0 3
Prunelloes - - - cwt.	0 2	0 1	0 1
Prunes - - - - ton	2 0	1 0	0 8
Pumice stone - - - —	1 0	0 6	0 4
Quern stones - - - each	0 9	0 4½	0 3
Quicksilver - - - package	0 6	0 3	0 2
Quills - - - 1,000	0 1	0 0½	
package	-	-	0 3*
Rags - - - ton	1 0	0 6	0 4
Raisins, also rock moss - - —	2 0	1 0	0 8
Rhubarb - - - cwt.	0 3	0 1½	0 1
Rice - - - - ton	1 6	0 9	0 6
Riddles - - - bundle	-	-	0 0½*
Rosin - - - ton	1 6	0 9	0 6
barrel	-	-	0 1½*
Rushes - - load (63 bundles)	1 0	0 6	0 4
Safflower, sal ammoniac, or gem - ton	2 0	1 0	0 8
Saffron - - - package	0 6	0 3	0 2
Sago, sanguis draconis, salep, also sanders wood, white and yellow - cwt.	0 3	0 1½	0 1
Sailcloth - - - package	1 0	0 6	0 3
Sails - - - each	0 6	0 3	0 2
Saltpetre - - - ton	1 6	0 9	0 6
firkin	-	-	0 0½
Salt, rock - - - ton	1 6	0 9	0 3
white - - - —	1 0	0 6	0 4
Sand for ironfounders and glassblowers, ton	-	0 1	
silversmiths - - casks	-	0 6	
Sarsaparilla, also sausages - cwt.	0 2	0 1	0 1
Sassafras - - - ton	1 6	0 9	0 6
Scammony - - - cwt.	1 0	0 6	0 4
Scythe stones - - dozen	0 0½	0 0½	0 0½
Scythes - - - bundle	-	-	0 0½*
Seeds, viz. aniseeds, caraway, clover, or trefoil - - - cwt.	0 3	0 1½	0 1
Canary - - - ton	2 0	1 0	0 8
coriander and garden - cwt.	0 3	0 1½	0 1
flax or linseed, hemp and rape, qr.	0 3	0 1½	0 1
furze - - 100 bushels	2 0	1 0	0 8
mustard - - ton	2 0	1 0	0 8
rye grass - - 100 bushels	2 0	1 0	0 8
Senna - - - ton	2 0	1 0	0 8
Shaddocks - - package	0 3	0 1½	0 1
Shakes - hogshead, puncheon, or tierce	0 1	0 1	0 1*
barrel, ½ barrel, or ½ cask	0 0½	0 0½	0 0½*
Sheathing - - - ton	1 0	0 6	
Shovels or spades - - bundle	-	0 1	0 0½
Shrimac - - - ton	1 6	0 9	0 6
Sieves - - - dozen	0 1	0 0½	0 0½
Silk, raw or thrown - - cwt.	1 6	0 9	0 6
waste - - - —	0 9	0 4½	0 3
manufactured - - package	1 0	0 6	0 3
Skins, kip and calf, dry - - cwt.	0 3	0 1½	0 1
wet - - —	0 1½	0 0¾	0 0½
			0 0½*
badger, bear, beaver, deer, elk, ermine, fisher, fox, leopard, lion, marten, otter, panther, seal (fur), tiger - - - score	0 6	0 3	0 2
cat, chinchilli, husse, mink, racoon, seal (hair) - - 120	0 6	0 3	0 2
goat, fitch, kid, lamb, musquash, nutria, sheep, swan - 120	0 3	0 1½	0 1
coney, hare, mole - - —	0 1	0 0½	0 0½
Skates, also slate pencils package	0 6	0 3	0 2
Slate and slate slabs - - ton	0 6	0 3	0 2
Slates - - puncheon or cask	-	-	0 4*
writing - - package	-	-	0 3*
Slime - - - ton	-	0 2	
Smalts - - - cwt.	0 2	0 1	0 1
Smart sticks - - - 1,200	1 6	0 9	0 6
Snuff - - - ton	2 0	1 0	0 8
Soap - - - - —	2 0	1 0	0 8
package	-	-	0 0½*
Soder or solder, or spelter - ton	2 0	1 0	0 8
Spermaceti - - - cwt.	0 3	0 1½	0 1
Spinnel - - - bales	0 3	0 1½	0 1
Spirits - - - 100 gallons	0 10	0 5	
pipe	-	-	0 6
puncheon	-	-	0 4
hogshead	-	-	0 2
bottle	0 2	0 1	0 1
Spirits of salts - - cwt.	0 6	0 3	0 2
Sponge - - - - 1,000	-	0 0½	
Sprats - - - 32 gallons	0 6	0 3	0 2
Spruce beer - - - cwt.	0 3	0 1½	0 1
Squills - - - ton	2 0	1 0	0 8
Staroh - - -			

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards.
	s. d.	s. d.	s. d.
*Stationery - - package	0 4	0 2	0 3
Steel, also sulphur vivum - ton	1 6	0 9	0 6
Straw and straw plait - package	0 6	0 3	0 2
Sturgeon - - - —	0 1	0 0½	0 0½
Succades and sweetmeats - cwt.	1 0	0 6	0 4
Sugar - - - ton	2 0	1 0	0 8
refined - - hogshead	-	-	0 5
tierce	-	-	0 3
barrel	-	-	0 1½
puncheon	-	-	0 4
candy - - cwt.	0 2	0 1	
Sago, tamarinds, or tapioca - —	0 3	0 1½	0 1
Tallow, also tin of all kinds - ton	2 0	1 0	0 8
Tanners' waste - - —	0 4	0 2	
Tapes, British - - package	0 6	0 3	
Tar - - last (12 barrels)	2 0	1 0	0 1
water - - barrel	0 2	0 1	0 1
Tarras - - - bushel	0 0½	0 0½	
Tea - - - package	0 6	0 3	0 2
Thread, linen, twist, cotton, or yarn, cwt	0 4	0 2	
Tincal - - - bag	0 3	0 1½	0 1
Tin plates - - box	-	-	0 0½
Tobacco and stalks, also turmeric cwt.	0 1	0 0½	0 0½
Tobacco pipes - - box	-	-	0 2
Tongues - - package	0 1	0 0½	0 0½
Tortoise-shell - - cwt.	0 6	0 3	0 2
Tow - - - ton	1 0	0 6	0 4
Toys - - package	0 6	0 3	0 3
Treenails - - 1,200	0 6	0 3	0 2
Trucks - - each	0 4	0 2	0 2
Truffles - - cwt.	1 0	0 6	0 4
Turnips - - ton	-	0 3	0 3*
Turpentine - - —	1 6	0 9	0 6
Twine - - - cwt.	0 2	0 1	
Types - - box	0 4	0 2	0 2
Valerian - - cwt.	0 2	0 1	0 1
Valonia, also varnish - ton	1 6	0 9	0 6
Vanelloes - - cwt.	1 0	0 6	0 4
Venice turpentine - - —	0 3	0 1½	0 1
Verdigris - - ton	2 0	1 0	0 8
Vermicelli, also vermilion cwt.	0 6	0 3	0 2
Vinegar and verjuice - ton	2 4	1 2	0 9
pipe	-	-	0 6*
cask	-	-	0 4*
hogshead	-	-	0 2*
½ hogshead	-	-	0 1*
Vitriol, white - - tun	2 0	1 0	0 8
oil of - - —	2 6	1 3	0 10
Whalebone fins - - cwt.	0 2	0 1	0 1
Wheelbarrows - - each	0 4	0 2	0 2
Whetstones - - cask	1 0	0 6	0 4
Whip-sticks - - bundle	0 1	0 0½	0 0½
Whiting - - ton	1 0	0 6	0 4
Wine - - - tun	2 4	1 2	0 9
bottled - - barrel	-	-	0 1½
box	-	-	0 2
case	-	-	0 2
cask	-	-	0 4
hogshead	-	-	0 5
puncheon	-	-	0 4
tierce	-	-	0 3
Wood, viz. anchor stocks - each	0 3	0 1½	0 1
axe handles - - 120	0 3	0 1½	0 1
battens, viz. 6 ft. to 21 ft. long —	1 0	0 6	0 4
above 21 ft. long —	1 6	0 9	0 4½
batten ends - - —	0 5	0 2½	0 2
beech poles - - load	1 0	0 6	0 4
boards, viz. beech, birch, pine, and poplar - 120	2 0	1 0	0 8
clap - - —	1 0	0 6	0 4
oak, above 15 ft. —	3 0	1 6	1 0
under do. - —	2 0	1 0	0 8
wainscot, above do. —	3 0	1 6	1 0
under do. —	2 0	1 0	0 8
coal pit props - - load	-	0 6	
crate and crop wood - —	-	0 3	
deals, viz. under 21 ft. - 120	2 0	1 0	0 8
exceeding do. - —	3 0	1 6	1 0
deal ends - - 120	1 0	0 6	0 4
fir quarters or balks, viz. under 8 in. square - —	2 0	1 0	0 8
8 inches and above - load	0 9	0 4½	0 3
fire wood - - fathom	0 4	0 2	
lath wood - - —	0 6	0 3	0 2
masts, viz. 6 in. and under 8 in. - - each	0 3	0 1½	0 1
8 in. and under 12 in. —	0 6	0 3	0 2
oak knees, viz. under 8 in. sq. 120	2 6	1 3	0 10
8 in. square and upwards, load	1 0	0 6	0 4
oar rafters and oars - 120	1 0	0 6	0 4
old wood - - load	0 6	0 3	0 2
planks, viz. beech, birch, oak, and poplar - - load	1 3	0 7½	0 5
pine - - 120	2 0	1 0	0 8
spars, viz. under 22 ft. long —	1 0	0 6	0 4
22 ft. long and upwards —	2 0	1 0	0 8
spruce knees, viz. under 8 in. —	2 0	1 0	0 8
8 in. and upwards load	0 9	0 4½	0 3
staves, above 1½ in. thick, not exceeding 36 in. long 120	0 3	0 1½	0 1
exceed. 36 in. and under 60 —	0 6	0 3	0 2
exceeding 60 in. long - —	0 9	0 4½	0 3
not above 1½ in. thick, not exceeding 36 in. long 120	0 1	0 0½	0 0½
exceed. 36 in. and under 60 —	0 2	0 1	0 1
exceeding 60 in. long - —	0 3	0 1½	0 1
timber, viz. fir - - load	0 9	0 4½	0 3
teak or oak - - —	1 0	0 6	0 4
pine, and all other timber —	0 9	0 4½	0 3

Articles.	Inwards. Foreign.	Inwards. Coastwise.	Outwards.
	s. d.	*s. d.*	*s. d.*
Wood — *continued.*			
ufers, viz. under 24 ft. long 120	2 0	1 0	0 8
24 feet long or upwards —	3 0	1 6	1 0
wainscot logs - - load	1 6	0 9	0 6
wedges - - 1,200	1 6	0 9	0 6
British or Irish - —	- -	- -	0 3
wheel spokes and fellies - —	1 6	0 9	0 6
British or Irish -	- -	- -	0 3
barwood or boxwood - ton	1 6	0 9	0 6
Brazil and Braziletto, or camwood - - ton	2 0	1 0	0 8
pipe boards. See *Staves.*			
masts, 12 in. and upwards. See *Fir Timber.*			
cedar wood, ebony, fustic, Guinea wood, lignum vitæ, logwood, mahogany, or red sanders ton	1 6	0 9	0 6
Nicaragua wood, sapan, or rosewood - - ton	2 0	1 0	0 8
Woollens - - package	1 0		
Yams - - package	0 3	0 1½	0 1
Yarn, bay - - cwt.	0 2	0 1	0 1
cotton or twist - - —	0 4	0 2	
grogram, also worsted - —	0 2	0 1	
linen - - —	0 4	0 2	
Yeast - - - package	1 6	0 6	0 2
Zaffre (a species of cobalt) - cwt.	0 4	0 2	0 2

Articles not rated, but to pay as follows.

Inwards, viz. Carpets as woollens, china as earthenware; cider, bottled, as ale; cordials as spirits, dammon as rosin; coin, foreign, as bullion; hosiery as haberdashery, iron liquor as printers' liquor, iron in packages as hardware, millinery as haberdashery, salad oil as olive in flasks, pomegranates as oranges; saddlery, wrought leather slops, see *Haberdashery*; straw bonnets and wearing apparel as haberdashery.

Outwards, viz. Bacon, hams, lard, and tripe, as beef and pork; iron, in packages; as hardware; linen as cotton, machinery as wrought iron, paper as stationery, pewter and tin as copper, preserves as pickles; soda water as pickles, tapes or linen, and twine, thread, twist, as cottons.

Painters' colours, in packages, outwards, includes ashes, brown powder, cement, chalk, charcoal, chromate of lead, or iron, copperas, cudbear, earths, blue, grease or greaves, lamp black, lead, litharge, manganese, ochre, starch, and whiting.

Liverpool Town Dues. — Besides the dock rates, town dues are levied on goods inwards and outwards, at a certain rate per package. The annual amount of these duties, since 1812, is shown in a previous Table, and we now subjoin an account of the rate at which they are charged.

Articles.	Inwards.	Outwards.
	s. d.	*s. d.*
Alabaster, the ton - - -	0 2	0 2
Ashes of fern, the 100 bushels -	1 4	0 8
Bacon, the ton - - -	1 0	0 6
Bricks, the 1,000 - - -	- -	0 1
Butter, the ton - - -	1 0	0 6
Calamine, the ton - - -	0 3	0 3
Candles, the box - - -	0 1	0 0½
Cheese, the ton - - -	0 6	0 6
Clay for potters, the ton - -	0 3	0 3
Copper, the ton - - -	0 6	0 3
Cotton, the bag - - -	0 2	0 1
Coals, the chaldron (Winchester measure) - - - -	0 2¾	0 2¾
the ton - - -	0 2	0 2
Cow shanks, the 1,000 - - -	0 2	0 1
horns, the 100 - - -	0 1	0 0½
Cork wood, the ton - - -	1 0	0 6
Corn, of all sorts, the 100 bushels -	1 4	0 8
Currants, the butt - - -	0 8	0 4
Deals, the 120 - - -	1 0	0 6
Deer skins, loose, the 100 - -	0 3	0 1½
dressed, the hogshead	0 4	0 2
Dyeing wood, of every kind, the ton -	0 6	0 3
Earthenware, the crate - -	0 2	
the ½ crate - -	- -	0 1
loose, the load (60 pieces)	- -	0 4
Ebony, the ton - - -	0 6	0 3
Elephants' teeth, the ton - -	1 0	0 6
Feathers, the bed or bag - -	0 3	0 3
Fish, salted, or stockfish, the ton -	1 0	0 6
Ginger, the bag - - -	0 1	0 0½
Glass bottles, the 100 dozen - -	1 0	0 6
Groceries, coastwise, the hogshead -	0 2	0 2
the firkin -	0 0½	0 0½
Gum Senegal, the ton - -	1 0	0 6
Gunpowder, the barrel - - -	0 1	0 0½
Hemp or flax, the ton - -	1 0	0 6
Herrings, the barrel - - -	0 1	0 1
Hides of cows and oxen, each - -	0 1	0 0½
imported from the East Indies, the dozen -	0 1	0 0½
of horses, each - -	0 0¼	0 0¼
Hops, the pocket - - -	0 2	0 2
Iron, in bars, the ton - -	1 0	0 6
in pigs, or cast, the ton - -	0 6	0 3
ore, the ton - - -	0 3	0 3
Kelp, the ton - - -	0 6	0 3
Lead, lead ore, or copper ore, the ton	0 6	0 6
Lathwood, the fathom - -	0 2	0 1
Linen, of all sorts, the pack - -	0 4	0 2
a box or bundle - -	0 2	0 1
Lemons or oranges, the chest -	0 2	0 1
the box - -	0 1	0 0½
Lignum vitæ, the ton - -	0 6	0 3
Mahogany, the ton - - -	0 6	0 6
Masts, above 12 inches diameter -	0 3	0 3
8 inches and under 12 inches diameter - - -	0 2	0 2
6 inches and under 8 inches diameter - - -	0 1	0 1
Meal of oats, &c. the ton - -	0 6	0 6
Molasses, the hogshead - -	0 2	0 2
Nuts, the barrel - - -	0 2	0 1
the bag - - -	0 1	0 1
Oak bark, the ton - - -	0 6	0 6
timber, the ton - - -	0 6	0 6
planks, the 120 - - -	1 0	0 6
Oil, viz. fish or train, the ton - -	0 8	0 8
Paper, the pack - - -	0 2	0 2
Perry or cider, the hogshead - -	0 2	0 2
Potatoes, the 100 bushels - -	1 0	1 0
Pots of iron, the ton - - -	0 6	0 3
Raisins, the 100 baskets - -	1 0	0 6
Salt, white, the 100 bushels - -	- -	2 0
coastwise - -	- -	1 0
rock, the 100 bushels - -	- -	1 4
coastwise, do. - -	- -	0 8
Seeds, garden, the sack - -	0 1	0 0½
Slates, the ton - - -	0 2	0 2
Soap, the box - - -	0 1	0 0½
Spirits, the puncheon - -	0 8	0 4
the hogshead - - -	0 6	0 3
drawn from corn, the puncheon	0 2	0 2
Staves, heading, and handspikes, the 1,000 - - - -	0 6	0 3
Starch, the chest - - -	0 2	0 2
Sugar, the hogshead - -	0 4	0 2
the tierce - - -	0 3	0 1½
the barrel - - - -	0 2	0 1
Tallow, the cwt. - - -	0 1	0 1
Tar and pitch, the barrel - -	0 2	0 1
Timber (fir, &c.), the load -	0 6	0 3
Tobacco, the hogshead - - -	0 4	0 2
Turpentine, the barrel - -	1 2	0 1
Wainscot boards, the 120 - -	1 0	0 6
Wine, the pipe - - -	1 0	0 6
the hogshead - -	0 6	0 3
coastwise, the pipe - -	1 0	0 6
Window glass, the side - -	0 1	0 1
the box - - -	0 0½	0 0½
Wool, the bag - - -	0 4	0 4
Yarns, linen, the truss - -	0 6	0 3
the peck - -	0 4	0 2
foreign, the fatt - -	0 8	0 4
bay, the pack - -	0 4	0 2
Dry goods, not before described, the package, viz.		
bale - - -	0 4	0 2
barrel - - -	0 2	0 1
box - - -	0 2	0 1
bundle - - -	0 1	0 0½
case - - -	0 4	0 2
cask - - -	0 4	0 2
chest - - -	0 4	0 2
crate - - -	0 2	0 2
½ crate - -	0 1	0 1
hamper - - -	0 1	0 0½
hogshead - -	0 4	0 2
puncheon - - -	0 6	0 3
tierce - - -	0 3	0 1½
trunk - - -	0 2	0 2
truss - - -	0 2	0 1
keg - - -	0 1	0 0½

☞ The above duties are not due on goods, the property of, and to be sold solely on account of, persons free of Liverpool, Bristol, London, Waterford, or Wexford; nor on the exportation of goods, which may have been imported, or brought coastwise, provided they are, at the time of exportation, the same property as when so imported, or brought coastwise.

The Liverpool Docks are all constructed [illegible] ion, and are managed by commissioners appointed by [illegible] belong to

individuals, and are private property. None of them belong to the Dock estate. Most of them are, of course, situated in the immediate vicinity of the docks. The discharging and loading of vessels in Liverpool is effected by a class of men called *lumpers*. Individuals who follow this business engage to discharge a ship for a specific, or *lump* sum, from 2 guineas, perhaps, up to 20, according to the size and description of cargo, having the requisite number of common labourers (chiefly Irishmen) to do the work; the lumper being master and superintendent: these labourers are generally paid day wages, but sometimes the job is a joint concern among the whole.

A West India ship of 500 tons would be discharged by lumpers for from 15*l.* to 20*l.*: a cotton ship of the same burden for 4*l.* to 6*l.* By discharging is merely meant putting out the cargo on the quay; the proprietors of the goods employ their own porters to weigh, load, and warehouse the property: they likewise employ their own coopers, where cooperage is required.

It will be seen that the system of managing business of this sort in Liverpool is entirely different from the plan followed in London, at least in the East India Docks, where all these operations are performed by the Dock Company.

The expense of loading a West India ship of 500 tons *outwards* would not be half as much as that of discharging inwards, because they very seldom take a full cargo *outwards*. The average does not, perhaps, exceed *a third*. Hence the total expense of a West India ship of 500 tons, coming into and going out of the port of Liverpool, may be estimated as follows: —

	£	s.	d.		£	s.	d.
Pilotage inwards	8	11	0	Pilotage outwards	3	8	0
Boat hire, warping, &c.	0	10	6	Boat hire assisting out	0	10	6
Lumpers discharging	17	10	0				
Labourers' hire for loading	5	10	0		£36	0	0

Besides these, there is the charge for the various light-houses in St. George's Channel, which cannot be called an expense peculiar to Liverpool.

In 1832, there belonged to Liverpool 853 registered vessels, of the burthen of 166,028 tons, manned by 9,329 men and boys. The gross customs duty collected in the port during the year 1833 amounted to the enormous sum of 3,733,132*l.*!

Imports of the principal Articles of East and West Indian, American, &c. Produce into Liverpool, during each of the *Five* Years ending with 1834, with the Stocks on Hand on the 31st of December each Year. —(From the *Circular Statement of Messrs. Jee, Brothers, and Co.*, 31st of December, 1834.)

Articles.	Packages and Quantities.	Imports.					Stocks on Hand, 31st of December.				
		1830.	1831.	1832.	1833.	1834.	1830.	1831.	1832.	1833.	1834.
Ashes, American	barrels	22,500	23,200	19,400	16,800	6,580	pot. 8,200 prl. 1,800	9,000 5,500	9,500 6,900	7,700 5,900	2,150 2,100
Brimstone	tons	3,800	4,880	6,300	8,300	9,780	400	40	140	930	2,500
Cocoa	brls. and bags	870	1,380	900	4,000	3,080	2,500	1,950	1,800	1,860	1,950
Coffee, West India	casks	7,800	8,560	9,780	7,000	8,040	tons 1,900	2,000	1,890	1,770	800
ditto	brls. and bags	6,100	4,540	10,560	10,300	5,170					
East India, &c.	do.	1,300	940	2,000	7,000	9,930					
Cotton	bags, &c.	794,030	796,440	777,210	844,110	858,285	258,000	212,350	197,960	180,770	145,300
Dye wood, fustic	tons	3,500	4,300	3,800	7,800	11,770	1,300	1,500	420	1,250	4,200
logwood	do.	6,200	5,900	8,300	13,300	10,460	2,000	950	1,900	4,500	3,800
Nicaragua wood	do.	850	1,000	1,500	2,500	3,460	1,400	860	840	500	1,850
camwood	do.	100	200	800	650	500	50	12	50	270	200
barwood	do.	600	1,300	400	650	1,500	100	1,200	600	250	1,100
Flour, American	barrels	300,500	647,000	48,200	41,000	21,020	130,000	288,000	241,000	190,000	163,500
Ginger, West India	brls. and bags	500	600	750	1,000	2,070	1,000	700	150	3,500	2,300
East India, &c.	pockets	400	1,130	4,650	20,000	10,020	bags 950	150	2,200		
Hides, foreign, cow and ox	number	380,900	362,000	231,000	410,600	469,400	75,000	107,800	55,000	113,000	211,700
East India	do.	30,300	17,000	31,200	243,700	205,300	6,000	3,400	10,500	50,000	27,000
horse	do.	92,000	182,500	67,900	71,400	36,100	10,000	85,000	20,400	14,000	9,100
Indigo	bxs. & serons	960	420	200	880	1,460	75	40	40	392	140
East India	chests	1,430	1,720	2,140	1,850	2,040	520	550	400	585	250
Molasses	puncheons	9,500	15,000	17,800	17,500	18,850	1,140	1,500	900	2,650	7,450
Olive oil	casks	10,400	16,350	92	7,300	7,400	tuns 870	3,900	550	1,230	1,500
Palm oil	tons	9,850	7,050	10,550	11,000	10,800	tons 1,700	1,500	2,550	3,600	5,000
Pepper	bags & pckts.	4,400	6,400	12,300	22,400	19,550	4,300	500	4,300	5,400	6,000
Pimento	brls. and bags	3,500	1,800	2,500	6,000	1,910	4,600	4,850	4,000	6,150	6,650
Quercitron bark	hogsheads	2,500	1,400	800	1,200	950	950	1,030	440	640	650
Rice, American	casks	1,100	3,800	1,100	1,700	900	600	- -	none	480	none
paddy	bushels	78,350	73,800	87,000	86,100	83,040	- -	- -	uncert.	uncert.	uncert.
Brazil, African	bags	- -	none	none	300	850	- -	- -	none	- -	none
East India	do.	32,000	46,350	43,300	58,600	61,310	10,000	7,000	10,000	30,500	17,300
Rum	puncheons	12,400	16,000	9,500	10,880	10,580	10,800	14,800	11,000	11,000	11,000
Saltpetre	bags, &c.	31,000	38,000	63,100	58,300	64,660	5,700	9,000	16,700	12,400	22,150
Seed, flax	quarters	17,260	25,000	24,000	25,300	18,240	- -	700	4,000	2,000	5,000
Shumac	bags	35,000	41,200	44,000	45,000	46,600	4,900	7,800	8,200	7,500	8,410
Sugar, Brit. plant.	hhds. and tcs.	42,000	48,400	45,400	49,300	51,360	10,500	11,100	10,500	13,000	9,550
Havannah	boxes	- -	8,300	1,900	1,300	- -	- -	4,000	4,500	1,630	1,500
Brazil	cases	960	10,500	2,600	3,700	2,180	50	4,600	3,600	2,650	550
Maurit. & E. I.	bags and bxs.	46,300	40,100	64,500	82,280	135,650	23,200	20,500	29,000	23,500	21,800
Manilla, &c.	bags and brls.	50	none	none	8,510	12,970	- -	none	none	17,300	15,500
Tar, American	barrels	16,000	17,100	15,000	14,600	19,180	3,750	none	1,000	700	500
Stockholm, &c.	do.	26,000	17,500	33,000	25,000	41,700	8,250	8,500	7,500	3,400	10,600
Tallow	casks	15,000	12,000	20,200	22,600	24,530	2,500	3,500	5,500	5,000	5,500
	serons	- -	- -	none	900	330	- -	- -	none	700	
Tobacco	hogsheads	8,100	9,550	5,100	8,270	9,800	7,000	9,700	7,600	7,700	8,300
Turpentine	barrels	51,400	73,200	74,000	76,500	87,970	8,000	14,000	10,500	15,500	13,000
Valonia	tons	1,900	1,450	2,400	2,700	1,800	1,400	700	850	450	500

Arrivals at Liverpool. — Account of the Number of Vessels, and their Tonnage, that have entered the Port of Liverpool from Foreign Ports, distinguishing British from Foreign, since 1820.

Years.	British.		Foreign.		Years.	British.		Foreign.	
	Ships.	*Tons.*	*Ships.*	*Tons.*		*Ships.*	*Tons.*	*Ships.*	*Tons.*
1820	1,146	228,233	633	166,821	1827	1,422	306,369	810	231,863
1821	1,188	242,322	582	149,151	1828	1,652	344,641	660	179,514
1822	1,263	261,137	699	174,607	1829	1,487	326,311	811	210,713
1823	1,459	296,710	798	199,866	1830	1,655	368,268	1,055	272,463
1824	1,554	327,198	702	174,593	1831	1,862	413,928	978	265,037
1825	1,531	315,115	863	222,187	1832	1,719	397,933	828	227,087
1826	1,387	299,037	680	181,907					

The falling off in 1832 is ascribable partly to the cholera then prevailing; but more to the rupture with the Dutch towards the end of the year.

Irish Trade. — The trade between Liverpool and Ireland has always been of considerable value and importance; but since the establishment of regular steam-packets to Dublin, Belfast, &c., it has increased prodigiously. The imports from Ireland into Liverpool may, at present, be estimated at about 4,500,000*l.* a year. They consist principally of articles of provision, which meet a ready and advantageous market in Manchester, and the surrounding manufacturing towns. The benefits resulting to Ireland from this intercourse are quite equal to those it confers on England; and the influence of the wealth arising from it is sufficiently apparent in the improved aspect of all the eastern parts of the country. We subjoin an account, which, though not official, may be depended upon as being sufficiently accurate for all practical purposes, of

The Quantity and Value of the various Articles of Irish raw Produce imported into Liverpool in 1831.

Articles.	Quantities.	Av. Price.	Amount.	Articles.	Quantities.	Av. Price.	Amount.
		£ s.	£ s.			£ s.	£ s.
Cows -	90,715	10 0	907,150 0	Butter -	258,087 firks.	2 10	645,217 10
Horses -	296	20 0	5,920 0	Do. - -	19,217 ½ firks.	1 5	24,021 5
Sheep -	134,702	1 5	235,833 10	Eggs -	2,596 crates	20 0	50,120 0
Mules -	243	15 0	3,645 0	Wheat -	277,060 qrs.	3 0	831,183 0
Pigs -	156,001	3 15	585,003 15	Oats -	380,679 —	1 12	532,950 12
Calves -	1,196	2 10	2,990 0	Barley -	21,328 —	1 15	37,324 0
Lambs -	25,725	1 0	25,725 0	Rye -	613 —	1 10	919 10
Bacon -	13,099 bales	5 0	65,494 0	Beans -	8,452 —	2 0	16,904 0
Pork -	14,554 brls.	3 0	43,662 0	Peas -	1,724 —	2 4	3,448 0
Do. -	936 ⅓ brls.	1 15	1,638 0	Malt -	6,850 —	2 10	17,125 0
Hams and tongues	590 hhds.	20 0	11,800 0	Meal -	149,816 loads	1 5	187,270 6
Beef -	6,391 tcs.	4 5	27,171 15	Flour -	23,154 sacks	2 5	209,596 10
Do. - -	1,189 brls.	3 0	3,567 4				
Lard -	465 tcs.	8 0	3,720 0	Thus making the gross value of Irish produce imported into Liverpool in 1831 - -			4,497,708 0
Do. - -	4,542 firks.	1 10	6,813 0				
Butter -	5,754 cools	2 0	11,508 0				

Account of the Quantities of Salted Beef, Pork, and Butter, imported into Liverpool from Ireland during the Twelve Years ending with 1832.

Year.	Beef.		Pork.		Butter.	
	Tierces.	*Barrels.*	*Barrels.*	*Half Barrels.*	*Firkins.*	*Half Firkins.*
1821	6,283	2,444	25,263	3,096	232,048	13,585
1822	5,387	2,713	13,222	1,423	166,365 —	14,629
1823	9,936	2,137	17,408	1,498	270,521	19,265
1824	7,114	1,743	16,389	1,650	296,564	15,684
1825	7,371	1,696	14,434	1,606	327,143	13,711
1826	5,358	773	11,351	844	236,647	12,257
1827	6,201	997	15,540	2,427	302,945	20,249
1828	6,852	1,538	9,978	1,169	336,603	21,402
1829	5,170	1,536	14,453	1,494	286,740	15,808
1830	7,105	828	19,360	2,458	256,385	17,670
1831	6,391	1,189	14,554	936	258,087	19,217
1832	6,887	1,173	11,914	1,297	292,292	15,866

III. Bristol Docks, Shipping, etc.

The Bristol Docks were formed in pursuance of the act 43 Geo. 3. c. 142., by changing the course of the rivers Avon and Frome, and placing gates or locks at each extremity of the old channel. The accommodation thus obtained is very extensive. The warehouses at Bristol, as at Liverpool, are not in any way connected with the docks: they all belong to private individuals.

Bristol, as a port, used to be inferior only to London; but now she ranks far below Liverpool, and probably is second to Hull. However, she still enjoys a very extensive trade, particularly with the West Indies and Ireland. The custom duties collected in Bristol amounted, in 1831, to 1,161,976*l.* In 1832, there belonged to the port 296 registered vessels, of the burden of 46,567 tons.

The produce of the dock duties on tonnage and goods, since 1820, has been as follows: —

Years.	Tonnage Rates.			Rates on Goods.			Years.	Tonnage Rates.			Rates on Goods.		
	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
1821	10,469	19	6	7,237	7	6	1826	14,863	10	0	9,438	14	3
1822	10,530	11	2	8,062	5	3	1827	13,934	1	8	7,773	12	0
1823	10,747	19	2	7,746	7	7	1828	15,292	0	2	8,396	16	2
1824	12,395	6	4	7,990	7	2	1829	15,833	4	6	8,871	13	0
1825	13,424	4	10	9,409	11	0	1830	15,998	12	8	8,087	1	0

The charges on ships entering Bristol are very heavy. They are as follow: —

For every vessel on entering into the port of Bristol, except barges or other vessels passing or going to or from the Bath River Navigation, or Kennet and Avon Canal, or re-shipping or discharging their cargoes to be again laden, and pass or go up the said navigation or canal, but not discharging any part of their cargoes at the quays of Bristol for sale, the several rates or duties, according to the register tonnage of such vessels following, viz.: —

	Per Ton. £ s. d.
First Class. — For every vessel trading from Africa, Honduras, Surinam, and other ports in South America, the United States of America, the East and West Indies, all the ports within the Straits of Gibraltar, and the Southern Whale Fishery - - - - -	0 3 0
Second Class. — For every vessel trading from the British Colonies, Portugal, Prussia, Russia, Spain without the Straits, and Sweden - - - - - -	0 2 0
Third Class. — For every vessel trading from Flanders, France without the Straits, Germany, Guernsey, Holland, Jersey, Norway, Poland, and Zealand - - - - - -	0 1 0
Fourth Class. — For every vessel trading from Ireland, the Isle of Man, and Scotland - -	0 0 8
Fifth Class. — For every vessel employed as a coaster, except as aforesaid, not including vessels from Cardiff, Newport, and other ports to the eastward of the Holmes, at each entering into the said port - - - - - - - - - -	0 0 6
For vessels from Cardiff, Newport, and other ports to the eastward of the Holmes (except as aforesaid), being market boats or vessels, having one third part at least of the lading consisting of coal, scruff, tin, iron, tin plates, grain, copper, bricks, stones, coal, tar, slate, bark, timber, or wood, and not exceeding 75 tons burden, each voyage - - - - -	0 5 0
—— if exceeding 75 tons burden, each voyage - - - - -	0 7 6
For all other vessels from Cardiff, Newport, and other ports to the eastward of the Holmes (except as aforesaid), if under 40 tons burden, each voyage - - - -	0 7 6
—— if of 40 tons and under 75 tons burden, each voyage - - - -	0 12 6
—— if 75 tons and under 100 tons burden, each voyage - - - - -	0 16 0
—— if 100 tons burden or upwards, each voyage - - - - -	1 1 0

The following is an estimate of the various expenses incurred by a West India ship of 500 tons, entering and discharging at Bristol: —

Inwards. — Anchorage, moorage, and lights, about 6*d.* per ton. — Dock dues, 3*s.* per do. — Pilotage, 15*l.* to 25*l.* — Warner, 1*l.* 1*s.* — Mayor and quay wardens' fees, 2*l.* 5*s.* — Cranage about 30*l.* — Labour discharging, 30*l.* to 40*l.* — Coopers' charges, from 50*l.* to 100*l.* The two last items depend greatly on the *condition* the cargo is in.

Outwards. — Lights, about 4*d.* per ton. — Pilotage, 15*l.* to 20*l.*

Account of the Number of Ships and their Tonnage, distinguishing between British and Foreign, which have entered inwards at Bristol since 1820.

Years.	British.		Foreign.		Years.	British.		Foreign.	
	Ships.	*Tons.*	*Ships.*	*Tons.*		*Ships.*	*Tons.*	*Ships.*	*Tons.*
1820	311	53,919	46	5,652	1827	412	75,916	72	8,368
1821	266	46,811	52	7,350	1828	357	66,558	61	8,508
1822	291	53,808	56	8,165	1829	371	73,129	63	8,561
1823	305	57,186	39	7,121	1830	357	66,479	50	7,818
1824	338	65,878	64	10,177	1831	404	76,807	97	12,387
1825	359	73,709	68	11,323	1832	240	46,871	29	4,352
1826	334	65,087	60	6,931					

IV. Hull Docks, Shipping, etc.

There are three considerable docks in Hull; occupying, inclusive of their basins, an area of 26 acres. They are capable of affording accommodation for about 312 ships of the average size of those that frequent the port. Hull is the next port in the empire, after Bristol, or perhaps Liverpool; for, although the customs, duty collected in Hull be inferior to that of Bristol, it having amounted, in 1831, to only 689,116*l.*, she has a larger amount of shipping. In 1832, there belonged to this port 557 registered vessels, of the aggregate burden of 68,892 tons.

The produce of the Hull dock duties, since 1824, has been as follows: —

Years.	Amount.			Years.	Amount.			Years	Amount.		
	£	s.	d.		£	s.	d.		£	s.	d.
1824	18,776	6	3	1827	22,381	9	9	1830	18,544	19	4
1825	25,861	16	0	1828	18,546	18	5	1831	22,386	18	5
1826	19,089	16	0	1829	19,669	5	4	1832	16,797	9	2

The decline in the last year was owing to the temporary falling off in the trade of the port, occasioned by the cholera, and the interruption of the intercourse with Holland.

The regulations to be observed by ships using the Hull Docks are similar to those in the Thames; but the dues on most articles are higher.

The dock and harbour dues on ships are as follow: —

	Per Ton. s.	d.
From within the Baltic	1	3
Denmark, Sweden, Norway below Elsinore, or any place in Germany, Holland, Flanders, France, to the eastward of Ushant, Ireland, Guernsey, and Jersey	0	10
Westward of Ushant, without the Straits of Gibraltar	1	3
West Indies, North and South America, Africa, Greenland, eastward of the north cape of Norway, within the Straits of Gibraltar	1	9

Number of Vessels, with the Amount of their Tonnage, entering inwards from Foreign Parts, at the Port of Hull, each Year from 1820, separating British from Foreign. — (*Parl. Paper*, No. 656. Sess. 1833.)

Years.	British.		Foreign		Years.	British.		Foreign.	
	Ships.	*Tons.*	*Ships.*	*Tons.*		*Ships.*	*Tons.*	*Ships.*	*Tons.*
1820	627	117,434	117	15,111	1827	982	191,364	800	72,338
1821	578	113,133	106	13,820	1828	881	156,925	674	60,082
1822	672	134,999	103	14,011	1829	883	165,791	603	58,854
1823	778	153,313	203	26,103	1830	897	163,657	556	51,015
1824	776	142,615	510	58,603	1831	974	187,361	725	73,547
1825	1,171	227,363	1,000	100,773	1832	762	140,788	454	43,481
1826	717	130,674	854	70,137					

The port of Goole has latterly drawn off some portion of the trade of Hull. A large proportion of the foreign vessels frequenting the port are of small burden, and are engaged in the importation of bones, rags, rapeseed, &c.

V. Goole Docks, Shipping, etc.

The port of Goole, situated on the Ouse, a little above its junction with the Humber, about 22 miles more inland than Hull, promises to prove a formidable rival to the latter. Ten or 12 years ago, Goole was but an insignificant hamlet. It communicates by means of canals with Liverpool, Manchester, Leeds, Wakefield, &c. Though so remote from the sea, vessels drawing 15 or 16 feet of water reach Goole in safety. It has 2 wet docks and a basin. The first, or *ship dock*, is 800 feet long by 200 in breadth. The second, or *barge dock*, is 900 feet long by 150 wide, and is intended for the accommodation of the small craft which ply upon the canals and rivers. The warehouses at Goole are extensive and convenient; and it has been admitted to the privileges of a bonding port. There belonged to it, in 1832, 119 registered ships, of the burden of 8,545 tons.

VI. Leith Docks, Shipping, etc.

Leith has 2 wet docks, constructed in the very best manner, containing more than 10 acres of water room, and capable of accommodating 150 such ships as frequent the port. There are also 3 dry docks contiguous to the wet docks.

The total expense of these docks seems to have amounted to 285,108*l.* sterling. Extensive improvements are at present going foward at the harbour of Leith; but the money for this purpose has not been furnished by individuals, but by government, and there is much reason to doubt whether the expenditure will be profitable.

The customs duty collected at Leith in 1831 amounted to 431,821*l.*; the number of registered vessels belonging to the port is 246, and their burden 25,629 tons.

Dock Rates at Leith are as follow: —

	Per Ton. s.	d.
For every ship or vessel, from any port between Buchanness and Eyemouth, including the great canal and the river Clyde, as far down as Greenock, coming by the canal	0	4
—— from any other port in great Britain and Ireland	0	8
—— from Norway, Sweden, Denmark, Holstein, Hamburgh, Bremen, Holland, and Flanders, that is, without the Baltic, and no further south than Dunkirk	0	10½
—— from the Baltic, all above the Sound, Onega, Archangel, Jersey or Guernsey, Portugal, France, and Spain, without the Straits of Gibraltar, Newfoundland, Madeira, or Western Islands	1	1½
—— from within the Straits of Gibraltar, or from America	1	4
—— from the West Indies, Asia, Africa, or the Cape de Verd Islands	1	8
—— from Greenland, or Davis's Straits	2	0
But if such ship or vessel shall make a second voyage, she shall be credited in the charge for such second voyage	0	4
For all ships and vessels (excepting those from Greenland or Davis's Straits) remaining in the dock above 3 calendar months, for each after-month, or any part thereof	0	2½
For all foreign vessels from any of the before-mentioned ports or places, the aforesaid respective rates, and one half more.		
For all loaded vessels not breaking bulk, and for all vessels in ballast which do not take in goods, coming into the present harbour, provided they do not make use of any of the docks, nor remain in the harbour above 4 weeks, one half of the aforesaid rates or duties.		
For every ship or vessel going from the port of Leith to any other port in the Frith of Forth, to take in a part of a cargo, and return to Leith, upon her return	0	2

No ship or vessel shall be subjected in payment of the aforesaid rates and duties for more than 8 voyages in any 1 year.

	s.	d.
Flag, or Light Dues. — Every vessel, of whatever burden, from foreign ports	2	6
—— of 40 tons burden and upwards, to pay for each coasting voyage	2	6
Beacon and anchorage, per ton	0	1½

This duty is only charged upon four fifths of the register tonnage.

DOG (Fr. *Chien*; Ger. *Hund*; It. *Cane*; Lat. *Canis familiaris*). Of this quadruped, emphatically styled "the friend and companion of man," there is a vast variety of species. But to attempt to give any description of an animal so well known, would be quite out of place in a work of this kind; and we mention it for the purpose principally of laying the following account before our readers, with a remark or two with respect to Asiatic dogs.

An Account of the Number of Dogs entered, and for which Duty was paid in Great Britain, in the Year 1830; distinguishing the Number of Packs of Hounds, and the Number of each Description of Dog, the Rate of Duty on each, and the aggregate Amount paid.

Description of Dogs.	Rates of Duty.	Total Number.	Amount of Duty.
	£ s. d.		£ s. d.
Greyhounds	1 0 0	18,192	18,192 0 0
Pointers, hounds, setting dogs, spaniels, terriers, lurchers, or any other dogs, where persons keep two or more dogs	0 14 0	113,307	79,314 18 0
Other dogs; persons keeping one only	0 8 0	219,013	87,605 4 0
Total, exclusive of packs of hounds	- - -	350,512	185,112 2 0
Packs of hounds	36 0 0	68	2,448 0 0

"Many dogs are exempted, either as belonging to poor persons, or as sheep dogs on small farms.
"From the number of persons compounding for their taxes, it is impossible to ascertain the number of dogs kept; the account is, therefore, made out of the number assessed."

Cuvier, the great French naturalist, says, "The dog is the most complete, the most remarkable, and the most useful conquest ever made by man: every species has become our property; each individual is altogether devoted to his master, assumes his manners, knows and defends his goods, and remains attached to him until death; and all this proceeds neither from want nor constraint, but solely from true gratitude and real friendship. The swiftness, the strength, and the scent of the dog have created for man a powerful ally against other animals, and were, perhaps, necessary to the establishment of society. He is the only animal which has followed man through every region of the earth."

It is singular, however, that neither Cuvier, nor any one of those by whom his statements have been copied, should have mentioned that this account is applicable only to Europe. All Mohammedan nations regard the dog as impure, and will not touch it without an ablution. The same is also the case with the Hindoos. From the Hellespont to the confines of Cochin-China, dogs are unappropriated, and have no master. They prowl about the towns and villages; and though they are naturally more familiar, they are in no respect more domesticated, than the carrion crows, kites, vultures, &c. which assist them in performing the functions of scavengers. In China and Cochin-China, the dog is eaten as food; its flesh being, with the exception of that of the hog, the most common in their markets.

The unnecessary multiplication of dogs, particularly in large cities, is a very great nuisance: coming, as they often do, into the possession of those who are without the means of providing for them, they are frequently left to wander about in the streets; and from ill usage, want of food and of proper attention, are apt, during hot weather, to become rabid. In several districts of the metropolis the nuisance has attained to a formidable height; and it is singular, considering the numerous fatal occurrences that have taken place, that no effort should have been made to have it abated. It has grown to its present excess, partly from too many exemptions being granted from the duty, and partly from a want of care in its collection; but besides lessening the number of the former, and more rigidly enforcing the latter, it would be proper to enact that all dogs found wandering in the streets without masters should be destroyed.

DOWN (Ger. *Dunen, Flaumfedern*; Du. *Dons*; Fr. *Duvet*; It. *Penna matta, Piumini*; Sp. *Flojel, Plumazo*; Rus. *Puch*; Lat. *Plumæ*), the fine feathers from the breasts of several birds, particularly those of the duck kind. That of the eider duck is the most valuable. These birds pluck it from their breasts and line their nests with it. Mr. Pennant says that it is so very elastic, that a quantity of it weighing only $\frac{3}{4}$ of an ounce, fills a larger space than the crown of the greatest hat. That found in the nest is most valued, and termed *live down*; it is much more elastic than that plucked from the dead bird, which is comparatively little esteemed. The eider duck is found on the western islands of Scotland, but the down is principally imported from Norway and Iceland.

DRAGONS' BLOOD. See Balsam.

DRAWBACK, a term used in commerce to signify the remitting or paying back of the duties previously paid on a commodity on its being exported.

A drawback is a device resorted to for enabling a commodity affected by taxes to be exported and sold in the foreign market on the same terms as if it had not been taxed at all. It differs in this from a bounty, — that the latter enables a commodity to be sold

abroad for *less* than its natural cost, whereas a drawback enables it to be sold exactly at its natural cost. Drawbacks, as Dr. Smith has observed, "do not occasion the exportation of a greater quantity of goods than would have been exported had no duty been imposed. They do not tend to turn towards any particular employment a greater share of the capital of the country than would go to that employment of its own accord, but only to hinder the duty from driving away any part of that share to other employments. They tend not to overturn that balance which naturally establishes itself among all the various employments of the society; but to hinder it from being overturned by the duty. They tend not to destroy, but to preserve, what it is in most cases advantageous to preserve — the natural division and distribution of labour in the society." — (Vol. ii. p. 352.)

Were it not for the system of drawbacks, it would be impossible, unless when a country enjoyed some very peculiar facilities of production, to export any commodity that was heavier taxed at home than abroad. But the drawback obviates this difficulty, and enables merchants to export commodities loaded at home with heavy duties, and to sell them in the foreign market on the same terms as those fetched from countries where they are not taxed.

Most foreign articles imported into this country may be warehoused for subsequent exportation. In this case they pay no duties on being imported: and, of course, get no drawback on their subsequent exportation.

Sometimes a drawback exceeds the duty or duties laid on the article; and in such cases the *excess* forms a real bounty of that amount, and should be so considered.

It is enacted by the act 3 & 4 Will. 4. c. 52., that no drawback or bounty shall be allowed upon the exportation from the United Kingdom of any goods, unless such goods shall have been entered in the name of the person who was the real owner thereof at the time of entry and shipping, or of the person who had actually purchased and shipped the same, in his own name and at his own liability and risk, on commission, according to the practice of merchants, and who was and shall have continued to be entitled in his own right to such drawback or bounty, except in the cases herein-after provided for. — § 86.

No drawback shall be allowed upon the exportation of any goods, unless such goods be shipped within 3 years after the payment of the duties inwards thereon. And no debenture for any drawback or bounty upon the exportation of any goods, shall be paid after the expiration of 2 years from the shipment of such goods; and no drawback shall be allowed upon any goods which, by reason of damage or decay, shall have become of less value for home use than the amount of such drawback; and all goods so damaged which shall be cleared for drawback shall be forfeited; and the person who caused such goods to be so cleared shall forfeit 200*l.*, or treble the amount of the drawback, at the option of the commissioners of customs. — § 90.

No drawback or bounty shall be allowed upon goods exported and cleared as being press-packed, unless the quantities and qualities of the same be verified by oath of the master packer thereof, or, in case of his unavoidable absence, by oath of his foreman. — § 93.

No goods cleared for drawback or bounty, or from any warehouses, shall be carried to be put on board ship for exportation, except by a person authorised for that purpose by licence of the commissioners of customs. — § 94. — (See IMPORTATION AND EXPORTATION.)

DUBBER, a leathern vessel, bottle, or jar, used in India to hold oil, ghee, &c. Barrels, as already observed — (see BARRELS), — are entirely a European invention. Liquids, in Eastern countries, are for the most part packed for exportation in leathern vessels. Dubbers are made of thin untanned goat skins; and are of all sizes, from a quart up to nearly a barrel.

DUNNAGE, in commercial navigation, loose wood, consisting of pieces of timber, boughs of trees, faggots, &c., laid in the bottom and against the sides of the ship's hold, either, 1st, by raising the cargo when she is loaded with heavy goods, to prevent her from becoming too stiff — (see BALLAST); or, 2d, to prevent the cargo, should it be susceptible of damage by water, from being injured in the event of her becoming leaky. A ship is not reckoned seaworthy unless she be provided with proper and sufficient dunnage. — (*Falconer's Marine Dictionary; Abbott (Lord Tenterden) on the Law of Shipping*, part iii. c. 3.)

E.

EARNEST, in commercial law, is the sum advanced by the buyer of goods in order to bind the seller to the terms of the agreement. It is enacted by the 17th section of the famous Statute of Frauds, 29 Cha. II. c. 3., that "no contract for the sale of any goods, wares, and merchandises, for the prices of 10*l.* sterling or upwards, shall be allowed to be good, except the buyer shall accept part of the goods so sold, and actually receive the same, or give something in *earnest* to bind the bargain, or in part payment, or that some note or memorandum in writing of the said bargain be made and signed by the parties to be charged by such contract, or their agents thereunto lawfully authorised."

As to what amounts to sufficient earnest, Blackstone lays it down, that "if any part of the price is paid down, if it is but a penny, or any portion of the [illegible] delivered

by way of earnest, it is binding." To constitute earnest, the thing must be given as a token of ratification of the contract, and it should be expressly stated so by the giver. — (*Chitty's Commercial Law*, vol. iii. p. 289.)

EARTHENWARE (Ger. *Irdene Waaren*; Du. *Aardegoed*; Fr. *Vaisselle de terre, Poterie*; It. *Stoviglie, Terraglia*; Sp. *Loza de barro*; Rus. *Gorschetschnüe possodü*; Pol. *Glinianæ naczynia*), or crockery, as it is sometimes termed, comprises every sort of household utensil made of clay hardened in the fire. Its manufacture is, in England, of very considerable importance; and the improvements that have been made in it since the middle of last century have contributed powerfully to its extension, and have added greatly to the comfort and convenience of all classes.

"There is scarcely," it has been well observed, "any manufacture which is so interesting to contemplate in its gradual improvement and extension as that of earthenware, presenting, as it does, so beautiful a union of science and art, in furnishing us with the comforts and ornaments of civilised life. Chemistry administers her part, by investigating the several species of earths, and ascertaining as well their most appropriate combinations, as the respective degrees of heat which the several compositions require. Art has studied the designs of antiquity, and produced from them vessels even more exquisite in form than the models by which they have been suggested. The ware has been provided in such gradations of quality as to suit every station from the highest to the lowest. It is to be seen in every country, and almost in every house, through the whole extent of America, in many parts of Asia, and in most of the countries of Europe. At home it has superseded the less cleanly vessels of pewter and of wood, and, by its cheapness, has been brought within the means of our poorest housekeepers. Formed from substances originally of no value, the fabrication has induced labour of such various classes, and created skill of such various degrees, that nearly the whole value of the annual produce may be considered as an addition made to the mass of national wealth. The abundance of the ware exhibited in every dwelling-house is sufficient evidence of the vast augmentation of the manufacture, which is also demonstrated by the rapid increase of the population in the districts where the potteries have been established."— (*Quarterly Review.*)

For the great and rapid extension of the manufacture we are chiefly indebted to the late Mr. Josiah Wedgwood; whose original and inventive genius enabled him to make many most important discoveries in the art; and who was equally successful in bringing his inventions into use. The principal seat of the manufacture is in Staffordshire, where there is a district denominated the Potteries, comprising a number of villages, and a population which is supposed to amount, at this moment, to above 60,000, by far the greater proportion of which is engaged in the manufacture. There are no authentic accounts of the population of this district in 1760, when Mr. Wedgwood began his discoveries; but the general opinion is, that it did not at that time exceed 20,000. The village of Etrùria, in the Potteries, was built by Mr. Wedgwood. The manufacture has been carried on at Burslem, in the same district, for several centuries.

The canals by which Staffordshire is intersected, have done much to accelerate the progress of the manufacture. Pipe-clay from Dorsetshire and Devonshire, and flints from Kent, are conveyed by water carriage to the places where the clay and coal abound; and the finished goods are conveyed by the same means to the great shipping ports, whence they are distributed over most parts of the globe.

It is estimated that the value of the various sorts of earthenware produced at the Potteries may amount to about 1,500,000*l.* a year; and that the earthenware produced at Worcester, Derby, and other parts of the country, may amount to about 750,000*l.* more; making the whole value of the manufacture 2,250,000*l.* a year. The consumption of gold at the Potteries is about 650*l.* a week, and of coal about 8,000 tons a week.

The earthenware manufacture has increased considerably since 1814, but it is not possible to state the exact ratio. It has been estimated at $\frac{3}{8}$ for the porcelain, $\frac{3}{5}$ for the best earthenware, and at $\frac{1}{4}$ or $\frac{1}{3}$ for the common or cream-coloured ware. The prices of the different sorts of earthenware are said to have fallen 20 per cent. during the last 15 years. Wages have not fallen in the same proportion; but we are assured that a workman can, at the present day, produce about *four* times the quantity he did in 1790. — (This article has been prepared from information obtained at the Potteries, obligingly communicated by James Loch, Esq. M. P.)

The real value of the earthenware exported from Great Britain to foreign countries, during the 6 years ending with 1832, according to the declarations of the exporters, was as follows: —

	£	s.	d.		£	s.	d.
1827	437,812	17	8	1830	439,566	19	2
1828	499,743	6	6	1831	458,965	11	11
1829	461,710	5	7	1832	489,980	17	7

The foreign demand for earthenware has increased considerably since 1815. The exports to South America, Cuba, and other *ci-devant* Spanish colonies, have been largely

increased. But, notwithstanding this increase, the United States continues to be by far the best market for British earthenware. Of the entire value exported in 1831, amounting to 458,965*l.*, the exports to the United States amounted to no less than 255,159*l.* The markets next in importance are Brazil, the British North American and West Indian colonies, Cuba, Germany, the Netherlands, &c. We have been assured that it is necessary to add $\frac{1}{4}$ to the declared value of the exports, to get their true value.

EAST INDIA COMPANY, a famous association, originally established for prosecuting the trade beween England and India, which they acquired a right to carry on exclusively. Since the middle of last century, however, the Company's political have become of more importance than their commercial concerns.

East Indies, a popular geographical term not very well defined, but generally understood to signify the continents and islands to the east and south of the river Indus, as far as the borders of China, including Timor and the Moluccas, but excluding the Philippine Islands, New Guinea, and New Holland. China and the Philippine Islands were, however, included within the limits of the East India Company's peculiar privileges.

I. East India Company (Historical Sketch of).
II. East India Company (Constitution of).
III. East Indies (State of Society in, growing Demand for English Goods, Trade, Colonisation, etc.).
IV. East Indies (Extent, Population, Military Force, Revenue, etc. of British).

I. East India Company (Historical Sketch of).

The persevering efforts of the Portuguese to discover a route to India, by sailing round Africa, were crowned with success in 1497. And it may appear singular, that, notwithstanding the exaggerated accounts that had been prevalent in Europe, from the remotest antiquity, with respect to the wealth of India, and the importance to which the commerce with it had raised the Phœnicians and Egyptians in antiquity, the Venetians in the middle ages, and which it was then seen to confer on the Portuguese, the latter should have been allowed to monopolise it for nearly a century after it had been turned into a channel accessible to every nation. But the prejudices by which the people of most European states were actuated in the sixteenth century, and the peculiar circumstances under which they were placed, hindered them from embarking with that alacrity and ardour that might have been expected in this new commercial career. Soon after the Portuguese began to prosecute their discoveries along the coast of Africa, they applied to the pope for a bull, securing to them the exclusive right to and possession of all countries occupied by infidels, they either had discovered, or might discover, to the south of Cape Non, on the west coast of Africa, in 27° 54′ north latitude: and the pontiff, desirous to display, and at the same time to extend, his power, immediately issued a bull to this effect. Nor, preposterous as a proceeding of this sort would now appear, did any one then doubt that the pope had a right to issue such a bull, and that all states and empires were bound to obey it. In consequence, the Portuguese were, for a lengthened period, allowed to prosecute their conquests in India without the interference of any other European power. And it was not till a considerable period after the beginning of the war, which the blind and brutal bigotry of Philip II. kindled in the Low Countries, that the Dutch navigators began to display their flag on the Eastern Ocean, and laid the foundations of their Indian empire.

The desire to comply with the injunctions in the pope's bull, and to avoid coming into collision, first with the Portuguese, and subsequently with the Spaniards, who had conquered Portugal in 1580, seems to have been the principal cause that led the English to make repeated attempts, in the reigns of Henry VIII. and Edward VI., and the early part of the reign of Elizabeth, to discover a route to India by a north-west or north-east passage; channels from which the Portuguese would have had no pretence for excluding them. But these attempts having proved unsuccessful, and the pope's bull having ceased to be of any effect in this country, the English merchants and navigators resolved to be no longer deterred by the imaginary rights of the Portuguese from directly entering upon what was then reckoned by far the most lucrative and advantageous branch of commerce. Captain Stephens, who performed the voyage in 1582, was the first Englishman who sailed to India by the Cape of Good Hope. The voyage of the famous Sir Francis Drake contributed greatly to diffuse a spirit of naval enterprise, and to render the English better acquainted with the newly opened route to India. But the voyage of the celebrated Mr. Thomas Cavendish was, in the latter respect, the

most important. Cavendish sailed from England in a little squadron, fitted out at his own expense, in July, 1586; and having explored the greater part of the Indian Ocean, as far as the Philippine Islands, and carefully observed the most important and characteristic features of the people and countries which he visited, returned to England, after a prosperous navigation, in September, 1588. Perhaps, however, nothing contributed so much to inspire the English with a desire to embark in the Indian trade, as the captures that were made, about this period, from the Spaniards. A Portuguese East India ship, or carrack, captured by Sir Francis Drake, during his expedition to the coast of Spain, inflamed the cupidity of the merchants by the richness of her cargo, at the same time that the papers found on board gave specific information respecting the traffic in which she had been engaged. A still more important capture, of the same sort, was made in 1593. An armament, fitted out for the East Indies by Sir Walter Raleigh, and commanded by Sir John Borroughs, fell in, near the Azores, with the largest of all the Portuguese carracks, a ship of 1,600 tons burden, carrying 700 men and 36 brass cannon; and, after an obstinate conflict, carried her into Dartmouth. She was the largest vessel that had been seen in England; and her cargo, consisting of gold, spices, calicoes, silks, pearls, drugs, porcelain, ivory, &c., excited the ardour of the English to engage in so opulent a commerce.

In consequence of these and other concurring causes, an association was formed in London, in 1599, for prosecuting the trade to India. The adventurers applied to the queen for a charter of incorporation, and also for power to exclude all other English subjects, who had not obtained a licence from them, from carrying on any species of traffic beyond the Cape of Good Hope or the Straits of Magellan. As exclusive companies were then very generally looked upon as the best instruments for prosecuting most branches of commerce and industry, the adventurers seem to have had little difficulty in obtaining their charter, which was dated the 31st of December, 1600. The corporation was entitled, "The Governor and Company of Merchants of London trading into the East Indies:" the first governor (Thomas Smythe, Esq.) and 24 directors were nominated in the charter; but power was given to the Company to elect a deputy governor, and, in future, to elect their governor and directors, and such other office-bearers as they might think fit to appoint. They were empowered to make by-laws; to inflict punishments, either corporal or pecuniary, provided such punishments were in accordance with the laws of England; to export all sorts of goods free of duty for 4 years; and to export foreign coin, or bullion, to the amount of 30,000*l.* a year, 6,000*l.* of the same being previously coined at the mint; but they were obliged to import, within 6 months after the completion of every voyage, except the first, the same quantity of silver, gold, and foreign coin that they had exported. The duration of the charter was limited to a period of 15 years; but with and under the condition that, if it were not found for the public advantage, it might be cancelled at any time upon 2 years' notice being given. Such was the origin of the British East India Company,—the most celebrated commercial association either of ancient or modern times, and which has now extended its sway over the whole of the Mogul empire.

It might have been expected that, after the charter was obtained, considerable eagerness would have been manifested to engage in the trade. But such was not the case. Notwithstanding the earnest calls and threats of the directors, many of the adventurers could not be induced to come forward to pay their proportion of the charges incident to the fitting out of the first expedition. And as the directors seem either to have wanted power to enforce their resolutions, or thought it better not to exercise it, they formed a subordinate association, consisting of such members of the Company as were really willing to defray the cost of the voyage, and to bear all the risks and losses attending it, on condition of their having the exclusive right to whatever profits might arise from it. And it was by such subordinate associations that the trade was conducted during the first 13 years of the Company's existence.

The first expedition to India, the cost of which amounted, ships and cargoes included, to 69,091*l.*, consisted of 5 ships, the largest being 600 and the smaller 130 tons burden. The goods put on board were principally bullion, iron, tin, broad cloths, cutlery, glass, &c. The chief command was intrusted to Captain James Lancaster, who had already been in India. They set sail from Torbay on the 13th of February, 1601. Being very imperfectly acquainted with the seas and countries they were to visit, they did not arrive at their destination, Acheen in Sumatra, till the 5th of June, 1602. But though tedious, the voyage was, on the whole, uncommonly prosperous. Lancaster entered into commercial treaties with the kings of Acheen and Bantam; and having taken on board a valuable cargo of pepper and other produce, he was fortunate enough, in his way home, to fall in with and capture, in concert with a Dutch vessel, a Portuguese carrack of 900 tons burden, richly laden. Lancaster returned to the Downs on the 11th of September, 1603. — (*Modern Universal History*, vol. x. p. 16.; *Macpherson's Commerce of the European Powers with India*, p. 81.)

But notwithstanding the favourable result of this voyage, the expeditions fitted out in the years immediately following, though sometimes consisting of larger ships, were not, at an average, materially increased. In 1612, Captain Best obtained from the court at Delhi several considerable privileges; and, amongst others, that of establisning a factory at Surat; which city was, henceforth, looked upon as the principal British station in the west of India, till the acquisition of Bombay.

In establishing factories in India, the English only followed the example of the Portuguese and Dutch. It was contended, that they were necessary to serve as *depôts* for the goods collected in the country for exportation to Europe, as well as for those imported into India, in the event of their not meeting with a ready market on the arrival of the ships. Such establishments, it was admitted, are not required in civilised countries; but the peculiar and unsettled state of India was said to render them indispensable there. Whatever weight may be attached to this statement, it is obvious that factories formed for such purposes could hardly fail of speedily degenerating into a species of forts. The security of the valuable property deposited in them, furnished a specious pretext for putting them in a condition to withstand an attack, while the agents, clerks, warehousemen, &c. formed a sort of garrison. Possessing such strong holds, the Europeans were early emboldened to act in a manner quite inconsistent with their character as merchants; and but a very short time elapsed before they began to form schemes for monopolising the commerce of particular districts, and acquiring territorial dominion.

Though the Company met with several heavy losses during the earlier part of their traffic with India, from shipwrecks and other unforeseen accidents, and still more from the hostility of the Dutch, yet, on the whole, the trade was decidedly profitable. There can, however, be little doubt, that their gains, at this early period, have been very much exaggerated. During the first 13 years, they are said to have amounted to 132 per cent. But then it should be borne in mind, as Mr. Grant has justly stated, that the voyages were seldom accomplished in less than 30 months, and sometimes extended to 3 or 4 years: and it should further be remarked, that on the arrival of the ships at home, the cargoes were disposed of at long credits of 18 months or 2 years; and that it was frequently even 6 or 7 years before the concerns of a single voyage were finally adjusted. — (*Sketch of the History of the Company*, p. 13.) When these circumstances are taken into view, it will immediately be seen that the Company's profits were not, really, by any means so great as has been represented. It may not, however, be uninstructive to remark, that the principal complaint that was then made against the Company did not proceed so much on the circumstance of its charter excluding the public from any share in an advantageous traffic, as in its authorising the Company to export gold and silver of the value of 30,000*l.* a year. It is true that the charter stipulated that the Company should import an equal quantity of gold and silver within 6 months of the termination of every voyage: but the enemies of the Company contended that this condition was not complied with; and that it was, besides, highly injurious to the public interest, and *contrary to all principle*, to allow gold and silver to be sent out of the kingdom. The merchants and others interested in the support of the Company could not controvert the reasoning of their opponents, without openly impugning the ancient policy of absolutely preventing the exportation of the precious metals. They did not, however, venture to contend, if the idea really occurred to them, that the exportation of bullion to the East was advantageous, on the broad ground of the commodities purchased by it being of greater value in England. But they contended that the exportation of bullion to India was advantageous, because the commodities thence imported were chiefly re-exported to other countries from which a much greater quantity of bullion was obtained than had been required to pay for them in India. Mr. Thomas Mun, a director of the East India Company, and the ablest of its early advocates, ingeniously compares the operations of the merchant in conducting a trade carried on by the exportation of gold and silver to the seed time and harvest of agriculture. "If we only behold," says he, "the actions of the husbandman in the seed time, when he casteth away much good corn into the ground, we shall account him rather a madman than a husbandman. But when we consider his labours in the harvest, which is the end of his endeavours, we find the worth and plentiful increase of his actions." — (*Treasure by Foreign Trade*, p. 50. ed. 1664.)

We may here remark, that what has been called the *mercantile system* of political economy, or that system which measures the progress of a country in the career of wealth by the supposed balance of payments in its favour, or by the estimated excess of the value of its exports over that of its imports, appears to have originated in the excuses now set up for the exportation of bullion. Previously to this epoch, the policy of prohibiting the exportation of bullion had been universally admitted; but it now began to be pretty generally allowed, that its exportation might be productive of advantage, provided it occasioned the subsequent exportation of a greater amount of raw or manufactured products to countries whence bullion was obtained for them. This, when compared with the previously existing prejudice — for it hardly deserves the name of

system — which wholly interdicted the exportation of gold and silver, must be allowed to be a considerable step in the progress to sounder opinions. The maxim, *ce n'est que le premier pas qui coute*, was strikingly verified on this occasion. The advocates of the East India Company began gradually to assume a higher tone, and, at length, boldly contended that bullion was nothing but a commodity, and that its exportation ought to be rendered as free as that of any thing else. Nor were these opinions confined to the partners of the East India Company. They were gradually communicated to others; and many eminent merchants were taught to look with suspicion on several of the previously received dogmas with respect to commerce, and were, in consequence, led to acquire more correct and comprehensive views. The new ideas ultimately made their way into the House of Commons; and, in 1663, the statutes prohibiting the exportation of foreign coin and bullion were repealed, and full liberty given to the East India Company and to private traders to export them in unlimited quantities.

But the objection to the East India Company, or rather the East India trade, on the ground of its causing the exportation of gold and silver, admitted of a more direct and conclusive, if not a more ingenious reply. How compendious soever the ancient intercourse with India by the Red Sea and the Mediterranean, it was unavoidably attended with a good deal of expense. The productions of the remote parts of Asia, brought to Ceylon, or the ports on the Malabar coast, by the natives, were there put on board the ships which arrived from the Arabic gulf. At Berenice they were landed, and carried by camels 250 miles to the banks of the Nile. They were there again embarked, and conveyed down the river to Alexandria, whence they were despatched to different markets. The addition to the price of goods by such a multiplicity of operations must have been considerable; more especially as the price charged on each operation was fixed by monopolists, subject to no competition or control. Pliny says, that the cost of the Arabian and Indian products brought to Rome when he flourished (A. D. 70.), was increased a hundred fold by the expenses of transit—(*Hist. Nat.* lib. vi. c. 23.); but there can be little or no doubt that this is to be regarded as a rhetorical exaggeration.—(See *antè*, p. 18.) There are good grounds for thinking that the less bulky sorts of Eastern products, such as silk, spices, balsams, precious stones, &c., which were those principally made use of at Rome, might, supposing there were no political obstacles in the way, be conveyed from most parts of India to the ports on the Mediterranean by way of Egypt, at a decidedly cheaper rate than they could be conveyed to them by the Cape of Good Hope.

But at the period when the latter route to India began to be frequented, Syria, Egypt, &c. were occupied by Turks and Mamelukes; barbarians who despised commerce and navigation, and were, at the same time, extremely jealous of strangers, especially of Christians or infidels. The price of the commodities obtained through the intervention of such persons was necessarily very much enhanced; and the discovery of the route by the Cape of Good Hope was, consequently, of the utmost importance; for, by putting an end to the monopoly enjoyed by the Turks and Mamelukes, it introduced, for the first time, something like competition into the Indian trade, and enabled the western parts of Europe to obtain supplies of Indian products for about a third part of what they had previously cost. Mr. Mun, in a tract published in 1621, estimates the quantity of Indian commodities imported into Europe, and their cost when bought in Aleppo and in India, as follows: —

Cost of Indian commodities consumed in Europe when bought in Aleppo (or Alexandria).

	£	s.	d.
6,000,000 lbs. pepper cost, with charges, &c. at Aleppo, 2*s.* per lb.	600,000	0	0
450,000 lbs. cloves, at 4*s.* 9*d.*	106,875	10	0
150,000 lbs. mace, at 4*s.* 9*d.*	35,626	0	0
400,000 lbs. nutmegs, at 2*s.* 4*d.*	46,666	2	4
350,000 lbs. indigo, at 4*s.* 4*d.*	75,833	6	8
1,000,000 lbs. Persian raw silk, at 12*s.*	600,000	0	0
	£1,465,000	19	0

But the same quantities of the same commodities cost, when bought in the East Indies, according to Mr. Mun, as follows: —

	£	s.	d.
6,000,000 lbs. pepper, at 2½*d.* per lb.	62,500	0	0
450,000 lbs. cloves, at 9*d.*	16,875	0	0
150,000 lbs. mace, at 8*d.*	5,000	0	0
400,000 lbs. nutmegs, at 4*d.*	6,666	13	4
350,000 lbs. indigo, at 1*s.* 2*d.*	20,416	12	4
1,000,000 lbs. raw silk, at 8*s.*	400,000	0	0
	£511,458	5	8

Which being deducted from the former, leaves a balance of 953,542*l.* 13*s.* 4*d.* And supposing that the statements made by Mr. Mun are correct, and that allowance is made for the difference between the freight from Aleppo and India, the result would indicate the saving which the discovery of the route by the Cape of Good Hope occasioned in

the purchase of the above-mentioned articles. — (*A Discourse ... from England to the East Indies*, by T. M., original ed. p. 10. This tract, which is very scarce, is reprinted in Purchas's Pilgrims.)

In the same publication (p. 37.), Mr. Mun informs us that, from the beginning of the Company's trade to July, 1620, they had sent 79 ships to India; of which 34 had come home safely and richly laden, 4 had been worn out by long service in India, 2 had been lost in careening, 6 had been lost by the perils of the sea, and 12 had been captured by the Dutch. Mr. Mun further states, that the exports to India, since the formation of the Company, had amounted to 840,376*l.*; that the produce brought from India had cost 356,288*l.*, and had produced here the enormous sum of 1,914,600*l.*; that the quarrels with the Dutch had occasioned a loss of 84,088*l.*; and that the stock of the Company, in ships, goods in India, &c., amounted to 400,000*l.*

The hostility of the Dutch, to which Mr. Mun has here alluded, was long a very formidable obstacle to the Company's success. The Dutch early endeavoured to obtain the exclusive possession of the spice trade, and were not at all scrupulous about the means by which they attempted to bring about this their favourite object. The English, on their part, naturally exerted themselves to obtain a share of so valuable a commerce; and as neither party was disposed to abandon its views and pretensions, the most violent animosities grew up between them. In this state of things, it would be ridiculous to suppose that unjustifiable acts were not committed by the one party as well as the other; though the worst act of the English appears venial, when compared with the conduct of the Dutch in the massacre at Amboyna, in 1622. While, however, the Dutch Company was vigorously supported by the government at home, the English Company met with no efficient assistance from the feeble and vacillating policy of James and Charles. The Dutch either despised their remonstrances, or defeated them by an apparent compliance; so that no real reparation was obtained for the outrages they had committed. During the civil war, Indian affairs were necessarily lost sight of; and the Dutch continued, until the ascendancy of the republican party had been established, to reign triumphant in the East, where the English commerce was nearly annihilated.

But notwithstanding their depressed condition, the Company's servants in India laid the foundation, during the period in question, of the settlements at Madras and in Bengal. Permission to build Fort St. George was obtained from the native authorities in 1640. In 1658, Madras was raised to the station of a presidency. In 1645, the Company began to establish factories in Bengal; the principal of which was at Hooghly. These were, for a lengthened period, subordinate to the presidency at Madras.

No sooner, however, had the civil wars terminated, than the arms and councils of Cromwell retrieved the situation of our affairs in India. The war which broke out between the long parliament and the Dutch, in 1652, was eminently injurious to the latter. In the treaty of peace, concluded in 1654, it was stipulated that indemnification should be made by the Dutch for the losses and injuries sustained by the English merchants and factors in India. The 27th article bears, "that the Lords, the states-general of the United Provinces, shall take care that justice be done upon those who were partakers or accomplices in the massacre of the English at Amboyna, as the republic of England is pleased to term that fact, provided any of them be living." A commission was at the same time appointed, conformably to another article of the treaty, to inquire into the reciprocal claims which the subjects of the contracting parties had upon each other for losses sustained in India, Brazil, &c.; and, upon their decision, the Dutch paid the sum of 85,000*l.* to the East India Company, and 3,615*l.* to the heirs or executors of the sufferers at Amboyna. — (*Bruce's Annals*, vol. i. p. 489.)

The charter under which the East India Company prosecuted their exclusive trade to India, being merely a grant from the Crown, and not ratified by any act of parliament, was understood by the merchants to be at an end when Charles I. was deposed. They were confirmed in this view of the matter, from the circumstance of Charles having himself granted, in 1635, a charter to Sir William Courten and others, authorising them to trade with those parts of India with which the Company had not established any regular intercourse. The reasons alleged in justification of this measure, by the Crown, were, that "the East India Company had neglected to establish fortified factories, or seats of trade, to which the king's subjects could resort with safety; that they had consulted their own interests only, without any regard to the king's revenue; and, in general, that they had broken the condition on which their charter and exclusive privileges had been granted to them." — (*Rym. Fœdera*, vol. xx. p. 146.)

Courten's association, for the foundation of which such satisfactory reasons had been assigned, continued to trade with India during the remainder of Charles's reign; and no sooner had the arms of the Commonwealth forced the Dutch to desist from their depredations, and to make reparation for the injuries they had inflicted on the English in India, than private adventurers engaged in great numbers in the Indian trade, and carried it on with a zeal, economy, and success, that monopoly can never expect to rival. It is

stated in a little work, entitled *Britannia Languens*, published in 1680, the author of which has evidently been a well-informed and intelligent person, that during the years 1653, 1654, 1655, and 1656, when the trade to India was open, the private traders imported East India commodities in such large quantities, and sold them at such reduced prices, that they not only fully supplied the British markets, but had even come into successful competition with the Dutch in the market of Amsterdam, "and very much sunk the actions (shares) of the Dutch East India Company." — (p. 132.) This circumstance naturally excited the greatest apprehensions on the part of the Dutch Company; for, besides the danger that they now ran of being deprived, by the active competition of the English merchants, of a considerable part of the trade which they had previously enjoyed, they could hardly expect that, if the trade were thrown open in England, the monopoly would be allowed to continue in Holland. A striking proof of what is now stated is to be found in a letter in the third volume of *Thurlow's State Papers*, dated at the Hague, the 15th of January, 1654, where it is said, that "the merchants of Amsterdam have advice that the Lord Protector intends to dissolve the East India Company at London, and to declare the navigation and commerce of the East Indies free and open; which doth cause great jealousy at Amsterdam, *as a thing that will very much prejudice the East India Company in Holland.*"

Feeling that it was impossible to contend with the private adventurers under a system of fair competition, the moment the treaty with the Dutch had been concluded, the Company began to solicit a renewal of their charter; but in this they were not only opposed by the free traders, but by a part of themselves. To understand how this happened, it may be proper to mention that Courten's association, the origin of which has been already noticed, had begun, in 1648, to found a colony at Assuda, an island near Madagascar. The Company, alarmed at this project, applied to the council of state to prevent its being carried into effect; and the council, without entering on the question of either party's rights, recommended to them to form a union; which was accordingly effected in 1649. But the union was, for a considerable time, rather nominal than real; and when the Dutch war had been put an end to, most of those holders of the Company's stock who had belonged to Courten's association joined in petitioning the council of state that the trade might in future be carried on, not by a joint stock, but by a *regulated* company; so that each individual engaging in it might be allowed to employ his own stock, servants, and shipping, in whatever way he might conceive most for his own advantage. — (*Petition of Adventurers*, 17th of Nov. 1656; *Bruce's Annals*, vol. i. p. 518.)

This proposal was obviously most reasonable. The Company had always founded their claim to a monopoly of the trade on the alleged ground of its being necessary to maintain forts, factories, and ships of war in India; and that as this was not done by government, it could only be done by a Company. But, by forming the traders with India into a regulated company, they might have been subjected to whatever rules were considered most advisable; and such special duties might have been laid on the commodities they exported and imported, as would have sufficed to defray the public expenses required for carrying on the trade, at the same time that the inestimable advantages of free competition would have been secured; each individual trader being left at liberty to conduct his enterprises, subject only to a few general regulations, in his own way and for his own advantage. — (See Companies.)

But notwithstanding the efforts of the petitioners, and the success that was clearly proved to have attended the operations of the private traders, the Company succeeded in obtaining a renewal of their charter from Cromwell in 1657. Charles II. confirmed this charter in 1661; and at the same time conferred on them the power of making peace or war with any power or people *not of the Christian religion;* of establishing fortifications, garrisons, and colonies; of exporting ammunition and stores to their settlements duty free; of seizing and sending to England such British subjects as should be found trading to India without their leave; and of exercising civil and criminal jurisdiction in their settlements, according to the laws of England. Still, however, as this charter was not fully confirmed by any act of parliament, it did not prevent traders, or interlopers as they were termed, from appearing within the limits of the Company's territories. The energy of private commerce, which, to use the words of Mr. Orme, "sees its drift with eagles' eyes," formed associations at the risk of trying the consequence at law, being safe at the outset, and during the voyage, since the Company were not authorised to stop or seize the ships of those who thus attempted to come into competition with them. Hence their monopoly was by no means complete; and it was not till after the Revolution, and when a free system of government had been established at home, that, by a singular contradiction, the authority of parliament was interposed to enable the Company wholly to engross the trade with the East.

In addition to the losses arising from this source, the Company's trade suffered severely, during the reign of Charles II., from the hostilities that were then waged with the Dutch, and from the confusion and disorders caused by contests among the native

princes; but in 1668, the Company obtained a very valuable acquisition in the island of Bombay. Charles II. acquired this island as a part of the marriage portion of his wife, Catharine of Portugal; and it was now made over to the Company, on condition of their not selling or alienating it to any persons whatever, except such as were subjects of the British crown. They were allowed to legislate for their new possession; but it was enjoined that their laws should be consonant to reason, and "as near as might be" agreeable to the practice of England. They were authorised to maintain their dominion by force of arms; and the natives of Bombay were declared to have the same liberties as natural born subjects. The Company's western presidency was soon after transferred from Surat to Bombay.

In 1664, the French East India Company was formed; and 10 years afterwards they laid the foundation of their settlement at Pondicherry.

But the reign of Charles II. is chiefly memorable in the Company's annals, from its being the era of the commencement of the tea trade. The first notice of tea in the Company's records is found in a despatch, addressed to their agent at Bantam, dated 24th of January, 1667-8, in which he is desired to send home 100 lbs. of tea, "the best he can get." — (*Bruce's Annals*, vol. ii. p. 210.) Such was the late and feeble beginning of the tea trade; a branch of commerce that has long been of vast importance to the British nation; and without which, it is more than probable that the East India Company would long since have ceased to exist, at least as a mercantile body.

In 1677, the Company obtained a fresh renewal of their charter; receiving at the same time an indemnity for all past misuse of their privileges, and authority to establish a mint at Bombay.

During the greater part of the reigns of Charles II. and James II., the Company's affairs at home were principally managed by the celebrated Sir Josiah Child, the ablest commercial writer of the time; and in India, by his brother Sir John Child. In 1681, Sir Josiah published an apology for the Company, under the signature of Φιλοπατρις— "A Treatise wherein is demonstrated that the East India Trade is the most National of all Foreign Trades:" in which, besides endeavouring to vindicate the Company from the objections that had been made against it, he gives an account of its state at the time. From this account it appears that the Company consisted of 556 partners; that they had from 35 to 36 ships, of from 775 to 100 tons, employed in the trade between England and India, and from port to port in India — (p. 23.); that the custom duties upon the trade amounted to about 60,000*l.* a year; and that the value of the exports, "in lead, tin, cloth, and stuffs, and other commodities of the production and manufacture of England," amounted to about 60,000*l.* or 70,000*l.* a year. Sir Josiah seems to have been struck, as he well might, by the inconsiderable amount of the trade; and he therefore dwells on the advantages of which it was indirectly productive, in enabling us to obtain supplies of raw silk, pepper, &c. at a much lower price than they would otherwise have fetched. But this, though true, proved nothing in favour of the Company; it being an admitted fact, that those articles were furnished at a still lower price by the interlopers or private traders.

Sir Josiah Child was one of the first who projected the formation of a territorial empire in India. But the expedition fitted out in 1686, in the view of accomplishing this purpose, proved unsuccessful; and the Company were glad to accept peace on the terms offered by the Mogul. Sir John Child, having died during the course of these transactions, was succeeded in the principal management of the Company's affairs in India by Mr. Vaux. On the appointment of the latter, Sir Josiah Child, to whom he owed his advancement, exhorted him to act with vigour, and to carry whatever instructions he might receive from home into immediate effect. Mr. Vaux returned for answer that he should endeavour to acquit himself with integrity and justice, and that he would make the laws of his country the rule of his conduct. Sir Josiah Child's answer to this letter is curious: — "He told Mr. Vaux roundly that he expected his orders were to be his rules, and not the laws of England, which were a heap of nonsense, compiled by a few ignorant country gentlemen, who hardly knew how to make laws for the good government of their own private families, much less for the regulating of companies and foreign commerce." — (*Hamilton's New Account of the East Indies*, vol. i. p. 232.)

During the latter part of the reign of Charles II., and that of his successor, the number of private adventurers, or interlopers, in the Indian trade, increased in an unusual degree. The Company vigorously exerted themselves in defence of what they conceived to be their rights; and the question with respect to the validity of the powers conferred on them by their charter was at length brought to issue, by a prosecution carried on at their instance against Mr. Thomas Sandys, for trading to the East Indies without their licence. Judgment was given in favour of the Company in 1685. But this decision was ascribed to corrupt influence; and instead of allaying, only served to increase the clamour against them. The meeting of the Convention Parliament gave the Company's

opponents hopes of a successful issue to their efforts; and had they been united, they might probably have succeeded. Their opinions were, however, divided — part being for throwing the trade open, and part for the formation of a new company on a more liberal footing. The latter being formed into a body, and acting in unison, the struggle against the Company was chiefly carried on by them. The proceedings that took place on this occasion are amongst the most disgraceful in the history of the country. The most open and unblushing corruption was practised by all parties. — "*It was, in fact, a trial which side should bribe the highest; public authority inclining to one or other as the irresistible force of gold directed.*" — (*Modern Universal History*, vol. x. p. 127.) Government appears, on the whole, to have been favourable to the Company; and they obtained a fresh charter from the Crown in 1693. But in the following year the trade was virtually laid open by a vote of the House of Commons, "that all the subjects of England had an equal right to trade to the East Indies, unless prohibited by act of parliament." Matters continued on this footing till 1698. The pecuniary difficulties in which government was then involved, induced them to apply to the Company for a loan of 2,000,000*l.* for which they offered 8 per cent. interest. The Company offered to advance 700,000*l.* at 4 per cent.; but the credit of government was at the time so low, that they preferred accepting an offer from the associated merchants, who had previously opposed the Company, of the 2,000,000*l.* at 8 per cent., on condition of their being formed into a new and exclusive company. While this project was in agitation, the advocates of free trade were not idle, but exerted themselves to show that, instead of establishing a new Company, the old one ought to be abolished. But however conclusive and unanswerable, their arguments, having no adventitious recommendations in their favour, failed of making any impression. The new Company was established by authority of the legislature; and as the charter of the old Company was not yet expired, the novel spectacle was exhibited of two legally constituted bodies, each claiming an exclusive right to the trade of the same possessions!

Notwithstanding all the pretensions set up by those who had obtained the new charter during their struggle with the old Company, it was immediately seen that they were as anxious as the latter to suppress every thing like free trade. They had not, it was obvious, been actuated by any enlarged views, but merely by a wish to grasp at the monopoly, which they believed would redound to their own individual interest. The public, in consequence, became equally disgusted with both parties; or if there were any difference, it is probable that the new Company was looked upon with the greatest aversion, inasmuch as we are naturally more exasperated by what we conceive to be duplicity and bad faith, than by fair undisguised hostility.

At first the mutual hatred of the rival associations knew no bounds. But they were not long in perceiving that such conduct would infallibly end in their ruin; and that, while one was labouring to destroy the other, the friends of free trade might step in and procure the dissolution of both. In consequence, they became gradually reconciled; and in 1702, having adjusted their differences, they resolved to form themselves into one company, entitled, *The United Company of Merchants of England trading to the East Indies.*

The authority of parliament was soon after interposed to give effect to this agreement.

The United Company engaged to advance 1,200,000*l.* to government without interest, which, as a previous advance had been made of 2,000,000*l.* at 8 per cent., made the total sum due to them by the public 3,200,000*l.*, bearing interest at 5 per cent.; and government agreed to ratify the terms of their agreement, and to extend the charter to the 25th of March, 1726, with 3 years' notice.

While those important matters were transacting at home, the Company had acquired some additional possessions in India. In 1692, the Bengal agency was transferred from Hooghly to Calcutta. In 1698, the Company acquired a grant from one of the grandsons of Aurengzebe, of Calcutta and 2 adjoining villages; with leave to exercise judiciary powers over the inhabitants, and to erect fortifications. These were soon after constructed, and received, in compliment to William III., then king of England, the name of Fort William. The agency at Bengal, which had hitherto been subsidiary only, was now raised to the rank of a presidency.

The vigorous competition that had been carried on for some years before the coalition of the old and new Companies, between them and the private traders, had occasioned a great additional importation of Indian silks, piece goods, and other products, and a great reduction of their price. These circumstances occasioned the most vehement complaints amongst the home manufacturers, who resorted to the arguments invariably made use of on such occasions by those who wish to exclude foreign competition; affirming that manufactured India goods had been largely substituted for those of England; that the English manufacturers had been reduced to the cruel necessity either of selling nothing, or of selling their commodities at such a price as left them no profit; that great numbers of their workmen had been thrown out of employment; and last of all, that

Indian goods were not bought by British goods, but by gold and silver, the exportation of which had caused the general impoverishment of the kingdom! The merchants and others interested in the India trade could not, as had previously happened to them in the controversy with respect to the exportation of bullion, meet these statements without attacking the principles on which they rested, and maintaining, in opposition to them, that it was for the advantage of every people to buy the products they wanted in the cheapest market. This just and sound principle was, in consequence, enforced in several petitions presented to parliament by the importers of Indian goods; and it was also enforced in several able publications that appeared at the time. But these arguments, how unanswerable soever they may now appear, had then but little influence; and in 1701, an act was passed, prohibiting the importation of Indian manufactured goods for home consumption.

For some years after the re-establishment of the Company, it continued to prosecute its efforts to consolidate and extend its commerce. But the unsettled state of the Mogul empire, coupled with the determination of the Company to establish factories in every convenient situation, exposed their affairs to perpetual vicissitudes. In 1715, it was resolved to send an embassy to Delhi, to solicit from Furucksur, an unworthy descendant of Aurengzebe, an extension and confirmation of the Company's territory and privileges. Address, accident, and the proper application of *presents*, conspired to ensure the success of the embassy. The grants or patents solicited by the Company were issued in 1717. They were in all 34. The substance of the privileges they conferred was, that English vessels wrecked on the coasts of the empire should be exempt from plunder; that the annual payment of a stipulated sum to the government of Surat should free the English trade at that port from all duties and exactions; that those villages contiguous to Madras formerly granted and afterwards refused by the government of Arcot, should be restored to the Company; that the island of Diu, near the port of Masulipatam, should belong to the Company, paying for it a fixed rent; that in Bengal, all persons, whether European or native, indebted or accountable to the Company, should be delivered up to the presidency on demand; that goods of export or import, belonging to the English, might, under a *dustuck* or passport from the president of Calcutta, be conveyed duty free through the Bengal provinces; and that the English should be at liberty to purchase the lordship of 37 towns contiguous to Calcutta, and in fact commanding both banks of the river for 10 miles south of that city. — (*Grant's Sketch of the Hist. of the East India Company*, p. 128.)

The important privileges thus granted, were long regarded as constituting the great charter of the English in India. Some of them, however, were not fully conceded; but were withheld or modified by the influence of the emperor's lieutenants, or soubahdars.

In 1717, the Company found themselves in danger from a new competitor. In the course of that year some ships appeared in India, fitted out by private adventurers from Ostend. Their success encouraged others to engage in the same line; and in 1722, the adventurers were formed into a company under a charter from his Imperial Majesty. The Dutch and English Companies, who had so long been hostile to each other, at once laid aside their animosities, and joined heartily in an attempt to crush their new competitors. Remonstrances being found ineffectual, force was resorted to; and the vessels of the Ostend Company were captured, under the most frivolous pretences, in the open seas and on the coasts of Brazil. The British and Dutch governments abetted the selfish spirit of hostility displayed by their respective Companies. And the emperor was, in the end, glad to purchase the support of Great Britain and Holland to the pragmatic sanction, by the sacrifice of the Company at Ostend.

Though the Company's trade had increased, it was still inconsiderable; and it is very difficult, indeed, when one examines the accounts that have from time to time been published of the Company's mercantile affairs, to imagine how the idea ever came to be entertained that their commerce was of any considerable, much less paramount, importance. At an average of the 10 years ending with 1724, the total value of the British manufactures and other products annually exported to India amounted to only 92,410*l.* 12*s.* 6*d.* The average value of the bullion annually exported during the same period, amounted to 518,102*l.* 11*s.* 0*d.*; making the total annual average exports 617,513*l.* 3*s.* 10*d.*; — a truly pitiful sum, when we consider the wealth, population, and industry of the countries between which the Company's commerce was carried on; and affording by its smallness a strong presumptive proof of the effect of the monopoly in preventing the growth of the trade.

In 1730, though there were 3 years still unexpired of the Company's charter, a vigorous effort was made by the merchants of London, Bristol, and Liverpool, to prevent its renewal. It has been said that the gains of the Company, had they been exactly known, would not have excited any very envious feelings on the part of the merchants; but being concealed, they were exaggerated; and the boasts of the Company as to the importance of their trade contributed to spread th[illegible]normous,

and consequently stimulated the exertions of their opponents. Supposing, however, that the real state of the case had been known, there was still enough to justify the utmost exertions on the part of the merchants: for the limited profits made by the Company, notwithstanding their monopoly, were entirely owing to the misconduct of their agents, which they had vainly endeavoured to restrain; and to the waste inseparable from such unwieldy establishments.

The merchants, on this occasion, followed the example that had been set by the petitioners for free trade in 1656. They offered, in the first place, to advance the 3,200,000*l.* lent by the Company to the public, on more favourable terms. And in the second place, they proposed that the subscribers to this loan should be formed into a *regulated* company, for opening the trade, under the most favourable circumstances, to all classes of their countrymen.

It was not intended that the Company should trade upon a joint stock, and in their corporate capacity, but that every individual who pleased should trade in the way of private adventure. The Company were to have the charge of erecting and maintaining the forts and establishments abroad; and for this, and for other expenses attending what was called the enlargement and preservation of the trade, it was proposed that they should receive a duty of 1 per cent. upon all exports to India, and of 5 per cent. upon all imports from it. For ensuring obedience to this and other regulations, it was to be enacted, that no one should trade to India without licence from the Company. And it was proposed that 31 years, with 3 years' notice, should be granted as the duration of their peculiar privilege.

"It appears from this," says Mr. Mill, "that the end which was proposed to be answered, by incorporating such a company, was the preservation and erection of the forts, buildings, and other fixed establishments, required for the trade of India. This Company promised to supply that demand which has always been held forth as peculiar to the India trade, as the grand exigency which, distinguishing the traffic with India from all other branches of trade, rendered monopoly advantageous in that peculiar case, how much soever it might be injurious in others. While it provided for this real or pretended want, it left the trade open to all the advantages of private enterprise, private vigilance, private skill, and private economy, — the virtues by which individuals thrive and nations prosper. And it gave the proposed company an interest in the careful discharge of its duty, by making its profits increase in exact proportion with the increase of the trade, and, of course, with the facilities and accommodation by which the trade was promoted.

"Three petitions were presented to the House of Commons in behalf of the proposed company, by the merchants of London, Bristol, and Liverpool. It was urged, that the proposed company would, through the competition of which it would be productive, cause a great extension of the trade; that it would produce a larger exportation of our own produce and manufactures to India, and reduce the price of all Indian commodities to the people at home; that new channels of traffic would be opened in Asia and America, as well as in Europe; that the duties of customs and excise would be increased; and that the waste and extravagance caused by the monopoly would be entirely avoided." — (*Mill's India*, vol. iii. p. 37.)

But these arguments did not prevail. The Company magnified the importance of their trade; and contended, that it would be unwise to risk advantages already realised, for the sake of those that were prospective and contingent. They alleged that, if the trade to India were thrown open, the price of goods in India would be so much enhanced by the competition of different traders, and their price in England so much diminished, that the freedom of the trade would certainly end in the ruin of all who had been foolish enough to adventure in it. To enlarge on the fallacy of these statements would be worse than superfluous. It is obvious that nothing whatever could have been risked, and that a great deal would have been gained, by opening the trade in the way that was proposed. And if it were really true that the trade to India ought to be subjected to a monopoly, lest the traders by their competition should ruin each other, it would follow that the trade to America — and not that only, but every branch both of the foreign and home trade of the empire — should be surrendered to exclusive companies. But such as the Company's arguments were, they seemed satisfactory to parliament. They, however, consented to reduce the interest on the debt due to them by the public from 5 to 4 per cent., and contributed a sum of 200,000*l.* for the public service. On these conditions it was agreed to extend their exclusive privileges to Lady-day, 1766, with the customary addition of 3 years' notice.

For about 15 years from this period, the Company's affairs went on without any very prominent changes. But notwithstanding the increased importation of tea, the consumption of which now began rapidly to extend, their trade continued to be comparatively insignificant. At an average of the 8 years ending with 1741, the value of the British goods and products of all sorts, exported by the Company to India and China,

amounted to only 157,944*l.* 4*s.* 7*d.* a year! And during the 7 years ending with 1748, they amounted to only 188,176*l.* 16*s.* 4*d.* And when it is borne in mind that these exports included the military stores of all sorts, forwarded to the Company's settlements in India and at St. Helena, the amount of which was, at all times, very considerable, it does appear exceedingly doubtful whether the Company really exported, during the entire period from 1730 to 1748, 150,000*l.* worth of British produce as a legitimate mercantile adventure! Their trade, such as it was, was entirely carried on by shipments of bullion; and even its annual average export, during the 7 years ending with 1748, only amounted to 548,711*l.* 19*s.* 2*d.* It would seem, indeed, that the Company had derived no perceptible advantage from the important concessions obtained from the Mogul emperor, in 1717. But the true conclusion is, not that these concessions were of little value, but that the deadening influence of monopoly had so paralysed the Company, that they were unable to turn them to account; and that, though without competitors, and with opulent kingdoms for their customers, their commerce was hardly greater than that carried on by some single merchants.

In 1732, the Company were obliged to reduce their dividend from 8 to 7 per cent., at which rate it continued till 1744.

The opposition the Company had experienced from the merchants, when the question as to the renewal of their charter was agitated, in 1730, made them very desirous to obtain the next renewal in as quiet a manner as possible. They therefore proposed, in 1743, when 23 years of their charter were yet unexpired, to lend 1,000,000*l.* to government, at 3 per cent., provided their exclusive privileges were extended to 1780, with the usual notice. And as none were expecting such an application, or prepared to oppose it, the consent of government was obtained without difficulty.

But the period was now come, when the mercantile character of the East India Company,—if, indeed, it could with propriety, be, at any time, said to belong to them,—was to be eclipsed by their achievements as a military power, and the magnitude of their conquests. For about two centuries after the European powers began their intercourse with India, the Mogul princes were regarded as amongst the most opulent and powerful of monarchs. Though of a foreign lineage—being descended from the famous Tamerlane, or Timur Bec, who overran India in 1400—and of a different religion from the great body of their subjects, their dominion was firmly established in every part of their extensive empire. The administration of the different provinces was committed to officers, denominated soubahdars, or nabobs, intrusted with powers, in their respective governments, similar to those enjoyed by the Roman prætors. So long as the emperors retained any considerable portion of the vigour and bravery of their hardy ancestors, the different parts of the government were held in due subordination, and the soubahdars yielded a ready obedience to the orders from Delhi. But the emperors were gradually debauched by the apparently prosperous condition of their affairs. Instead of being educated in the council or the camp, the heirs of almost unbounded power were brought up in the slothful luxury of the seraglio; ignorant of public affairs; benumbed by indolence; depraved by the flattery of women, of eunuchs, and of slaves; their minds contracted with their enjoyments; their inclinations were vilified by their habits; and their government grew as vicious, as corrupt, and as worthless as themselves. When the famous Kouli Khan, the usurper of the Persian throne, invaded India, the effeminate successor of Tamerlane and Aurengzebe was too unprepared to oppose, and too dastardly to think of avenging the attack. This was the signal for the dismemberment of the monarchy. No sooner had the invader withdrawn, than he soubahdars either openly threw off their allegiance to the emperor, or paid only species of nominal or mock deference to his orders. The independence of the soubahdars was very soon followed by wars amongst themselves; and, being well aware of the superiority of European troops and tactics, they anxiously courted the alliance and support of the French and English East India Companies. These bodies, having espoused different sides, according as their interests or prejudices dictated, began very soon to turn the quarrels of the soubahdars to their own account. Instead of being contented, as hitherto, with the possession of factories and trading towns, they aspired to the dominion of provinces; and the struggle soon came to be, not which of the native princes should prevail, but whether the English or the French should become the umpires of India.

But these transactions are altogether foreign to the subject of this work; nor could any intelligible account of them be given without entering into lengthened statements. We shall only, therefore, observe that the affairs of the French were ably conducted by La Bourdonnais, Dupleix, and Lally, officers of distinguished merit, and not less celebrated for their great actions than for the base ingratitude of which they were the victims. But though victory seemed at first to incline to the French and their allies, the English affairs were effectually retrieved by the extraordinary talents and address of a single individual; — Colonel (afterwards Lord) Clive was equally brave, ca terprising;

not scrupulous in the use of means; fertile in expedients; endowed with wonderful sagacity and resolution; and capable of turning even the most apparently adverse circumstances to advantage. Having succeeded in humbling the French power in the vicinity of Madras, Clive landed at Calcutta in 1757, in order to chastise the soubahdar, Surajah ul Dowlah, who had a short while before attacked the English factory at that place, and inhumanly shut up 146 Englishmen in a prison, where, owing to the excessive heat and want of water, 123 perished in a single night. Clive had only 700 European troops and 1,400 Sepoys with him when he landed; but with these, and 570 sailors furnished by the fleet, he did not hesitate to attack the immense army commanded by the soubahdar, and totally defeated him in the famous battle of Plassey. This victory threw the whole provinces of Bengal, Bahar, and Orissa, into our hands; and they were finally confirmed to us by the treaty negotiated in 1765.

Opinion has been long divided as to the policy of our military operations in India; and it has been strenuously contended, that we ought never to have extended our conquests beyond the limits of Bengal. The legislature seems to have taken this view of the matter; the House of Commons having resolved, in 1782, "that to pursue schemes of conquest and extent of dominion in India are measures repugnant to the wish, the honour, and the policy of this nation." But others have argued, and apparently on pretty good grounds, that, having gone thus far, we were compelled to advance. The native powers, trembling at the increase of British dominion, endeavoured, when too late, to make head against the growing evil. In this view they entered into combinations and wars against the English; and the latter having been uniformly victorious, their empire necessarily went on increasing, till all the native powers have been swallowed up in its vast extent.

The magnitude of the acquisitions made by Lord Clive powerfully excited the attention of the British public. Their value was prodigiously exaggerated; and it was generally admitted that the Company had no legal claim to enjoy, during the whole period of their charter, all the advantages resulting from conquests, to which the fleets and armies of the state had largely contributed. In 1767, the subject was taken up by the House of Commons; and a committee was appointed to investigate the whole circumstances of the case, and to calculate the entire expenditure incurred by the public on the Company's account. During the agitation of this matter, the right of the Company to the new conquests was totally denied by several members. In the end, however, the question was compromised by the Company agreeing to pay 400,000*l.* a year for 2 years; and in 1769, this agreement, including the yearly payment, was further extended for 5 years more. The Company, at the same time, increased their dividend, which had been fixed by the former agreement at 10, to 12½ per cent.

But the Company's anticipations of increased revenue proved entirely visionary. The rapidity of their conquests in India, the distance of the controlling authority at home, and the abuses in the government of the native princes, to whom the Company had succeeded, conspired to foster a strong spirit of peculation among their servants. Abuses of every sort were multiplied to a frightful extent. The English, having obtained, or rather enforced, an exemption from those heavy transit duties to which the native traders were subject, engrossed the whole internal trade of the country. They even went so far as to decide what quantity of goods each manufacturer should deliver, and what he should receive for them. It is due to the directors to say, that they exerted themselves to repress these abuses. But their resolutions were neither carried into effect by their servants in India, nor sanctioned by the proprietors at home; so that the abuses, instead of being repressed, went on acquiring fresh strength and virulence. The resources of the country were rapidly impaired; and while many of the Company's servants returned to Europe with immense fortunes, the Company itself was involved in debt and difficulties; and so far from being able to pay the stipulated sum of 400,000*l.* a year to government, was compelled to apply, in 1772, to the Treasury for a loan!

In this crisis of their affairs, government interposed, and a considerable change was made in the constitution of the Company. The dividend was restricted to 6 per cent., till the sum of 1,400,000*l.*, advanced to them by the public, should be paid. It was further enacted, that the court of directors should be elected for 4 years, 6 members annually, but none to hold their seats for more than 4 years at a time; that no person was to vote at the courts of proprietors who had not possessed his stock for 12 months; and that the amount of stock required to qualify for a vote should be increased from 500*l.* to 1,000*l.* The jurisdiction of the Mayor's Court at Calcutta was in future confined to small mercantile cases; and, in lieu of it, a new court was appointed, consisting of a chief justice and 3 principal judges appointed by the Crown. A superiority was also given to Bengal over the other presidencies, Mr. Warren Hastings being named in the act as governor-general of India. The governor-general, councillors, and judges, were prohibited from having any concern whatever in trade; and no person residing in the Company's settlements was allowed to take more than 12 per cent. per

annum for money. Though strenuously opposed, these measures were carried by a large majority.

At this period (1773) the total number of proprietors of East India stock, with their qualifications as they stood in the Company's book, were as follows: —

	Proprietors.	Stocks. £	s.	d.
Englishmen, possessing 1,000*l.* stock and upwards -	487	1,018,398	19	11
Foreigners, possessing 1,000*l.* stock and upwards -	325	890,940	17	0
Englishmen, possessing 500*l.* stock and upwards -	1,246	634,464	1	8
Foreigners, possessing 500*l.* stock and upwards -	95	50,226	0	0
Total - - -	2,153	£2,594,029	18	7

Notwithstanding the vast extension of the Company's territories, their trade continued to be apparently insignificant. During the 3 years ending with 1773, the value of the entire exports of British produce and manufactures, including military stores exported by the Company to India and China, amounted to 1,469,411*l.*, being at the rate of 489,803*l.* a year; the annual exports of bullion during the same period being only 84,933*l.*! During the same 3 years, 23 ships sailed annually for India. The truth, indeed, seems to be, that, but for the increased consumption of tea in Great Britain, the Company would have entirely ceased to carry on any branch of trade with the East; and the monopoly would have excluded us as effectually from the markets of India and China as if the trade had reverted to its ancient channels, and the route by the Cape of Good Hope been relinquished.

In 1781, the exclusive privileges of the Company were extended to 1791, with 3 years' notice; the dividend on the Company's stock was fixed at 8 per cent.; three fourths of their surplus revenues, after paying the dividend, and the sum of 400,000*l.* payable to government, was to be applied to the public service, and the remaining fourth to the Company's own use.

In 1780, the value of British produce and manufactures exported by the Company to India and China amounted to only 386,152*l.*; the bullion exported during the same year was 15,014*l.* The total value of the exports during the same year was 12,648,616*l.*; showing that the East India trade formed only *one thirty-second* part of the entire foreign trade of the empire!

The administration of Mr. Hastings was one continued scene of war, negotiation, and intrigue. The state of the country, instead of being improved, became worse; so much so, that in a council minute by Marquis Cornwallis, dated the 18th of September, 1789, it is distinctly stated, "*that one third of the Company's territory is now a jungle for wild beasts.*" Some abuses in the conduct of their servants were, indeed, rectified; but, notwithstanding, the nett revenue of Bengal, Bahar, and Orissa, which, in 1772, had amounted to 2,126,766*l.*, declined, in 1785, to 2,072,963*l.* This exhaustion of the country, and the expenses incurred in the war with Hyder Ally and France, involved the Company in fresh difficulties. And being unable to meet them, they were obliged, in 1783, to present a petition to parliament, setting forth their inability to pay the stipulated sum of 400,000*l.* a year to the public, and praying to be excused from that payment, and to be supported by a loan of 900,000*l.*

All parties seemed now to be convinced that some further changes in the constitution of the Company had become indispensable. In this crisis, Mr. Fox brought forward his famous India Bill; the grand object of which was to abolish the courts of directors and proprietors, and to vest the government of India in the hands of 7 commissioners appointed by parliament. The coalition between Lord North and Mr. Fox had rendered the ministry exceedingly unpopular; and advantage was taken of the circumstance to raise an extraordinary clamour against the bill. The East India Company stigmatised it as an invasion of their chartered rights; though it is obvious, that, from their inability to carry into effect the stipulations under which those rights were conceded to them, they necessarily reverted to the public; and it was as open to parliament to legislate upon them as upon any other question. The political opponents of the government represented the proposal for vesting the nomination of commissioners in the legislature, as a daring invasion of the prerogative of the Crown, and an insidious attempt of the minister to render himself all-powerful, by adding the patronage of India to that already in his possession. The bill was, however, carried through the House of Commons; but, in consequence of the ferment it had excited, and the avowed opposition of his Majesty, it was thrown out in the House of Lords. This event proved fatal to the coalition ministry. A new one was formed, with Mr. Pitt at its head; and parliament being soon after dissolved, the new minister acquired a decisive majority in both Houses. When thus secure of parliamentary support, Mr. Pitt brought forward his India Bill, which was successfully carried through all its stages. By this

bill a Board of Control was erected, consisting of 6 members of the privy council, who were "to check, superintend, and control all acts, operations, and concerns, which in anywise relate to the civil or military government, or revenues, of the territories and possessions of the East India Company." All communications to or from India, touching any of the above matters, were to be submitted to this Board; the directors being ordered to yield obedience to its commands, and to alter or amend all instructions sent to India as directed by it. A secret committee of 3 directors was formed, with which the Board of Control might transact any business it did not choose to submit to the court of directors. Persons returning from India were to be obliged, under very severe penalties, to declare the amount of their fortunes; and a tribunal was appointed for the trial of all individuals accused of misconduct in India, consisting of a judge from each of the Courts of King's Bench, Common Pleas, and Exchequer; 5 members of the House of Lords, and 7 members of the House of Commons; the last being chosen by lot at the commencement of each session. The superintendence of all commercial matters continued, as formerly, in the hands of the directors.

During the administration of Marquis Cornwallis, who succeeded Mr. Hastings, Tippoo Saib, the son of Hyder Ally, was stripped of nearly half his dominions; the Company's territorial revenue was, in consequence, greatly increased; at the same time that the permanent settlement was carried into effect in Bengal, and other important changes accomplished. Opinion has been long divided as to the influence of these changes. On the whole, however, we are inclined to think that they have been decidedly advantageous. Lord Cornwallis was, beyond all question, a sincere friend to the people of India; and laboured earnestly, if not always successfully, to promote their interests, which he well knew were identified with those of the British nation.

During the 3 years ending with 1793, the value of the Company's exports of British produce and manufactures fluctuated from 928,783*l.* to 1,031,262*l.* But this increase is wholly to be ascribed to the reduction of the duty on tea in 1784, and the vast increase that, consequently, took place in its consumption. — (See article Tea.) Had the consumption of tea continued stationary, there appear no grounds for thinking that the Company's exports in 1793 would have been greater than in 1780; unless an increase had taken place in the quantity of military stores exported.

In 1793, the Company's charter was prolonged till the 1st of March, 1814. In the act for this purpose, a species of provision was made for opening the trade to India to private individuals. All his Majesty's subjects, residing in any part of his European dominions, were allowed to export to India any article of the produce or manufacture of the British dominions, except military stores, ammunition, masts, spars, cordage, pitch, tar, and copper; and the Company's civil servants in India, and the free merchants resident there, were allowed to ship, on their own account and risk, all kinds of Indian goods, except calicoes, dimities, muslins, and other piece goods. But neither the merchants in England, nor the Company's servants or merchants in India, were allowed to export or import except in Company's ships. And in order to insure such conveyance, it was enacted, that the Company should annually appropriate 3,000 tons of shipping for the use of private traders; it being stipulated that they were to pay, in time of peace, 5*l.* outwards, and 15*l.* homewards, for every ton occupied by them in the Company's ships; and that this freight might be raised in time of war, with the approbation of the Board of Control.

It might have been, and, indeed, most probably was, foreseen that very few British merchants or manufacturers would be inclined to avail themselves of the privilege of sending out goods in Company's ships; or of engaging in a trade fettered on all sides by the jealousy of powerful monopolists, and where, consequently, their superior judgment and economy would have availed almost nothing. As far, therefore, as they were concerned, the relaxation was more apparent than real, and did not produce any useful results.* It was, however, made use of to a considerable extent by private merchants in India; and also by the Company's servants returning from India, many of whom invested a part, and some the whole, of their fortune, in produce fit for the European markets.

The financial difficulties of the East India Company led to the revolution which took place in its government in 1784. But, notwithstanding the superintendence of the Board of Control, its finances have continued nearly in the same unprosperous state as before. We have been favoured, from time to time, with the most dazzling accounts of revenue that was to be immediately derived from India; and numberless acts of parliament have been passed for the appropriation of surpluses that never had any existence

* In his letter to the East India Company, dated the 21st of March, 1812, Lord Melville says: "It will not be denied that the facilities granted by that act (the act of 1793) have not been satisfactory, at least to the merchants either of this country or of India. They have been the source of constant dispute, and they have even entailed a heavy expense upon the Company without affording to the public any adequate benefit from such a sacrifice." — (*Papers published by E. I. Comp.* 1813, p. 84.)

except in the imagination of their framers. The proceedings that took place at the renewal of the charter, in 1793, afford a striking example of this. Lord Cornwallis had then concluded the war with Tippoo Saib, which had stripped him of half his dominions: the perpetual settlement, from which so many benefits were expected to be derived, had been adopted in Bengal; and the Company's receipts had been increased, in consequence of accessions to their territory, and subsidies from native princes, &c., to upwards of *eight* millions sterling a year, which, it was calculated, would afford a future annual surplus, after every description of charge had been deducted, of 1,240,000*l.* Mr. Dundas (afterwards Lord Melville), then president of the Board of Control, availed himself of these favourable appearances, to give the most flattering representation of the Company's affairs. There could, he said, be no question as to the permanent and regular increase of the Company's surplus revenue: he assured the House that the estimates had all been framed with the greatest care; that the Company's possessions were in a state of prosperity till then unknown in India; that the abuses, which had formerly insinuated themselves into some departments of the government, had been rooted out; and that the period was at length arrived, when India was to pour her golden treasures into the lap of England! Parliament participated in these brilliant anticipations, and in the act prolonging the charter it was enacted, 1st, That 500,000*l.* a year of the surplus revenue should be set aside for reducing the Company's debt in India to 2,000,000*l.*; 2dly, That 500,000*l.* a year should be paid into the exchequer, to be appropriated for the public service as parliament should think fit to order; 3dly, When the India debt was reduced to 2,000,000*l.*, and the bond debt to 1,500,000*l.*, *one sixth* part of the surplus was to be applied to augment the dividends, and the other *five sixths* were to be paid into the Bank, in the name of the commissioners of the national debt, to be accumulated as a *guarantee fund*, until it amounted to 12,000,000*l.*; and when it reached that sum, the dividends upon it were to be applied to make up the dividends on the capital stock of the Company to 10 per cent., if, at any time, the funds appropriated to that purpose should prove deficient, &c.

Not one of these anticipations has been realised! Instead of being diminished, the Company's debts began immediately to increase. In 1795, they were authorised to add to the amount of their floating debt. In 1796, a new device to obtain money was fallen upon. Mr. Dundas represented that as all competition had been destroyed in consequence of the war, the Company's commerce had been greatly increased, and that their mercantile capital had become insufficient for the extent of their transactions. In consequence of this representation, leave was given to the Company to add *two millions* to their capital stock by creating 20,000 new shares; but as these shares sold at the rate of 173*l.* each, they produced 3,460,000*l.* In 1797, the Company issued additional bonds to the extent of 1,417,000*l.*; and, notwithstanding all this, Mr. Dundas stated in the House of Commons, on the 13th of March, 1799, that there had been a deficit in the previous year of 1,319,000*l.*

During the administration of the Marquis Wellesley, which began in 1797–8 and terminated in 1805–6, the British empire in India was augmented by the conquest of Seringapatam and the whole territories of Tippoo Saib, the cession of large tracts by the Mahratta chiefs, the capture of Delhi, the ancient seat of the Mogul empire, and various other important acquisitions; so that that the revenue, which had amounted to 8,059,000*l.* in 1797, was increased to 15,403,000*l.* in 1805. But the expenses of government, and the interest of the debt, increased in a still greater proportion than the revenue; having amounted, in 1805, to 17,672,000*l.*, leaving a deficit of 2,269,000*l.* In the following year the revenue fell off nearly 1,000,000*l.*, while the expenses continued nearly the same. And there was, at an average, a continued excess of expenditure, including commercial charges, and a contraction of fresh debt, down to 1811–12.

Notwithstanding the vast additions made to their territories, the Company's commerce with them continued to be very inconsiderable. During the 5 years ending with 1811, the exports to India by the Company, exclusive of those made on account of individuals in their ships, were as under: —

	£		£
1807	952,416	1810	1,010,815
1808	919,544	1811	1,033,816
1809	866,153		

The exports by the private trade, and the *privilege* trade, that is, the commanders and officers of the Company's ships, during the above-mentioned years, were about as large. During the 5 years ending with 1807–8, the annual average imports into India by British private traders, only, amounted to 305,496*l.* — (*Papers published by the East India Company in* 1813, 4to. p. 56.)

The Company's exports include the value of the military stores sent from Great Britain to India. The ships employed in the trade to *India and China*, during the same 5 years, varied from 44 to 53, and their burden from 36,671 to 45,349 tons.

For some years previously to the termination of the Company's charter in 1813, the conviction had been gaining ground among all classes, that the trade to the East was capable of being very greatly extended; and that it was solely owing to the want of enterprise and competition, occasioned by its being subjected to a monopoly, that it was confined within such narrow limits. Very great efforts were, consequently, made by the manufacturing and commercial interests to have the monopoly set aside, and the trade to the East thrown open. The Company vigorously resisted these pretensions; and had interest enough to procure a prolongation of the privilege of carrying on an exclusive trade to China to the 10th of April, 1831, with 3 years' notice; the government of India being continued in their hands for the same period. Fortunately, however, the trade to India was opened, under certain conditions, to the public. The principal of these conditions were, that private individuals should trade, directly only, with the presidencies of Calcutta, Madras, and Bombay, and the port of Penang; that the vessels fitted out by them should not be under 350 tons burden; and that they should abstain, unless permitted by the Company, or the Board of Control, from engaging in the carrying trade of India, or in the trade between India and China. And yet, in despite of these disadvantages, such is the energy of individual enterprise as compared with monopoly, that the private traders gained an almost immediate ascendancy over the East India Company, and in a very short time more than *trebled* our trade with India!

In the Report of the committee of the House of Lords on the foreign trade of the country, printed in May, 1821, it is stated, that "the greatly increased consumption of British goods in the East, since the commencement of the free trade, cannot be accounted for by the demand of European residents, the number of whom does not materially vary; and it appears to have been much the greatest in articles calculated for the general use of the natives. That of the cotton manufactures of this country alone is stated, since the first opening of the trade, to have been augmented from *four* to *five* fold (it is now augmented from *fifty* to *sixty* fold). The value of the merchandise exported from Great Britain to India, which amounted, in 1814, to 870,177*l.*, amounted *, in 1819, to 3,052,741*l.*; and although the market appears then to have been so far overstocked as to occasion a diminution of nearly one half in the exports of the following year, that diminution appears to have taken place more in the articles intended for the consumption of Europeans than of natives; and the trade is now stated to the committee, by the best informed persons, to be reviving. When the amount of population, and the extent of the country over which the consumption of these articles is spread, are considered, it is obvious that any facility which can, consistently with the political interests and security of the Company's dominions, be given to the private trader, for the distribution of his exports, by increasing the number of ports at which he may have the option of touching in pursuit of a market, cannot fail to promote a more ready and extensive demand."

Besides the restraints imposed by the act of 1813 on the proceedings of the free traders†, they frequently experienced very great loss and inconvenience from the commercial speculations of the East India Company. The latter have had commercial residents, with large establishments of servants, some of them intended for coercive purposes, stationed in all the considerable towns; and the Marquis Wellesley has stated, "that the intimation of a wish from the Company's resident is always received as a command by the native manufacturers and producers." It was obviously impossible for a private trader to come fairly into competition with persons possessing such authority, and who were often instructed to make their purchases on any terms. Mr. Tucker, now deputy chairman of the Company, states, in his useful work on Indian finance, that the Company's investments (purchases) in India during the last 10 years may in some instances be said to have been forced; meaning by this, that the goods exported by them from India have sometimes been compulsorily obtained from the natives, and sometimes bought at a higher price than they would have brought in a market frequented only by regular merchants. But the truth is, that it was not in the nature of things that the Company's purchases could be fairly made; the natives could not deal with their servants as they would have dealt with private individuals; and it would be absurd to suppose that agents authorised to buy on account of government, and to draw on the public treasury for the means of payment, should generally evince the prudence and discretion of individuals directly responsible in their own private fortunes for their transactions. The interference of such persons would, under any circumstances, have rendered the East India trade peculiarly hazardous. But their influence in this respect was materially aggravated by the irregularity of their appearances. No individual, not belonging to the court of directors, could foresee whether the Company's agents would be in the market at all; or, if there, to what extent

* This is the amount of the Company's exports only, and the sum is not quite accurate, see *post*.

† These restraints were a good deal modified by the 3 Geo. 4. c. 80., passed in pursuance of the recommendation of the committee quoted above.

they would either purchase or sell. So capricious were their proceedings, that in some years they have laid out 700,000*l.* on indigo, while in others they have not laid out a single shilling; and so with other things. A fluctuating demand of this sort necessarily occasioned great and sudden variations of price, and was injurious alike to the producers and the private merchants. Mr. Mackenzie, late secretary to the government of Bengal, set the mischievous influence of the circumstances now alluded to in the clearest point of view, in his masterly evidence before the select committee of 1832 on the affairs of India; and he further showed, that it was not possible, by any sort of contrivance, to obviate the inconveniences complained of, and that they would unavoidably continue till the Company ceased to have any thing to do with commerce.

But besides being injurious to the private trader, and to the public generally, both in India and England, this trade was of no advantage to the East India Company. How, indeed, could it be otherwise? A company that maintained armies and retailed tea, that carried a sword in the one hand and a ledger in the other, was a contradiction; and, had she traded with success, would have been a prodigy. It was impossible for her to pay that attention to details that is indispensable to the carrying on of commerce with advantage. She may have gained something by her monopoly of the tea trade, though even that is very questionable; but it is admitted on all hands, that she has lost heavily by her trade to India.* When, therefore, the question as to the renewal of the charter came to be discussed in 1832 and 1833, the Company had no reasonable objection to urge against their being deprived of the privilege of trading. And the act 3 & 4 Will. 4. c. 85., for continuing the charter till 1854, has *terminated the Company's commercial character;* by enacting, that the Company's trade to China is to cease on the 22d of April, 1834†, and that the Company is, as soon as possible after that date, to dispose of their stocks on hand, and close their commercial business.

We congratulate our readers on this consummation. The trade to India, China, and the East generally, is now, for the first time, opened to free and unfettered mercantile enterprise. What has been effected since the opening of the trade to India in 1814, notwithstanding the many drawbacks under which it has laboured, is an earnest of what may be anticipated from the new arrangements. We have no doubt that it will be found that the commerce between the Eastern and Western worlds is as yet only in its infancy; and that it is destined, now that the incubus of monopoly is wholly removed, to attain to a magnitude and importance of which we can form no definite idea.

II. East India Company (Constitution of).

Under the new act, the functions of the East India Company are wholly political. She is to continue to govern India, with the concurrence and under the supervision of the Board of Control, nearly on the plan laid down in Mr. Pitt's act, till the 30th of April, 1854. All the real and personal property belonging to the Company on the 22d of April, 1834, is vested in the Crown, and is to be held or managed by the Company in trust for the same, subject of course to all claims, debts, contracts, &c. already in existence, or that may hereafter be brought into existence by competent authority. The Company's debts and liabilities are all charged on India. The dividend, which is to continue at 10½ per cent., is to be paid in England out of the revenues of India; and provision is made for the establishment of a *security fund* for its discharge. The dividend may be redeemed by parliament, on payment of 200*l.* for 100*l.* stock, any time after April, 1874; but it is provided, in the event of the Company being deprived of the government of India in 1854, that they may claim redemption of the dividend any time thereafter upon 3 years' notice. — (3 & 4 *Will.* 4. c. 85.)

Company's Stock — forms a capital of 6,000,000*l.*, into which all persons, natives or foreigners, males or females, bodies politic or corporate (the Governor and Company of the Bank of England only excepted), are at liberty to purchase, without limitation of amount. Since 1793, the dividends have been 10½ per cent., to which they are limited by the late act.

General Courts. — The proprietors in general court assembled are empowered to enact by-laws, and in other respects are competent to the complete investigation, regulation, and control of every branch of the Company's concerns; but, for the more prompt despatch of business, the executive detail is vested in a court of directors. A general court is required to be held once in the months of March, June, September, and December, in each year. No one can be present at a general court unless possessed of 500*l.* stock; nor can any person vote upon the determination of any question, who has not been in possession of 1,000*l.* stock for the preceding 12 months, unless such stock have been obtained by bequest or marriage. Persons possessed of 1,000*l.* stock are empowered to give a single vote; 3,000*l.* are a qualification for two votes; 6,000*l.* for three votes; and 10,000*l.* and upwards for four votes. There were 2,003 proprietors on the Company's books in 1825; of these, 1,494 were qualified to give single votes; 392, two votes; 69, three votes; and 48, four votes. Upon any special occasion, 9 proprietors, duly qualified by

* It is needless now to enter upon the controversy as to the origin of the Company's debt. — (See former edition of this work, p. 507.) It is probable that those who contend that this debt is *wholly attributable* to the Company's commercial operations, may have somewhat exaggerated their injurious influence. But we do not think that there is any room for doubting, notwithstanding the enormous prices charged on tea, that, for these many years past, the Company's trade has been, on the whole, productive of nothing but loss.

† For the new regulations as to the China trade, see

the possession of 1,000*l.* stock, may, by a requisition in writing to the court of directors, call a general court; which the directors are required to summon within 10 days, or, in default, the proprietors may call such court by notice affixed upon the Royal Exchange. In all such courts the questions are decided by a majority of voices; in case of an equality, the determination must be by the treasurer drawing a lot. Nine proprietors may, by a requisition in writing, demand a ballot upon any question, which shall not be taken within 24 hours after the breaking up of the general court.

Court of Directors. — The court of directors is composed of 24 members, chosen from among the proprietors, each of whom must be possessed of 2,000*l.* stock; nor can any director, after being chosen, act longer than while he continues to hold stock. Of these, 6 are chosen on the second Wednesday in April in each year, to serve for 4 years, in the room of 6 who have completed such service. After an interval of 12 months, those who had gone out by rotation are eligible to be re-elected for the ensuing 4 years. Formerly, no person who had been in the Company's civil or military service in India was eligible to be elected a director until he had been a resident in England 2 years after quitting the service: but this condition no longer exists; and all civil or military servants of the Company in India, supposing they are otherwise eligible, may be chosen directors immediately on their return to England, provided they have no unsettled accounts with the Company; if so, they are ineligible for 2 years after their return, unless their accounts be sooner settled. — (3 & 4 *Will.* 4. c. 85. § 28.) The directors choose annually, from amongst themselves, a chairman and a deputy chairman. They are required by by-laws to meet once in every week at least; but they frequently meet oftener, as occasion requires. Not less than 13 can form a court. Their determinations are guided by a majority: in case of an equality, the question must be decided by the drawing of a lot by the treasurer; upon all questions of importance, the sense of the court is taken by ballot. The Company's officers, both at home and abroad, receive their appointments immediately from the court; to whom they are responsible for the due and faithful discharge of the trust reposed in them. The patronage is, nevertheless, so arranged, as that each member of the court separately participates therein.

Secret Committee. — The principal powers of the court of directors are vested in a secret committee, forming a sort of cabinet or privy council. All communications of a confidential or delicate nature between the Board of Control and the Company are submitted, in the first instance at least, to the consideration of this committee; and the directions of the Board, as to political affairs, may be transmitted direct to India, through the committee, without being seen by the other directors. The secret committee is appointed by the court of directors, and its members are sworn to secresy.

III. East Indies (State of Society in, growing Demand for English Goods, Trade, Colonisation, etc.).

1. *Distinction of Castes in India. Inaccuracy of the Representations as to the Inhabitants being unalterably attached to ancient Customs and Practices.* — We have taken occasion, in the preceding sketch of the history of the East India Company, repeatedly to notice the small extent of the trade carried on by its agency. It has been contended, however, that this is to be ascribed, not to the deadening influence of monopoly, but to the peculiar state of the people of India. A notion has long been prevalent in this quarter of the world, that the Hindoos are a race unsusceptible of change or improvement of any sort; that every man is brought up to the profession of his father, and can engage in none else; and that, owing to the simplicity and unalterableness of their habits, they never can be consumers, at least to any considerable extent, of foreign commodities. "What is now in India, has always been there, and is likely still to continue." — (*Robertson's Disquisition*, p. 202.) The Hindoos of this day are said to be the same as the Hindoos of the age of Alexander the Great. The description of them given by Arrian has been quoted as applying to their actual situation. It is affirmed that they have neither improved nor retrograded; and we are referred to India as to a country in which the institutions and manners that prevailed 3,000 years ago may still be found in their pristine purity! The President de Goguet lays it down distinctly, in his learned and invaluable work on the origin of laws, arts, and sciences, that in India "every trade is confined to a particular caste, and can be exercised only by those whose parents professed it." — (*Origin of Laws, &c.* Eng. trans. vol. iii. p. 24.) Dr. Robertson says, that "*the station of every Hindoo is unalterably fixed; his destiny is irrevocable; and the walk of life is marked out, from which he must never deviate.*" — (*Disquisition on India*, p. 199.) The same opinions are maintained by later authorities. Dr. Tennant says, that "the whole Indian community is divided into 4 great classes; and each class is stationed between certain walls of separation, which are impassable by the purest virtue, and most conspicuous merit." — (Quoted by *Mr. Rickards*, p. 6.) This unalterable destiny of individuals has been repeatedly assumed in the despatches and official papers put forth by the East India Company; and has been referred to on all occasions by them and their servants, as a proof that the depressed and miserable condition of the natives is not owing to misgovernment, or to the weight of the burdens laid upon them; and that it is in vain to think of materially improving their condition, or of making them acquainted with new arts, or giving them new habits, so long as the institution of castes, and the prejudices to which it has given rise, preserve their ascendancy unimpaired.

But notwithstanding the universal currency which the opinions now referred to have obtained, and the high authority by which they are supported, they are, in all the most essential respects, entirely without foundation! The books and codes of the Hindoos themselves, and the minute and careful observations that have recently been made on Indian society, have shown that the influence ascribed to the institution of castes by the ancients, and by the more early modern travellers, has been prodigiously exaggerated. In the first part of his excellent work on India, Mr. Rickards has established, partly by references to the authoritative books of the Hindoos, and partly by his own observations,

and those of Mr. Colebrook, Dr. Heber, and other high authorities, that the vast majority of the Hindoo population may, and, in fact, does engage in all sorts of employments. Mr. Rickards has further shown, that there is nothing in the structure of Indian society to oppose any serious obstacle to the introduction of new arts, or the spread of improvement; and that the causes of the poverty and misery of the people must be sought for in other circumstances than the institution of castes, and the nature of Hindoo superstition.

The early division of the population into the 4 great classes of priests (Brahmins), soldiers (Cshatryas), husbandmen and artificers (Vaisyas), and slaves (Sudras), was maintained only for a very short period. The Hindoo traditions record that a partial intermixture of these classes took place at a very remote epoch; and the mixed brood thence arising were divided into a vast variety of new tribes, or castes, to whom, speaking generally, no employments are forbidden.

"The employments," says Mr. Rickards, "allowed to these mixed and impure castes, may be said to be every description of handicraft, and occupation, for which the wants of human society have created a demand. Though many seem to take their names from their ordinary trade or profession, and some have duties assigned them too low, and disgusting, for any others to perform, but from the direst necessity; yet no employment, generally speaking, is forbidden to the mixed and impure tribes, excepting three of the prescribed duties of the sacerdotal class; viz. teaching the *Vedas*, officiating at a sacrifice, and receiving presents from a pure-handed giver; which three are exclusively *Brahminical*."

Mr. Colebrook, who is acknowledged on all hands to be one of the very highest authorities, as to all that respects Indian affairs, has a paper in the fifth volume of the *Asiatic Researches*, on the subject of castes. In this paper, Mr. Colebrook states that the *Jatimala*, a Hindoo work, enumerates *forty-two* mixed classes springing from the intercourse of a man of inferior class with a woman of a superior class, or in the *inverse* order of the classes. Now, if we add to these the number that must have sprung from intermixture in the *direct* order of the classes, and the hosts further arising from the continued intermixture of the mixed tribes amongst themselves, we shall not certainly be disposed to dissent from Mr. Colebrook's conclusion, "that the subdivisions of these classes have further multiplied distinctions to an *endless variety*."

Mr. Colebrook has given the following distinct and accurate account of the professions and employments of the several classes at the present day. It forms a curious commentary on the "irrevocable destiny" of Dr. Robertson, and the "impassable walls" of Dr. Tennant.

"A *Brahman*, unable to subsist by his duties, may live by the duty of a soldier; if he cannot get a subsistence by either of these employments, he may apply to tillage and attendance on cattle, or gain a competence by traffic, avoiding certain commodities. A *Cshatrya* in distress, may subsist by all these means; but he must not have recourse to the highest functions. In seasons of distress, a further latitude is given. The practice of medicine, and other learned professions, painting, and other arts, work for wages, menial service, alms, and usury, are among the modes of subsistence allowed both to the *Brahman* and *Cshatrya*. A *Vaisya*, unable to subsist by his own duties, may descend to the servile acts of a *Sudra*: and a *Sudra*, not finding employment by waiting on men of the higher classes, may subsist by handicrafts; principally following those mechanical operations, as joinery and masonry, and practical arts, as painting and writing, by which he may serve men of superior classes; and although a man of a lower class is in general restricted from the acts of a higher class, the *Sudra* is expressly permitted to become a trader, or a husbandman.

"Besides the particular occupation assigned to each of the mixed classes, they have the alternative of following that profession, which regularly belongs to the class from which they derive their origin on the mother's side; those at least have such an option, who are born in the direct order of the classes. *The mixed classes are also permitted to subsist by any of the duties of a Sudra, that is, by menial service, by handicrafts, by commerce, and agriculture.* Hence it appears, THAT ALMOST EVERY OCCUPATION, THOUGH REGULARLY IT BE THE PROFESSION OF A PARTICULAR CLASS, IS OPEN TO MOST OTHER CLASSES; and that the limitations, far from being rigorous, do in fact reserve only the peculiar profession of the *Brahman*, which consists in teaching the *Veda*, and officiating at religious ceremonies."

"We have thus," says Mr. Rickards, by whom this passage has been quoted, "the highest existing authority for utterly rejecting the doctrine of the whole Hindoo community 'being divided into four castes;' and of their peculiar prerogatives being guarded inviolate by "impassable walls of separation.' It is also clear that the intermixture of castes had taken place, to an indefinite extent, at the time when the *Dherma Sastra* was composed, which Sir William Jones computes to be about 880 years B. C.; for the mixed classes are specified in this work, and it also refers, in many places, to past times, and to events which a course of time only could have brought about. The origin of the intermixture is therefore lost in the remotest and obscurest antiquity; and having been carried on through a long course of ages, a heterogeneous mass is every where presented to us, in these latter times, without a single example in any particular state, or kingdom, or separate portion of the Hindoo community, of that quadruple division of castes, which has been so confidently insisted upon.

"I have myself seen carpenters of five or six different castes, and as many different bricklayers, employed on the same building. The same diversity of castes may be observed among the craftsmen in dockyards, and all other great works; and those, who have resided for any time in the principal commercial cities of India, must be sensible, that every increasing demand for labour, in all its different branches and varieties of old and new arts, has been speedily and effectually supplied, in spite of the tremendous institution of castes; which we are taught to believe forms so impassable an obstruction to the advancement of Indian industry."

2. *Growing Demand for English Goods.* — It is difficult to suppose that the directors of the East India Company should not have been early aware of the fallacy of the opinions as to the fixedness of Indian habits. So far, however, as we know, they have not, in this instance, evinced any acquaintance with the discoveries of their servants. On the contrary, in all the discussions that took place with respect to the opening of the trade in 1814, the Company invariably contended that no increase of trade to India

could be expected. In a letter of the chairman and deputy chairman to the Right Honourable Robert Dundas, dated 13th of January, 1809, it is stated, that the small demand for foreign commodities in India "results from the nature of the Indian people, their climate, and their usages. The articles of first necessity their own country furnishes more abundantly and more cheaply than it is possible for Europe to supply them. The labour of the great body of the common people only enables them to subsist on rice, and to wear a slight covering of cotton cloth; they, therefore, *can purchase none of the superfluities we offer them.* The comparatively few in better circumstances, restricted, like the rest, by numerous religious and civil customs, of which all are remarkably tenacious, find few of our commodities to their taste; and their climate, so dissimilar to ours, renders many of them unsuitable to their use; so that a commerce between them and us cannot proceed far upon the principle of supplying mutual wants. Hence, except woollens, in a very limited degree, for mantles in the cold season, and metals, on a scale also very limited, to be worked up by their own artisans for the few utensils they need, hardly any of our staple commodities find a vent among the Indians; the other exports which Europe sends to India being chiefly consumed by the European population there, and some of the descendants of the early Portuguese settlers, all of whom, taken collectively, form but a small body, in view to any question of national commerce."—(*Papers published by authority of the East India Company*, 1813, p. 21.)

The volume from which we have made this extract contains a variety of passages to the same effect. So confident, indeed, were the Company that they had carried the trade to India to the utmost extent of which it was capable, that it is expressly stated, in resolutions passed in a general court held at the India House, on the 26th of January, 1813, "that no large or sudden addition can be made to the amount of British exports to India or China;" that the Company had suffered a loss in attempting to extend this branch of their trade; that the warehouses at home were glutted with Indian commodities for which there was no demand; and that to open the outports to the trade would be no other than "a ruinous transfer of it into new channels, to the destruction of immense and costly establishments, and the beggary of many thousands of industrious individuals."

Luckily, however, these representations were unable to prevent the opening of the trade, and the result has sufficiently demonstrated their fallacy. The enterprise and exertion of individuals has vastly increased our exports to India — to that very country which the Company had so confidently pronounced was, and would necessarily continue to be, incapable of affording any additional outlet for our peculiar products!

The commercial accounts for 1812 and 1813 were unfortunately destroyed by the fire at the Custom-house. The trade to India was opened on the 10th of April, 1814; and in that year the declared or real value of the products exported from Great Britain to the countries eastward of the Cape of Good Hope, excepting China, by the East India Company, was 826,558*l.*, and by the private traders, 1,048,132*l.* In 1817, the Company's exports had declined to 638,382*l.*, while those of the private traders had increased to 2,750,333*l.*; and in 1828, the former had sunk to only 488,601*l.*, while the latter had increased to 3,979,072*l.*, being more than double the total exports to India, as well by the Company as by private traders, in 1814!

The Company have stated, and no doubt truly, that they have lost a very large sum in attempting to extend the demand for British woollens in India and China, which, notwithstanding, continues very limited. But in their efforts to force the sale of woollens, they seem to have entirely forgotten that we had attained to great excellency in the manufacture of cotton stuffs, the article principally made use of as clothing in Hindostan; and that, notwithstanding the cheapness of labour in India, the advantage we derived from our superior machinery might enable us to offer cotton stuffs to the natives at a lower price than they could afford to manufacture them for. No sooner, however, had the trade been opened to private adventurers, than this channel of enterprise was explored; and the result has been, that, instead of bringing cottons from India to England, the former has become *one of the best and most extensive markets for the cottons of the latter.* We question, indeed, whether, in the whole history of commerce, another equally striking example can be produced of the powerful influence of competition in opening new and almost boundless fields for the successful prosecution of commercial enterprise.

In 1814, the first year of the free trade to India, the exports of cotton amounted to 817,000 yards, of which only about 170,000 yards, valued at 17,778*l.*, were exported by the Company! The progress of the trade will be seen in the following statement: —

Account specifying the Quantities of the printed and plain Cotton Stuffs, the declared Value of all Sorts of manufactured Cotton Goods, the Quantity of Cotton Twist or Yarn, and the declared Value of the same, exported from the United Kingdom, to all Parts of the East, except China, each Year from 1814.

Years.	Cotton Manufactures.			Cotton Twist.	
	Printed.	Plain.	Declared Value.*	Twist.	Declared Value.
	Yards.	*Yards.*	£	*Lbs.*	£
1814	604,800	213,408	109,480	8	7
1815	866,077	489,399	142,410		
1816	991,147	714,611	160,534	624	190
1817	2,848,705	2,468,024	422,814	2,704	505
1818	2,227,665	4,614,381	700,892	1,861	455
1819	3,713,601	3,414,060	461,268	971	138
1820	7,509,000	6,484,256	834,118	224	24
1821	9,715,374	9,423,352	1,084,440	5,865	805
1822	9,029,204	11,712,639	1,145,057	22,200	2,335
1823	9,431,700	13,047,717	1,128,468	121,500	16,993
1824	9,611,880	14,858,515	1,113,477	105,350	13,041
1825	8,826,715	14,201,496	1,036,871	233,360	35,345
1826	9,750,076	15,248,781	994,019	918,587	100,804
1827	14,264,794	27,295,286	1,614,517	3,063,668	274,002
1828	12,410,220	30,411,857	1,621,560	4,558,185	388,888
1829	11,215,743	32,893,931	1,453,404	2,927,476	200,552
1830	13,595,074	43,481,156	1,760,552	4,689,570	324,955
1831	14,569,583	35,012,953	1,419,995	6,541,853	483,762
1832	18,291,650	39,276,511	1,531,393	4,295,427	309.719

The East India Company contributed nothing whatever to this extraordinary increase of the cotton trade; their exports not having been so large in any one year as in 1814, when they only amounted to the inconsiderable sum already mentioned.

The demand for several other articles of British manufacture has recently increased, though not in the same unprecedented manner as cotton, with considerable rapidity. Notwithstanding all that has been said as to the immutability of Hindoo habits, the fact is not to be denied, that a taste for European products and customs is rapidly spreading itself over India. And the fair presumption is, that it will continue to gain ground according as education is more diffused, and as the natives become better acquainted with our language, arts, and habits. The authenticity of Dr. Heber's statements cannot be called in question; and there are many passages in different parts of his Journal that might be quoted in corroboration of what has now been stated. Our limits, however, will only permit us to make a very few extracts.

"Nor have the religious prejudices, and the unchangeableness of the Hindoo habits, been less exaggerated. Some of the best informed of their nation, with whom I have conversed, assure me, that half their most remarkable customs of civil and domestic life are borrowed from their Mohammedan conquerors; and *at present there is an obvious and increasing disposition to imitate the English in every thing*, which has already led to very remarkable changes, and will, probably, to still more important. The wealthy natives now all affect to have their houses decorated with Corinthian pillars, and filled with English furniture; they drive the best horses and the most dashing carriages in Calcutta; many of them speak English fluently, and are tolerably read in English literature; and the children of one of our friends I saw one day dressed in jackets and trowsers, with round hats, shoes, and stockings. In the Bengalee newspapers, of which there are two or three, politics are canvassed with a bias, as I am told, inclined to Whiggism; and one of their leading men gave a great dinner, not long since, in honour of the Spanish revolution: among the lower orders the same feeling shows itself more beneficially in a growing neglect of caste."—(Vol. ii. p. 306.)

"To say that the Hindoos or Mussulmans are deficient in any essential feature of a civilised people, is an assertion which I can scarcely suppose to be made by any who have lived with them; their manners are at least as pleasing and courteous as those in the corresponding stations of life among ourselves; their houses are larger, and, according to their wants and climate, to the full as convenient as ours; their architecture is at least as elegant; nor is it true that in the mechanic arts they are inferior to the general run of European nations. Where they fall short of us, (which is chiefly in agricultural implements, and the mechanics of common life,) they are not, so far as I have understood of Italy and the south of France, surpassed in any degree by the people of those countries. Their goldsmiths and weavers produce as beautiful fabrics as our own; and it is so far from true that they are obstinately wedded to their old patterns, that they show an anxiety to imitate our models, and do imitate them very successfully. The ships built by native artists at Bombay are notoriously as good as any which sail from London or Liverpool. The carriages and gigs which they supply at Calcutta are as handsome, though not as durable, as those of Long Acre. In the little town of Monghyr, 300 miles from Calcutta, I had pistols, double-barrelled guns, and different pieces of cabinet work, brought down to my boat for sale, which in outward form (for I know no further) nobody but perhaps Mr. ———— could detect to be of Hindoo origin; and at Delhi, in the shop of a wealthy native jeweller, I found brooches, ear-rings, snuff-boxes, &c. of the latest models (so far as I am a judge), and ornamented with French devices and mottos."—(Vol. ii. p. 382.)

As Bishop Heber penetrated into the interior of India, he found the same taste as in Calcutta, for European articles and for luxuries, to prevail every where among the natives. Of Benares, he writes as follows:—

"But what surprised me still more, as I penetrated further into it, were the large, lofty, and handsome dwelling-houses, the beauty and apparent richness of the goods exposed in the bazaars, and the evident hum of business. Benares is in fact a very industrious and wealthy, as well as a very holy city. It is the great mart where the shawls of the north, the diamonds of the south, and the muslins of Dacca and the eastern provinces centre; and it has very considerable silk, cotton, and fine woollen manufactories of its own; while English hardware, swords, shields, and spears, from Lucknow and Monghyr, and *those European luxuries and elegancies which are daily becoming more popular in India*, circulate from hence through Bundlecund, Gorruckpoor, Nepaul, and other tracts which are removed from the main artery of the Ganges."—(Vol. i. p. 289.)

* Including lace, hosiery, and small wares.

Proceeding still further into the interior of the country, and when at Nusseerabad, distant above 1,000 miles from Calcutta, the bishop continues his Journal in the same strain; viz.

"European articles are, at Nusseerabad *, as might be expected, very dear; the shops are kept by a Greek and two Parsees from Bombay: they had in their list all the usual items of a Calcutta warehouse. English cotton cloths, both white and printed, are to be met with commonly in wear among the people of the country, and may, I learned to my surprise, be bought best and cheapest, as well as all kinds of hardware, crockery, writing-desks, &c., at Pallee, a large town and celebrated mart in Marwar, on the edge of the desert, several days' journey west of Joudpoor, where, till very lately, no European was known to have penetrated."—(Vol. ii. p. 36.)

As to the character of the Hindoos, their capacity, and even anxious desire for improvement, the bishop's testimony is equally clear and decided; and as this is a point of pre-eminent importance, the reader's attention is requested to the following statements:—

"In the schools which have been lately established in this part of the empire, of which there are at present 9 established by the Church Missionary, and 11 by the Christian Knowledge Societies, some very unexpected facts have occurred. As all direct attempts to convert the children are disclaimed, the parents send them without scruple. But it is no less strange than true, that there is no objection made to the use of the Old and New Testament as a class-book; that so long as the teachers do not urge them to eat what will make them lose their caste, or to be baptised, or to curse their country's gods, they readily consent to every thing else; and not only Mussulmans, but Brahmins, stand by with perfect coolness, and listen sometimes with apparent interest and pleasure, while the scholars, by the road side, are reading the stories of the creation and of Jesus Christ."—(Vol. ii. p. 290.)

"Hearing all I had heard of the prejudices of the Hindoos and Mussulmans, I certainly did not at all expect to find that the common people would, not only without objection, but with the greatest thankfulness, send their children to schools on Bell's system; and they seem to be fully sensible of the advantages conferred by writing, arithmetic, and, above all, by a knowledge of English. There are now in Calcutta, and the surrounding villages, 20 boys' schools, containing 60 to 120 each; and 23 girls', each of 25 or 30."—(Vol. ii. p. 300.)

"In the same holy city (Benares) I visited another college, founded lately by a wealthy Hindoo banker, and intrusted by him to the management of the Church Missionary Society, in which, besides a grammatical knowledge of the Hindoostanee language, as well as Persian and Arabic, the senior boys could pass a good examination in English grammar, in Hume's History of England, Joyce's Scientific Dialogues, the use of the globes, and the principal facts and moral precepts of the Gospel; most of them writing beautifully in the Persian, and very tolerably in the English character, and excelling most boys I have met with in the accuracy and readiness of their arithmetic."—(Vol. ii. p. 388.)

"The different nations which I have seen in India, (for it is a great mistake to suppose that all India is peopled by a single race, or that there is not as great a disparity between the inhabitants of Guzerat, Bengal, the Dooab, and the Deccan, both in language, manners, and physiognomy, as between any four nations in Europe,) have, of course, in a greater or less degree, the vices which must be expected to attend on arbitrary government, a demoralising and absurd religion, and (in all the independent states, and in some of the districts which are partially subject to the British) a laxity of law, and an almost universal prevalence of intestine feuds and habits of plunder. The general character, however, has much which is extremely pleasing to me; they are brave, courteous, intelligent, and most eager after knowledge and improvement, with a remarkable talent for the sciences of geometry, astronomy, &c., as well as for the arts of painting and sculpture. In all these points they have had great difficulties to struggle with, both from the want of models, instruments, and elementary instruction; the indisposition, or rather the horror, entertained, till lately, by many among their European masters, for giving them instruction of any kind; and now from the real difficulty which exists of translating works of science into languages which have no corresponding terms."—(Vol. ii. p. 409.)

Even if our space permitted, it would be unnecessary to add to these extracts. The facts and circumstances now mentioned, must, we think, satisfy every one that there is nothing in the nature of Indian society, in the institution of castes as at present existing, or in the habits and customs of the natives, to hinder them from advancing in the career of civilisation, commerce, and wealth. "It may safely be asserted," says Mr. Hamilton, "that with so vast an extent of fertile soil, peopled by so many millions of tractable and industrious inhabitants, Hindostan is capable of supplying the whole world with any species of tropical merchandise; the production, in fact, being only limited by the demand."

3. *Trade with India.*—The principal obstacle in the way of extending the commerce with India does not consist in any indisposition on the part of the natives to purchase our commodities, but in the difficulty under which they are placed of furnishing equivalents for them. This, however, is rather a factitious than a real difficulty. It results more from the discriminating duties laid on several articles of Indian produce, than from their being, in any respect, unsuitable for our markets. Instead of admitting all the articles raised in the different dependencies of the empire for home consumption on the same terms, we have been accustomed to give a marked preference to those raised in the West Indies. We confess, however, that we are wholly unable to discover any grounds on which to vindicate such preference. The protection which every just government is bound to afford to all classes of its subjects, cannot vary with the varying degrees of latitude and longitude under which they happen to live. And as no one denies that the inhabitants of Bengal are, as well as those of Demerara or Jamaica, liege subjects of the British crown, it does seem quite at variance with every fair principle, to treat them worse than the West Indians, by imposing higher duties on their produce when brought to our markets.

The following Tables give a comprehensive view of the trade with India since the relaxation of the monopoly in 1814, and particularly during the 3 years ending with 1832:—

* Nusseerabad, near Ajmere, in the heart of the Rajepoot country.

An Account of the Value of the Imports and Exports between Great Britain and all Places Eastward of the Cape of Good Hope (excepting China); distinguishing the Private Trade from that of the East India Company, in each Year, from 1814 to the latest Period to which the same can be made up.

Years.	Value of Imports into Great Britain, from all Places Eastward of the Cape of Good Hope (except China), according to the Prices at the East India Company's Sales in the respective Years.			Value of Exports from Great Britain to all Places Eastward of the Cape of Good Hope (except China), according to the Declarations of the Exporters.		
	By the East India Company.	Private Trade.	Total Imports.	By the East India Company.	Private Trade.	Total Exports.
	£	£	£	£	£	£
1814	4,208,079	4,435,196	8,643,275	826,558	1,048,132	1,874,690
1815	3,016,556	5,119,611	8,136,167	996,248	1,569,513	2,565,761
1816	2,027,703	4,402,082	6,429,785	633,546	1,955,909	2,589,455
1817	2,323,630	4,541,956	6,865,586	638,382	2,750,333	3,388,715
1818	2,305,003	6,901,144	9,206,147	553,385	3,018,779	3,572,164
1819	1,932,401	4,683,367	6,615,768	760,508	1,586,575	2,347,083
1820	1,757,137	4,201,389	5,958,526	971,096	2,066,815	3,037,911
1821	1,743,733	3,031,413	4,775,146	887,619	2,656,776	3,544,395
1822	1,092,329	2,621,334	3,713,663	606,089	2,838,354	3,444,443
1823	1,587,078	4,344,973	5,932,051	458,550	2,957,705	3,416,255
1824	1,194,753	4,410,347	5,605,100	654,783	2,841,795	3,496,578
1825	1,462,692	4,716,083	6,178,775	598,553	2,574,660	3,173,213
1826	1,520,060	5,210,866	6,730,926	990,964	2,480,588	3,471,552
1827	1,612,480	4,068,537	5,681,017	805,610	3,830,580	4,636,190
1828	1,930,107	5,135,073	7,065,180	488,601	3,979,072	4,467,673
1829	1,593,442	4,624,842	6,218,284	434,586	3,665,678	4,100,264
1830	1,593,566	4,085,505	5,679,071	195,394	3,891,917	4,087,311
1831	1,434,372	4,295,438	5,729,810	146,480	3,488,571	3,635,051
1832	1,107,787	5,229,311	6,337,098	149,193	3,601,093	3,750,286

An Account of the Imports into Great Britain from all Places Eastward of the Cape of Good Hope (excepting China), distinguishing between those made by the East India Company and those made by private Traders during the Three Years ending with 1832. — (From *Parl. Paper*, No. 425. Sess. 1833.)

Articles.	1830.			1831.			1832.		
	East India Company.	Private Trade.	Total.	East India Company.	Private Trade.	Total.	East India Company.	Private Trade.	Total.
Aloes - - lbs.	-	51,065	51,065	- -	20,305	20,305	- -	31,684	31,684
Asafœtida - - —	- -	8,722	8,722	- -	892	892	- -	15,731	15,731
Benjamin - - —	- -	27,428	27,428	- -	83,879	83,879	- -	92,493	92,493
Borax - - - —	- -	172,642	172,642	- -	188,241	188,241	- -	150,295	150,295
Camphire, unrefined - —	- -	273,682	273,682	- -	106,979	106,979	- -	205,754	205,754
Canes, viz. rattans (not ground) - - numb.	- -	2,414,562	2,414,562	- -	3,908,423	3,908,423	- -	3,922,355	3,922,355
Coffee - - - lbs.	- -	7,025,799	7,025,799	- -	7,656,386	7,656,386	- -	10,407,857	10,407,857
Cotton piece goods, white calicoes and muslins, pcs.	171,223	- -	171,223	1,467	15,900	17,367	- -	79,090	79,090
Cotton piece goods, dyed cotton & grass cloths, pcs.	47,538	205,025	252,563	32,107	136,731	168,838	11,126	216,100	227,226
Nanquin cloths - —	- -	573,581	573,581	- -	854,671	854,671	- -	195,807	195,807
Cardamoms - - lbs.	- -	41,035	41,035	- -	72,800	72,800	- -	67,218	67,218
Cassia buds - - —	- -	86,758	86,758	- -	171,720	171,720	- -	75,173	75,173
Cassia lignea - - —	- -	831,296	831,296	- -	392,789	392,789	- -	996,368	996,368
Cinnamon - - —	- -	449,656	449,656	- -	222,991	222,991	- -	25,738	25,738
Cloves - - - —	- -	3,198	3,198	- -	124,607	124,607	- -	224,644	224,644
Cotton wool - - —	620,333	11,892,556	12,512,889	446,950	25,366,645	25,813,573	2,586,415	32,633,089	35,219,504
Dye & hard ebony, tons	- -	1,301	1,301	- -	111	111	- -	70	70
woods, viz. red sanders,	- -	14	14	- -	65	65	- -	149	149
Elephants' teeth - cwt.	- -	1,602	1,602	- -	2,173	2,173	- -	1,010	1,010
Galls - - - —	- -	1,561	1,561	- -	1,031	1,031	- -	867	867
Ginger - - —	35	1,234	1,269	- -	850	850	- -	2,509	2,509
Gum, animi and copal, lbs.	- -	55,651	55,651	- -	190,274	190,274	- -	155,290	155,290
Arabic - - cwt.	- -	1,962	1,962	- -	2,489	2,489	- -	2,693	2,693
Lac dye, lac lake, and cake lac - - lbs.	- -	485,269	485,269	- -	753,252	753,252	- -	459,379	459,379
Shell lac and seed lac —	- -	649,636	649,636	- -	1,146,128	1,146,128	- -	1,070,261	1,070,261
Stick lac - - —	- -	37,595	37,595	- -	149,144	149,144	- -	349,373	349,373
Hemp - - cwt.	- -	14,130	14,130	- -	11,735	11,735	- -	64,940	64,940
Nutmegs - - lbs.	- -	45,059	45,059	- -	110,039	110,039	- -	223,426	223,426
Oil, castor - - —	- -	441,275	441,275	- -	343,373	343,373	- -	257,387	257,387
Cocoa nut - - cwt.	- -	6,484	6,484	- -	3,555	3,555	- -	10,660	10,660
of mace & nutmegs, lbs.oz.	- -	466,15	466,15	- -	651,14	651,14	- -	264,0	264,0
Olibanum - - cwt.	- -	4,181	4,181	- -	761	761	- -	5,506	5,506
Pepper, of all sorts - lbs.	- -	2,742,224	2,742,224	1,070,464	5,057,776	6,128,240	- -	4,650,475	4,650,475
Hides, untanned - cwt.	- -	5,104	5,104	- -	3,376	3,376	- -	10,739	10,739
Indigo - - lbs.	2,154,341	5,772,516	7,926,857	1,781,978	5,223,268	7,005,246	1,731,898	4,479,997	6,211,895
Mace - - - —	- -	12,962	12,962	- -	40,921	40,921	- -	72,022	72,022
Madder root - - cwt.	- -	992	992	- -	2,571	2,571	- -	334	334
Mother o'pearl shells, rh.lbs.	- -	465,591	465,591	- -	510,492	510,492	- -	721,527	721,527
Musk - - - oz.	- -	3,320	3,320	- -	3,447	3,447	- -	8,129	8,129
Rhubarb - - lbs.	- -	157,211	157,211	- -	133,462	133,462	- -	115,257	115,257
Rice, not in the husk, cwt.	- -	125,487	125,487	- -	133,887	133,887	- -	171,560	171,560
in the husk - - bush.	- -	21,948	21,948	- -	55,555	55,555	- -	19,744	19,744
Safflower - - cwt.	- -	2,170	2,170	- -	2,436	2,436	- -	5,556	5,556
Sago - - - —	- -	2,661	2,661	- -	2,253	2,253	- -	3,577	3,577
Saltpetre - - - —	44,928	98,774	143,702	28,818	141,904	170,722	49,512	180,026	229,538
Senna - - - lbs.		176,593	176,593	- -	200,990	200,990	- -	464,917	464,917
Silk, raw, waste, & floss, —	1,020,963	715,268	1,736,231	1,088,973	636,677	1,725,650	727,175	1,087,641	1,814,816
Manufactured, viz.									
Bandana handkerchiefs and romals - pieces	68,524	55,752	124,276	62,997	121,401	184,398	63,547	148,340	211,887
Crape, in pieces —	- -	513	513	- -	932	932			
Crape shawls, scarf, and gown-pieces and handkerchiefs - numb.	- -	23,711	23,711	- -	17,740	17,740	- -	11,469	11,469
Taffaties, and other silks, in pieces - pieces	6,173	2,356	8,529	4,282	3,086	7,368	2,206	2,319	4,525
Soap - - cwt.	- -	11	11	- -	1	1			
Spirits, viz. arrack, imp.gall.		41,419	41,419	- -	7,911	7,911	- -	20,591	20,591
Sugar, unrefined - cwt.	118,358	660,729	779,087	102,476	647,972	750,448	56,060	647,077	703,137
Tin - - - —	- -	14,574	14,574	- -	5,472	5,472	- -	26,642	26,642
Tortoiseshell, rough - lbs.	- -	32,189	32,189	- -	30,902	30,902	- -	39,004	39,004
Turmeric - - —	- -	1,867,764	1,867,764					045	1,004,045
Vermilion - - —	- -	- -	-					926	1,926
Other articles - value *L.*	2,815	206,020	20					719	208,719
Total Value of Imports, *L.*	1,593,566	4,085,505	5,67					311	6,337,098

An Account of the Quantities and declared Values of the various Articles exported from Great Britain to all Places Eastward of the Cape of Good Hope (except China), distinguishing between those made by the East India Company, and those made by private Traders, during the Three Years ending with 1832. — (From the *Parl. Paper*, No. 425, Sess. 1833.)

Articles.	1830.			1831.			1832.		
	East India Comp.	Private Trade.	Total.	East India Comp.	Private Trade.	Total.	East India Comp.	Private Trade.	Total.
Apothecary wares Declared value *L.*	10,588	2,542	13,130	6,582	6,169	12,751	6,967	9,778	16,745
Apparel - - -	4,548	28,224	32,772	1,894	27,362	29,257	9,271	23,477	32,748
Beer and ale - tuns	-	3,473	3,473	28	3,144	3,170	-	4,737	4,737
Declared value *L.*	-	71,394	71,394	338	60,495	60,795	-	87,606	87,606
Books, printed - cwt.	40	703	743	6	823	829	13	1,032	1,045
Declared value *L.*	1,143	19,504	20,647	250	23,016	23,275	237	27,189	27,426
Brass - - cwt.	10	232	242	3	164	169	45	124	169
Declared value *L.*	90	2,145	2,235	40	1,244	1,284	393	1,005	1,398
Cabinet and upholstery wares Declared value *L.*	-	3,525	3,525	-	2,019	2,019	47	3,098	3,145
Carriages - number	-	153	153	-	137	137	-	80	80
Declared value *L.*	-	11,835	11,835	-	9,382	9,382	-	5,430	5,430
Coals - - tons	1,877	2,126	4,003	2,615	5,015	5,056	1,926	4,547	6,473
Declared value *L.*	2,538	1,053	3,591	2,314	2,555	4,869	1,870	3,898	5,768
Cochineal - - lbs.	-	44,529	44,529	-	34,676	34,676	-	29,588	29,588
Declared value *L.*	-	21,036	21,036	-	13,870	13,870	-	11,095	11,095
Colours for painters Declared value *L.*	679	14,454	15,113	891	8,573	9,464	1,150	11,951	13,101
Copper, unwrought, in bricks and pigs - cwt.	-	46,807	46,807	-	49,359	49,359	2,639	43,710	46,349
Declared value *L.*	-	200,050	200,050	-	204,936	204,936	11,180	178,036	189,216
Wrought, of all sorts - - cwt.	1,028	43,186	44,214	714	35,216	35,930	243	40,548	40,791
Declared value *L.*	5,038	195,098	200,136	3,500	133,554	137,054	1,232	173,876	175,108
Cordage - - cwt.	441	911	1,352	1,615	1,595	3,210	285	5,751	6,036
Declared value *L.*	1,161	2,127	3,288	3,270	3,643	6,913	602	10,524	11,126
Cotton manufactures (Brit.) Calicoes, &c., white or plain - - yards	7,500	37,555,687	37,563,187	10,410	28,639,567	28,649,977	6,414	34,077,810	34,084,224
Declared value *L.*	240	1,008,865	1,009,105	300	726,706	726,706	208	818,921	819,189
Ditto, printed, checked, stained, or dyed - yards	2,600	13,426,203	13,428,803	800	13,971,220	13,972,110	-	17,907,088	17,907,088
Declared value *L.*	160	535,951	536,111	71	471,617	471,688	-	531,654	531,654
Muslins, &c., white or plain - - yards	-	5,917,969	5,917,969	-	6,362,976	6,362,976	-	5,192,287	5,192,287
Declared value *L.*	-	185,340	185,340	-	179,692	179,692	-	143,140	143,140
Ditto, printed, checked, stained, or dyed - yards	-	166,271	166,271	-	597,473	597,473	-	384,562	384,562
Declared value *L.*	-	7,562	7,562	-	22,579	22,579	-	14,168	14,168
Hosiery, and small wares Declared value *L.*	149	21,685	21,835	90	19,280	19,370	-	23,242	23,242
Aggregate value of British cotton manufactures Declared value *L.*	549	1,760,003	1,760,552	481	1,419,514	1,419,995	268	1,531,125	1,531,393
Cotton twist and yarn - lbs.	38	4,689,532	4,689,570	-	6,341,833	6,341,833	169	4,295,258	4,295,427
Declared value *L.*	1	324,954	324,955	-	483,762	483,762	12	309,719	309,731
Cotton manufactures (fm.) square yards	-	2,883	2,883	-	7,806	7,806			
value *L.*	-	111	111	-	1	1	-	991	991
Declared value *L.*	-	258	258	-	327	327	-	991	991
Earthenware of all sorts pieces	42,000	1,245,800	1,287,800	27,000	1,253,525	1,280,525	6,900	2,087,339	2,094,239
Declared value *L.*	432	20,072	20,504	312	17,209	17,521	82	27,004	27,086
Glass - Declared value *L.*	1,746	102,870	104,616	2,534	100,069	102,423	1,060	100,087	101,147
Guns and pistols - number	2,300	1,400	3,700	1,420	478	1,898	820	8,219	9,039
Declared value *L.*	4,284	5,100	9,384	1,585	3,640	5,225	1,416	11,257	12,673
Haberdashery and millinery Declared value *L.*	112	25,367	25,479	20	20,862	20,882	16	29,543	29,559
Hardwares and cutlery Declared value *L.*	9,030	72,013	81,043	10,332	50,690	61,042	11,264	71,025	82,289
Hats of all sorts - dozens	1,332	2,322	3,654	980	2,014	2,994	1,001	2,791	3,792
Declared value *L.*	1,847	13,540	15,387	1,471	9,376	10,847	1,604	12,760	14,364
Iron, bar and bolt - tons	45	12,290	12,335	95	11,753	11,848	30	17,400	17,430
Declared value *L.*	376	86,938	87,314	980	79,258	80,238	272	103,765	104,037
cast and wrought cwt.	5,980	69,616	75,596	10,400	73,087	86,589	2,495	58,854	61,349
Declared value *L.*	7,341	50,231	57,572	12,824	50,628	63,252	2,740	37,916	40,656
Lace and thread of gold and silver - - lbs.	163	557	720	86	212	308	187	474	661
Declared value *L.*	1,455	4,661	6,116	786	1,677	2,463	1,465	2,944	4,409
Lead and shot - tons	31	1,226	1,257	92	1,380	1,532	61	1,565	1,626
Declared value *L.*	487	16,507	16,994	719	16,432	17,151	827	18,986	19,813
Leather and saddlery Declared value *L.*	1,345	29,051	30,396	3,671	18,367	22,038	1,505	22,709	24,214
Linen manufactures Declared value *L.*	2,077	21,211	23,288	1,641	23,724	25,365	5,341	43,715	49,056
Machinery and mill-work Declared value *L.*	7,384	21,105	28,489	3,092	10,340	13,432	3,651	11,523	15,174
Military stores not otherwise described Declared value *L.*	5,983	404	6,387	1,681	221	1,902	128	115	243
Musical instruments Declared value *L.*	294	12,060	12,354	246	8,954	9,194	252	7,085	7,337
Opium - - lbs.	-	21,890	21,890	-	5,483	5,483			
Declared value *L.*	-	16,418	16,418	-	4,524	4,524			
Ordnance, of brass and iron tons	223	116	339	224	5	229	34	23	57
Declared value *L.*	8,140	730	8,870	3,286	140	3,426	816	130	946
Plate, plated ware, jewellery and watches Declared value *L.*	10,025	44,370	54,395	2,333	38,208	40,541	-	33,778	33,778
Provisions, declared value *L.*	7,889	21,347	29,236	7,931	14,151	21,082	10,992	21,454	32,446
Quicksilver - lbs.	-	155,948	155,948	-	95,702	95,702	-	36,743	36,743
Declared value *L.*	-	14,112	14,112	-	8,972	8,972	-	3,521	3,521
Silk manufactures Declared value *L.*	-	9,873	9,873	1,083	8,015	9,098	45	25,159	25,204
Soap and candles - cwt.	619	866	1,485	445	850	1,295	2	1,344	1,346
Declared value *L.*	1,845	3,889	5,734	1,318	3,657	4,975	4	5,207	5,211
Spelter, foreign - cwt.	-	62,276	62,276	-	42,264	42,264	-	37,499	37,499
Declared value *L.*	-	32,747	32,747	-	27,480	27,480	-	21,093	21,093
Spirits, British - gallons	-	3,632	3,632	-	6,001	6,001	-	6,289	6,289
Declared value *L.*	-	1,780	1,780	-	2,121	2,121	-	2,362	2,362
Spirits, foreign - gallons	-	99,453	99,453	-	128,174	128,174	-	208,581	208,581
Declared value *L.*	-	12,072	12,072	-	19,310	19,310	-	32,032	32,032

Exports — *continued.*

Articles.	1830.			1831.			1832.		
	East India Comp.	Private Trade.	Total.	East India Comp.	Private Trade.	Total.	East India Comp.	Private Trade.	Total.
Stationery, declared value *L.*	13,175	33,064	46,239	20,663	27,298	47,961	23,924	26,252	50,176
Steel, unwrought - cwt.	-	10,881	10,881	-	21,651	21,651	20	14,446	14,466
Declared value *L.*	-	11,153	11,153	-	24,439	24,439	40	15,106	15,146
Sugar, refined - cwt.	44	853	897	-	763	763	31	778	809
Declared value *L.*	89	1,890	1,979	-	1,792	1,792	57	1,951	2,008
Swords - number	1,700	90	1,790	750	161	911	1,150	90	1,240
Declared value *L.*	1,635	140	1,775	484	139	623	1,052	101	1,153
Tin, unwrought - cwt.	-	5	5	-	41	41	6	129	135
Declared value *L.*	-	15	15	-	165	165	20	495	515
Tin and pewter wares, and tin plates - Dec. val. *L.*	731	10,138	10,869	704	8,558	9,262	573	6,822	7,395
Wines - Imp. gallons	1,332	239,259	240,591	116	205,777	205,893	900	338,535	339,435
Declared value *L.*	459	104,945	105,404	51	92,530	92,581	308	149,949	150,257
Woollen manufactures (Br.)									
Cloths of all sorts - pieces	6,029	47,719	53,748	2,959	51,712½	54,671½	3,507	30,186	33,693
Declared value *L.*	60,565	211,171	271,734	31,470	195,136	226,606	34,108	141,365	175,473
Stuffs, viz. camlets, serges, &c. - - pieces	94	20,148	20,242	251	14,767	15,018	56	18,909¼	18,965¼
Declared value *L.*	302	49,129	49,431	352	40,757	41,109	84	42,801	42,885
Other woollens, dec. val. *L.*	4,127	19,106	23,233	2,226	11,497	13,723	3,609	15,542	19,151
Aggregate value of British woollens - Dec. val. *L.*	64,992	279,406	344,398	34,048	247,390	281,438	37,801	199,708	237,509
Woollen manufactures (foreign) - pieces	-	2	2	-	372	372	-	483	483
value *L.*	-	40	40	-	404	404	-	400	400
Declared value *L.*	-	58	58	-	3,566	3,566	-	4,505	4,505
All other articles - -	16,215	147,218	163,433	14,661	122,656	137,317	8,709	162,236	170,945
Total value of exports - *L.*	195,394	3,891,917	4,087,311	146,480	3,488,571	3,635,051	149,193	3,661,093	3,750,286

The preference in favour of West Indian commodities was within these 5 years much greater than at present; but the following statement shows that it is still very considerable: —

An Account of Articles imported from British Possessions East of the Cape of Good Hope, on which a higher Customs Duty is charged on Import into the United Kingdom, than is charged on the same Articles imported from British Possessions in any other Parts of the World: showing, in Three parallel Columns, the Different Rates and the Excess of Duty on each Article; also, the Amount of Duty levied on each of these Articles in the Year 1832, and the Quantity on which the same was levied.

Articles.	Rates of Duty charged.			Quantity charged with Duty in the Year 1832.		Amount of Duty received in the Year 1832.	
	On Importations from Brit. Possessions within the Limits of the E. I. Co.'s Charter, except the Mauritius.	On Importations from other British Possessions.	Excess of Duty charged on Importations within the Limits of the E. I. Co.'s Charter.	Imported from British Possessions within the Limits of the E. I. Co.'s Charter.	Imported from other British Possessions, and charged with a lower Rate of Duty.	On Importations from British Possessions within the Limits of the Company's Charter.	On Importations from other British Possessions, and charged with a lower Rate of Duty.
Coffee - -	9*d.* per lb.	6*d.* per lb., if the produce of and imported from the Mauritius or any British possession in America -	3*d.* per lb.	*Lbs.* 1,953,744	*Lbs.* 20,996,837	*L. s. d.* 73,227 18 0	*L. s. d.* 524,920 18 6
Sugar - -	32*s.* per cwt.	24*s.* per cwt., if do.	8*s.* per cwt.	*Cwt. qr. lb.* 79,608 2 5	*Cwt. qr. lb.* 4,355,814 2 21	127,373 13 6	5,226,977 12 6
Spirits -	15*s.* per gal.	9*s.* per gal. -	6*s.* per gal.	- -	3,513,250 *gal.*	- -	1,580,962 10 0
Tobacco * -	3*s.* per lb.	2*s.* 9*d.* per lb. -	3*d.* per lb.				

Under the new regulations as to residence in India (see *post*), Englishmen will be allowed to employ themselves in the raising of sugar, as they have hitherto been allowed to employ themselves in the raising of indigo; but, unless the duty be equalised, this concession will be of little importance, at least in so far as respects sugar. An equalisation is, however, imperiously required, as well in justice to India as in the view of promoting the interests of the British public; and should it take place, we have little doubt that the growth of sugar in India will be very greatly extended, and that it will become an article of great commercial value.

The regulations as to the importation of coffee from India are as objectionable as can well be imagined. Why should the coffee of Malabar and Ceylon pay 3*d.* per lb. more duty than that of the Mauritius? A distinction of this sort is an outrage upon common sense, and an insult to India. Foreign coffee may be imported from any port of British India at 9*d.* per lb.; but if it be imported from a foreign port it pays 1*s.* Hence, if a British ship take on board coffee at Mocha, Manilla, or Java, she is obliged to call in her way home at Bombay or Singapore; and must there unload and then reload her cargo! Such a regulation requires no lengthened commentary; it is enough to remark that its existence is a disgrace to a civilised nation.

Besides being unfairly assessed, the duties on several most important articles of East India produce are signally oppressive in their amount. Arrack, for example, which may be bought in bond here for about 3*s.* a gallon, is loaded with a duty of 15*s.* It is almost unnecessary to add that this duty is perfectly unproductive; its only effect is to exclude a valuable article from the market; to deprive the public of a gratification they

* Quantity of tobacco brought from the East too trifling to deserve [illegible]

might otherwise enjoy, and the government of a considerable amount of revenue. The duty on pepper is also most extravagantly high; being no less than 1*s.* on an article that sells from about 3*d.* to 4½*d.* Considering the degree in which the demand for pepper is checked by this anti-consumption impost, we believe we may safely affirm that its reduction to 3*d.* or 4*d.* would be productive of an increase of revenue.

However, it is but fair to add that a very material deduction has been made from the duties charged on several articles of East India produce since the publication of the former edition of this work. It is to be hoped that the good effects of which these reductions cannot fail to be productive may speedily lead to others. The following account will no doubt receive the attentive consideration of the reader: —

Account showing the Prices in Bond in London of the different Articles of East India Produce, on the 1st of November, 1833; the present Duty on such Articles, and the Rate per Cent. of the Duty on the Price. A Column is added, showing the Duties in 1831 that have since been modified.

Goods.	Prices, 1st of November, 1833. From	Prices, 1st of November, 1833. To	Per	Duties, 1st of November, 1833.	Duty. Rate per Cent. From	Duty. Rate per Cent. To	Duties, 1st of January, 1831.
	L. s. d.	*L. s. d.*		*s. d. per*			*L. s. d. per*
Aloes	2 0 0	12 0 0	cwt.	0 2 lb.	7	46	0 1 3 lb.
Asafœtida	1 10 0	3 0 0	—	6 0 cwt.	19	20	4 13 4 cwt.
Benjamin, 1st sort	- -	40 0 0	—	- -	-	0·5	
2d —	10 0 0	20 0 0	—	4 0 —	1	2·7	11 4 0 —
3d —	4 10 0	7 10 0	—	- -	2·7	4	
Barilla	- -	5 0 0	ton	40 0 ton	-	40	
Borax, refined	4 0 0	4 5 0	cwt.	10 0 cwt.	12	12·5	2 16 0 —
unrefined	4 0 0	4 9 0	—	4 0 —	4·5	5	1 8 0 —
Camphor	- -	7 5 0	—	1 0 —	-	0·7	0 9 4 —
Cardamoms, Ceylon	0 1 6	0 1 8	lb.	1 0 lb.	60	66	0 2 0 lb.
Malabar	0 3 6	0 3 9	—	1 0 —	26	30	0 2 0 —
Cassia buds	- -	4 0 0	cwt.	1 0 —	-	140	
lignea	3 5 0	4 5 0	—	0 6 —	65	86	
Cinnamon	0 4 6	0 9 6	lb.	0 6 —	5	11	
Cloves, Bourbon	0 1 0	0 1 2	—	2 0 —	170	200	
Amboyna	0 1 3	0 1 6	—	2 0 —	133	160	
Coccinea Indicus	0 15 0	- -	cwt.	2 6 —	-	1860	
Cochineal	0 1 0	0 1 3	lb.	0 2 —	13	16	0 0 4 —
Coffee, Mocha	3 10 0	6 6 0	cwt.	0 9 lb.	66	120	
other sorts	2 10 0	3 0 0	—	from Brit. ports	140	168	
Cotton, Bengal	0 0 6	0 0 7	lb.	- -	0·5	0·6	
Madras	0 0 6½	0 0 8	—	0 4 cwt.	0·4	0·7	
Surat	0 0 5½	0 0 7	—	- -	0·5	0·6	
Cubebs	2 15 0	3 5 0	cwt.	0 6 lb.	80	100	0 2 0 —
Dragon's blood	5 10 0	25 0 0	—	4 0 cwt.	0·8	3·7	9 6 8 cwt.
Ebony wood	6 10 0	7 10 0	ton	3 0 ton	2	2·5	0 15 0 ton
Galls	3 10 0	4 5 0	cwt	2 0 cwt.	2	3	0 5 0 cwt.
Gambage	9 0 0	18 0 0	—	4 0 —	1·1	2·2	9 6 8 —
Ginger, Bengal	1 15 0	1 18 0	—	11 0 —	29	31	0 11 6 —
Gum ammoniac	2 10 0	5 0 0	—	6 0 —	6	12	7 0 0 —
animi	6 0 0	10 0 0	—	6 0 —	3	5	2 16 0 —
Arabic	2 10 0	2 15 0	—	6 0 —	11	12	
Gum lac, lac dye fine DI.	0 1 6	0 2 3	lb.	6 0 —	2·2	3·5	5 per cent.
other sorts	0 0 9	0 1 3	—	6 0 —	4	7	
shell lac	6 5 0	7 15 0	cwt.	6 0 —	3·7	4·7	20 —
Hemp	- -	23 0 0	ton	1 8 ton	-	0·3	free
Hides, buffalo and ox dry	0 0 5	0 0 9½	lb.	2 4 cwt.	2·5	5	
Hides, buffalo and ox wet	0 0 3	0 0 5	—	1 2 —	2·5	4	
Indigo, fine	0 6 9	0 8 6	—	- -	5	3·7	
good and middling	0 4 3	0 6 6	—	0 3 lb.	4	6	
ordinary	0 3 6	0 4 0	—	- -	6·2	7	
Mace	0 4 0	0 6 6	—	3 6 —	53	87	
Mother-o'-pearl shells, Bombay	1 5 0	2 0 0	cwt.	5 per cent.	-	5	
Manilla	3 15 0	4 0 0	—				
Musk	0 15 0	1 8 0	oz.	0 6 oz.	1·7	3·3	0 5 0 oz.
Myrrh	4 0 0	14 0 0	cwt.	6 0 cwt.	2	7·5	9 6 8 cwt.
Nutmegs	0 3 6	0 6 6	lb.	2 6 lb.	38	71	
Nux vomica	0 15 0	- -	cwt.	2 6 —	-	1860	
Oil of aniseed	0 0 6¾	- -	oz.	1 4 —	-	15	0 4 0 lb.
cassia	0 0 6½	0 0 7	—	1 4 —	14	15	0 16 0 —
cinnamon	0 5 6	- -	—	1 4 —	-	1·3	0 16 0 —
cloves	0 0 9	0 0 10	—	14 0 —	105	116	1 12 0 —
mace	0 0 2	0 0 4	—	1 4 —	25	50	2 0 0 —
nutmegs	0 0 10	0 1 3	—	1 4 —	6·7	10	2 0 0 —
Olibanum	2 0 0	3 15 0	cwt.	6 0 cwt.	8	15	2 0 0 cwt.
Pepper, black	0 0 3¾	0 0 4½	lb.	1 0 lb.	266	320	
white	0 0 4	0 0 9	—	1 0 —	133	300	
Rhubarb, common	0 1 10	0 2 4	—	1 0 —	43	54	0 2 6 lb.
fine Dutch, trimmed	0 3 6	0 5 0	—	1 0 —	20	28	
Rice from British possessions	0 12 0	1 0 0	cwt.	1 0 cwt.	5	8	
Spirits, arrack	0 3 0	- -	gal.	15 0 gal.	-	500	
Safflower	5 5 0	8 10 0	cwt.	1 0 cwt.	0·6	1	0 2 6 cwt.
Sago, common	0 10 0	- -	—	1 0 —	-	10	
pearl	0 15 0	2 0 0	—	1 0 —	2·5	6·7	0 10 0 cwt.
Sal ammoniac	3 0 0	- -	—	1 0 —	-	1·7	1 8 0 —
Saltpetre	1 15 0	2 0 0	—	0 6 —	1·2	1·4	
Sapan wood	8 0 0	17 0 0	ton	1 0 ton	0·3	0·6	0 15 0 ton
Saunders' wood, red	13 0 0	16 0 0	—	1 0 —	0·3	0·4	0 12 0 —
Seeds, aniseed, star	3 5 0	- -	cwt.	5 0 cwt.	-	7·5	1 10 0 cwt.
Silk, Bengal and China	0 16 0	1 3 0	lb.	0 1 lb.	0·35	0·45	
Sugar, Bengal, white	1 4 0	1 11 0	cwt.	32 0 cwt.	103	133	
yellow	1 1 0	1 3 0	—	32 0 —	139	152	
Mauritius, yellow	1 6 0	1 14 0	—	24 0 —	70	92	
brown	1 2 0	1 6 0	—	24 0 —	92	109	
Teeth, elephants'	19 0 0	28 0 0	—	20 0 —	5·5	5·2	
Terra japonica	3 15 0	4 0 0	—	1 0 —	1·2	1·3	0 3 0 cwt.
Tortoise shell	1 10 0	2 15 0	lb.	0 1 lb.	0·1	0·3	0 0 6 lb.
Turmeric, Bengal	0 16 0	0 18 0	cwt.	- -	13	15	
Java	1 0 0	1 3 0	—	2 4 cwt.	10	11·4	
China	1 0 0	1 5 0	—	from Brit. ports	9	11·4	
Vermilion	0 2 10	- -	lb.	0 6 lb.	-	17·2	0 1 0 —

N. B. — We are indebted for this valuable Table to Mr. Begbie, secretary to the East India Association.

There is another grievance affecting the East India trade, which calls loudly for redress. Goods from America, the West Indies, or any where except the East Indies, may be conveyed from one warehousing port to another without payment of the duties. But with East India goods a different rule has been established. There are only about a dozen ports in the empire in which East India goods may be received and warehoused; and whenever it becomes necessary to remove these goods to any other place, not privileged to receive India goods, the whole duties have to be paid; so that if a merchant found it expedient to ship 1,000*l.* worth of pepper from London, Hull, or any other privileged port, to Newcastle, Plymouth, Aberdeen, or any non-privileged port, he would, before he could make such shipment, have to advance about 4,000*l.* of duty! This is a most oppressive regulation. There is not, and there never was, any good reason for prohibiting East India goods from being removed, under bond, from one port to another where other goods are allowed to be bonded. Many considerable advantages would result from permitting this to be done. It would distribute East India goods more equally over the country; and country dealers would be able to lay in and keep up sufficient stocks with a far less outlay of capital than at present. Such a measure, coupled, as it ought to be, with an adequate reduction of the duties, would materially extend the comforts of all classes at home.

4. *Colonisation of India.* — Hitherto very considerable obstacles have been thrown in the way of Europeans establishing themselves in India, and particularly of their acquiring or holding land. This policy was dictated by various considerations; partly by a wish to prevent the extrusion of the natives from the soil, which it was supposed would be eagerly bought up by Europeans, and partly by the fear lest the latter, when scattered over the country, and released from any effectual control, should offend the prejudices of the natives, and get embroiled with them. Now, however, it seems to be the general opinion of those best acquainted with India that but little danger is to be apprehended from these circumstances; that the few Europeans established in it as indigo planters, &c. have contributed very materially to its improvement; and that the increase and diffusion of the English population, and their permanent settlement in the country, are at once the most likely means of spreading a knowledge of our arts and sciences, and of widening and strengthening the foundations of our ascendancy. It is obvious, indeed, that the duration of our power in India must depend on a very uncertain tenure, unless we take root, as it were, in the soil, and a considerable portion of the population be attached to us by the ties of kindred, and of common interests and sympathies. In this respect we ought to imitate the Roman in preference to the Lacedemonian or Athenian policy. *Quid aliud exitio Lacedæmoniis Atheniensibus fuit, quanquam armis pollerent, nisi quod victis pro alienigenis arcebant?* Looking, however, at the density of population in India, the low rate of wages, the nature of the climate, and other similar circumstances, it seems very doubtful whether it will ever become the resort of any considerable number of English settlers; at least of such a number as would be sufficient, within any reasonable period, to form any thing like a powerful native English interest. But to whatever extent it may be carried, it promises to be highly advantageous. "We need not, I imagine," says the present Governor-General of India, Lord William Bentinck, "use any laboured argument to prove that it would be infinitely advantageous for India to borrow largely in arts and knowledge from England. The legislature has expressly declared the truth; its acknowledgment has been implied in the daily acts and professions of government, and in all the efforts of humane individuals and societies for the education of the people. Nor will it, I conceive, be doubted, that the diffusion of useful knowledge, and its application to the arts and business of life, must be comparatively tardy, unless we add to precept the example of Europeans, mingling familiarly with the natives in the course of their profession, and practically demonstrating, by daily recurring evidence, the nature and the value of the principles we desire to inculcate, and of the plans we seek to have adopted. It seems to be almost equally plain, that independently of their influencing the native community in this way, various and important national advantages will result from there being a considerable body of our countrymen, and their descendants, settled in the country. To question it, is to deny the superiority which has gained us the dominion of India: it is to doubt whether national character has any effect on national wealth, strength, and good government: it is to shut our eyes to all the perils and difficulties of our situation: it is to hold as nothing community of language, sentiment and interest, between the government and the governed: it is to disregard the evidence afforded by every corner of the globe in which the British flag is hoisted: it is to tell our merchants and our manufacturers, that the habits of a people go for nothing in creating a market, and that enterprise, skill, and capital, and the credit which creates capital, are of no avail in the production of commodities."

The existing regulations as to the residence of Englishmen in India are embodied in the act 3 & 4 Will. 4. c. 85., and are as follows: —

Authority for his Majesty's Subjects to reside in certain Parts of India. — It shall be lawful for any natural-born subjects of his Majesty to proceed by sea to any port or place having a Custom-house establishment within the same, and to reside thereat, or to proceed to reside in or pass through any part of such of the said territories as were under the government of the said Company on the 1st day of January, 1800, and in any part of the countries ceded by the nabob of the Carnatic, of the province of Cuttack, and of the settlements of Singapore and Malacca, without any licence whatever; provided that all subjects of his Majesty not natives of the said territories shall, on their arrival in any part of the same from any port or place not within said territories, make known in writing their names, places of destination, and objects of pursuit in India, to the chief officer of the customs or other officer authorised for that purpose at such port or place as aforesaid. — § 81.

Subjects of his Majesty not to reside in certain Parts of India without Licence. — It shall not be lawful for any subject of his Majesty, except the servants of the said Company and others now lawfully authorised to reside in the said territories, to enter the same by land, or to proceed to or reside in such parts of the said territories as are not herein-before in that behalf mentioned, without licence first obtained from the commissioners of the board of control, or the court of directors, or the governor-general, or a governor of any of the said presidencies: provided, that no licence given to any natural-born subject of his Majesty to reside in parts of the territories not open to all such subjects shall be determined or revoked unless in accordance with the terms of some express clause of revocation or determination in such licence contained. — § 82.

The Governor-General with previous Consent of Directors, may declare other Places open. — It shall be lawful for the governor-general in council, with the previous consent and approbation of the said court of directors, to declare any place or places whatever within the said territories open to all his Majesty's natural-born subjects, and it shall be thenceforth lawful for any of his Majesty s natural-born subjects to proceed to, or reside in, or pass through any place or places declared open without any licence whatever. — § 83.

Laws against illicit Residence to be made. — The governor-general shall and is required to make laws or regulations providing for the prevention or punishment of the illicit entrance into or residence in the said territories of persons not authorised to enter or reside therein. — § 84.

Laws and Regulations to be made for Protection of Natives. — And whereas the removal of restrictions on the intercourse of Europeans with the said territories will render it necessary to provide against any mischiefs or dangers that may arise therefrom, it is enacted, that the governor-general shall and is required, by laws or regulations, to provide with all convenient speed for the protection of the natives of the said territories from insult and outrage in their persons, religions, or opinions. — § 85.

Lands within the Indian Territories may be purchased. — It shall be lawful for any natural-born subject of his Majesty authorised to reside in the said territories to acquire and hold lands, or any right, interest, or profit in or out of lands, for any term of years, in such part or parts of the said territories as he shall be so authorised to reside in: provided always, that nothing herein contained shall be taken to prevent the governor-general in council from enabling, by any laws or regulations, or otherwise, any subjects of his Majesty to acquire or hold any lands, or rights, interests, or profits in or out of lands, in any part of the said territories, and for any estates or terms whatever. — § 86.

No Disabilities in respect of Religion, Colour, or Place of Birth. — No native of the said territories, nor any natural born subject of his Majesty resident therein, shall, by reason only of his religion, place of birth, descent, colour, or any of them, be disabled from holding any place, office, or employment under the said company. — § 87.

IV. East Indies, (Extent, Population, Military Force, Revenue, etc. of British).

1. *Extent, Population, &c. of British Dominions in Hindostan, and of the Tributary and Independent States.* — We copy the following Table from the second edition of Mr. Hamilton's *Gazetteer*. It must, however, be regarded as an approximation only, inasmuch as no means exist of coming at correct conclusions; but the talents of the writer, and his perfect acquaintance with the subject, warrant the belief that it is as accurate as it can be made with the present imperfect means of information.

Table of the relative Area and Population of the Modern States of Hindostan.

	British Square Miles.	Population.
Bengal, Bahar, and Benares	162,000	39,000,000
Additions in Hindostan since A. D. 1765	148,000	18,000,000
Gurwal, Kumoon, and the tract between the Sutuleje and Jumna	18,000	500,000
Total under the Bengal Presidency	328,000	57,500,000
Under the Madras Presidency	154,000	15,000,000
Under the Bombay Presidency	11,000	2,500,000
Territories in the Deccan, &c. acquired since 1815, consisting of the Peishwa's dominions, &c., and since mostly attached to the Bombay Presidency	60,000	8,000,000
Total under the British government	553,000	83,000,000
British Allies and Tributaries.		
The Nizam	96,000	10,000,000
The Nagpoor Raja	70,000	3,000,000
The King of Oude	20,000	3,000,000
The Guicowar	18,000	2,000,000
Kotah, 6,500; Boondee, 2,500; Bopaul, 5,000	14,000	1,500,000
The Mysore Raja	27,000	3,000,000
The Satara Raja	14,000	1,500,000
Travancore, 6,000; Cochin, 2,000	8,000	1,000,000
Under the Rajas of Joudpour, Jeypoor, Odeypoor, Bicancere, Jesselmere, and other Rajpoot chiefs, Holcar, Ameer Khan, the Row of Cutch, Bhurtpoor, Macherry, and numerous other petty chiefs, Seiks, Gonds, Bheels, Coolies, and Catties, all comprehended within the line of British protection	283,000	15,000,000
Total under the British government and its allies	1,103,000	123,000,000

Table of the relative Area and Population — *continued.*

	British Square Miles.	Population.
Brought up - -	1,103,000	123,000,000
Independent States.		
The Nepaul Raja - - - - - -	53,000	2,000,000
The Lahore Raja (Runjeet Singh) - - - - -	50,000	3,000,000
The Ameers of Sinde - - - - - -	24,000	1,000,000
The dominions of Sindia - - - - -	40,000	4,000,000
The Cabul sovereign east of the Indus - - - -	10,000	1,000,000
Grand total of Hindostan - - - -	1,280,000	134,000,000

India beyond the Ganges. — British Acquisitions in 1824 and 1825.

	British Square Miles.	Population.
Countries south of Rangoon, consisting of half the province of Martaban, and the provinces of Tavoy, Ye, Tenasserim, and the Mergui Isles -	12,000	51,000
The province of Arracan - - - - -	11,000	100,000
Countries from which the Burmese have been expelled, consisting of Assam and the adjacent petty states, occupying a space of about -	54,000	150,000
Total - - -	77,000	301,000

In 1805, according to official returns transmitted, the total number of British-born subjects in Hindostan was 31,000. Of these, 22,000 were in the army as officers and privates; the civil officers of government of all descriptions were about 2,000; the free merchants and mariners who resided in India under covenant, about 5,000; the officers and practitioners in the courts of justice, 300; the remaining 1,700 consisted of adventurers who had smuggled themselves out in various capacities. Since the date above mentioned, no detailed reports have been published: but there is reason to believe that even now the total number of British subjects in Hindostan does not exceed 40,000; the removal of the restrictions on the commercial intercourse having, contrary to expectation, added very few to the previous number.

The army required for the protection of these extensive provinces, and for the retaining them under due subordination, although it presents a formidable grand total, probably does not amount to a fifth part of the number maintained by the Mogul sovereigns and their functionaries, when their empire was in its zenith; yet, even under the ablest of the emperors, commotions in some quarter of their ill-subdued territories were unceasing. The British system in India has always been to keep the troops in a constant state of preparation for war; but never to enter into unprovoked hostilities, or engage in any contests except those rendered necessary by the principle of self-defence. At present, with the exception of the Russian, the British military force is probably the largest standing army in the world. In 1796, it amounted to 55,000. In 1830, the latest period for which we have a detailed statement, it consisted of infantry 170,062, cavalry 19,539, artillery 17,385, engineers 1,084, with pioneers, invalids, &c., making a grand total of 223,476 men. Of these, 187,068 were natives, and 37,376 Europeans; the latter being divided between the King's and the Company's services in the proportion of 20,292 to the former, and 17,084 to the latter. The total expenditure on account of the Indian army during the same year amounted to 9,461,953*l.* It may, perhaps, be worth while remarking, that the war department in Prussia, which has one of the most efficient armies in Europe, cost, in 1829, 22,165,000 rix-dollars, or 3,324,000*l.*, being little more than the third of the cost of the British Indian army! Recently, however, very great efforts have been made to economise in this department. The army has been reduced to about 190,000 men, and some of the former allowances have been discontinued.

A good deal of rather conflicting evidence was given before the late select committee on the state of the Indian army. On the whole, it would seem to be decidedly superior, in respect of discipline and efficiency, to any native army ever organised in India. But many very intelligent officers doubt whether it could make any effectual opposition to European troops, to whom, generally speaking, the sepoys are inferior both in physical strength and moral energy. Some of the witnesses seem to think that the Indian army has recently been a good deal deteriorated.

The army is distributed throughout Hindostan under the orders of the supreme government, promulgated through its political agents. Commencing from the great stations in the Doab of the Ganges, at Ajmeer is one corps; another at Neemutch; a third at Mow; all supplied from the Bengal army. These are succeeded by the Gujerat subsidiary forces, the field corps at Mulligaum, and the Poonah division, furnished chiefly by the Bombay army. The circle is further continued by the field force in the southern Mahratta country; the Hyderabad and Nagpoor subsidiaries, composed

of Madras troops; and the detachments from the Bengal establishment, forming the Nerbudda and Saugur divisions, from whence the cordon terminates in Bundelcund. Such is the general outline, liable, of course, to temporary modifications, and occasional change in the selection of stations. At present, with the exception of a tract 35 miles broad on each side of Aseerghur, there is an unbroken line of communication through the British territory from Bombay to Calcutta.

In direct and authoritative control, the dominion of the British government extends much further than that possessed by any prior dynasty, whether Patan or Mogul; yet the latter, so long as they abstained from persecution, had nothing to apprehend from the religion of the Hindoos; and history proves that the commotions which agitated the Mohammedan monarchies chiefly arose from their own internal dissensions and national disputes. Neither does it appear that any prior conquerors ever employed disciplined corps of their own countrymen in defence of their own sovereignty, although they had to contend with one very numerous tribe — the Hindoo; while the British, more advantageously situated, have two to put in motion against each other, and in process of time may raise up a third. Each foreign invader certainly favoured his own countrymen; but it was by bestowing on them places and high appointments, which excited envy, without essentially strengthening his domination. Besides, therefore, total abstinence from persecution, the British government, in a powerful corps entirely European, and totally distinguished from the natives by colour, language, and manners, possesses a solidity and consistence much beyond any of the prior Mohammedan dynasties. — (*Hamilton's East India Gazetteer*, 2d ed. vol. i. pp. 656—659.)

2. *Revenue and Expenditure of the East India Company.* — The far greater part of the revenue of India is at present, and has always been, derived from the soil. The land has been held by its immediate cultivators generally in small portions, with a perpetual and transferable title; but they have been under the obligation of making an annual payment to government of a certain portion of the produce of their farms, which might be increased or diminished at the pleasure of the sovereign; and which has, in almost all cases, been so large, as seldom to leave the cultivators more than a bare subsistence. Under the Mohammedan government, the *gross* produce of the soil was divided into equal or nearly equal shares, between the ryots, or cultivators, and the government. We regret we are not able to say that the British government has made any material deductions from this enormous assessment. Its oppressiveness, more than any thing else, has prevented our ascendancy in India; and the comparative tranquillity and good order we have introduced, from having the beneficial effects that might have been anticipated. The cultivators throughout Hindostan are proverbially poor; and till the amount of the assessment they are at present subject to be effectually reduced, they cannot be otherwise than wretched. They are commonly obliged to borrow money to buy their seed and carry on their operations, at a high interest, on a species of mortgage over the ensuing crop. Their only object is to get subsistence — to be able to exist in the same obscure poverty as their forefathers. If they succeed in this, they are satisfied. Mr. Colebrooke, whose authority on all that relates to India is so deservedly high, mentions that the quantity of land occupied by each ryot, or cultivator, in Bengal is commonly about 6 acres, and rarely amounts to 24; and it is obvious that the abstraction of half the produce raised on such patches can leave their occupiers nothing more than the barest subsistence for themselves and their families. Indeed, Mr. Colebrooke tells us that the condition of ryots subject to this tax is generally inferior to that of a hired labourer, who receives the miserable pittance of 2 annas, or about 3 pence, a day of wages.

Besides the land revenue *, a considerable revenue is derived in India from the monopolies of salt and opium, the sale of spirituous liquors, land and sea customs, post-office, &c. Of these monopolies, the first is, in all respects, decidedly the most objectionable. Few things, indeed, would do more to promote the improvement of India, than the total abolition of this monopoly. An open trade in salt, with moderate duties, would, there can be no doubt, be productive of the greatest advantage to the public, and of a large increase of revenue to government. The opium monopoly, though less objectionable than the last, is, notwithstanding, very oppressive. It interferes with the industry of the inhabitants; those who are engaged in the cultivation of opium being obliged to sell their produce at prices arbitrarily fixed by the Company's agents. It would be worse than useless to waste the reader's time, by pointing out in detail the mischievous effects of such a system; they are too obvious not to arrest the attention of every one. The produce of these and the other branches of Indian taxation is specified in the subjoined Table, which we have carefully compiled from the official accounts.

* For an account of the land revenue of India, of the various modes in which it is assessed, and its influence on the condition of the inhabitants, we beg to refer to Mr. Rickards's work on India. The various important and difficult questions with respect to Indian taxation are there treated with great learning and sagacity, and placed in the most luminous point of view.

Account of the Territorial Revenues of the East India Company during the Official Year 1827-28.

Description.	Bengal.	Madras.	Bombay.	Penang	Malacca.	Singapore.	Saint Helena.	London	Total.
	£	£	£	£	£	£	£	£	£
Land rent	8,252,797	3,519,745	1,965,093	21,893	4,881	18,559	1,064	- -	13,784,032
Liquors (nett)	485,422	257,638	- -	- -	- -	- -	- -	- -	743,060
Opium (monopoly)	2,051,620	- -	- -	- -	- -	- -	- -	- -	2,051,620
Tobacco (do.)	- -	85,482	- -	- -	- -	- -	- -	- -	85,482
Salt (partial monopoly)	2,389,600	346,192	19,936	- -	- -	- -	- -	- -	2,755,728
Farms and licences (nett)	- -	56,252	225,650	- -	- -	- -	66	- -	281,968
Mint	38,139	4,332	5,440	- -	- -	- -	- -	- -	47,911
Post-office	91,833	32,043	12,584	- -	- -	- -	- -	- -	136,460
Stamps	327,709	56,261	5,161	- -	- -	- -	- -	- -	389,131
Bank, Madras (nett)	- -	9,162	- -	- -	- -	- -	- -	- -	9,162
Customs — sea	- -	126,859	65,698	- -	- -	- -	2,216	- -	194,773
inland	- -	439,870	109,209	- -	- -	- -	- -	- -	549,079
do. unspecified	831,734	- -	219,784	- -	- -	- -	- -	- -	1,051,518
Sundries	308,355	392,355	- -	- -	- -	- -	- -	- -	700,710
Revenue	14,777,209	5,326,191	2,628,555	21,893	4,881	18,559	3,346	- -	22,780,634
General board, (repayment by)	- -	- -	- -	3,617	- -	- -	- -	- -	3,617
Marine (pilotage)	38,486	7,802	18,383	367	- -	- -	- -	- -	65,038
Judicial (fines and fees)	106,287	13,845	17,890	5,039	- -	- -	52	- -	143,113
Total civil revenue	14,921,982	5,347,838	2,664,828	30,916	4,881	18,559	3,398	- -	22,992,402
Military (repayments)	- -	- -	- -	373	- -	- -	- -	- -	373
Buildings (do.)	- -	- -	- -	49	- -	- -	- -	- -	49
Total receipts	14,921,982	5,347,838	2,664,828	31,338	4,881	18,559	3,398	- -	22,992,821
Interest	- -	- -	- -	- -	- -	- -	- -	- -	- -
Gross revenue and receipts	14,921,982	5,347,838	2,664,828	31,338	4,881	18,559	3,398	- -	22,992,821
Nett surplus revenue over expenditure	1,479,273	- -	- -	- -	- -	- -	- -	- -	- -

Account of the Territorial Charges of the East India Company during the Official Year 1827-28.

Description.	Bengal.	Madras.	Bombay.	Penang.	Malacca.	Singapore.	Saint Helena.	London.	Total.
	£	£	£	£	£	£	£	£	£
Land rent (collection, pensions, &c.)	1,608,480	702,677	642,551	3,000	500	1,500	- -	- -	2,958,708
Liquors (charges of collection not specified.)									
Opium (cost and charges)	658,254	- -	- -	- -	- -	- -	- -	- -	658,254
Tobacco (do.)	- -	31,843	- -	- -	- -	- -	- -	- -	31,843
Salt (do.)	808,322	74,419	- -	- -	- -	- -	- -	- -	882,741
Farms and licences (charges of collection not specified)									
Mint (charges on)	51,786	20,406	3,637	- -	- -	- -	- -	- -	75,829
Post-office (do.)	89,075	29,339	18,848	- -	- -	- -	- -	- -	137,262
Stamps (do.)	81,690	9,437	- -	- -	- -	- -	- -	- -	91,127
Bank (charges not specified.)									
Customs—sea (charges of collection)	- -	23,445	14,867	- -	- -	- -	- -	- -	38,312
inland (do.)	- -	28,587	3,037	- -	- -	- -	- -	- -	31,624
general unspecified	126,808	- -	25,605	- -	- -	- -	- -	- -	152,413
Sundries	140,849	363,854	136,944	- -	- -	- -	- -	- -	641,647
Charge under revenue board	3,565,264	1,284,007	845,489	3,000	500	1,500	- -	- -	5,699,760
Charges under general do.	1,102,824	353,659	474,781	100,014	12,825	36,637	46,808	- -	2,127,548
Charges under marine do.	117,745	18,781	212,862	6,000	1,000	3,000	- -	- -	359,388
Charges under judicial do.	1,150,394	371,751	305,446	12,000	2,000	6,000	- -	- -	1,847,591
Gross amount of civil charges	5,936,227	2,028,198	1,838,578	121,014	16,325	47,137	46,808	- -	10,034,287
Do. military do.	5,245,737	3,897,520	2,051,810	49,255	8,030	11,341	75,172	- -	11,338,865
Buildings both civil and military do.	548,492	81,877	163,088	4,833	1,186	4,606	1,989	- -	786,071
Charge in India	11,730,456	6,007,595	4,053,476	175,102	25,541	63,084	123,969	- -	22,159,223
Interest on debt	1,712,253	179,025	27,230	2,024	- -	- -	- -	- -	1,920,532
Unspecified	- -	- -	- -	- -	- -	- -	- -	2,060,141	2,060,141
Gross charge	13,442,709	6,186,620	4,060,706	177,126	25,541	63,084	123,969	2,060,141	26,139,896
Nett charge, or excess of expenditure over revenue	- -	838,782	1,395,881	145,788	20,660	44,525	120,571	2,060,141	3,147,975

The territorial revenues at the disposal of the East India Company have, for a lengthened period, equalled those of the most powerful monarchies. At present they are greater than those of either Russia or Austria, being inferior only to those of Great Britain and France! Still, however, the Company's financial situation is the very reverse of prosperous. Vast as their revenue has been, their expenditure appears, in most instances, to have been still larger; and at this moment their debts exceed 60,000,000*l.*! The Company have given the following statem[illegible]airs, which

is applicable, as respects India, to the 1st of May, 1831; and as respects England, to the 1st of May, 1832: —

	£	£
Total territorial and political debts abroad and at home		61,197,782
Ditto, credits, ditto		29,579,523
Balance deficient in the territorial and political branch		31,618,259
Total commercial debts abroad and at home	£ 1,928,494	
Ditto, credits, ditto	21,647,149	
Balance in favour in the commercial branch		19,718,655
Balance deficient		11,899,604
Add the amount of the Company's home bond debt		3,542,854
Total balance deficient, including the home bond debt		£ 15,442,458

Of the credits placed to account of the Company, arrears of revenue, &c. form an important item; but of these it is most probable a considerable portion will never be realised. In a statement laid by the East India Company before parliament, and printed in the former edition of this work (p. 511.), intended to represent the situation of the Company's affairs on the 1st of January, 1831, their assets were said to exceed their debts and liabilities by about 3,000,000*l*. The wide difference between that account and the one given above, is principally owing to the Company having struck out of the latter a sum of 10,870,000*l*. expended by them on account of fortifications, buildings, &c. erected in India, which they took credit for in the former.

The statement now given renders it abundantly obvious, that the recent arrangements with the Company have been quite as beneficial to it as, we doubt not, they will prove to the public. All the territorial and other property made over to the Crown will certainly be far short of meeting the claims upon it.

The following account shows the balance between the revenue and expenditure of our Indian dominions, from 1809–10 to 1830–31: —

An Account of the Total annual Revenues and Charges of the British Possessions in India under the East India Company, from 1809–10 to 1830–31: showing also the Nett Charge of Bencoolen, Prince of Wales Island, and St. Helena; the Interest paid on account of Debts in India; and the Amount of Territorial Charges paid in England. — (Abstracted from the *Parl. Papers*, No. 22. Sess. 1830, and No. 306. Sess. 1833.)

Years.	Total Gross Revenues of India.	Total Charges in India.	Nett Charge of Bencoolen, Prince of Wales Island, and St. Helena.	Interest on Debts.	Territorial Charges paid in England.			General Result.	
					Cost of Political Stores.	Other Territorial Payments chargeable on the Revenue. (Pensions, &c.)	Total.	Surplus Revenue.	Surplus Charge.
	£	£	£	£	£	£	£	£	£
1809–10	16,464,391	13,775,577	203,361	2,159,919	190,128	867,097	1,057,225	- -	730,791
1810–11	16,679,198	13,909,285	199,663	2,193,691	217,703	901,688	1,119,391	- -	736,530
1811–12	16,605,616	13,290,967	168,288	1,457,077	154,998	922,770	1,077,768	681,516	
1812–13	16,459,774	13,659,429	201,549	1,491,879	193,784	1,184,976	1,378,768	- -	271,634
1813–14	17,228,711	15,617,725	209,957	1,537,434	64,257	1,148,156	1,212,413	651,182	
1814–15	17,231,191	14,182,454	204,250	1,502,217	129,873	1,064,223	1,194,596	147,677	
1815–16	17,168,195	15,081,587	225,558	1,584,157	81,903	1,199,952	1,281,885	- -	1,004,992
1816–17	18,010,135	15,129,839	205,372	1,719,470	194,374	1,071,176	1,265,550	- -	310,096
1817–18	18,305,265	15,844,964	219,793	1,755,918	81,941	1,094,701	1,176,642	- -	689,152
1818–19	19,392,002	17,558,615	210,224	1,665,928	130,162	1,150,378	1,280,540	- -	1,323,305
1819–20	19,172,506	17,040,848	142,049	1,940,327	265,055	1,150,391	1,415,446	- -	1,466,164
1820–21	21,292,036	17,520,612	220,043	1,902,535	228,058	1,072,106	1,300,164	348,632	
1821–22	21,753,271	17,555,668	207,816	1,932,835	202,735	1,175,149	1,377,884	679,068	
1822–23	23,120,934	18,083,432	154,761	1,694,731	204,147	1,354,960	1,559,107	1,528,853	
1823–24	21,238,623	18,902,511	257,276	1,652,449	395,276	758,590	1,153,866	- -	727,479
1824–25	20,705,152	20,410,929	279,277	1,453,453	414,181	1,166,078	1,580,259	- -	3,025,746
1825–26	21,096,960	22,346,365	214,285	1,575,941	740,728	1,076,504	1,817,232	- -	4,856,857
1826–27	23,327,753	21,424,894	207,973	1,749,068	1,111,792	1,318,102	2,429,894	- -	2,484,076
1827–28	22,818,184	21,778,431	272,014	1,958,313	805,016	1,255,125	2,060,141	- -	3,250,715
1828–29	22,692,711	19,298,622	250,794	2,121,165	449,603	1,517,802	1,967,405	- -	945,275
1829–30	21,662,310	18,300,715	213,304	2,007,693	293,873	1,454,867	1,748,740	- -	608,142
Estimate 1830–31	22,366,926	18,075,428	86,044	2,211,869	138,430	1,335,135	1,473,565	520,020	

However much this account of the financial concerns of our Eastern empire may be at variance with the exaggerated ideas entertained respecting it, as well by a large proportion of the people of England as by foreigners, it will excite no surprise in the mind of any one who has ever reflected on the subject. It is due, indeed, to the directors, to state, that though they have occasionally acted on erroneous principles, they have always exerted themselves to enforce economy in every branch of their expenditure, and to impose and collect their revenues in the best and cheapest manner. But though they have succeeded in repressing many abuses, it would be idle to suppose that they should ever entirely succeed in rooting them out. How can it be imagined, that strangers sent to India, conscious that they are armed with all the strength of government, placed under

no real responsibility, exempted from the salutary influence of public opinion, fearing no exposure through the medium of the press, and anxious only to accumulate a fortune, should not occasionally abuse their authority? or that they should manage the complicated and difficult affairs of a vast empire, inhabited by a race of people of whose language, manners, and habits, they are almost wholly ignorant, with that prudence, economy, and vigilance, without which it were idle to expect that any great surplus revenue could ever be realised?

EBONY (Ger. *Ebenholz;* Du. *Ebbenhout;* Fr. *Ebéne;* It. *Ebano;* Rus. *Ebenowoederewo;* Lat. *Ebenus*), a species of wood brought principally from the East. It is exceedingly hard and heavy, of great durability, susceptible of a very fine polish, and on that account used in mosaic and other inlaid work. There are many species of ebony. The best is that which is jet black, free from veins and rind, very compact, astringent, and of an acrid pungent taste. This species, (denominated by botanists *Diospyrus Ebenus*), is found principally in Madagascar, the Mauritius, and Ceylon. The centre only of the tree is said to be valuable. In 1826, 2,002,783 lbs. of ebony, of the estimated value of 9,017*l.* 7*s.* 6*d.* were exported from the Mauritius. Besides the black, there are red, green, and yellow ebonies; but the latter are not so much esteemed as the former. Cabinet-makers are in the habit of substituting pear-tree and other woods dyed black, in the place of genuine ebony; these, however, want its polish and lustre, though they hold glue better. The price of ebony varies, in the London market, from 5*l.* to 20*l.* a ton. The quantities imported are but inconsiderable.

EEL (*Anguilla muræna* of Linnæus), a fish, the appearance of which is too well known to require any description. It is a native of almost all the waters of Europe, frequenting not only rivers but stagnant pools. Eels are, in many places, extremely abundant, particularly in Holland and Jutland. Several ponds are appropriated in England to the raising of eels; and considerable numbers are taken in the Thames and other rivers. But by far the largest portion of the eels used in England are furnished by Holland. Indeed, very few except Dutch eels are ever seen in London; and even Hampton and Richmond are principally supplied by them. The trade is carried on by two Dutch companies, who employ in it several small vessels, by means of which the market is regularly and amply provided for. A cargo of eels is supposed to average from 15,000 to 20,000 lbs. weight, and is charged with a duty on importation of 13*l.* 1*s.* 3*d.* In 1832, this duty produced 940*l.* 10*s.*, showing that 72 cargoes had been imported that year. —(*Report on Channel Fisheries*, p. 93. &c.)

EGGS (Fr. *Œufs;* Lat. *Ova*), are too well known to require to be described. They differ in size, colour, taste, &c. according to the different species of birds that lay them. The eggs of hens are those most commonly used as food; and form an article of very considerable importance in a commercial point of view. Vast quantities are brought from the country to London and other great towns. Since the peace they have also been very largely imported from the Continent. At this moment, indeed, the trade in eggs forms a considerable branch of our commerce with France, and affords constant employment for a number of small vessels!

Account of the Number of Eggs imported since 1826, specifying the Countries whence they were brought, and the Revenue accruing thereon.

Countries from which imported.	1826.	1827.	1828.	1829.	1830.	1831.	1832.
	Number.	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*
Germany	7,200	9,020	- -	80	3,600	- -	3,120
United Netherlands	2,524,110	3,088,698	5,447,280	6,749,759	4,626,748	7,557,146	5,734,960
France	59,507,899	63,109,618	60,043,026	56,370,479	48,026,006	50,401,506	55,651,243
Isles of Guernsey, Jersey, Alderney, and Man, produce (duty free)	718,086	456,802	609,930	671,435	705,760	732,998	655,229
Isles of Guernsey, Jersey, Alderney, and Man, produce (foreign)	493,985	220,674	348,447	373,419	281,654	505,798	546,065
All other places	9,047	1,220	5,090	300	400	240	1,200
Total of the importations into the United Kingdom	63,260,627	66,886,132	66,455,773	64,165,472	53,644,168	59,197,688	62,591,817
	L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
Amount of duty received	21,726 10 2	23,071 4 1	22,920 8 3	22,189 2 10	18,505 14 8	20,372 15 9	21,537 2 0
Rate of duty charged	10*d.* per 120 during the whole period.						

It appears from this official statement, that the eggs imported from France amount to about 55,000,000 a year; and supposing them to cost, at an average, 4*d.* a dozen, it follows that the people of the metropolis and Brighton (for it is into them that they are almost all imported) pay the French about 76,388*l.* a year for eggs; and supposing that the freight, importers' and retailers' profit, duty, &c. raise their price to the consumer to 10*d.* a dozen, their total cost will be 190,972*l.*

EJOO. See Gomuti.

ELEMI, a resin obtained from the *Amyris elemifera*, a tree growing in different parts of America, Turkey, &c. It is obtained by wounding the bark in dry weather, the juice being left to thicken in the sun. It is of a pale yellow colour, semi-transparent; at

first softish, but it hardens by keeping. Its taste is slightly bitter and warm. Its smell, which is, at first, strong and fragrant, gradually diminishes. It used to be imported in long roundish cakes, wrapped in flag leaves, but it is now usually imported in mats and chests. — (*Thomson's Chemistry.*)

ELEPHANTS' TEETH. See IVORY.

ELM (*Ulmus*), a forest tree common in Great Britain, of which there are several varieties. It attains to a great size, and lives to a great age: its trunk is often rugged and crooked, and it is of slow growth. The colour of the heart-wood of elm is generally darker than that of oak, and of a redder brown. The sap-wood is of a yellowish or brownish white, with pores inclined to red. It is in general porous, and cross-grained, sometimes coarse-grained, and has no larger septa. It has a peculiar odour. It twists and warps much in drying, and shrinks very much both in length and breadth. It is difficult to work, but is not liable to split, and bears the driving of bolts and nails better than any other timber. In Scotland, chairs and other articles of household furniture are frequently made of elm wood; but in England, where the wood is inferior, it is chiefly used in the manufacture of coffins, casks, pumps, pipes, &c. It is appropriated to these purposes because of its great durability in water, which also occasions its extensive use as piles and planking for wet foundations. The naves of wheels are frequently made of elm; those of the heavy wagons and drays of London are made of oak, which supports a heavier weight, but does not hold the spokes so firmly. Elm is said to bear transplanting better than any other large tree. — (*Tredgold's Principles of Carpentry*, pp. 201—203. &c.)

ELSINEUR, OR HELSINGOR, a town in Zealand, about 22 miles north of Copenhagen, in lat. 56° 2′ 17″ N., lon. 12° 38′ 2″ E. Population about 7,000. Adjacent to Elsineur is the castle of Cronborg, which commands the entrance to the Baltic by the Sound. All merchant ships passing to and from the Baltic are obliged, under the reservations mentioned below, to salute Cronborg Castle by lowering their sails when abreast of the same; and no ship, unless she belong to Sweden, is allowed to pass the Sound without clearing out at Elsineur, and paying toll, according to the provisions in the treaties to that effect negotiated with Denmark by the different European powers. The first treaty with England having reference to this subject is dated in 1450. The Sound duties had their origin in an agreement between the King of Denmark on the one part, and the Hanse Towns on the other, by which the former undertook to construct lighthouses, landmarks, &c. along the Cattegat, and the latter to pay duty for the same. The duties have since been varied at different periods. Ships of war are exempted from the payment of duties. Most maritime nations have consuls resident at Elsineur. The following plan of the Sound is taken from the Admiralty Chart, compiled from Danish authorities. — (See opposite page.)

Ordinance respecting lowering in the Sound. — This ceremony being attended with much inconvenience in unfavourable weather, his Danish Majesty issued, in 1829, the following ordinance: —

1. All ships sailing through the Sound, whether they come from the north or south, must salute Cronborg Castle, by lowering their sails so soon as the northernmost church in Elsineur begins to be concealed behind the castle. The lowering must not commence before the church goes in behind the castle, and must continue till the church opens itself without the castle again, or for the full space of 5 minutes. Every person neglecting this duty must expect to be compelled, by cannon-shot, to the same, and to be fined for contumacy.

N. B. — When a ship lowers her sails on her first entrance into the marks, and keeps them lowered 5 minutes, though not come out of the marks, it is considered sufficient.

2. The sails to be lowered are as follow: — Ships carrying top-gallant sails, standing or flying, must lower the top-gallant sails entirely down on the cap: ships having only one top-gallant sail, and, at the same time, the fore-top-sail, they must be lowered half-mast down: ships having no top-gallant sails must lower both the top-sails on half-mast: all other ships, be they galliots, smacks, ketches, brigantines, or of what denomination soever, carrying only flying top-sails, must lower the top-sails entirely down; but those having no standing or flying top-sails, or which have all their reefs in their top-sails, are exempt from lowering.

3. When ships cruize through the Sound with a contrary wind, or when (with a scant wind or small breeze) the current is so strong against them that it would set them astern, if they lowered their sails, *then it shall be made known to them, by hoisting the colours at the castle, that no salute is required, and that they may make the best of their way without striking their sails.*

4. When any vessel has been fired at, then the master or mate, with two of the ship's crew, must go on shore, and make declaration, on oath, before the Court of Inquest, why they have not lowered in the time or in the manner prescribed. If it be deposed that lowering was performed in due time and manner, then the master will be free from paying for the shot fired at him; on the contrary, he must then pay for each shot fired at him from the castle, 5 rixdollars 20 stivers current; and 1 ducat for each shot from the guard-ship's boat when in pursuit of the ship. If the master of a vessel should sail away without acquitting himself, when it is proved who the master or ship was, the fine will be demanded of the person who clears him at the Custom-house.

In stormy weather, when a ship cannot come to anchor in Elsineur roads without danger, or if she be leaky, or going to repair or deliver; in such cases, going to Copenhagen is not considered a fraud. But it is in all cases indispensable that the ship's papers should be sent to Elsineur as soon as possible, that she may be cleared.

References to Plan. — A, Castle and light of Cronborg; B, Elsineur; C, Helsingborg in Sweden; D, the bank called the Lappen; E, the bank called the Disken. The soundings are in fathoms.

Pilotage, &c. — When ships come into Elsineur roads, or lie wind-bound near the Lappen, watermen come on board to inquire if the master will be carried ashore to clear; and in rough weather it is always best to make use of their services, their boats being generally very safe. The Danish authorities have published a Table of rates, being the highest charge that can be made by the boatmen upon such occasions; but captains may bargain with them for as much less as they please. Most ships passing the Sound take on board pilots, the signal for one being a flag at the fore-topmast-head. Those bound for the Baltic take a pilot at Elsineur, who either carries the ship to Copenhagen, or Dragoe, a small town on the south-east extremity of the island of Amack, where she is clear of the grounds. Those leaving the Baltic take a pilot from Dragoe, who carries the ship to Elsineur. Sometimes, when the wind is fresh from the E. and S.E., it is impossible for a ship bound for Copenhagen or the Baltic to double the point of Cronborg; and in that case an Elsineur pilot is sometimes employed to moor the ship in the channel towards Kull Point on the Swedish shore, in lat. 56° 18′ 3″ N., lon. 12° 26′ E. This contingency is, however, less likely to happen in future, as we understand the Danish government have recently hired a steam tug for the special purpose of bringing ships, in adverse weather, round Cronborg Point. The pilots are regularly licensed, so that, by employing them, the captain's responsibility is at an end. Their charges are fixed by authority, and depend on the ship's draught of water. We subjoin a copy of the tariff applicable to pilots taken on board at Elsineur to carry ships to Dragoe, Copenhagen, or Kull Point, with the sums both in silver and in Rigsbank paper dollars.

Pilotage from the 1st of April to the 30th of September.

Ships drawing Water.	Dragoe.				Copenhagen.				Kull Point.			
	Silver.		Paper.		Silver.		Paper.		Silver.		Paper.	
Feet.	R.b. dr.	sch.	R.b. dr.	sch.	R.b. dr.	sch.	R.b. dr.	sch.	R.b. dr.	sch.	R.b. dr.	sch.
Under - - 8	11	78	12	18	9	10	9	58	5	72	5	89
Between - 8 and 9	13	16	13	56	10	6	10	36	6	63	6	83
9 — 10	14	50	14	84	11	2	11	35	7	53	7	76
10 — 11	15	84	16	36	11	94	12	34	8	44	8	69
11 — 12	17	22	17	74	12	91	13	33	9	35	9	63
12 — 13	18	56	19	16	13	87	14	32	10	25	10	56
13 — 14	19	90	20	64	14	83	15	31	11	16	11	50
14 — 15	21	28	21	92	15	78	16	30	12	7	12	43
15 — 16	22	62	23	34	16	75	17	29	12	93	13	36
16 — 17	24	65	25	43	18	56	19	16	13	84	14	30
17 — 18	26	68	27	52	20	37	21	2	15	44	15	90
18 — 19	28	71	29	61	22	19	22	86	17	3	17	54
19 — 20	30	74	31	72	24	0	24	72	18	59	19	19
20 — 21	32	77	33	80	25	77	26	58	20	19	20	80
21 — 22	34	80	35	89	27	59	28	46	21	74	22	43
22 — 23	36	83	38	1	29	40	30	32	23	34	24	28

Pilotage from the 1st of October to the 30th of March.

Ships drawing Water.	Dragoe.				Copenhagen.				Kull Point.			
	Silver.		Paper.		Silver.		Paper.		Silver.		Paper.	
Feet.	R.b. dr.	sch.	R.b. dr.	sch.	R.b. dr.	sch.	R.b. dr.	sch.	R.b. dr.	sch.	R.b. dr.	sch.
Under - - 8	14	92	15	40	11	35	11	70	7	53	7	76
Between - 8 and 9	16	75	17	30	12	61	13	2	8	73	9	3
9 — 10	18	56	19	16	13	88	14	64	9	92	10	26
10 — 11	20	37	21	2	14	19	15	64	11	16	11	50
11 — 12	22	19	22	86	16	47	17	-	12	36	12	73
12 — 13	24	-	24	72	17	73	18	30	13	55	14	-
13 — 14	25	77	26	58	19	4	19	62	14	75	15	24
14 — 15	27	59	28	46	20	29	20	90	15	95	16	48
15 — 16	29	40	30	32	21	57	22	26	17	17	17	68
16 — 17	32	12	33	12	24	-	24	72	18	37	18	92
17 — 18	34	80	35	88	26	30	27	22	20	48	21	14
18 — 19	37	52	38	68	28	79	29	70	22	57	23	28
19 — 20	40	24	41	48	31	21	32	19	24	68	25	46
20 — 21	42	92	44	28	33	60	34	65	26	79	27	64
21 — 22	45	64	47	9	36	4	37	16	28	88	29	78
22 — 23	48	36	49	85	38	45	39	62	31	3	32	0

N. B. — When a pilot is taken on board at Dragoe to carry a ship to Elsineur, the charge is the same as that given under the first head of the above column. — (*Archives du Commerce*, tome iii. p. 145.)

The *Monies*, *Weights*, and *Measures* of Elsineur are the same as those of Copenhagen (which see), except that the rixdollar is divided into 4 *orts* instead of 6 marcs: thus, 24 skillings make 1 ort; and 4 orts 1 rixdollar.

In paying toll, however, at the passage of the Sound, the monies are distinguished into three different values; namely, specie, crown, and current.

Specie money is that in which the duties of the Sound were fixed in 1701.

Crown money was the ancient currency of Denmark, in which the toll is sometimes reckoned.

Current money is the actual currency of the country.

The proportion between these denominations is as follows: —

Eight specie rixdollars = 9 crown rixdollars; 16 crown rixdollars = 17 current rixdollars: therefore to reduce specie money into crown money, add one eighth; and for the reverse operation, subtract one ninth.

To reduce crown money into current money, add one sixteenth; and for the reverse operation, subtract one seventeenth.

Hence, also, 128 specie rixdollars are worth 144 crown rixdollars, or 153 current rixdollars; and therefore specie money is 12½ per cent. better than crown money, and 19$\frac{32}{32}$ per cent. better than current money.

Houses in the Baltic charge the Sound duties in the invoices, and have their own agents at Elsineur, to clear all the merchandise shipped by them. If this be not the case, the merchants at Elsineur then draw upon the owners or agents where the goods are directed or addressed.

Weights. — A shippound from the Baltic, of 10 stone, is calculated as 300 lbs. Danish; a Russian berkowitz, as 300 lbs.; a pud, as 30 lbs. Danish; a centner from the Baltic, as 110 lbs.; and a cwt. English, as 112 lbs. Danish.

Corn Measure of different Places reduced to Danish Lasts, for paying the Sound Dues.

Barth, Colberg, Demmin, Ragenwalde, Stolpe, Treptow, Stralsund, Wolgast — 3 lasts will be reckoned in the Sound as 4 lasts.

Gripswalde, Wismar, Anclam — 4 lasts reckoned as 5.

Rostock, 5 lasts for 6.

Stettin, Warnemunde, Wisemunde — 6 lasts for 7.

Lubeck, 7 lasts for 8.

Riga, Konigsberg, Dantzic, Elbing, Memel, Revel, Petersburgh, Oesel — The same as the Dutch.

	Lasts.
16 Russian chetwerts	1
1 cent. of 28 muids French salt, from Rochelle	13
1 cent. from Bordeaux	12
13 raziers from Dunkirk	1
10 muids from Havre	12
7 movos from Cadiz, Lisbon, &c.	12
[illegible] Dutch marts (measures)	7
1 English chaldron, 2 weighs, 2 tons, or 80 bushels	1

Liquid Measure. — A tonneau of French wine is considered as 4 oxhofts, or 24 ankers.

A pipe of Spanish or Portuguese wine, as 2 oxhofts.

30 Spanish arrobas, or 25 Portuguese almudes, as a regular pipe.

30 Spanish arrobas, or 48 pots of oil, as a regular both (pipe); a hogshead of brandy, as 6 ankers; a tierce, as 4 ankers; an anker, 5 velts, or 40 Danish pots.

Duties payable at the Sound on the principal Articles commonly passing through.

	Rixd.	st.
Ale or beer, the 8 hogsheads, at 4½	0	36
Almonds, the 100 lbs.	0	9
Alum, the shippound	0	12
Aniseed, the 100 lbs.	0	9
Antimony, the shippound	0	12
Anchor and locks, the schock of 60	1	0
Apples, the last of 22 barrels	0	12
Apothecaries' drugs, the lispound valued at 36 rixdollars	0	18
Argol, the shippound	0	6
Arsenic, do.	0	12
Ashes, weed, the last of 12 barrels, or 12 do.	0	6
pot, the last of 12 do., or 12 do.	1	0
Bacon, the shippound	0	9
Baize, the single piece	0	3
the double do.	0	6
Balks, great, of oak, the piece	0	3
fir, 4 do.	0	6
small, do. 20 do.	0	13
Bay, berries, the 200 lbs.	0	9
Beef, salted, the last of 12 barrels	0	36
Biscuit, or bread of wheat, 4 barrels	0	6
rye, 4 do.	0	4
Books, printed, the 100 lbs. valued at 36 rixdollars	0	18
Brass, or brass wire, the shippound	0	24
wrought, the 100 lbs. valued at 36 rixdollars	0	18
Brimstone, the last of 12 shippound	1	0
Brandy, French or Spanish, the hogshead	0	24
corn, the barrel	0	6
Rhenish, the ahm	0	24
Brazil wood, the 500 lbs.	0	15
Bristles, the shippound, valued at 36 rixdollars	0	18
Butter, the barrel	0	5
Cables, cordage, or cable yarn, the shippound	0	6
Calicoes, the 8 pieces	0	15
Capers, the pipe, or 2 hogsheads	0	18
Cards, for playing or for wool, the 10 dozen	0	6
Cardamoms, cinnamon, cloves, or cochineal, the 100 lbs.	0	34
Camlets, the 4 pieces	0	10
Canvass, or cambrics, 4 do.	0	15
Callimancoes, the 8 do.	0	10
Campeachy wood, the 500 lbs.	0	18
Caraway seeds, the 100 do.	0	9
Caviare, the shippound, valued at 36 rixdollars	0	9
Cheese, the shippound	0	4
Chesnuts, the 36 sacks	0	36
Cider, the hogshead	0	12
Clock-work, the 100 lbs. valued at 36 rixdollars	0	18
Cloth of silk, the piece	0	9
fine or short cloths, or double dozens, the 2 pieces	0	9
coarse, or long cloths, or dozens, the 4 do.	0	9
Coffee, the 200 lbs.	0	24
Copper, the shippound	0	24
wrought, the 100 lbs. valued at 32 rixdollars	0	6
Cork, the 30 bundles	0	36
Copperas, calamine, or cream of tartar, the shippound	0	6
Cotton wool, the 100 lbs.	0	18
Corn, barley, the last of 20 barrels	0	22
beans, peas, oats, or buckwheat, the last of 12 do.	0	18
malt, the last of 12 do.	0	12
rye, the last of 20 do.	0	10
wheat, the last of 20 do.	1	2
Coriander and currants, the 200 lbs.	0	6
Damask, of silk, the piece	0	12
linen, the 4 pieces	0	10
woollen, the 8 do.	0	10
Deals of oak or fir, above 20 feet, the schock	1	0
Carlsham, under 20 feet	0	24
Prussian	0	36
common, 10 to 14 feet, the 1,000	0	36
Diaper or drilling, the 20 pieces	0	30
Down, the shippound	0	36
Druggets, the 2 pieces	0	9
Eels, the last of 12 barrels	0	30
Elephants' teeth, each	0	36
Feathers, the shippound	0	6
Fernambuco wood, 1,000 lbs.	0	30
Figs, the 18 baskets, 800 do.	0	48
Fish, cod, the last, 12 barrels	0	12
stock, the last, 12 shippound, or 1,000 fish	0	30
salmon, the barrel	0	5
salted herrings, do.	0	2
red herrings, the last of 20 straes, or 20,000	0	12
Flannels, the 8 pieces of 25 ells each	0	10
Flax, dressed, the shippound	0	36
undressed, as Petersburgh, Narva, 12 hogsheads; Marienburg, all fine sorts podilla, racketzer, and paternoster, the 4 do.	1	0
coarse, half clean, Farken, Rassets, Memels, and Marienburg, the 6 do.	1	0
tow, the 5 do.	0	18
Flounders, dry, the 20,000	0	12
Flour of wheat, the 200 lbs.	0	9
barley or rye, the last of 12 barrels	0	12
Frieze, the piece	0	6
Galls, or gum, the 200 lbs.	0	9
Glass for windows, English, French, Lubeck, and Dantzic, the 8 chests	0	30
Venice, drinking do., the chest	0	9
bottles, the ton, 4 hogsheads and 30 schocks	0	30
the 2 pipes	0	10
quart bottles, 100 dozen, 50 rixdollars	0	24
Gloves, Russia, or Courland, the 250 pair	0	9
leather, the dozen, value 2 rixdollars	1	0
Gunpowder, the 100 lbs.	0	6
Haberdashery ware, the 100 lbs. valued at 36 rixdollars	0	18
Hair, camels' or coneys', the 50 lbs.	0	50
Handspikes, the 500	0	8
Hats, felt, the cask	0	12
beaver, the dozen, value 48 rixdollars	0	24
castor, the dozen, do.	0	12
Hemp, the shippound	0	8
tow, the 10 do.	0	36
Hides, elks', harts', bucks', or Russia, the decker	0	9
salted, elks', harts', bucks', or Russia, do.	0	6
dry, elks', harts', bucks', or Russia, the 5 do.	0	18
Russia, the shippound	0	36
Honey, the hogshead	0	7
Hops, the shippound	0	6
Horses, the pair	0	36
Indigo, the 100 lbs.	0	36
Iron wire, or pans, do.	0	4
stoves, plates or pots, the shippound	0	6
bars, bats, bolts, hoops, anchors, and guns, do.	0	4
wrought, the 100 lbs. valued at 24 rixdollars	0	12
old, the shippound	0	3
Ostermunds, do.	0	2
Isinglass, the 100 lbs.	0	6
Juniper berries, the 200 do.	0	9
Kerseys, the 8 pieces	0	10
Lace, silk, or ferret, the 4 lbs.	0	10
thread, wool, cotton, or hair, the 10 do.	0	6
gold and silver, the lb.	0	5
Lemons, the 12 chests, or 36,000	0	24
pickled, the pipe or hogshead	0	18
Lead, fodder, the ton, or 6 shippound	0	24
shot, the 100 lbs.	0	4
red or white, do.	0	2
Leather, Russia or Scotch, the decker	0	9
Spanish, Cordovan, Turkey, and buff, do.	0	6
Sems, the 10 do.	0	36
Basanes, the 10 do.	0	18
tanned or sole, the 100 lbs.	0	9
alumed or white, the 500 pieces	0	18
Lignum vitæ, the 100 lbs.	0	9
Linseed, the last of 24 barrels	0	36
Linen, calicoes, the 16 pieces	0	30
flax, the 20 do.	0	30
Holland, Silesia, and Westphalia, the 4 do.	0	10
hemp, black tow, the 80 do.	0	30
canvass, the 8 do.	0	30
damask, the 12 do.	0	30
drilling, the 20 do., or 500 arsheens	0	30
from Petersburgh, all sorts, the 40 do., or 2,000 do.	0	30
Logwood, the 800 lbs.	0	30
Mace, the 50 lbs.	0	18
Masts, 15 palms and upwards, the piece	0	24
small	0	1
for boats, the schock	1	24
Mats from Petersburgh, the 1,000	0	15
Mohair, the 50 lbs.	0	30
Mustard seed, the last of 12 barrels	0	30
Nails, Holland or Lubeck, the centner	0	4
tree nails for ships, the 40,000	0	36
Nutmegs, do.	0	18
Nuts, the last of 20 barrels or sacks	0	12
Oars, great, the schock	0	12
small, do.	0	8
Oil, olive, of Seville or Portugal, the pipe	0	36
rape, linseed, hemp, the last of 8 ahms	0	36
train, the last of 8 hogsheads, or 12 barrels	0	36
Olibanum, the 100 lbs.	0	9
Olives, the pipe, or 2 hogsheads	0	18
Oranges, the 12 chests, or 3,600	0	24
Paper, the 8 bales, or 80 reams	0	30
Pepper, the 100 lbs.	0	12
Pewter, the shippound	0	24
Pitch, great band	0	18
small	0	9
Plates of tin, the 4 casks, or shippound	0	12
Plaiding, the 1,000 ells, or 40 pieces	0	50
Prunes, the 400 lbs.	0	9
Prunelloes, the 100 do.	0	9
Quicksilver, the 50 do.	0	36
Rapeseed, the last of 24 barrels	0	36
Raisins, the 400 lbs., or 36 baskets	0	36
Resin, the shippound	0	6
Ribands of silk, or ferrets, the 4 lbs.	0	10
gold or silver, the 2 do.	0	10
Rice, the 200 do.	0	9
Saffron, the 2 do.	0	9
Salt, Spanish, French, and Scotch, the last of 18 barrels, or 8 bushels	0	24
Lunenburg, the last of 12 bushels	0	36
Saltpetre, the shippound	0	6
Says, double, the 2 pieces	0	9
single, or English, the 4 do.	0	6
Sailcloth, the 8 do.	0	30
Sarsaparilla, do.	0	18
Shumac, the 400 lbs.	0	9
Silk, sewing, ferret, wrought lace, the 4 do.	0	10
raw, the 100 do.	0	30
stuffs, do.	0	15
with gold and silver, the piece	0	18
Skins, beaver, the 5 deckers	0	24
otter, the piece	0	6
Russia, dry, wolf and fox, the 5 deckers	0	18
goat, the 20 do.	0	36
calf, the 10 do.	0	12
cat and sheep, the 500 pieces	0	18
black rabbit, or lamb, the 1,000 do.	0	18
grey rabbit, or kid, the 2,000	0	18
marten, the 40	0	30
hare, the bale, valued at 72 rixdollars	0	36
Soap, white, the 100 lbs.	0	9
green, the last of 12 barrels	0	36
Spars, great, the 25 pieces	0	36
small, the 1,000 do.	0	16
Starch, the 300 lbs.	0	8
Staves, pipe, hogshead, and barrel, the great hundred of 48 schocks	0	30
Steel, the 100 lbs.	0	4
Stones, Poland, the 1,000 feet of 500 ells	0	30
Stockings of silk, the dozen, or 12 lbs.	0	30
kersey, woollen, or worsted, for children,	0	30

	Rixd.	s.
Stockings — *continued.*		
worsted, floret, and sayet, the 50 do.	0	30
woollen, for children, the 200 do.	0	30
Sturgeon, the last of 12 barrels	1	12
Stuffs, woollen, the 8 pieces	0	12
Sarsnet, the 50 lbs.	0	12
Sugar candy, or confectionary, the 100 do.	0	18
loaves, powder, or Muscovado, the 200 lbs.	0	18
Sword blades, the 50	0	12
hilts, do.	0	18
Sweetwood, the 100 lbs.	0	9
Tallow, the shippound	0	6
Tarras, the last, 6 shippound, or 12 barrels	0	36
Tar, great band, the last of 12 barrels	0	18
small band, the last of do.	0	9
Thread, white and coloured, the 50 lbs.	0	30
gold and silver, the lb.	0	5
Tin, the shippound	0	24
Tobacco, the 100 lbs.	0	9
Treacle, the pipe, or 2 hogsheads	0	36
Turpentine, the shippound	0	6
Verdigris, the 100 lbs.	0	9
Vermilion, do	0	36
Velvet, fine, the piece	0	9
with thread, the 2 pieces	0	9
Vinegar of wine, the hogshead	0	12
beer, ale, or cider, the 2 do.	0	9

	Rixd.	st.
Wax, the shippound	0	36
Wainscot boards, the schock	0	14
Wine, Bordeaux, the ton, or 4 hogsheads, at 52 rix-dollars	1	36
Picardin, Hoogland, Muscat, and Frontignac, the 2 hogsheads	1	0
Spanish or Portuguese, the pipe	1	24
Italian and Levant	2	0
Rhenish, the ahm	0	40
Wire, iron, or brass, the shippound	0	24
steel, the 100 lbs.	0	24
gold and silver, the lb.	0	5
Wool, lowver, the 50 lbs.	1	0
Spanish, or fine, the 4 shippound	0	36
coarse, or Scotch, the 6 do.	0	36
flock, or cutting wool, the 2 do.	0	9
Scotch shirts, the 10 pieces	0	15
shifts, the 8 do.	0	10
Wood shovels, the 10 schocks	0	9
dishes or trays, the 5 do.	0	9
plates, the 5 do.	0	9
nails, the 20,000	0	18
Yarn, cotton, the 50 lbs.	0	36
linen, the shippound, or 40 schocks	0	36
tow, the 4 do.	0	36
sail, the shippound	0	36
all sorts of woollen, the 50 lbs.	0	36

Memorandum respecting the Mode of preventing certain Overcharges of Sound Duties on Goods shipped for the Baltic.

There have been many complaints of the Sound duty being overrated on goods which, as they are not noticed in the tariff, are chargeable *ad valorem*, (1 per cent. in the case of the English, Dutch, and Swedes; 1½ per cent. in the case of other nations;) this charge being solely regulated by the value expressed in the cockets, the only documents by which the Custom-house officers at the Sound are governed. This originates in the shippers of goods finding it expedient occasionally to give a nominal value to merchandise not liable to an export duty in England, far exceeding the real value, in order to provide for a further shipment of the same species of goods in the same vessel (which entry can alone be considered as expressive of the intention to ship goods to that extent). It is, therefore, suggested to the shippers of merchandise for the Baltic, that, besides the above-mentioned nominal value, they should cause the *real value of the goods actually shipped* to be inserted on the reverse of the cocket, as there is every reason to believe that this real value will then become the criterion by which the Sound duty will be calculated. For instance, supposing a cocket to run thus—

"Know ye that Parkinson and Co. have entered British cottons, value 10,000*l.* sterling, to be shipped per the Newland, Francis Hunter, master, for St. Petersburgh:"

The indorsement should be—

"P. l. a. 10. Ten bales cambrics, value 4,794*l.* 5*s.* sterling, shipped on board the Newland, Francis Hunter, for Petersburgh."

(Signed by) PARKINSON and Co.
(Or by the signing Custom-house officer) N. N

The Sound duty will then probably be charged not on 10,000*l.*, but on 4,794*l.* 5*s.* Should, however, the latter entry be wanting, the first sum will be the only criterion by which to calculate the Sound duty; and in case of overcharge, no restitution need be hoped for.—(*Rordanz, European Commerce.*)

NAVIGATION OF THE BALTIC.

This is exhibited in the following Account of the Number of Ships that have passed (going and returning) the Sound at different Periods, from the Year 1777 to the present Time, specifying the Countries to which they belonged.

Countries.	1777.	1780.	1783.	1785.	1787.	1789.	1790.	1792.	1814.	1816.	1820.	1825.	1827.	1829.	1830.	1831.	1832.
British islands	2,552	1,701	2,862	2,537	2,806	3,501	3,771	4,349	2,319	1,848	3,597	5,186	5,099	4,805	4,274	4,772	3,530
Holland	2,567	2,058	510	1,571	1,436	1,924	2,089	2,581	534	876	853	630	814	1,105	1,227	1,023	1,425
Sweden	1,773	1,880	2,474	2,136	2,360	53	430	2,134	2,759	2,042	1,549	1,319	1,389	1,117	1,188	1,347	1,005
Denmark	1,110	1,341	1,796	1,787	1,337	1,343	1,586	1,368	476	787	792	805	836	865	744	695	855
Prussia	472	671	2,086	1,358	743	945	569	737	2,033	1,014	1,554	2,391	3,038	2,186	2,255	1,810	1,763
Russia	47	43	137	114	96	-	6	65	495	569	242	355	384	367	405	424	2485
United States	-	-	3	20	30	42	44	68	-	168	169	230	191	180	152	179	189
France	21	-	8	20	35	111	123	25	12	16	63	72	103	180	199	72	251
Spain	10	-	7	15	10	23	32	40	22	9	-	-	-	10	8	4	4
Hanover	-	-	-	-	-	-	-	-	55	265	458	413	457	602	645	451	542
Imperial (Austria)	5	30	533	66	61	107	6	40	-								
Dantzic	231	174	202	161	200	186	248	209	-								
Mecklenburgh	-	-	-	-	-	-	-	-	-	386	517	602	555	627	664	535	591
Oldenburgh	-	-	-	-	2	-	24	33	18	29	47	54	35	44	56	53	78
Lubeck	78	82	125	79	66	83	89	86	28	45	64	121	99	104	80	77	77
Bremen	82	146	263	176	142	181	177	188	248	111	59	34	55	85	79	92	80
Hamburgh	22	31		61	77	62	104	83	36	36	15	31	35	46	25	41	21
Rostock	79	104	57	101	-	224	339	338									
Papenburgh	-	-	-	-	61	-	99	142									
Portugal	12	21	29	28	16	33	28	11	42	48	2	9	11	-	-	2	
Courland	2	7	10	25	10	5	22	21									
Naples	-	-	1														
Venice	-	2	2	4	-	2	(It.)6	-	2	-	-	-	-	2	6	12	8
Norway	-	-	-	-	-	-	-	-	85	794	946	951	879	1,161	1,202	1,357	1,555
Greece	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Totals	9,053	8,291	11,233	10,268	9,746	8,823	9,742	12,414	8,186	8,871	10,926	13,160	13,000	13,486	13,212	12,946	12,202

The statements in this Table for the years 1777, 1780, 1783, and 1789, are taken from the valuable work entitled *Voyage de Deux François au Nord de l'Europe* (tom. i. p. 300.); the other years are taken from the returns sent by the British consul at Elsineur, printed in various parliamentary papers. We have seen no two returns of the shipping that pass the Sound that quite agree, though the differences are not very material. The above account, though in many respects most interesting, is defective, inasmuch as it does not give the tonnage as well as the number of the ships. Since 1831, however, the British consul has sent returns of the shipping; and it is not improbable that the Danish authorities may be able to supply this desideratum for a lengthened period. The falling off in the amount of British shipping in 1832 was wholly owing to the alarm caused by the prevalence of cholera, and other evanescent causes.—We subjoin an

Account of the British Shipping employed in the Baltic Trade through the Sound in 1832; exhibiting the Number of Vessels sent out, the Number of Voyages performed by them, and their Tonnage, as ascertained by the Consul at Elsineur. — (*Papers published by Board of Trade*, vol. ii. p. 53.)

To what Ports belonging.	Number of Ships sent out.	Tonnage.	Number of Voyages performed.	Aggregate Tonnage.
England and Wales -	679	140,469	1,891	403,997
Scotland - - -	395	50,694	1,352	175,992
Ireland - - -	16	2,193	38	5,232
Guernsey and Jersey -	22	3,556	43	6,914
The Colonies - -	3	699	6	1,398
Total - -	1,115	197,611	3,330	593,533

There were lost in the Baltic, in 1832, 14 British ships, of the burden of 2,897 tons; and 8 British ships, of the burden of 1,823 tons, were detained in it by the frost at the close of the year, and obliged to winter in its various ports.

EMBARGO, an order issued by the government of a country to prevent the sailing of ships.

EMERALD (Fr. *Emeraude*; Ger. *Smaragd*; It. *Smeraldo*; Lat. *Smaragdus*; Sp. *Esmeralda*), a precious stone in high estimation. It is distinguished from all other gems by its peculiar *emerald green* lustre, varying in intensity from the palest possible tinge to a full and deep colour, than which, as Pliny has truly stated, nothing can be more beautiful and pleasing; *nullius coloris aspectus jucundior est.* It emulates, he continues, if it do not surpass, the verdure of the spring; and the eye, satiated by the dazzling glare of the more brilliant gems, or wearied by intense application, is refreshed and strengthened by the quiet enlivening green of the emerald. In Pliny's time, the best came from Scythia. Those met with in modern times do not often exceed the size of a walnut. Some of a much larger size, and perfect, have been found, but they are extremely rare. Nero used one as an eye-glass in surveying the combats of the gladiators. Hitherto it has always been found crystallised. Specific gravity from 2·6 to 2·77. — (*Plin. Hist. Nat.* lib. xxxvii. cap. 5.; *Thomson's Chemistry.*)

"For the last two centuries and more, the only country known to yield emeralds is Peru, where they occur in Santa Fé, and in the valley of Tunca. Several large stones have appeared in Europe: about 2 years ago I cut one, exceeding 2 ounces in weight, for the Emperor of Morocco, but it was full of imperfections. The largest specimen known is an hexagonal crystal, nearly 6 inches long, and above 2 in diameter. This gem, however small, is so rarely seen perfect, that 'an emerald without a flaw' has passed into a proverb. A fine stone of 4 carats may be valued at 40*l.* or 50*l.*, or even more if very pure. Inferior stones of 1 or 2 carats are sold at from 40*s.* to 70*s.* per carat; and if smaller and defective, at 10*s.* or 15*s.* per carat. Fine emeralds are rare, and in such demand, that a particular suit has been known to have passed into the possession of a series of purchasers, and to have made the tour of Europe in the course of half a century." — (*Mawe on Diamonds*, 2d ed. p. 104.)

EMERY (Fr. *Emeril, Emeri*; Ger. *Smirgel*; It. *Smerglio, Smeregio*; Sp. *Esmeril*; Rus. *Nashdak*; Lat. *Smiris*), a mineral brought to Britain from the isle of Naxos, where it exists in large quantities. It occurs also in Germany, Italy, and Spain. It is always in shapeless masses, and mixed with other minerals. Colour intermediate between greyish black and bluish grey. Specific gravity about 4. Lustre glistening and adamantine. Emery is extensively used in the polishing of hard bodies. Its fine powder is obtained by trituration. — (*Thomson's Chemistry.*)

ENGROSSING, is "the buying up of corn and other dead victuals, with intent to sell them again." — (*Blackstone*, book iv. cap. 12.) We have shown in another article, how absurd it is to suppose that this practice should have any injurious influence — (*antè*, p. 410.). But, for a long time, most scarcities that occurred were either entirely ascribed to the influence of engrossers and forestallers — (see FORESTALLING) — or, at least, were supposed to be materially aggravated by their proceedings. In consequence, however, of the prevalence of more just and enlarged views upon such subjects, the statutes that had been made for the suppression and punishment of engrossing, forestalling, &c. were repealed in 1772. — (See *antè*, p. 403.) But notwithstanding this repeal, engrossing continues to be an indictable offence, punishable at common law by fine and imprisonment; though it is not at all likely, were an attempt made, that any jury would now be found ignorant or prejudiced enough to convict any one on such a charge.

ENTRY, BILL OF. See IMPORTATION.

ERMINE (Ger. *Hermelin*; Fr. *Hermine, Ermine*; Rus. *Gornostai*), a species of weasel (*Mustela candida* Lin.), abundant in all cold countries, particularly Russia, Norway, Lapland, &c., and producing a most valuable species of fur. In summer, the ermine is of a brown colour, and is called the *stoat.* It is in winter only that the fur has that beautiful snowy whiteness and consistence so much admired. — (See FURS.)

ESPARTO, a species of rush, the *Stipa tenacissima* of botanists. It is found in the southern provinces of Spain; and is particularly abundant on all the sterile, uncultivated, and mountainous districts of Valencia. — Beckmann (*Hist. of Invent.* vol. ii. p. 288. Eng. ed.) supposes, apparently with good reason, that the *stipa tenacissima* is the plant described by Pliny under the name of *Sparta*, who ascribes its application to useful purposes to the Carthaginians — (*Hist. Nat.* [illegible] the same

purposes as in antiquity, being manufactured into cordage, shoes, matting, baskets, nets, mattresses, sacks, &c. Cables made of esparto are said to be excellent; being light, they float on the surface of the water, and are not, therefore, so liable as hempen cables to be cut or injured by a foul bottom. They are exclusively made use of in the Spanish navy. Esparto is largely consumed in the manufacture of *alpergates*. These are light shoes worn by the Valencian peasantry, having platted soles made either of esparto or hemp, but principally of the former. They are extremely cheap and commodious in hot climates; and besides being in extensive demand at home, used to be exported in immense quantities to both Indies; but since the emancipation of Spanish America, this trade has greatly fallen off. The Spanish peasantry have attained to wonderful dexterity in the manufacture of esparto. "After having soaked the rush in water, the women and children, without either wheel or spindle, contrive to twist two threads at the same time. This they do by rubbing them between the palms of their hands, in the same manner as a shoemaker forms a thread upon his knees, with this difference, that one motion gives the twist to each thread, and, at the same time, unites them. To keep the threads asunder, the thumb of the right hand is interposed between them; and when that is wanted for other purposes, the left thumb supplies its place. Two threads being thus twisted into one of the bigness of a large crow-quill, 46 yards are sold for little more than $\frac{1}{4}d.$, the materials being worth about $\frac{1}{3}$th part of the price." — (*Townsend's Travels in Spain*, vol. iii. p. 177., see also p. 129.; *Fischer's Picture of Valencia*, Eng. ed. p. 92. and p. 57. &c.)

ESTRICH OR ESTRIDGE (Fr. *Duvet d'autruche*; It. *Penna matta di strozzo*; Sp. *Plumazo de avestrux*; Lat. *Struthionum plumæ molliores*), is the fine soft down which lies immediately under the feathers of the ostrich. The finest is used as a substitute for beaver in the manufacture of hats, and the coarser or stronger sort is employed in the fabrication of a stuff which resembles fine woollen cloth. Estridge is brought from the Levant, Italy, and other parts of the Mediterranean.

EUPHORBIUM (Ger. *Euphorbiengummi*; Lat. *Euphorbium*; Fr. *Euphorbe*; Arab. *Akal-nafzah*), the produce of a perennial plant, a native of Africa, and of many parts of India, &c. It is a concrete gum resin; is inodorous; when first chewed has little taste, but it soon gives a very acrid burning impression to the tongue, palate, and throat, which is very permanent, and almost insupportable. It is imported in serons containing from 100 to 150 lbs. It is in small, hollow, forked pieces, often mixed with seeds and other impurities. — (*Thomson's Dispensatory.*)

EXCHANGE. In commerce, this term is generally used to designate that species of mercantile transactions, by which the debts of individuals residing at a distance from their creditors are cancelled without the transmission of money.

Among cities or countries having any considerable intercourse together, the debts mutually due by each other approach, for the most part, near to an equality. There are at all times, for example, a considerable number of persons in London indebted to Hamburgh; but, speaking generally, there are about an equal number of persons in London to whom Hamburgh is indebted. And hence, when A. of London has a payment to make to B. of Hamburgh, he does not remit an equivalent sum of money to the latter; but he goes into the market and buys a *bill* upon Hamburgh, that is, he buys an order from C. of London addressed to his debtor D. of Hamburgh, requesting him to pay the amount to A. or his order. A., having indorsed this bill or order, sends it to B., who receives payment from his neighbour D. The convenience of all parties is consulted by a transaction of this sort. The debts due by A. to B., and by D. to C., are extinguished without the intervention of any money. A. of London pays C. of ditto, and D. of Hamburgh pays B. of ditto. The debtor in one place is substituted for the debtor in another; and a postage or two, and the stamp for the bill, form the whole expenses. All risk of loss is obviated.

A bill of exchange may, therefore, be defined to be an order addressed to some person residing at a distance, directing him to pay a certain specified sum to the person in whose favour the bill is drawn, or his order. In mercantile phraseology, the person who draws a bill is termed the *drawer*; the person in whose favour it is drawn, the *remitter*; the person on whom it is drawn, the *drawee*; and after he has accepted, the *acceptor*. Those persons into whose hands the bill may have passed previously to its being paid, are, from their writing their names on the back, termed *indorsers*; and the person in whose possession the bill is at any given period, is termed the *holder* or *possessor*.

The negotiation of *inland* bills of exchange, or of those drawn in one part of Great Britain and Ireland on another, is entirely in the hands of bankers, and is conducted in the manner already explained. — (See *antè*, p. 65.) Bills drawn by the merchants of one country upon another are termed *foreign* bills of exchange, and it is to their negotiation that the following remarks principally apply.

I. *Par of Exchange.* — The *par* of the currency of any two countries means, among merchants, the equivalency of a certain amount of the currency of the one in the currency

of the other, *supposing the currencies of both to be of the precise weight and purity fixed by their respective mints.* Thus, according to the mint regulations of Great Britain and France, 1*l.* sterling is equal to 25 fr. 20 cent., which is said to be the par between London and Paris. And the exchange between the two countries is said to be at par when bills are negotiated on this footing; that is, for example, when a bill for 100*l.* drawn in London is worth 2,520 fr. in Paris, and conversely. When 1*l.* in London buys a bill on Paris for more than 25 fr. 20 cent., the exchange is said to be in favour of London and against Paris; and when, on the other hand, 1*l.* in London will not buy a bill on Paris for 25 fr. 20 cent., the exchange is against London and in favour of Paris. — (See Table of the par of exchange at the end of this article.)

II. *Circumstances which determine the Course of Exchange.* — The exchange is affected, or made to diverge from par, by two classes of circumstances: *first*, by any discrepancy between the actual weight or fineness of the coins, or of the bullion for which the substitutes used in their place will exchange, and their weight or fineness as fixed by the mint regulations; and, *secondly*, by any sudden increase or diminution of the bills drawn in one country upon another.

1. It is but seldom that the coins of any country correspond exactly with their mint standard; and when they diverge from it, an allowance corresponding to the difference between the actual value of the coins, and their mint value, must be made in determining the *real* par. Thus, if, while the coins of Great Britain corresponded with the mint standard in weight and purity, those of France were either 10 per cent. worse or debased below the standard of her mint, the exchange, it is obvious, would be at *real* par when it was *nominally* 10 per cent. against Paris, or when a bill payable in London for 100*l.* was worth in Paris 2,772 fr. instead of 2,520 fr. In estimating the real course of exchange between any 2 or more places, it is always necessary to attend carefully to this circumstance; that is, to examine whether their currencies be all of the standard weight and purity, and if not, how much they differ from it. When the coins circulating in a country are either so worn or rubbed as to have sunk considerably below their mint standard, or when paper money is depreciated from excess or want of credit, the exchange is at real par only when it is against such country to the extent to which its coins are worn or its paper depreciated. When this circumstance is taken into account, it will be found that the exchange during the latter years of the war, though apparently very much against this country, was really in our favour. The depression was nominal only; being occasioned by the great depreciation of the paper currency in which bills were paid.

2. Variations in the actual course of exchange, or in the price of bills, arising from circumstances affecting the currency of either of two countries trading together, are *nominal* only: such as are *real* grow out of circumstances affecting their trade.

When two countries trade together, and each buys of the other commodities of precisely the same value, their debts and credits will be equal, and, of course, the *real* exchange will be at par. The *bills* drawn by the one will be exactly equivalent to those drawn by the other, and their respective claims will be adjusted without requiring the transfer of bullion or any other valuable produce. But it very rarely happens that the debts reciprocally due by any two countries are equal. There is almost always a balance owing on the one side or the other; and this balance must affect the exchange. If the debts due by London to Paris exceeded those due by Paris to London, the competition in the London market for bills on Paris would, because of the comparatively great amount of payments our merchants had to make in Paris, be greater than the competition in Paris for bills on London; and, consequently, the real exchange would be in favour of Paris and against London.

The cost of conveying bullion from one country to another forms the limit within which the rise and fall of the *real* exchange between them must be confined. If 1 per cent. sufficed to cover the expense and risk attending the transmission of money from London to Paris, it would be indifferent to a London merchant whether he paid 1 per cent. premium for a bill of exchange on Paris, or remitted money direct to that city. If the premium were less than 1 per cent., it would clearly be his interest to make his payments by bills in preference to remittances: and that it could not exceed 1 per cent. is obvious; for every one would prefer remitting money, to buying a bill at a greater premium than sufficed to cover the expense of a money remittance. If, owing to the breaking out of hostilities between the two countries, or to any other cause, the cost of remitting money from London to Paris were increased, the fluctuations of the *real* exchange between them *might* also be increased. For the limits within which such fluctuations *may* range, correspond in all cases with the cost of making remittances in cash.

Fluctuations in the *nominal* exchange, that is, in the value of the currencies of countries trading together, have no effect on foreign trade. When the currency is depreciated, the premium which the exporter of commodities derives from the sale of the bill drawn on his correspondent abroad, is only equivalent to the increase in the price of the goods exported, occasioned by this depreciation. But when the premium

on a foreign bill is a consequence, not of a fall in the value of money, but of a deficiency in the supply of bills, there is no rise of prices; and in these circumstances the unfavourable exchange operates as a stimulus to exportation. As soon as the *real* exchange diverges from *par*, the mere inspection of a price current is no longer sufficient to regulate the operations of the merchant. If it be unfavourable, the premium which the exporter will receive on the sale of his bill must be included in the estimate of the profit he is likely to derive from the transaction. The greater that premium, the less will be the difference of prices necessary to induce him to export. And hence an unfavourable *real* exchange has an effect exactly the same with what would be produced by granting a bounty on exportation equal to the premium on foreign bills.

But for the same reason that an unfavourable *real* exchange increases exportation, it proportionally diminishes importation. When the exchange is really unfavourable, the price of commodities imported from abroad must be so much lower than their price at home, as not merely to afford, exclusive of expenses, the ordinary profit of stock on their sale, but also to compensate for the premium which the importer must pay for a foreign bill, if he remit one to his correspondent, or for the discount, added to the invoice price, if his correspondent draw upon him. A less quantity of foreign goods will, therefore, suit our market when the *real* exchange is unfavourable; and fewer payments having to be made abroad, the competition for foreign bills will be diminished, and the *real* exchange rendered proportionally favourable. In the same way, it is easy to see that a favourable *real* exchange must operate as a *duty* on exportation, and as a *bounty* on importation.

It is thus that fluctuations in the *real* exchange have a necessary tendency to correct themselves. They can never, for any considerable period, *exceed* the expense of transmitting bullion from the debtor to the creditor country. But the exchange cannot continue either permanently favourable or unfavourable to this extent. When favourable, it corrects itself by restricting exportation and facilitating importation; and when unfavourable, it produces the same effect by giving an unusual stimulus to exportation, and by throwing obstacles in the way of importation. The true PAR forms the centre of these oscillations; and although the thousand circumstances which are daily and hourly affecting the state of debt and credit, prevent the ordinary course of exchange from being almost ever precisely at *par*, its fluctuations, whether on the one side or the other, are confined within certain limits, and have a constant tendency to disappear.

This natural tendency which the exchange has to correct itself, is powerfully assisted by the operations of the bill-merchants.

England, for example, might owe a large excess of debt to Amsterdam, yet, as the aggregate amount of the debts *due* by a commercial country is generally balanced by the amount of those which it has to receive, the deficiency of bills on Amsterdam in London would most probably be compensated by a proportional redundancy of those on some other place. Now, it is the business of the merchants who deal in bills, in the same way as of those who deal in bullion or any other commodity, to buy them where they are cheapest, and to sell them where they are dearest. They would, therefore, buy up the bills drawn by other countries on Amsterdam, and dispose of them in London; and by so doing, would prevent any great fall in the price of bills on Amsterdam in those countries in which the supply exceeded the demand, and any great rise in Great Britain and those countries in which the supply happened to be deficient. In the trade between Italy and this country, the bills drawn on Great Britain amount almost invariably to a greater sum than those drawn on Italy. The bill-merchants, however, by buying up the excess of the Italian bills on London, and selling them in Holland, and other countries indebted to England, prevent the *real* exchange from ever becoming very much depressed.

III. *Negotiation of Bills of Exchange.* — Bills of exchange are either made payable at *sight*, at a certain specified time *after sight* or *after date*, or at *usance*, which is the usual term allowed by the custom or law of the place where the bill is payable. Generally, however, a few days are allowed for payment beyond the term when the bill becomes due, which are denominated *days of grace*, and which vary in different countries. In Great Britain and Ireland, *three* days' grace are allowed for all bills except those payable at sight, which must be paid as soon as presented. The following is a statement of the usance and days of grace for bills drawn upon some of the principal commercial cities: —

[*m|d. m|s. d|d. d|s. d|a.* respectively denote *months after date, months after sight, days after date, days after sight, days after acceptance.*]

London on	Usance.	Days of Grace.	London on	Usance.	Days of Grace.	London on	Usance.	Days of Grace.
Amsterdam	1 m d.	6	Geneva	30 d d.	5	Vienna †	14 d a.	3
Rotterdam	1 m d.	6	Madrid	2 m s.	14	Malta	30 d d.	13
Antwerp	1 m d.	6	Cadiz	60 d d.	6	Naples	3 m d.	3
Hamburgh	1 m d.	12	Bilboa	2 m d.	14	Palermo	3 m d.	0
Altona	1 m d.	12	Gibraltar	2 m s.	14	Lisbon	30 d s.	6
Dantzic	14 d a.	10	Leghorn	3 m d.	0	Oporto	30 d s.	6
Paris *	30 d d.	10	Leipsic	14 d a.	0	Rio Janeiro	30 d d.	6
Bordeaux	30 d d.	10	Genoa	3 m d.	30	Dublin	21 d s.	3
Bremen	1 m d.	8	Venice	3 m d.	6	Cork	21 d s.	3
Barcelona	60 d d.	14						

In the dating of bills, the new style is now used in every country in Europe, with the exception of Russia.

In London, bills of exchange are bought and sold by brokers, who go round to the principal merchants and discover whether they are buyers or sellers of bills. A few of the brokers of most influence, after ascertaining the state of the relative supply and demand for bills, suggest a price at which the greater part of the transactions of the day are settled, with such deviations as particular bills, from their being in very high or low credit, may be subject to. The price fixed by the brokers is that which is published in Wettenhall's List; but the first houses generally negotiate their bills on $\frac{1}{2}$, 1, $1\frac{1}{2}$, and 2 *per cent.* better terms than those quoted. In London and other great commercial cities, a class of middlemen speculate largely on the rise and fall of the exchange; buying bills when they expect a rise, and selling them when a fall is anticipated.

It is usual, in drawing foreign bills of exchange, to draw them in sets, or duplicates, lest the first should be lost or miscarry. When bills are drawn in sets, each must contain a condition that it shall be payable only while the others remain unpaid: thus, the first is payable only, "second and third unpaid;" the second, "first and third being unpaid," and the third, "first and second unpaid."

All bills of exchange must be drawn upon stamps as under: —

Inland Bills and Notes. — Not exceeding Two Months after Date, or Sixty Days after Sight.

	£	s.			£	s.		£	s.	d.	Exceeding Two Months, &c. £	s.	d.
If	2	0	and not above		5	5		0	1	0	0	1	6
Above	5	5	—		20	0		0	1	6	0	2	0
—	20	0	—		30	0		0	2	0	0	2	6
—	30	0	—		50	0		0	2	6	0	3	6
—	50	0	—		100	0		0	3	6	0	4	6
—	100	0	—		200	0		0	4	6	0	5	0
—	200	0	—		300	0		0	5	0	0	6	0
—	300	0	—		500	0		0	6	0	0	8	6
—	500	0	—		1,000	0		0	8	6	0	12	6
—	1,000	0	—		2,000	0		0	12	6	0	15	0
—	2,000	0	—		3,000	0		0	15	6	1	5	0
—	3,000	0						1	5	0	1	10	0

Promissory notes from 2*l.* to 100*l.* inclusive are not to be drawn payable to bearer on demand (excepting bankers' *re-issuable* notes, which require a different stamp). — But notes for any sum exceeding 100*l.* may be drawn either payable to bearer on demand, or otherwise. — (See *antè*, p. 69.)

Foreign Bills of Exchange. — Foreign bill, drawn in but payable out of Great Britain, if drawn singly *the same duty as an inland bill.*

	s.	d.				s.	d.
Foreign bills of exchange, drawn in sets, for every bill of each set, if the sum does not exceed 100*l.*	1	6	Exceeding 500*l.* and not exceeding 1,000*l.*			5	0
Exceeding 100*l.* and not exceeding 200*l.*	3	0	— 1,000*l.*	—	2,000*l.*	7	6
— 200*l.* — 500*l.*	4	0	— 2,000*l.*	—	3,000*l.*	10	0
			— 3,000*l.*	—		15	0

No one acquainted with the fundamental rules of arithmetic can have any difficulty whatever in estimating how much a sum of money in one country is worth in another, according to the state of the exchange at the time. The common arithmetical books abound in examples of such computations. But in conducting the business of exchange, a direct remittance is not always preferred. When a merchant in London, for example, means to discharge a debt due by him in Paris, it is his business to ascertain not only the state of the direct exchange between London and Paris, and, consequently, the sum which he must pay in London for a bill on Paris equivalent to his debt, but also the state of the exchange between London and Hamburgh, Hamburgh and Paris, &c.; for it frequently happens that it may be more advantageous for him to buy a bill on Hamburgh, Amsterdam, or Lisbon, and to direct his agent to invest the proceeds in a bill on Paris, rather than remit directly to the latter. This is termed the Arbitration of exchange. An example or two will suffice to show the principle on which it is conducted.

Thus, if the exchange between London and Amsterdam be 35*s.* Flemish (old coinage) per pound sterling, and between Paris and Amsterdam 1*s.* 6*d.* Flemish per franc, then, in order to ascertain whether a direct or indirect remittance to Paris would be most advantageous, we must calculate what would be the value

* In France, no days of grace are allowed on bills payable *à vue.*

† In Austria, bills payable at sight, or on demand, or at less than 7 days after sight or date, are not allowed any days of grace.

of the franc in English money if the remittance were made through Holland; for if it be less than that resulting from the direct exchange, it will obviously be the preferable mode of remitting. This is determined by stating, as 35*s.* Flem. (the Amsterdam currency in a pound sterling) : 1*s.* 6*d.* Flem. (Amsterdam currency in a franc) : : 1*l.* : 10*d.* the proportional, or *arbitrated* value of the franc. — Hence, if the English money, or bill of exchange, to pay a debt in Paris, were remitted by Amsterdam, it would require 10*d.* to discharge a debt of a franc, or 1*l.* to discharge a debt of 24 francs: and, therefore, if the exchange between London and Paris were at 24, it would be indifferent to the English merchant whether he remitted directly to Paris, or indirectly *viâ* Amsterdam; but if the exchange between London and Paris were *above* 24, then a direct remittance would be preferable; while, if, on the other hand, the direct exchange were lesss than 24, the indirect remittance ought as plainly to be preferred.

"Suppose," to borrow an example from Dr. Kelly (*Universal Cambist*, vol. ii. p. 137.), "the exchange of London and Lisbon to be at 68*d.* per milree, and that of Lisbon on Madrid 500 rees per dollar, the arbitrated price between London and Madrid is 34*d.* sterling per dollar; for as 1,000 rees : 68*d.* : : 500 rees : 34*d.* But if the direct exchange of London on Madrid be 35*d.* sterling per dollar, then London, by remitting directly to Madrid, must pay 35*d.* for every dollar; whereas, by remitting through Lisbon, he will pay only 34*d.*; it is, therefore, the interest of London to remit indirectly to Madrid through Lisbon. On the other hand, if London draws directly on Madrid, he will receive 35*d.* sterling per dollar; whereas, by drawing indirectly through Lisbon, he would receive only 34*d.*; it is, therefore, the interest of London to draw directly on Madrid. Hence the following rules: —

"1. Where the certain price is given, draw through the place which produces the lowest arbitrated price, and remit through that which produces the highest.

"2. Where the uncertain price is given, draw through that place which produces the highest arbitrated price, and remit through that which produces the lowest."

In compound arbitration, or when more than 3 places are concerned, then, in order to find how much a remittance passing through them all will amount to in the last place, or, which is the same thing, to find the arbitrated price between the first and the last, we have only to repeat the different statements in the same manner as in the foregoing examples.

Thus, if the exchange between London and Amsterdam be 35*s.* Flem. for 1*l.* sterling; between Amsterdam and Lisbon 42*d.* Flem. for 1 old crusade; and between Lisbon and Paris 480 rees for 3 francs: what is the arbitrated price between London and Paris?

In the first place, as 35*s.* Flem. : 1*l.* : : 42*d.* Flem. : 2*s.* sterling = 1 old crusade.

Second, as 1 old crusade, or 400 rees : 2*s.* sterling : : 480 rees : 2*s.* 4·8*d.* sterling = 3 francs.

Third, as 2*s.* 4·8*d.* sterling : 3 francs : : 1*l.* sterling : 25 francs, the arbitrated price of the pound sterling between London and Paris.

This operation may be abridged as follows: —

		1*l.* sterling.
1*l.* sterling	=	35*s.* Flemish.
35 shillings Flem.	=	1 old crusade.
1 old crusade	=	400 rees.
480 rees	=	3 francs.

Hence $\frac{35 \times 400 \times 3}{480 \times 35} = \frac{4,200}{168} = 25$ francs.

This abridged operation evidently consists in arranging the terms so that those which would form the divisors in continued statements in the Rule of Three are multiplied together for a common divisor, and the other terms for a common dividend. The ordinary arithmetical books abound with examples of such operations.

The following account of the manner in which a very large transaction was actually conducted by indirect remittances, will sufficiently illustrate the principles we have been endeavouring to explain.

In 1804, Spain was bound to pay to France a large subsidy; and, in order to do this, three distinct methods presented themselves: —

1. To send dollars to Paris by land.
2. To remit bills of exchange directly to Paris.
3. To authorise Paris to draw directly on Spain.

The first of these methods was tried, but it was found too slow and expensive; and the second and third plans were considered likely to turn the exchange against Spain. The following method by the indirect, or circular exchange, was, therefore, adopted.

A merchant, or *banquier*, at Paris, was appointed to manage the operation, which he thus conducted: — He chose London, Amsterdam, Hamburgh, Cadiz, Madrid, and Paris, as the principal hinges on which the operation was to turn; and he engaged correspondents in each of these cities to support the circulation. Madrid and Cadiz were the places in Spain from whence remittances were to be made; and dollars were, of course, to be sent to where they bore the highest price, for which bills were to be procured on Paris, or on any other places that might be deemed more advantageous.

The principle being thus established, it only remained to regulate the extent of the operation, so as not to issue too much paper on Spain, and to give the circulation as much support as possible from real business. With this view, London was chosen as a place to which the operation might be chiefly directed, as the price of dollars was then high in England; a circumstance which rendered the proportional exchange advantageous to Spain.

The business was commenced at Paris, where the negotiation of drafts issued on Hamburgh and Amsterdam served to answer the immediate demands of the state; and orders were transmitted to these places to draw for the reimbursements on London, Madrid, or Cadiz, according as the course of exchange was most favourable. The proceedings were all conducted with judgment, and attended with complete success. At the commencement of the operation, the course of exchange of Cadiz on London was 36*d.*; but, by the plan adopted, Spain got 39¼*d.*, or above 8 *per cent.* by the remittance of dollars to London, and considerable advantages were also gained by the circulation of bills through the several places on the Continent. — (*Kelly's Cambist*, vol. ii. p. 168.; *Dubost's Elements of Commerce*, 2d ed. p. 218.)

Law of Bills of Exchange.

The chief legal privileges appertaining to bills are, first, that though only a simple contract, yet they are always presumed to have been originally given for a good and valuable consideration; and, secondly they are assignable to a third person not named in the bill or party to the contract, so as to vest in the assignee a right of action, in his own name; which right of action, no release by the drawer to the acceptor, nor set-off or cross demand due from the former to the latter, can affect.

All persons, whether merchants or not, being legally qualified to contract, may be parties to a bill. But no action can be supported against a person incapable of binding himself, on a bill drawn, indorsed, or accepted by such incapacitated person; at the same time the bill is good against all other competent parties thereto.

Bills may be drawn, accepted, or indorsed by the party's agent or attorney verbally authorised for the purpose. When a person has such authority, he must either write the name of his principal, or state in writing that he draws, &c. as agent: thus, "per procuration, for A. B."

Where one of several partners accepts a bill drawn on the firm, for himself and partners, or in his own name only, such acceptance binds the partnership if it concern the trade. But the acceptance of one of several partners on behalf of himself and partners, will not bind the others, if it concern the acceptor

only in a separate and distinct interest; and the holder of the bill, at the time he becomes so, was aware of that circumstance. If, however, he be a *bonâ fide* holder for a sufficient consideration, and had no such knowledge at the time he first became possessed of the bill, no subsequently acquired knowledge of the misconduct of the partner in giving such security will prevent him from recovering on such bills against all the partners.

Although no precise form of words is required to constitute a bill of exchange or promissory note, yet it is necessary that it should be *payable at all events*, and not depend on any contingency; and that it be made for the payment of money only, and not for payment of money and performance of some other act, as the delivery of a horse, or the like.

If, however, the event on which the payment is to depend must inevitably happen, it is of no importance how long the payment may be in suspense; so a bill is negotiable and valid if drawn payable 6 weeks after the death of the drawer's father, or payable to an infant when he shall become of age.

Any material alteration of a bill after it has been drawn, accepted, or indorsed, such as the date, sum, or time of payment, will invalidate it: but the mere correction of a mistake, as by inserting the words "or order," will have no such effect.

The negotiability of a bill depends on the insertion of sufficient operative words of transfer; such as by making it payable to A. or order, or to A. or bearer, or to bearer generally.

Although a bill is presumed to have been originally drawn upon a good and valuable consideration, yet in certain cases a want of sufficient consideration may be insisted on in defence to an action on a bill. Certain considerations have been made illegal by statute; as for signing a bankrupt's certificate, for money won at gaming, or for money lent on a usurious contract. But with respect to gaming, it is held, that a bill founded on a gambling transaction is good in the hands of a *bonâ fide* holder; and by 58 Geo. 3. c. 93. a bill or note in the hands of an innocent holder, although originally founded on a usurious contract, is not invalid.

In general, if a bill is fair and legal in its origin, a subsequent illegal contract or consideration on the indorsement thereof will not invalidate it in the hands of a *bonâ fide* holder.

A bill cannot be given in evidence in a court of justice, unless it be duly stamped, not only with a stamp of the proper value, but also of the proper denomination.

Acceptance of a Bill. — An acceptance is an engagement to pay a bill according to the tenor of the acceptance, which may be either *absolute* or *qualified*. An *absolute* acceptance is an engagement to pay a bill according to its request, which is done by the drawee writing "Accepted" on the bill, and subscribing his name, or writing "Accepted" only; or merely subscribing his name at the bottom or across the bill. A *qualified* acceptance is when a bill is accepted conditionally; as when goods conveyed to the drawee are sold, or when a navy bill is paid, or other future event which does not bind the acceptor till the contingency has happened.

An acceptance may be also partial; as to pay 100*l.* instead of 150*l.*, or to pay at a different time or place from that required by the bill. But in all cases of a conditional or partial acceptance, the holder should, if he mean to resort to the other parties to the bill in default of payment, give notice to them of such partial or conditional acceptance.

In all cases of presenting a bill for acceptance, it is necessary to present the bill at the house where the drawee lives, or where it is made payable. By 1 & 2 Geo. 4. c. 78., all bills accepted payable at a banker's or other place are to be deemed a general acceptance; but if they are accepted payable at a banker's "only, and not otherwise or elsewhere," it is a qualified acceptance, and the acceptor is not liable to pay the bill, except in default of payment when such payment shall have been first demanded at the banker's. The drawee is entitled to keep the bill 24 hours when presented for acceptance. The acceptance of an inland bill must be *in writing on the face of the bill*, or, if there be more parts than one, on one of such parts; nothing short of this constitutes a valid acceptance.

If a bill is made payable a certain time *after sight*, it must, in order to fix the time when it is to be paid, be presented for acceptance, and the date of the acceptance should appear thus: "Accepted, July 1st, 1831."

Due diligence is the only thing to be considered in presenting any description of bill for acceptance; and such diligence is a question depending on the situation of the parties, the distance at which they live, and the facility of communication between them.

When the drawee refuses to accept, any third party, after protesting, may accept for the honour of the bill generally, or for the drawee, or for the indorser; in which case the acceptance is called an acceptance *supra protest*.

The drawers and indorsers are discharged from liability, unless due notice of non-acceptance when presented for acceptance, or non-payment at the time the bill becomes due, is given. These notices must be given with all due diligence to all the parties to whom the holder means to resort for payment. Generally, in both foreign and inland bills, notice is given next day to the immediate indorser, and such indorser is allowed a day, when he should give fresh notice to the parties who are liable to him.

Notice may be sent by the post, however near the residence of the parties may be to each other; and though the letter containing such notice should miscarry, yet it will be sufficient; but the letter containing the notice should be delivered at the General Post-office, or at a receiving-house appointed by that office, not to the bellman in the street. In all cases of notice, notice to one of several parties is held to be notice to all; and if one of several drawers be also the acceptor, it is not necessary to give notice to the other drawers.

Upon the non-acceptance or non-payment of a bill, the holder, or a public notary for him, should protest it; that is, draw up a notice of the refusal to accept or pay the bill, and the declaration of the holder against sustaining loss thereby. Inland bills need not be protested; in practice they are usually only noted for non-acceptance; but this, without the protest, is wholly futile, and adds nothing whatever to the evidence of the holder, while it entails a useless expense on those liable to pay.

Indorsement of Bills. — An indorsement is the act by which the holder of a negotiable instrument transfers his right to another person, termed the indorsee. It is usually made on the back of a bill, and must be in writing; but the law has not prescribed any set form of words as necessary to the ceremony, and in general the mere signature of the indorser is sufficient.

All bills payable to order or to bearer for 1*l.* and upwards are negotiable by indorsement; and the transfer of them for a good consideration, before they are payable, gives a right of action against all the precedent parties on the bill, if the bills in themselves are valid; but a transfer after they are due will only place the holder in the situation of the person from whom he takes them.

Bills may be transferred either by delivery only, or by indorsement and delivery: bills payable to order are transferred by the latter mode only; but bills payable to bearer may be transferred by either mode. On a transfer by delivery, the person making it ceases to be a party to the bill; but on a transfer by indorsement, he is to all intents and purposes chargeable as a new drawer.

A bill originally transferable may be restrained by restrictive words; for the payee or indorsee, having the absolute property in the bill, may, by express words, restrict its currency, by indorsing it "Payable to A. B. only," or "to A. B. for his use," or any other words clearly demonstrating his intention to make a restrictive and limited indorsement. Such special indorsement precludes the person in whose favour it is made from making a transfer, so as to give a right of action against the special indorser, or any of the precedent parties to the bill.

In taking bills to account or discount, it is important well to examine all special indorsements. Lord Tenterden decided that a person who discounts a bill indorsed "Pay to A. B. or order *for my use*," discounts it subject to the risk of having to pay the money to the special indorser, who so limited the ap-

plication *for my use*; thus a party may be liable to pay the amount of the bill twice over, unless he previously ascertains that the payment has been made considerably to the import of the indorsement.

After the payment of part, a bill may be indorsed over for the residue.

Presentment for Payment. — The holder of a bill must be careful to present it for payment at the time when due, or the drawer and indorsers will be exonerated from their liability; even the bankruptcy, insolvency, or death of the acceptor will not excuse a neglect to make presentment to the assignees or executor; nor will the insufficiency of a bill in any respect constitute an excuse for non-presentment: the presentment should be made at a reasonable time of the day when the bill is due; and if by the known custom of any trade or place bills are payable only within particular hours, a presentment must be within those hours. If a bill has a qualified acceptance, the presentment should be at the place mentioned in such qualified acceptance, or all the parties will be discharged from their obligations.

If a bill fall due on Sunday, Good Friday, Christmas Day, or any public fast or thanksgiving day, the presentment must be on the day preceding these holidays. By 7 & 8 Geo. 4. c. 15., if a bill or note be payable on the day preceding these holidays, notice of the dishonour may be given the day following the holiday; and if Christmas Day fall on Monday, notice may be given on Tuesday.

Bills, however, payable at usance, or at a certain time after date or sight, or after demand, ought not to be presented for payment precisely at the expiration of the time mentioned in the bills, but at the expiration of what are termed *days of grace*. The days of grace allowed vary in different countries, and ought always to be computed according to the usage of the place where the bill is due.—(See *antè*, p. 561.) At Hamburgh, and in France, the day on which the bill falls due makes one of the days of grace; but no where else.

On bills payable on demand, or when no time of payment is expressed, no days of grace are allowed; but they are payable instantly on presentment. On bank post bills no days of grace are claimed; but on a bill payable at sight the usual days of grace are allowed from the sight or demand.

Payment of a bill should be made only to the holder; and it may be refused unless the bill be produced and delivered up. On payment, a receipt should be written on the back; and when a part is paid, the same should be acknowledged upon the bill, or the party paying may be liable to pay the amount a second time to a *bonâ fide* indorser.

Promissory Notes and Checks. — The chief distinction between promissory notes and bills of exchange is, that the former are a direct engagement by the drawer to pay them according to their tenor, without the intervention of a third party as a drawee or acceptor. Promissory notes may be drawn payable on demand to a person named therein, or to order, or to bearer generally. They are assignable and indorsable; and in all respects so nearly assimilated to bills by 3 & 4 Ann. c. 9., that the laws which have been stated as bearing upon the latter, may be generally understood as applicable to the former. In *Edis* v. *Bury* it has been decided, in case an instrument is drawn so equivocally as to render it uncertain whether it be a bill of exchange or promissory note, the holder may treat it as either against the drawer.

Promissory notes, bills, drafts, or undertakings in writing, being made negotiable or transferable, for a less sum than 20*s*., are void, and persons uttering such are subject to a penalty not exceeding 20*l*., recoverable before a justice of peace.

The issue of any promissory note payable to bearer on demand for a less sum than 5*l*. by the Bank of England, or any licensed English banker, is prohibited; and by 9 Geo. 4. c. 65. it is provided, that no corporation or person shall utter or negotiate, in England, any such note which has been made or issued in Scotland, Ireland, or elsewhere, under a penalty not exceeding 20*l*. nor less than 5*l*. But this does not extend to any draft or order on bankers for the use of the drawer.

Promissory notes for any sum exceeding 100*l*. may be drawn payable to bearer on demand or otherwise; but notes from 2*l*. to 100*l*. inclusive are not to be drawn payable to bearer on demand, except bankers' re-issuable notes, which require a different stamp.

A *check* or *draft* is as negotiable as a bill of exchange, and vests in the assignee the same right of action against the assignor. As to the presentation of checks, &c., see CHECK.

Any person making, accepting, or paying any bill, draft, order, or promissory note, not duly stamped, is liable to a penalty of 50*l*.; for post-dating them, 100*l*.; and for not truly specifying the place where unstamped drafts are issued, 100*l*.: and any person knowingly receiving such unstamped draft, 20*l*.; and the banker knowingly paying it, 100*l*.; besides not being allowed such sum in account.

Before concluding this article on mercantile paper, it may not be improper to introduce one or two cautions with regard to acceptances, and accommodation paper, and proceedings in case of the loss of bills.

First, A man should not put his name as acceptor to a bill of exchange without well considering whether he has the means of paying the same when due, as otherwise he may be liable not only to the costs of the action against himself, but also to the costs of the actions against the other parties to the bill: the shrewd tradesman is generally anxious to get the acceptance of his debtor at a short date, well knowing that it not only fixes the amount of the debt, but it is more speedily recoverable by legal procedure than a book debt.

Secondly, Traders who wish to support their respectability, and desire to succeed in business, should be cautious in resorting to the destructive system of cross-accommodation acceptances: it seldom ends well, and usually excites suspicion as to the integrity of the parties; it being an expedient often adopted by swindlers to defraud the public. Independent of the expense in stamps and discounts, and frequently in noting, interest, and law expenses, the danger attending such accommodation is sufficient to deter from the practice. Suppose, for instance, A. and B. mutually accommodate each other to the amount of 1,000*l*., the acceptances being in the hands of third persons: both A. and B. are liable to such third persons to the extent of 2,000*l*. each; and should A. by any unforeseen occurrence be suddenly rendered unable to meet his acceptances, the holders of the whole, as well the acceptances of A. as the acceptances of B., will resort to B. for payment; and it may so happen, that although B. could have provided for his own share of the accommodation paper, he may be unable to provide for the whole, and may thus become insolvent.

Thirdly, In case of the loss of a bill, the 9 & 10 Will. 3. c. 17. provides, that if any inland bill be lost or missing within the time limited for its payment, the drawer shall, on sufficient security given to indemnify him if such bill be found again, give another bill of the same tenor with the first.

Lastly, It is of great importance to bankers and others taking bills and notes, that they should have some knowledge of the parties from whom they receive them; otherwise, if the instrument turn out to have been lost or fraudulently obtained, they may, without equivalent, be deprived of their security, on an action by the owner to recover possession. Lord Tenterden decided, "if a person take a bill, note, or any other kind of security, under circumstances which ought to excite suspicion in the mind of any reasonable man acquainted with the ordinary affairs of life, and which ought to put him on his guard to make the necessary inquiries, and he do not, then he loses the right of maintaining possession of the instrument against the rightful owner." — (*Guildhall*, Oct. 25. 1826.)

I. Table containing the VALUE OF THE MONIES of Account of different Places (expressed in Pence and Decimals of Pence), according to the Mint Price both of Gold and Silver in England; that is, 3*l.* 17*s.* 10½*d.* per oz. for Gold, and 5*s.* 2*d.* per oz. for Silver. — (*Kelly's Cambist*, vol. ii. p. 149.)

Coins.	Value in Silver.	Value in Gold.
	d.	*d.*
Aix-la-Chapelle, Rixdollar current	31·40	31·43
Amsterdam, Rixdollar banco (agio at 4 per cent.)	52·54	variable
Florin banco	21·	ditto
Florin current	20·72	ditto
Pound Flemish current	124·32	ditto
Antwerp, Pound Flemish (money of exchange)	123·25	123·87
Florin (money of exchange)	20·54	20·64
Pound Flemish current	105·65	106·18
Florin current	17·60	17·70
Barcelona, Libra Catalan	28·14	26·70
Basil - Rixdollar, or ecu of exchange	47·27	47·
Rixdollar current	42·45	42·20
Berlin - Pound banco	47·25	variable
Rixdollar current	36·	ditto
Berne - Ecu of 3 livres	42·64	42·90
Crown of 25 batzen	35·53	35·75
Bremen, Rixdollar current	37·80	variable
Rixdollar in Carls d'or	-	39·68
Cassel - Rixdollar current	37·80	variable
Cologne, Rixdollar specie of 80 albuses	31·38	ditto
Rixdollar current of 78 albuses	30·60	ditto
Constantinople, Piastre, or dollar	9·45	uncert.
Dantzic, Gulden or florin	9·	9·
Denmark, Rixdollar specie	54·72	
Rixdollar crown money	48·37	
Rixdollar Danish currency	44·27	44·88
England, Pound sterling	240·	240·
Florence, Lira	8·12	8·53
Ducat, or crown current	56·84	59·71
Scudo d'or, or gold crown	-	63·97
France Livre Tournois	9·58	9·38
Franc (new system)	9·70	9·52
Francfort, Rixdollar convention money	37·80	37·65
Rixdollar Muntze, or in small coins	31·50	
Germany, Rixdollar current	37·80	variable
Rixdollar specie	50·40	ditto
Florin of the Empire	25·20	ditto
Rixdollar Muntze	31·50	ditto
Florin Muntze	21·	ditto
Geneva, Livre current	16·13	16·13
Florin	4·60	4·84
Genoa - Lira fuori banco	8·	7·83
Pezza, or dollar of exchange	45·92	45·50
Scudo di cambio, or crown of exchange	36·75	36·02
Hamburgh, Mark banco (at med.)	18·22	variable
Pound Flemish banco	136·65	ditto
Hamburgh, Mark current	14·82	variable
Pound Flemish current	111·15	ditto
Hanover, Rixdollar (in cash)	42·	42·26
Rixdollar (gold value)	39·	39·24
Königsberg, Gulden or florin	12·	variable
Leghorn, Pezza of 8 reals	46·25	49·16
Lira moneta buona	8·13	8·55
Lira moneta lunga	7·79	8·19
Leipsic, Rixdollar convention money	37·80	variable
Rixdollar in Louis d'ors or Fredericks	-	39·68
Malta - Scudo or crown	21·32	23·34
Milan - Lira Imperiale	10·41	10·55
Lira corrente	7·45	7·44
Scudo Imperiale	60·90	61·60
Scudo corrente	42·32	42·78
Modena, Lira	3·72	
Munich, Gulden or florin	21·	21·28
Naples - Ducat of 1818	41·20	41·22
Parma - Lira	2·35	2·40
Persia - Toman of 100 mamoodis	287·60	
Poland - Gulden or florin	6·03	6·27
Portugal, Milree	-	67·34
Old crusade	-	26·94
Riga - Rixdollar Alberts	52·54	variable
Rixdollar currency (agio at 40 per cent.)	37·53	ditto
Rome - Scudo or crown	52·05	51·63
Scudo di stampa d'oro	79·37	78·73
Russia, Rouble	-	variable
Sardinia, Lira	18·21	18·82
Sicily - Ounce	123·54	124·80
Scudo or crown	49·02	49·92
Spain - Real of old plate	4·88	4·57
Real of new plate	5·18	4·86
Real of Mexican plate	6·48	6·07
Real vellon	2·59	2·43
Dollar of old plate, or of exchange	39·	36·59
Sweden, Rixdollar	55·41	56·43
Switzerland, Franc (new system)	22·14	
Trieste, Florin, Austrian currency	25·20	25·05
Lira, Trieste currency	4·76	4·73
Lira di piazza	4·65	4·63
Turin - Lira	11·28	11·23
Valencia, Libra	39·45	39·59
Venice, Lira piccola (in the old coins)	5·07	variable
Lira piccola (in the coins introduced by the Austrians)	4·25	ditto
Vienna, Florin	25·20	25·05
Zante - Real	4·06	variable
Zurich, Florin (money of exchange)	25·85	ditto
Florin current	23·50	ditto

II. An Account of the Course of Exchange, London, 17th of December, 1833, with some Explanatory Statements.

Course of Exchange.		Explanatory Statements.		
Amsterdam, 3 ms.	12 2¾	that is, London	receives	12 florins 2¾ stivers for 1*l.*
Antwerp	12 4½	—	receives	12 ditto 4½ ditto for 1*l.*
Hamburgh, mcs. bco.	13 10¾	—	receives	13 marcs 10¾ schillings banco for 1*l.*
Paris, 3 ms.	25 40	—	receives	25 francs 40 cent. for 1*l.*
Francfort	150¾	—	receives	150¾ batzen for 1*l.*
Petersburgh, p. rou. 3 us.	10	—	gives	10 pence sterl. for 1 rouble bank money.
Vienna, eff. Flo. 2 ms.	9 54	—	receives	9 florins 54 creutzers for 1*l.*
Madrid, 3 ms.	36⅝	—	gives	36⅝ pence sterling for 1 dollar.
Leghorn	48½	—	gives	48½ ditto for 1 pezza of 8 reals.
Genoa	25 55	—	receives	25 lire Italiane 55 cent. for 1*l.*
Venice, p. 6 Aust. livr.	47½	—	receives	47½ lire piccoli for 1*l.*
Naples	40⅞	—	gives	40⅞ pence sterl. for 1 ducato di regno.
Lisbon, 30 days' sight	52	—	gives	52 ditto for 1 milree.
Rio Janeiro, ditto	36	—	gives	36 ditto for 1 ditto.

111. Par of Exchange between England and the following Places, viz. Amsterdam, Hamburgh, Paris, Madrid, Lisbon, Leghorn, Genoa, Naples, and Venice; the same being computed from the intrinsic Value of their principal Coins, by comparing Gold with Gold, and Silver with Silver, according to their Mint Regulations, and to Assays made at the London and Paris Mints. — (Presented by Dr. Kelly to the Committee of the House of Lords, on the Expediency of the Bank's resuming Cash Payments.)

	Gold.		Silver.				Explanations.
			Old Coinage.		New Coinage.		
	Mint Regulations.	Assays.	Mint Regulations.	Assays.	Mint Regulations.	Assays.	Monies of Exchange.
Amsterdam, banco	36 8	36 6·8	37 3	37 10·5	35 0	35 6·5	Schillings and pence Flemish per pound sterling. Agio 2 per cent.
Do. current	11 4·5	11 3·8	11 8·5	11 11·8	10 14·6	10 17·6	Florins and stivers per pound sterling.
Hamburgh -	34 3·5	33 1·5	34 1	35 1·3	32 11	32 11·5	Schillings and pence Flemish banco per pound sterling.
Paris - -	25 29	25 26	24 73	24 91	23 23	23 40	Francs and cents. per pound sterling.
Madrid - -	37·3	37·2	39·2	39·0	41·7	41·5	Pence sterling for the piastre or dollar of exchange.
Lisbon - -	67·4	67·5	60·41	58·33	64·30	62·69	Pence sterling per milree.
Leghorn - -	49·1	49·0	46·46	46·5	49·60	49·5	Pence sterling per pezza of exchange,
Genoa - -	45·5	45·5	46·46	48·2	49·4	52·0	Pence sterling per pezza fuori banco.*
Naples - -	41·22	- -	41·42	- -	43·9	- -	Pence sterling per ducat (new coinage of 1818.)
Venice - -	46·3	46·0	47·5	49·9	44·6	46·1	Lire piccole per pound sterl.

For further and more ample elucidations, see the articles on the great trading towns, in this Dictionary.

EXCHEQUER BILLS. See FUNDS.

EXPECTATION, of life. See INSURANCE.

EXPORTATION, in commerce, the act of sending or carrying commodities from one country to another. — (See IMPORTATION AND EXPORTATION.)

EXCISE, the name given to the duties or taxes laid on such articles as are produced and consumed at home. Customs duties are those laid on commodities when imported into or exported from a country.

Excise duties were introduced into England by the Long Parliament in 1643; being then laid on the makers and venders of ale, beer, cider, and perry. The royalists soon after followed the example of the republicans; both sides declaring that the excise should be continued no longer than the termination of the war. But it was found too productive a source of revenue to be again relinquished; and when the nation had been accustomed to it for a few years, the parliament declared, in 1649, that the "impost of excise was the most easy and indifferent levy that could be laid upon the people." It was placed on a new footing at the Restoration; and notwithstanding Mr. Justice Blackstone says, that "from its first original to the present time its very name has been odious to the people of England" — (*Com.* book i. c. 3.), — it has continued progressively to gain ground; and is at this moment imposed on a variety of most important articles, and furnishes nearly half the entire public revenue of the kingdom.

The prejudice in the public mind to which Blackstone has alluded, against the excise duties, seems to depend more on the regulations connected with their imposition, than on the oppressive extent to which they have sometimes been carried. The facilities of smuggling, and the frauds that might be committed upon the revenue, unless a very strict watch were kept, have led to the enactment of several rather severe regulations. The officers have been empowered to enter and search the houses of such individuals as deal in exciseable commodities at any time of the day, and in most instances also of the night. And the proceedings in cases of transgression are of such a nature, that persons may be convicted in heavy penalties, by the summary judgment of 2 commissioners of excise, or 2 justices of the peace, without the intervention of a jury.

For the more easily levying the revenue of excise, England and Wales are divided into about 56 collections, some of which are called by the names of particular counties, others by the names of great towns; where one county is divided into several collections, or where a collection comprehends the contiguous parts of several counties. Every such collection is subdivided into several districts, within which there is a supervisor; and each district is again subdivided into out-rides and foot-walks, within each of which there is a gauger or surveying officer.

Accounts are given of the different duties and regulations affecting the articles subject to the excise laws, under these articles. We shall, therefore, content ourselves at present with giving, from the parliamentary returns,

* The currency of Genoa has consisted, since 1826, of *Lire Italiane* of exactly the same weight and fineness as francs; so that the par of exchange with Genoa is now the same as with Paris.

An Account of the *Gross* and *Nett* Produce of the Excise Revenue in Great Britain, during the Year ended 5th of January, 1833.

Articles.	Gross Receipt.	Drawbacks, and Bounties of the Nature of Drawbacks.	Allowances.	Repayments on Over-Entries, damaged Goods, &c.	Nett Produce.
	L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
Auctions	225,633 3 11¾	- - -	- - -	8,607 13 6	217,025 10 5¾
Beer *	106 18 10	55 12 10	- -	- - -	51 6 0
Bricks and tiles	333,620 7 0¾	4,834 10 7½	- -	3,528 18 2¾	325,256 18 2½
Candles	45,088 18 7½	1,931 7 3½	- -	- - -	43,157 11 4
Glass	729,082 4 9	185,099 10 9¾	874 13 9	914 19 10½	542,193 0 4
Hides *	2 1 0	2 1 0			
Hops	300,279 5 1	5,934 0 8	- -	19 6 10	294,325 17 7
Licences	786,264 16 11	- - -	- -	1,017 12 9	785,247 4 2
Malt	4,815,426 7 6½	17,807 14 0½	226,471 13 6	983 5 10	4,570,163 14 1¾
Paper	778,345 12 5¼	31,841 9 5¾	15,492 6 5¼	70 19 0	730,940 17 6¼
Printed goods *	3,575 3 6¼	199 18 7¾	- -	- - -	3,375 4 10½
Soap	1,550,344 15 4¼	263,794 16 7¾	100,330 6 8¾	- -	1,186,219 11 11¾
Spirits	3,409,340 9 3	- - -	- -	56 1 4½	3,409,284 7 10½
Starch	112,324 2 8¼	3,859 7 9	20,586 5 5	- -	87,878 9 6¾
Stone bottles	4,007 10 4	449 6 10¾	- -	- -	3,558 3 5¼
Sweets	3,852 1 7	- -	- -	- -	3,852 1 7
Tea	3,509,834 13 7	- -	- -	- -	3,509,834 13 7
Vinegar	22,577 1 8	- -	- -	- -	22,577 1 8
	16,629,705 14 2¼	515,809 16 8¼	363,755 5 10	15,198 17 4½	15,734,941 14 3½
Payment exceeding the receipt, on the following article:					
Hides	- -	113 17 6	- -	- -	Deduct, 113 17 6
					15,734,827 16 9½
Law costs recovered	2,287 9 2¾	- -	- -	- -	2,287 9 2¾
Fines and forfeitures	18,743 10 1¼	- -	- -	- -	18,743 10 1¼
L.	16,650,736 13 5¾	515,923 14 2¾	363,755 5 10	15,198 17 4½	15,755,858 16 1

The total charges of collection on the excise revenue of Great Britain, in 1832, were 946,545*l.* 11*s.* 1*d.*

Account of the *Gross* and *Nett* Produce of the Excise Revenue of Ireland, during the Year ended 5th of January, 1833.

Articles.	Gross Receipt.	Drawbacks, and Bounties in the Nature of Drawbacks.	Allowances and Repayments on Overcharges.	Nett Produce.
	L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
Auctions	10,128 11 8	- - -	218 7 7	10,210 4 1
Glass	22,366 7 2	4,125 17 9½	- - -	18,240 9 4½
Licences	112,184 15 0	- - -	73 11 9	112,111 3 3
Malt	260,989 9 10¾	506 14 10	5,146 8 4½	254,966 6 8¾
Paper	25,637 18 1¼	383 1 4½	55 15 9	25,199 0 11¾
Spirits (home-made)	1,754,032 3 6	- - -	137 14 4	1,753,894 9 2
Sweets and mead	137 17 6	- - -	- - -	137 17 6
Vinegar	411 1 2	- - -	- - -	411 1 2
	2,186,188 4 0	5,015 14 0	6,001 17 9½	2,173,170 12 2½
Late collector's balances	2,493 16 4½	- - -	- - -	2,403 16 4½
Law costs recovered	1,364 16 6½	- - -	- - -	1,364 16 6½
Fines and seizures	8,712 15 5	- - -	- - -	8,712 15 5
Total *L.*	2,198,759 12 4	5,015 14 0	6,001 17 9½	2,187,742 0 6½

The total charges for collecting the excise revenue in Ireland during the year 1832 amounted to 189,338*l.* 16*s.* 3½*d.*

The laws with respect to the general management of the excise were consolidated by the 7 & 8 Geo. 4. c. 53., from which the following particulars are selected: —

Commissioners. — Four commissioners constitute a Board. They are to be subject, in all things relating to their peculiar duty, to the orders of the Treasury. They may appoint collectors and other subordinate officers, and give them such salaries and allowances as the Treasury shall direct: but they are not allowed to increase the number of inferior officers without the permission and approval of the Treasury. No member of the House of Commons can be a commissioner of excise.

Officers of Excise. — No officer of excise is to vote or interfere at any election of a member of parliament, under pain of forfeiting 500*l.*, and being rendered incapable of ever holding any office or place of trust under his Majesty.

No person holding any office of excise is to deal in any sort of goods subject to the excise laws.

Any person bribing or offering to bribe any officer of excise shall forfeit 500*l.*; and every officer accepting such bribe, or doing, conniving at, or permitting any act or thing whereby any of the provisions of the excise laws may be evaded or broken, shall forfeit 500*l.*, and be declared incapable of ever after serving his Majesty in any capacity whatever. But if any of the parties to such illegal transactions shall inform against the other, before any proceedings thereupon shall have been instituted, he shall be indemnified against the penalties and disabilities imposed for such offences.

Duties and Powers of Officers. — It is lawful for any officer to enter any building or other place, used for carrying on any trade subject to the excise, either by night or by day (but if by night, in the presence of a constable or peace officer), to inspect the same, &c. And upon an officer making oath that he has cause to suspect that goods forfeited under the excise acts are deposited in any private house or place, 2 commissioners of excise, or 1 justice of the peace, may grant warrant to the officer to enter such house or place, (if in the night, in the presence of a constable,) to search for and seize such forfeited goods.

Specimen Books may be left by the officers on the premises of persons subject to the excise laws; and any one who shall remove or deface such books shall be liable to a penalty of 200*l.*

Removing Goods to avoid Duty. — Goods fraudulently removed or secreted, in order to avoid the duty, to be forfeited; and every person assisting in such removal shall forfeit and lose treble the value of such goods, or 100*l.*, at the discretion of the commissioners.

* Arrears only; the duty having been repealed.

Obstructing Officers. — All persons who shall oppose, molest, &c. any officer of excise in the execution of his duty, shall respectively, for every such offence, forfeit 200*l.*

Officers violently resisted in making any seizure may oppose force to force; and in the event of their wounding, maiming, or killing any person, when so opposed, they shall be admitted to bail, and may plead the general issue.

Justices, mayors, bailiffs, constables, &c. are required to assist excise officers; and any constable, or peace officer, who, on notice and request, declines going with an excise officer, is to forfeit 20*l.* for every such offence.

Claimants of Goods seized. — No claim shall be entered for goods seized, except in the real names of the proprietors of such goods. Claimants are bound with 2 sureties in a penalty of 100*l.* to pay the expenses of claim; and in default thereof the goods are to be condemned.

Proceedings in Courts of Law. — All penalties under the excise laws may be sued for and recovered in the Courts of Exchequer at Westminster, Edinburgh, or Dublin respectively, according as the offence may have taken place in England, Scotland, or Ireland; provided that the proceedings in the courts commence within 3 years after the commission of the offence.

Informations for the recovery of penalties against the excise laws in London may be heard and adjudged by any 3 or more of the commissioners of excise; and in other places such informations may be exhibited before 1 or more justices of the peace, and may be heard and adjudged by any 2 or more such justices.

Mitigation of Penalties. — Justices are authorised, if they shall see cause, except when there is a special provision to the contrary, to mitigate any penalty incurred for any offence committed against the excise laws to *one fourth* part thereof; but it is lawful for the commissioners of excise, when they see cause, further to mitigate, or entirely remit, such penalty.

Distribution of Penalties. — All penalties and forfeitures incurred under the excise acts are to be distributed, half to his Majesty, and half to the officer or person who shall discover, inform, or sue for the penalty. On proof being made of any officer acting collusively in making a seizure, the commissioners may direct his share to be forfeited.

Oaths and Affirmations. — Persons wilfully taking or making any false oath or affirmation as to any matter connected with the excise laws shall, upon being convicted of such offence, suffer the pains and penalties incident to wilful and corrupt perjury; and those procuring or suborning such persons to swear or affirm falsely shall, upon conviction, be liable to the pains and penalties incident to subornation of perjury.

Actions against Excise Officers. — No writ, summons, or process, shall be sued out or served upon, nor shall any action be brought, raised, or prosecuted, against any officer of excise for any thing done under any of the excise laws, until after the expiration of 1 calendar month next after notice in writing has been delivered to such officer, specifying the cause of such action, and the name and place of abode of the person in whose name it is to be brought. No action shall lie against any excise officer for any thing done under the excise laws, unless it be brought within 3 months after the cause of action shall have arisen. If judgment be given against the plaintiff, and in favour of the defendant, the latter shall, in every such action, have *treble* costs awarded to him.

Forging Certificates, &c. — By the 41 Geo. 3. c. 91. it is enacted, that if any one shall forge, counterfeit, or knowingly give any forged certificate required to be granted by any officer of excise, he shall be guilty of felony, and being convicted, shall be transported for 7 years.

All individuals carrying on any business subjected to the control of the excise, must take out licences renewable annually on the 5th of July. — (See Licences.)

All such individuals are also obliged to make entries of every building, place, vessel, or utensil, as the case may be, in the name of the real owner, with the officer of excise in whose survey such building, place, &c. shall be situated. Individuals found employed in unentered excise manufactories are severally liable in a penalty of 50*l.* for the first offence; and in the event of any such offender refusing or neglecting to pay such penalty, he is to be committed to the house of correction or other prison for 3 calendar months, to be kept to hard labour, and not to be liberated until the fine of 30*l.* has been paid, or the term of 3 months has expired; and if found guilty of a second offence, the fine is to be 60*l.*; and in the event of its not being paid, the imprisonment is to be for 6 months. — (7 & 8 *Geo.* 4. c. 53. § 33.)

Permits are usually necessary for the removal of exciseable commodities. — (See Permits.)

EXPORTS, the articles exported, or sent beyond seas. — (See Imports and Exports.)

F.

FACTOR, an agent employed by some one individual or individuals, to transact business on his or their account. He is not generally resident in the same place as his principal, but, usually, in a foreign country. He is authorised, either by letter of attorney or otherwise, to receive, buy, and sell goods and merchandise; and, generally, to transact all sorts of business on account of his employers, under such limitations and conditions as the latter may choose to impose. A very large proportion of the foreign trade of this and most other countries is now carried on by means of factors or agents.

Factors and brokers are, in some respects, nearly identical, but in others they are radically different. "A factor," said Mr. Justice Holroyd, in a late case, "differs materially from a broker. The former is a person to whom goods are sent or consigned; and he has not only the possession, but, in consequence of its being usual to advance money upon them, has also a special property in them, and a general lien upon them. When, therefore, he sells in his own name, it is within the scope of his authority; and it may be right, therefore, that the principal should be bound by the consequences of such sale. But the case of a broker is different: he has not the possession of the goods, and so the vendor cannot be deceived by the circumstance; and, besides, the employing a person to sell goods as a broker does not authorise him to sell in his own name. If, therefore, he sells in his own name, he acts beyond the scope of his authority; and his principal is not bound."

A factor is usually paid by a percentage or commission on the goods he sells or buys. If he act under what is called a *del credere* commission, that is, *if he guarantee the price*

of the goods sold on account of his principal, he receives an additional percentage to indemnify him for this additional responsibility. In cases of this sort the factor stands in the vendee's place, and must answer to the principal for the value of the goods sold. But where the factor undertakes no responsibility, and intimates that he acts only on account of another, it is clearly established that he is not liable in the event of the vendee's failing.

The sound maxim, that the principal is responsible for the acts of his agent, prevails universally in courts of law and equity. In order to bind the principal, it is necessary only that third parties should deal *bonâ fide* with the agent, and that the conduct of the latter should *be conformable to the common usage and mode of dealing.* Thus, a factor may sell goods upon credit, that being in the ordinary course of conducting mercantile affairs: but a stock broker, though acting *bonâ fide,* and with a view to the benefit of his principal, cannot sell stock upon credit, *unless he have special instructions to that effect;* that being contrary to the usual course of business.

A sale by a factor creates a contract between the owner and buyer; and this rule holds even in cases where the factor acts upon a *del credere* commission. Hence, if a factor sell goods, and the owner *give notice to the buyer to pay the price to him,* and not to the factor, the buyer will not be justified in afterwards paying the factor, and the owner may bring his action against the buyer for the price, unless the factor has a lien thereon. But if no such notice be given, a payment to the individual selling is quite sufficient.

If a factor buy goods on account of his principal, where he is accustomed so to do, the contract of the factor binds the principal to a performance of the bargain; and the principal is the person to be sued for non-performance. But it is ruled, that if a factor enter into a charterparty of affreightment with the master of a ship, the contract obliges *him* only, unless he lade the vessel with his principal's goods, in which case the principal and lading become liable, and not the factor. Where a factor, who is authorised to sell goods in his own name, makes the buyer debtor to himself; then, though he be not answerable to the principal for the debt, if the money be not paid, yet he has a right to receive it, if it be paid, and his receipt is a sufficient discharge; the factor may, in such a case, enforce the payment by action, and the buyer cannot defend himself by alleging that the principal was indebted to him in more than the amount.

"Where a factor," said Lord Mansfield, "dealing for a principal, but concealing that principal, delivers goods in his own name, the person contracting with him has a right to consider him, to all intents and purposes, as the principal; and though the real principal may appear, and bring an action on that contract against the purchaser of the goods, yet that purchaser may set off any claim he may have against the factor, in answer to the demand of the principal."

Merchants employing the same factor run the joint risk of his actions, although they are strangers to each other: thus, if different merchants remit to a factor different bales of goods, and the factor sell them as a single lot to an individual who is to pay one moiety of the price down and the other at 6 months' end; if the buyer fail before the second payment, each merchant must bear a proportional share of the loss, and be content to accept his dividend of the money advanced. — (*Beawes, Lex Merc.*)

A factor employed, without his knowledge, in negotiating an illegal or fraudulent transaction, has an action against his principal. On this ground it was decided, that a merchant who had consigned counterfeit jewels to his factor, representing them to be genuine, should make full compensation to the factor for the injury done to him by being concerned in such a transaction, as well as to the persons to whom the jewels had been sold.

The office of a factor or agent being one of very great trust and responsibility, those who undertake it are bound, both legally and morally, to conduct themselves with the utmost fidelity and circumspection. A factor should take the greatest care of his principal's goods in his hands: he should be punctual in advising him as to his transactions on his behalf, in sales, purchases, freights, and, more particularly, bills of exchange: he should deviate as seldom as possible from the terms, and never from the *spirit and tenor,* of the orders he receives as to the sale of commodities: in the execution of a commission for purchasing goods, he should endeavour to conform as closely as practicable to his instructions as to the quality or kind of goods: if he give more for them than he is authorised, they may be thrown on his hands; but he is bound to buy them for as much less as he possibly can. After the goods are bought, he must dispose of them according to order. If he send them to a different place from that to which he was directed, they will be at his risk, unless the principal, on getting advice of the transaction, consent to acknowledge it.*

* "Whoever," says Dr. Paley, "undertakes another man's business, makes it his own; that is, promises to employ upon it the same care, attention, and diligence, that he would do if it were actually his own; for he knows that the business was committed to him with that expectation. And he promises nothing more than this. Therefore, an agent is not obliged to wait, in the country,

A factor who sells a commodity under the price he is ordered, may be obliged to make good the difference, unless the *commodity be of a perishable nature and not in a condition longer to be kept.* And if he purchase goods for another at a fixed rate, and their price having afterwards risen, he fraudulently takes them to himself, and sends them somewhere else, in order to secure an advantage, he will be found, by the custom of merchants, liable in damages to his principal.

If a factor, in conformity with a merchant's orders, buy with his money, or on his credit, a commodity he is directed to purchase, and, without giving advice of the transaction, sells it again at a profit, appropriating that profit to himself, the merchant may recover it from him, and have him amerced for fraud.

If a factor buy, conformably to his instructions, goods of which he is *robbed*, or which suffer some unavoidable injury, he is discharged, and the loss falls on the principal. But if the goods be *stolen* from the factor, he will not be so easily discharged; for the fact of their having been abstracted by *stealth*, and not by *violence*, raises a strong presumption that he had not taken that reasonable care of them which was incumbent upon him. If, however, he can prove that the goods were lodged in a place of security, and that he had not been guilty of positive negligence, nor exercised less care towards them than towards his own property, he will not be held responsible even for a theft committed by his servants. — (*Jones on Bailments*, 2d ed. p. 76.; *Chitty on Commercial Law*, vol. iii. p. 368.)

If a factor, having money in his hands belonging to his principal, neglect to insure a ship and goods, according to order, he must, in the event of the ship miscarrying, make good the damage; and if he make any composition with the insurers after insurance, without orders to that effect, he is answerable for the whole insurance. A principal, at the end of a very long letter, directed his agent thus: "Observe the premium on this value is also to be insured." But the agent, not noticing this sentence, neglected to insure the premium; and, being sued, was held liable for the omission.

If goods are remitted to a factor, and he make a false entry of them at the Custom-house, or land them without entry, and they are, in consequence, seized or forfeited, he is bound to make good the damage to his principal: but if the factor make his entry according to invoice or letters of advice, and these proving erroneous, the goods are seized, he is discharged.

It is now a settled point, that a factor has a lien on goods consigned to him, not only for incidental charges, but as an item of mutual account for the balance due to him so long as he remains in possession. If he be surety in a bond for his principal, he has a lien on the goods sold by him on account of such principal, to the amount of the sum he is bound for.

It being the general rule of law "that property does not change while *in transitu*," or in the hands of a carrier, a consignment made *before* the bankruptcy of a consignor, but not arriving till *after*, remains the property of the consignor, except, indeed, where the *delivery* is made *by the order* and upon the account of the consignee, and is a complete *alienation from* the consignor. In the case, therefore, of a consignment to a factor, the property remains the consignor's, and passes into the hands of *his* assignees. When a factor has a lien on goods, he has a right to the price, though received after the bankruptcy.

Where general or unlimited orders are given to a factor, he is left to buy and sell on the best conditions he can. And if detriment arise to a principal from the proceedings of a factor acting under such authority, he has no redress, unless he can show that he acted fraudulently or with *gross negligence.*

A factor or broker acting against the interest of his principal cannot even receive his

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toil, or study, whilst there remains a possibility of benefiting his employer. If he exert as much activity, and use such caution, as the value of the business in his judgment deserves; that is, as he would have thought sufficient if the same interest of his own had been at stake; he has discharged his duty, although it should afterwards turn out, that by more activity, and longer perseverance, he might have concluded the business with greater advantage."— (*Moral and Pol. Phil.* c. 12.)

There seems to be a good deal of laxity in this statement. It is necessary to distinguish between those who, in executing a commission, render their services for the particular occasion only, without hire, and those who undertake it *in the course of business*, making a regular charge for their trouble. If the former bestow on it that ordinary degree of care and attention which the *generality of mankind* bestow on similar affairs of their own, it is all, perhaps, that can be expected: but the latter will be justly censurable, if they do not execute their engagements on account of others with that care and diligence which a "*provident and attentive father of a family*" uses in his own private concerns. It is their duty to exert themselves proportionally to the exigency of the affair in hand; and neither to *do* any thing, how minute soever, by which their employers may sustain damage, nor omit any thing, however inconsiderable, which the nature of the act requires. Perhaps the best general rule on the subject is, to suppose a factor or agent bound to exert that degree of care and vigilance that may *be reasonably expected of him by others.* At all events, it is clear he is not to be regulated by his own notions of the "value of the business." A man may neglect business of his own, or not think it worth attending to; but he is not, therefore, to be excused for neglecting any similar business he has undertaken to transact for others. — (There are some very good observations on this subject in *Sir William Jones's Essay on Bailments*, 2d ed. p. 53. and *passim.*)

commission. If he pay money on account of his principal, without being authorised, he cannot recover it back.

An agent cannot delegate his rights to another so as to bind the principal, unless expressly authorised to nominate a sub-agent.

(For further information as to the general powers and liabilities of factors and agents, see *Beawes's Lex Mercatoria*, art. *Factors, Supercargoes, &c.*; *Chitty's Commercial Law*, vol. iii. c. 3.; *Woolrych on Commercial Law*, pp. 317—329. &c. See also the article BROKERS.)

The law with respect to the effect of the transactions of factors or agents on third parties was placed on its present footing by the act 6 Geo. 4. c. 94. Under the law that previously obtained, it was held, that a factor, as such, had no authority to *pledge*, but only to *sell* the goods of his principal; and it was repeatedly decided that a principal might recover back goods on which a *bonâ fide* advance of money had been made by a third party, without his being bound to repay such advance; and notwithstanding this third party was wholly ignorant that the individual pledging the goods held them as a mere factor or agent. It used also to be held, that *bonâ fide* purchasers of goods from factors or agents not vested with the power of sale, might be made liable to pay the price of the goods a second time to the real owner.

The extreme hardship and injurious influence of such regulations is obvious. It is the business of a principal to satisfy himself as to the conduct and character of the factor or agent he employs; and if he make a false estimate of them, it is more equitable, surely, that he should be the sufferer, than those who have no means of knowing any thing of the matter. The injustice of the law in question, and the injury it did to the commerce of the country, had frequently excited attention; and was very ably set forth by Lord Liverpool, in his speech in the House of Lords, on moving the second reading of the new bill.

"Those of their Lordships who were acquainted with commercial transactions, would know that money was frequently advanced on goods, without its being possible for the person advancing the money to have any further acquaintance with the transactions, than that the factor was in actual possession of the goods. It then became a question, putting fraud out of view, if the factor became a bankrupt, or in any other way failed to execute his engagements, whether the loss should fall on the principal who had consigned these goods, or on the *pledgee* who had advanced money on them. It had been of late ruled, that if the factor were intrusted only to dispose of the property, the loss must fall on the pledgee. He meant to contend, that this was contrary to equity, and contrary to analogy; that it was disapproved of by high authority, and was contrary to the law in every country of the world, except this, and the United States of America, which had drawn their law from this country. It was contrary to equity, he thought, that the pledgee, who had advanced his money without any fraud, but on the *bonâ fide* possession of the goods, should suffer. He had placed no confidence, but the principal who had appointed the factor had placed confidence. He could limit him in his operations as he pleased — he could give him any kind of instructions — he might qualify his power — he was bound to take precautions before placing confidence; and he was in all respects more liable to suffer from his faults than the pledgee. The latter knew nothing of the power of the factor, he saw only the goods, and advanced his money on what was a sufficient security for repayment. On every principle of natural equity, therefore, the loss ought to fall, not on the *pledgee*, but on the principal. He knew that this view was connected with one very important question — that of possession and title; but it was not possible for transactions to go on, unless the possession was admitted as the title to the goods. If this were an indifferent question, or a question involving only a few cases, he would not have called on their Lordships to legislate on this subject; but all the commercial interests of the country were connected with it. And he might say he believed that two thirds of the whole commerce of the country was carried on by consigning goods to a factor, and leaving it to his discretion to dispose of them to the greatest advantage, sending them to market when he pleased, and raising money on them when he could not send them to market. Bills of exchange, Exchequer bills, and money bills of every description, were subject to this rule. If a person consigned Exchequer bills to a second person, and he parted with them, the third party who obtained them was held to have a right to them. Commercial proceedings were of as much importance as money proceedings, and he could not see why they should not receive the same security. It might be asked, perhaps, when this was felt to be so great an evil, why it was not altered before; but it seemed to be one of those things which had grown up gradually, and which did much mischief before they became extensively known. The first decision, he believed, which established the law as it now stood, was delivered in 1742; and he knew that Lord Chief Justice Gibbs had said, he could not explain the origin of that decision. He supposed it might have been dictated by some fraud. That decision, the Lord Chief Justice maintained, was at variance with the best interests of commerce, and had grown out of circumstances he could not explain. From the time of the first decision, the decisions had not been numerous, till of late years. He did not doubt but the judges had decided according to the law as it was established by these precedents; but in doing that, they had expressed their regret that these precedents had been established. [Here his Lordship read an extract from opinions delivered by the late Lord Chief Justice Ellenborough, and a late judge, Mr. Le Blanc, expressing their regret, in deciding cases according to these precedents, that they had been established.] He inferred from these opinions, that these judges, though they had felt themselves obliged to decide in this way, supposed that the law was contrary to the general analogy of our laws, and to the principles of justice. He then came to the last consideration, the law of this country being in this respect different from the law of all other countries, except the law of the United States of America. In all other countries, the law was recognised to be what he wished to establish it by the bill before their Lordships. When there was no evidence of fraud, it was held, that the man, advancing money on goods held by a factor, should not suffer for his faults, but that the person who confided in the factor must be the sufferer. This was also the law in Scotland. He had understood, too, that the evils of the law were felt in America, and that means had been taken for bringing it before the congress, with a view to assimilate the law of America to the law of other countries. If the question were examined by the principles of equity, by analogy with other cases, by the authority of those who decided in our courts, or by the practice of other countries, it would be found that the reasons were strong in favour of the bill. It was of great importance in commercial transactions, that our law should be like the laws of other countries. It was not the same with the laws relative to real property — to our local law, if he might so call it; but when the bill was founded on equity and analogy, he thought it was an additional reason in its favour, that it assimilated our commercial law to the commercial law of other countries. He did not know if he had made himself under-

stood, or if he had sufficiently explained the object of the bill; but the measure was founded in justice, and he hoped to have their Lordships' consent to it." The noble Earl concluded by moving the second reading of the bill.

By the new law, all persons intrusted with and in possession of goods are supposed, unless the contrary be made distinctly to appear, to be their *owners*, so far, at least, that they may pledge them or sell them to third parties. The following are the principal clauses of this important act, 6 Geo. 4. c. 94.

Factors or Agents having Goods or Merchandize in their Possession, shall be deemed to be the true Owners. — Any person intrusted, for the purpose of consignment or of sale, with any goods, wares, or merchandise, and who shall have shipped such in his own name, and any person in whose name any goods, wares, or merchandise shall be shipped by any other person, shall be deemed to be the true owner, so far as to entitle the consignee to a lien thereon in respect of any money or negotiable security advanced by such consignee for the use of the person in whose name such goods, wares, or merchandise shall be shipped, or in respect of any money or negotiable security received by him to the use of such consignee, in like manner as if such person was the true owner; provided such consignee shall not have notice by the bill of lading, or otherwise, before the time of any advance of such money or negotiable security, or of such receipt of money or negotiable security, in respect of which such lien is claimed, that such person so shipping in his own name, or in whose name any goods, wares, or merchandise shall be shipped by any person, is not the actual and *bonâ fide* owner, any law, usage, or custom to the contrary thereof notwithstanding: provided also, that the person in whose name such goods, wares, or merchandise are so shipped shall be taken, for the purposes of this act, to have been intrusted therewith for the purpose of consignment or of sale, unless the contrary thereof shall be made to appear by bill of discovery, or be made to appear in evidence by any person disputing such fact. — § 1.

Persons in Possession of Bills of Lading to be the Owners, so far as to make valid Contracts. — From and after the 1st of October, 1826, any person intrusted with any bill of lading, India warrant, dock warrant, warehouse keeper's certificate, wharfinger's certificate, warrant or order for delivery of goods, shall be deemed to be the true owner, so far as to give validity to any contract or agreement thereafter to be entered into by such person so intrusted, with any person, body politic or corporate, for the sale of the said goods, wares, and merchandise, or for the deposit or pledge thereof as a security for any money or negotiable instrument advanced or given by such person, body politic or corporate, upon the faith of such documents; provided such person, body politic or corporate, shall not have notice, by such documents or otherwise, that such person so intrusted is not the actual and *bonâ fide* owner. — § 2.

No Person to acquire a Security upon Goods in the Hands of an Agent for an antecedent Debt, beyond the Amount of the Agent's Interest in the Goods. — In case any person, body politic or corporate, shall, after this act, accept any such goods, in deposit or pledge, from any such person so intrusted, without notice as aforesaid, as a security for any debt or demand due from such person so intrusted, to such person, body politic or corporate, before the time of such deposit, then such person, body politic or corporate, so accepting such goods in deposit or pledge, shall acquire no further interest in the said goods, or any such document, than was possessed, or might have been enforced, by the said person so intrusted, at the time of such deposit or pledge; but such person, body politic or corporate, so accepting such goods in deposit or pledge, shall acquire, possess, and enforce such right, title, or interest as might have been enforced by such person so intrusted. — § 3.

Persons may contract with known Agents in the ordinary Course of Business, or out of that Course, if within the Agent's Authority. — From and after the 1st of October, 1826, it shall be lawful for any person, body politic or corporate, to contract with any agent, intrusted with any goods, or to whom the same may be consigned, for the purchase of such goods, and to receive the same of and pay for the same to such agent; and such contract and payment shall be binding upon the owner, notwithstanding such person, body politic or corporate, shall have notice that the person making and entering into such contract, or on whose behalf such contract is made, is an agent; provided such contract and payment be made in the usual course of business, and that such person, body politic or corporate, shall not have notice that such agent is not authorised to sell the said goods, or to receive the said purchase money. — § 4.

Persons may accept and take Goods in Pledge from known Agents. — From and after the passing of this act, it shall be lawful for any person, body politic or corporate, to accept any such goods, or any such document as aforesaid, in deposit or pledge from any factor or agent, notwithstanding such person, body politic or corporate, shall have notice that the person making such deposit or pledge is a factor or agent; but then and in that case such person, body politic or corporate, shall acquire no further interest in the said goods, or any such document, than was possessed or might have been enforced by the said factor or agent, at the time of such deposit or pledge; but such person, body politic or corporate, shall acquire, possess, and enforce such right, title, or interest as was possessed and might have been enforced by such factor or agent. — § 5.

Right of the true Owner to follow his Goods while in the Hands of his Agent or of his Assignee in case of Bankruptcy. — Nothing herein contained shall be deemed to deprive the true owner or proprietor of such goods from demanding and recovering the same from his factor or agent, before the same shall have been so sold, deposited, or pledged, or from the assignees of such factor or agent, in the event of his, her, or their bankruptcy; nor to prevent such owner or proprietor from demanding or recovering of and from any persons, bodies politic or corporate, the price agreed to be paid for the purchase of such goods, subject to any right of set-off on the part of such persons, bodies politic or corporate, against such factor or agent; not [nor] to prevent such owner or proprietor from demanding or recovering of and from such persons, bodies politic or corporate, such goods, so deposited or pledged, upon repayment of the money, or on restoration of the negotiable instrument so advanced or given on the security of such goods, by such persons, bodies politic or corporate, to such factor or agent; and upon payment of such further sum, or on restoration of such other negotiable instrument (if any) as may have been advanced or given by such factor or agent, to such owner or proprietor, or on payment of a sum equal to the amount of such instrument; nor to prevent the said owner or proprietor from recovering of and from such persons, bodies politic or corporate, any balance remaining in their hands, as the produce of the sale of such goods, after deducting thereout the amount of the money or negotiable instrument so advanced or given upon the security thereof: provided always, that in case of the bankruptcy of any such factor or agent, the owner or proprietor of the goods so pledged and redeemed shall be held to have discharged *pro tanto* the debt due by them to the estate of such bankrupt. — § 6.

Agents fraudulently pledging the Goods of their Principals. — The 7 & 8 Geo. 4. c. 29. § 51. enacts, "That if any factor or agent intrusted, for the purpose of sale, with any goods or merchandise, or intrusted with any bill of lading, warehouse keeper's or wharfinger's certificate, or warrant or order for the delivery of goods or merchandise, shall, *for his own benefit, and in violation of good faith*, deposit or pledge any such goods or merchandise, or any of the said documents, as a security for any money or negotiable instrument borrowed or received by such factor or agent, at or before the time of making such deposit or pledge, or intended to be thereafter borrowed or received, every such offender shall be guilty of a misdemeanor, and, being convicted thereof, shall be liable, at the discretion of the court, to be transported beyond the seas for any term not exceeding 14 years, nor less than 7 years, or to suffer such other punishment by fine or imprisonment, or by both, as the court shall award; but no such factor or agent shall be liable to any prosecution for depositing or pledging any such goods or merchandise, or any of the said documents, in case the same shall not be made a security for, or subject to the payment of, any greater

sum of money than the amount which, at the time of such deposit or pledge, was justly due and owing to such factor or agent from his principal, together with the amount of any bill or bills of exchange drawn by or on account of such principal, and accepted by such factor or agent."

This provision does not extend to partners not being privy to the offence; nor does it take away any remedy at law or equity which any party aggrieved by any offence might have been entitled to against such offender. And no one shall be liable to be convicted by any evidence whatever as an offender against this act, in respect of any act done by him, if he shall, at any time previously to his being indicted for such offence, have disclosed such acts, on oath, in consequence of any compulsory process of any court of law or equity, in any action, suit, &c. which shall have been *bonâ fide* instituted by any party aggrieved, or if he shall have disclosed the same in any examination or deposition before any commissioners of bankrupt. — § 52.

FACTORAGE, OR COMMISSION, the allowance given to factors by the merchants and manufacturers, &c. who employ them: it is a percentage on the goods they purchase or sell on account of their principals; and varies in different countries, and as it refers to different articles. It is customary for factors, as observed in the previous article, to insure the debts due to those for whom they sell for an additional, or *del credere*, commission, generally averaging from 1½ to 2 per cent. Factorage or commission is also frequently charged at a certain rate per cask, or other package, measure, or weight, especially when the factor is only employed to receive or deliver: this commission is usually fixed by special agreement between the merchant and factor.

FACTORAGE, BROKERAGE, AND COMMISSION TABLE.

Amt.	At ⅛ per Ct.	At ¼ per Ct.	At ⅜ per Ct.	At ½ per Ct.	At ⅝ per Ct.	At ¾ per Ct.	At ⅞ per Ct.	At 1 per Ct.
L.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
1	0 0 0½	0 0 0½	0 0 0¾	0 0 1	0 0 1½	0 0 1¾	0 0 2	0 0 2½
2	0 0 0¾	0 0 1	0 0 1½	0 0 2½	0 0 3	0 0 3½	0 0 4	0 0 4¾
3	0 0 0¾	0 0 1¾	0 0 2¼	0 0 3½	0 0 4½	0 0 5¼	0 0 6¼	0 0 7
4	0 0 1	0 0 2¼	0 0 3	0 0 4¾	0 0 6	0 0 7	0 0 8¼	0 0 9½
5	0 0 1¼	0 0 3	0 0 4¼	0 0 6	0 0 7½	0 0 9	0 0 10½	0 1 0
6	0 0 1¾	0 0 3½	0 0 5¼	0 0 7	0 0 9	0 0 10¾	0 1 0½	0 1 2
7	0 0 2	0 0 4	0 0 6¾	0 0 8¼	0 0 10½	0 1 0½	0 1 2½	0 1 4¾
8	0 0 2¼	0 0 4¾	0 0 7	0 0 9½	0 1 0	0 1 2½	0 1 4¾	0 1 7
9	0 0 2½	0 0 5¼	0 0 8	0 0 10¾	0 1 1½	0 1 4	0 1 6¾	0 1 9½
10	0 0 3	0 0 6	0 0 9	0 1 0	0 1 3	0 1 6	0 1 9	0 2 0
20	0 0 6	0 1 0	0 1 6	0 2 0	0 2 6	0 3 0	0 3 6	0 4 0
30	0 0 9	0 1 6	0 2 3	0 3 0	0 3 9	0 4 6	0 5 3	0 6 0
40	0 1 0	0 2 0	0 3 0	0 4 0	0 5 0	0 6 0	0 7 0	0 8 0
50	0 1 3	0 2 6	0 3 9	0 5 0	0 6 3	0 7 6	0 8 9	0 10 0
60	0 1 6	0 3 0	0 4 6	0 6 0	0 7 6	0 9 0	0 10 6	0 12 0
70	0 1 9	0 3 6	0 5 3	0 7 0	0 8 9	0 10 6	0 12 3	0 14 0
80	0 2 0	0 4 0	0 6 0	0 8 0	0 10 0	0 12 0	0 14 0	0 16 0
90	0 2 3	0 4 6	0 6 9	0 9 0	0 11 3	0 13 6	0 15 9	0 18 0
100	0 2 6	0 5 0	0 7 6	0 10 0	0 12 6	0 15 0	0 17 6	1 0 0
200	0 5 0	0 10 0	0 15 0	1 0 0	1 5 0	1 10 0	1 15 0	2 0 0
300	0 7 6	0 15 0	1 2 6	1 10 0	1 17 6	2 5 0	2 12 6	3 0 0
400	0 10 0	1 0 0	1 10 0	2 0 0	2 10 0	3 0 0	3 10 0	4 0 0
500	0 12 6	1 5 0	1 17 6	2 10 0	3 2 6	3 15 0	4 7 6	5 0 0
600	0 15 0	1 10 0	2 5 0	3 0 0	3 15 0	4 10 0	5 5 0	6 0 0
700	0 17 6	1 15 0	2 12 6	3 10 0	4 7 6	5 5 0	6 2 6	7 0 0
800	1 0 0	2 0 0	3 0 0	4 0 0	5 0 0	6 0 0	7 0 0	8 0 0
900	1 2 6	2 5 0	3 7 6	4 10 0	5 12 6	6 15 0	7 17 6	9 0 0
1,000	1 5 0	2 10 0	3 15 0	5 0 0	6 5 0	7 10 0	8 15 0	10 0 0
2,000	2 10 0	5 0 0	7 10 0	10 0 0	12 10 0	15 0 0	17 10 0	20 0 0
3,000	3 15 0	7 10 0	11 5 0	15 0 0	18 15 0	22 10 0	26 5 0	30 0 0
4,000	5 0 0	10 0 0	15 0 0	20 0 0	25 0 0	30 0 0	35 0 0	40 0 0
5,000	6 5 0	12 10 0	18 15 0	25 0 0	31 5 0	37 10 0	43 15 0	50 0 0
10,000	12 10 0	25 0 0	37 10 0	50 0 0	62 10 0	75 0 0	87 10 0	100 0 0

Amt.	At 1½ per Ct.	At 2 per Ct.	At 2½ per Ct.	At 3 per Ct.	At 4 per Ct.	At 4½ per Ct.	At 5 per Ct.
L.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
1	0 0 3½	0 0 4¾	0 0 6	0 0 7	0 0 9	0 0 10¾	0 1 0
2	0 0 7	0 0 9½	0 1 0	0 1 2¾	0 1 7	0 1 9½	0 2 0
3	0 0 10¾	0 1 2¾	0 1 6	0 1 9½	0 2 4	0 2 8¼	0 3 0
4	0 1 2¼	0 1 7	0 2 0	0 2 4¾	0 3 2	0 3 7	0 4 0
5	0 1 6	0 2 0	0 2 6	0 3 0	0 4 0	0 4 6	0 5 0
6	0 1 9½	0 2 4¾	0 3 0	0 3 7	0 4 9	0 5 4¾	0 6 0
7	0 2 1	0 2 9½	0 3 6	0 4 2¼	0 5 7	0 6 3½	0 7 0
8	0 2 4¾	0 3 2¼	0 4 0	0 4 9½	0 6 4	0 7 2¼	0 8 0
9	0 2 8¼	0 3 7	0 4 6	0 5 4¾	0 7 2	0 8 1	0 9 0
10	0 3 0	0 4 0	0 5 0	0 6 0	0 8 0	0 9 0	0 10 0
20	0 6 0	0 8 0	0 10 0	0 12 0	0 16 0	0 18 0	1 0 0
30	0 9 0	0 10 0	0 15 0	0 18 0	1 4 0	1 7 0	1 10 0
40	0 12 0	0 16 0	1 0 0	1 4 0	1 12 0	1 16 0	2 0 0
50	0 15 0	1 0 0	1 5 0	1 10 0	2 0 0	2 5 0	2 10 0
60	0 18 0	1 4 0	1 10 0	1 16 0	2 8 0	2 14 0	3 0 0
70	1 1 0	1 8 0	1 15 0	2 2 0	2 16 0	3 3 0	3 10 0
80	1 4 0	1 12 0	2 0 0	2 8 0	3 4 0	3 12 0	4 0 0
90	1 7 0	1 16 0	2 5 0	2 14 0	3 12 0	4 1 0	4 10 0
100	1 10 0	2 0 0	2 10 0	3 0 0	4 0 0	4 10 0	5 0 0
200	3 0 0	4 0 0	5 0 0	6 0 0	8 0 0	9 0 0	10 0 0
300	4 10 0	6 0 0	7 10 0	9 0 0	12 0 0	13 10 0	15 0 0
400	6 0 0	8 0 0	10 0 0	12 0 0	16 0 0	18 0 0	20 0 0
500	7 10 0	10 0 0	12 10 0	15 0 0	20 0 0	22 10 0	25 0 0
600	9 0 0	12 0 0	15 0 0	18 0 0	24 0 0	27 0 0	30 0 0
700	10 10 0	14 0 0	17 10 0	21 0 0	28 0 0	31 10 0	35 0 0
800	12 0 0	16 0 0	20 0 0	74 0 0	32 0 0	36 0 0	40 0 0
900	13 10 0	18 0 0	22 10 0	27 0 0	36 0 0	40 10 0	45 0 0
1,000	15 0 0	20 0 0	25 0 0	30 0 0	40 0 0	45 0 0	50 0 0
2,000	30 0 0	40 0 0	50 0 0	60 0 0	80 0 0	92 0 0	100 0 0
3,000	45 0 0	60 0 0	75 0 0	90 0 0	120 0 0	135 0 0	150 0 0
4,000	60 0 0	80 0 0	100 0 0	120 0 0	160 0 0	180 0 0	200 0 0
5,000	75 0 0	100 0 0	125 0 0	150 0 0	200 0 0	225 0 0	250 0 0
10,000	150 0 0	200 0 0	250 0 0	300 0 0	400 0 0	450 0 0	500 0 0

FACTORY, a place where merchants and factors reside, to negotiate business for themselves and their correspondents on commission. We have factories in China, Turkey, Portugal, Russia, &c.

FAIRS AND MARKETS. These institutions are very closely allied. A fair, as the term is now generally understood, is only a greater species of market recurring at more distant intervals. Both are appropriated to the sale of 1 or more species of goods, the hiring of servants, or labourers, &c.: but fairs are, in most cases, attended by a greater concourse of people, for whose amusement various exhibitions are got up.

1. *Origin of Fairs.* — Institutions of this sort are peculiarly serviceable in the earlier stages of society, and in rude and inland countries. The number of shops, and the commodities in them, are then either comparatively limited, or they are but little frequented by dealers; so that it is for the advantage of all, that fairs should be established, and merchants induced to attend them. For this purpose various privileges have been annexed to fairs, and numerous facilities afforded to the disposal of property in them. To give them a greater degree of solemnity, they were originally, both in the ancient and modern world, associated with religious festivals. In most places, indeed, they are still held on the same day with the wake or feast of the saint to whom the church is dedicated; and till the practice was prohibited, it was customary, in England, to hold them in churchyards! — (*Jacob's Law Dict.* art. *Fair.*) But since the growth of towns, and the opportunities afforded for the disposal and purchase of all sorts of produce at the weekly or monthly markets held in them, the utility of fairs, in this country, at least, has very much diminished; they have, also, lost much of their ancient splendour; and, though some of them are still well attended, and of real use, a good number might be advantageously suppressed.

But it is far otherwise in inland countries, where the facilities for carrying on commercial transactions are comparatively circumscribed. There it is of the utmost importance, that certain convenient places and specified periods should be appointed for the bringing together of commodities and dealers. This is not only the readiest and best means of promoting commerce, but also of softening national antipathies, and diffusing a knowledge of the products, arts, and customs of other countries.

2. *Establishment of English Fairs.* — No fair can be holden without grant from the Crown, or a prescription which supposes such grant. And before a patent is granted, it is usual to have a writ of *ad quod damnum* executed and returned, that it may not be issued to the prejudice of a similar establishment already existing. The grant usually contains a clause that it shall not be to the hurt of another fair or market; but this clause, if omitted, will be implied in law: for if the franchise occasion damage either to the king or a subject, in this or any other respect, it will be revoked; and a person, whose ancient title is prejudiced, is entitled to have a *scire facias* in the king's name to repeal the letters patent. If his Majesty grant power to hold a fair or market in a particular place, the lieges can resort to no other, even though it be inconvenient. But if no place be appointed, the grantees may keep the fair or market where they please, or rather, where they can most conveniently.

3. *Times of holding Fairs and Markets.* — These are either determined by the letters patent appointing the fair or market, or by usage. The statute 2 Edw. 3. c. 15. enacts, that the duration of the fair shall be declared at its commencement, and that it shall not be continued beyond the specified time. By statute 5 Edw. 3. c. 5., any merchant selling goods after the stipulated time is to forfeit double the value of the goods sold.

4. *Effect of Sales in Fairs and Markets.* — A *bonâ fide* sale made in a fair or open market, in general, transfers the complete property of the thing sold to the vendee; so that, however vicious or illegal the title of the vendor may be, the vendee's is good against every one except the king. But the sale, in order to come within this rule, must take place *on the market day, and at the place assigned for the market.* The city of London is said to be a market overt every day of the week except Sunday; every shop being a market overt for such things as the shopkeeper professes to deal in. The property of goods may, however, be changed, and effectually transferred to the buyer, by a *bonâ fide* sale in a shop out of London, whether the shopkeeper be the vendor or vendee, if the goods are of the kind in which he trades. A wharf in London is not within the custom, and is not a market overt for articles brought there. But a sale in a market will not be binding, if it be such as carries with it a presumption of fraud: as, for example, if it take place in a back room, or secret place; if the sale be covinous, and intended to defraud the real owner; or if the buyer know that the vendor is not the real owner of the goods, &c. It is very difficult to transfer the property of horses, even when they are sold in an open market, without the consent of the real owner. — (See HORSES.)

5. *Court of Pié Poudre.* — To every fair or market there is incident, even without any express words in the grant, a court of *pié poudre*, in allusion to the dusty feet of the suitors. The steward or mayor may preside. It has cognizance of all questions as to contracts made in the market, respecting goods *bought and delivered there*, &c. Formerly *pié poudre* courts were held at every considerable fair; but they are now entirely laid aside.

6. *Clerk of the Market.* — Owners and governors of fairs are to take care that every thing be sold according to just weights and measures. And for that and other purposes they may appoint a clerk of the fair or market, who is to mark and allow all such weights, &c.; charging 1*d.* for sealing and marking a bushel, $\frac{1}{2}d.$ for marking a half bushel or peck, and $\frac{1}{4}d.$ for marking a gallon, pottle, quart, pint, &c., under penalty of 5*l.* — (22 *Cha.* 2. c. 8.)

7. *Tolls.* — Being a matter of private benefit to the owners of fairs or markets, and not incident to them, tolls are not exigible unless specially granted in the patent: but the king may by a new grant authorise a reasonable toll to be taken. If the toll granted be excessive, the patent will be void. It is a general rule, unless changed by a contrary custom obtaining time out of mind, that no toll be paid for any thing brought to a fair or market, before the same is sold, and that it shall then be *paid by the buyer.*

The owner of a house next to a fair or market is not allowed to open his shop during such fair or market, without paying *stallage* (toll for having a stall); on the ground that if he take the benefit of the market, he ought to pay the duties thereon. This regulation has been a good deal complained of.

The owners of fairs and markets are required by statute (2 & 3 Ph. and M. c. 7.) to appoint a person in a special open place to take the toll. The most important part of this person's duty has reference to his entering the horses sold with three distinguishing marks, and the names, &c. of those who buy and sell them. — (See Horses.)

An action lies against any one who refuses to pay the customary toll.

(For further information as to British fairs and markets, see *Chitty on Commercial Law*, vol. ii. c. 9.)

The 3 Geo. 4. c. 55. enacts, that at all fairs held within 10 miles of Temple Bar, business and amusements of all kinds shall cease at 11 o'clock in the evening, and not re-commence before 6 o'clock in the morning, under a penalty of 40*s.* to be paid by any master, mistress, or other person, having the care or management of any house, shop, room, booth, standing, tent, caravan or wagon, where any breach of this enactment shall have been committed. Power is also given by the same act to any 2 justices of the peace, within their respective jurisdictions, to put a stop to any fair which is held without charter, prescription, or lawful authority.

8. *Principal British Fairs.* — Among these may be specified Stourbridge, in Worcestershire. Bristol has two considerable fairs, one in March, and one in September. Exeter December fair, for cattle, horses, and most sorts of commodities. Weyhill fair, in Hampshire (October 10.), has, probably, the greatest display of sheep of any fair in the kingdom. Bartholomew fair, in London, used to be of considerable importance, but is now appropriated only to shows of wild beasts, and such like exhibitions, and might be suppressed with advantage. St. Faith's, near Norwich (October 17.), is the principal English fair for Scotch cattle. They are sold to the graziers and feeders of Norfolk, Suffolk, Essex, &c., by whom they are fattened for the London markets, where they are met with in great abundance. But besides those sold at St. Faith's, large numbers or Scotch cattle are disposed of at Market Harborough, Carlisle, Ormskirk, and other places. Ipswich has two considerable fairs: one in August, for lambs: and one in September, for butter and cheese: it is reckoned that above 100,000 lambs are annually sold at the former. Woodborough-hill, in Dorset, for west country manufactures, as kerseys, druggets, &c. Woodstock October fair, for cheese. Northampton and Nottingham have each several large fairs, for horses, cattle, cheese, &c. The August fair of Horncastle, in Lincolnshire, is the largest horse fair in the kingdom, many thousand horses being exhibited for sale during its continuance: it is resorted to by crowds of dealers from all parts of Great Britain, by several from the Continent, and sometimes even from North America. Howden, in Yorkshire, has, also, a very large horse fair, particularly for Yorkshire hunters. Devizes, in Wiltshire, has several large fairs for sheep and cattle. There is usually a large display of cheese at the Gloucester April fair. A guild, or jubilee, commencing the last week of August, is held every twentieth year at Preston, in Lancashire; the last was held in 1822, and was well attended. The October fair of Market Harborough, Leicestershire, lasts 9 days, and a great deal of business is usually done in cattle, cheese, &c. Woodbridge Lady-day fair is celebrated for the show of Suffolk horses. Falkirk fair, or tryst, is one of the most important in Scotland, for the sale of cattle and sheep. The October fair of Ballinasloe, in the county Galway, is famous for the display of cattle and sheep; by far the largest proportion of these animals raised for sale in Connaught being disposed of at it. The sheep are generally from 3 to 4, the heifers from 3 to 4, and the bullocks from 4 to 5 years of age. They are mostly lean; and are kept for a year in Leinster before they are fit for the Dublin or Liverpool markets. It would seem that the number of cattle and sheep disposed of at Ballinasloe is rather declining; a result ascribable to the increase of cultivation caused by the great augmentation of population, and the continued subdivision of the land.

We subjoin an

Account of the Number of Sheep and Cattle, sold and unsold, at the October Fairs of Ballinasloe, from the Year 1820 to the Year 1832, both inclusive. — (*Agricultural Report of* 1832, p. 349.)

Years.	Sheep sold.	Sheep unsold.	Total.	Cattle sold.	Cattle unsold.	Total.
1820	59,943	20,833	80,776	4,504	4,001	8,505
1821	74,854	10,366	85,220	6,062	1,222	7,284
1822	74,718	15,459	90,177	5,322	3,695	9,017
1823	75,584	20,315	95,899	6,588	4,321	10,909
1824	77,448	6,786	84,234	9,058	1,447	10,505
1825	72,577	17,688	90,265	8,012	2,254	10,266
1826	57,805	36,597	94,402	4,593	3,844	8,240
1827	77,076	14,300	91,376	6,658	1,711	8,349
1828	86,574	11,010	97,584	7,707	3,806	11,513
1829	71,434	14,979	86,413	5,677	3,666	9,347
1830	66,874	14,611	81,485	5,894	1,563	7,457
1831	57,040	3,299	61,339	6,192	1,321	7,513
1832	58,055	4,793	62,848	6,101	556	6,657

9. *Principal French Fairs.* — Among these may be specified the fairs of St. Germains, Lyons, Rheims, Chartres, Rouen, Bordeaux, Troyes, and Bayonne; but they are said to be, for the most part, much fallen off. This, however, does not appear to be the case with the fair held at Beaucaire, in the department of the Gard, in July. It is said that there were from 70,000 to 80,000 persons at the fair of 1833, and that the business done exceeded 160,000,000 fr., or 6,400,000*l.*! These statements are not, however, official, and are, most probably, exaggerated; and it is admitted, that the last was the greatest fair that has been held for these many years past. — (*Archives du Commerce*, tom. iii. pp. 236—245.)

10. *German Fairs.* — The principal German, or rather European, fairs, are those of Frankfort on the Maine, Frankfort on the Oder, and Leipsic. The concourse of merchants, and the business done at these fairs, is generally very great. They are copiously supplied with the cotton stuffs, twist, cloths, and hardware of England; the silks and jewellery of France; the printed cottons of Switzerland and Austria; the raw, manufactured, and literary products of Germany; the furs of the North; Turkey carpets; Cachemere shawls, &c.; and there, also, are to be found merchants of all countries, those of Ispahan negotiating with those of Montreal for the purchase of furs; and Georgians and Servians supplying themselves with the cottons of Manchester and the jewellery of Paris. There, in fact, are met the representatives, as it were, of every people in the world, labouring, though without intending it, to promote each other's interest, and to extend and strengthen those ties that bind together the great family of the human race.

The fairs at Frankfort on the Maine should begin, the first on Easter Tuesday, and the second on the Monday nearest to the 8th of September. Their duration is limited to 3 weeks, but they usually begin from 8 to 15 days before their legal commencement. Accounts are kept in rixdollars: 1 rixdollar of account = $1\frac{1}{2}$ florin, or $4\frac{1}{2}$ copsticks, or $22\frac{1}{2}$ batzen. The rixdollar = 3*s.* 1·8*d.*; so that the par of exchange is 141 batzen per 1*l.* sterling. 100 lbs. common Frankfort weight = 103 lbs. avoirdupois. The foot = 11·27 English inches.

The fairs at Frankfort on the Oder are 3 in number: viz. *Reminiscere*, in February or March; *St. Margaret*, in July; and *St. Martin*, in November. They ought, strictly speaking, to terminate in 8 days, but they usually extend to 15. The Prussian government gives every facility to those who attend these fairs. Accounts are kept in Prussian money, that is, in rixdollars of 2*s.* $11\frac{1}{4}$*d.* 100 lbs. Prussian = 103 lbs. avoirdupois. The foot = 12·356 English inches.

The fairs of Leipsic are still more celebrated than those of either Frankfort. They are held thrice a year, — on the 1st of January, at Easter, and at Michaelmas. The first is the least important. Above 20,000 dealers are said to have been present at the Easter fair in 1832, and above 13,000 at that of Michaelmas. The Easter and Michaelmas fairs are famous, particularly the former, for the vast number of new publications usually offered for sale. They are attended by all the principal booksellers of Germany, and by many from the adjoining countries, who adjust their accounts, learn the state of the trade in all parts of the world, and endeavour to form new connections. Most German publishers have agents in Leipsic; which is to the literature of Germany, what London is to that of Great Britain. As many as 4,000 new publications have been in a single Leipsic catalogue! The fairs ought to close in 8 days, but they usually continue for about 3 weeks. No days of grace are allowed. The holder of a bill must demand payment on the day it becomes due; and, if not paid, he must have it protested on that very day, and returned by the first opportunity. If he neglect any of these regulations, he loses all right of recourse upon the drawer and indorsers. Money of account at Leipsic same as at Frankfort on the Maine. 100 lbs. Leipsic = 103 lbs. avoirdupois. The foot = 11·11 English inches. — (*Kelly's Cambist; Manuel de Nelkenbrecher; Archives du Commerce*, tom. ii. p. 27., *&c.*)

Dr. Bright gives, in his *Travels in Hungary* (pp. 201—223.), an interesting account of the fairs held at Debretzin and Pesth. The latter has become the grand centre of Hungarian commerce; most part of which is conducted at its fairs.

11. *Italian Fairs.*—Of these, the most celebrated is that of Sinigaglia, a small but handsome town of the Papal dominions, on the Misa, near its confluence with the Adriatic. The fair commences on the 14th of July, and should terminate on the last day of that month, but it usually continues 5 or 6 days longer. The duties on goods brought to the fair are extremely moderate, and every thing is done to promote the convenience of those frequenting it. All sorts of cotton and woollen goods, lace, iron and steel, hardware, jewellery, brandy and liqueurs, raw and refined sugar, dried fish, cacao, coffee, spices, &c. are brought here by the English, French, Austrians, Americans, Swiss, &c. These are exchanged for the various raw and manufactured products of Italy and the Levant; consisting, among others, of raw, thrown, and wrought silks; oil, fruits, cheese, alum, soda, sumach, sulphur, &c. The value of the imports for the fair of 1832 was estimated at about 2,000,000*l.* Accounts are kept in scudi of 20 soldi; the scudo = 4*s.* 4*d.* very nearly. 100 lbs. Sinigaglia = 73¾ lbs. avoirdupois. The ell or braccio measures 25·33 English inches. — (*Manuel de Nelkenbrecher; Archives du Commerce*, tom. ii. p. 38.)

12. *Russian Fairs.*—These are numerous, and many of them well attended. The most important is held at Nishnei-Novogorod. This city is situated at the confluence of the Oka with the Wolga, in lat. 56° 16′ N., lon. 44° 18′ E. It is the great emporium of the internal trade of Russia; communicating by an inland navigation with the Baltic, the Black Sea, and the Caspian. The fair was formerly held at Makarief, 84 versts distant. It generally lasts from 6 weeks to 2 months, and is well known all over the east of Europe. The bazaars erected for the accommodation of those who attend this fair, form, according to Dr. Lyall, the finest establishment of the kind in the world. The sale of iron and iron articles is said usually to amount to above 10,000,000 roubles; the furs to 36,000,000; the images to 1,300,000. Captain Cochrane is of opinion, that "the fair, in point of value, is second to none in Europe; the business done being estimated at nearly 200,000,000 roubles." The stationary population of the place amounts to from 15,000 to 16,000: but during the fair it is said to amount to 120,000 or 150,000; among whom may be seen Chinese, Persians, Circassians, Armenians, Tâtars, Bucharians, Jews, "and a specimen of almost every European nation." — (See *Modern Traveller*, art. *Russia*, p. 305.) We suspect, however, that these statements are very far beyond the mark. It is stated in the *Archives du Commerce* (tom. i. p. 173.), that the total value of the merchandise disposed of at the fair of Nishnei-Novogorod, in 1832, amounted to 123,200,000 roubles. Theatrical exhibitions, shows of wild beasts, and other Bartholomew fair amusements, add to the attractions of the scene.

Another celebrated Russian fair is held, in the month of December, at Kiachta, in Mongolia, on the Chinese frontier, in lat. 50° 20′ N., lon. uncertain, but about 105° E. The town is small, the population not exceeding 4,000 or 5,000; but by far the largest part of the commerce between the Russian and Chinese empires is transacted at its fair, and it is also the centre of the political intercourse between them. The commodities brought by the Russians consist principally of furs, sheep and lamb skins, Russian and German broad cloths, Russia leather, coarse linens, worsted stuffs, cattle, &c., with, for the most part, bullion. These they exchange with the Chinese for tea, raw and manufactured silk, nankeens, porcelain, sugar candy, rhubarb, tobacco, musk, &c. The quantity of tea, using the word in the sense in which it is understood here, purchased at the Kiachta fairs by the Russians, amounts, at an average, to about 60,000 boxes a year, that is, to about 4,200,000 lbs.; the greater part being the fine species of black tea called pekoe. But, exclusive of this, the Russians buy large quantities of a coarser species of tea, called break or Tartar tea, which, though not thought worth the trouble of putting into packages, is largely consumed by the nomadic Tartars and Siberians. According to the official accounts published by the Russian Custom-house, the total value of the exports by way of Kiachta, in 1831, amounted to 4,655,536 roubles, and that of the imports to 6,775,858 ditto. The Russian trade is in the hands of a comparatively small number of merchants, some of whom are very rich; that of the Chinese is much more diffused. Commodities may be conveyed from Kiachta to European Russia either by land or by water. In the former case, the journey takes a year; in the latter, it takes 3 years, or rather 3 very short summers; the rivers being for the most part of the year frozen over. — (*Schnitzler, Statistique Générale de l'Empire de la Russie*, p. 143.; *private communications* from *Captain Gordon*, who visited Kiachta in 1819; *Official Statement of the Trade of the Russian Empire in* 1831, *&c.*)

13. *Eastern Fairs.* — The most important fair in the Eastern world is that held at Mecca, during the resort of pilgrims in the month of Dhalhajja. It used to be frequented by many thousands of individuals of all ranks and orders, brought together from the remotest corners of the Mohammedan world; and though the numbers attending it have declined of late years, the concourse is still very great. — (See CARAVAN.)

Hurdwar, in Hindostan, in lat. 29° 57′ N., lon. 78° 2′ E., 117 miles N.E. from Delhi, is famous from its being one of the principal places of Hindoo pilgrimage, and the greatest

fair in India. The town, which is but inconsiderable, is situated on the Ganges, at the point where that sacred stream issues from the mountains. The pilgrimage and fair are held together at the vernal equinox; and Europeans, nowise addicted to exaggeration, who have been repeatedly present on these occasions, estimate that from 200,000 to 300,000 strangers are then assembled in the town and its vicinity. But every twelfth year is reckoned peculiarly holy; and then it is supposed that from 1,000,000 to 1,500,000, and even 2,000,000 pilgrims and dealers are congregated together from all parts of India and the countries to the north. In 1819, which happened to be a twelfth year, when the auspicious moment for bathing in the Ganges was announced to the impatient devotees, the rush was so tremendous that no fewer than 430 persons were either trampled to death under foot, or drowned in the river! The foreigners resorting to Hurdwar fair for commercial purposes only, consist principally of natives of Nepaul, the Punjab, and Peshwaur, with Afghans, Usbeck Tartars, &c. They import vast numbers of horses, cattle, and camels; Persian dried fruits, shawls, drugs, &c.: the returns are made in cotton piece goods, indigo, sugar, spices, and other tropical productions. The merchants never mention the price of their goods, but conduct the bargain by touching the different joints of their fingers, to hinder the bystanders gaining any information. During the Mahratta sway, a kind of poll-tax and duties on cattle were levied; but all is now free, without impost or molestation of any sort. Owing, also, to the precautions adopted by the British government, the most perfect order is preserved; much to the surprise and satisfaction of the natives; for, antecedent to our occupation of the country, the fairs usually ended in disorder and bloodshed. — (*Private information*, and the excellent account of *Hurdwar* in *Hamilton's Gazetteer.*)

The fairs of Portobello, Vera Cruz, and Acapulco, once so famous, are now totally deserted; that of the Havannah is also much fallen off.

FATHOM, a measure of length, 6 feet, chiefly used for measuring the length of cordage, and the depth of water and mines.

FEATHERS, BED-FEATHERS (Fr. *Plumes, Plumes à lit;* Ger. *Federn, Bettfedern;* Du. *Bedveern, Pluimen;* It. *Piume;* Sp. *Plumas*), make a considerable article of commerce; particularly those of the ostrich, heron, swan, peacock, goose, and other poultry; for plumes, ornaments of the head, filling of beds, quilts, &c. The coarsest part of the ostrich plumage is generally denominated *hair*, to which it bears a resemblance, and is used in the manufacture of hats. Many parts of Great Britain supply feathers for beds, and an inferior sort is brought from Ireland. Eider down is imported from the north of Europe; the ducks that supply it being inhabitants of Greenland, Iceland, and Norway. The eider duck breeds in the islands on the west of Scotland, but not in sufficient numbers to form a profitable branch of trade to the inhabitants. Hudson's Bay furnishes very fine feathers. The down of the swan is brought from Dantzic, as well as large quantities of superior feathers.

The bed-feathers imported in 1828 amounted to 3,103 cwt., yielding 6,826*l.* 12*s.* of duty. The duty on ostrich feathers during the same year produced 962*l.* 8*s.* 9*d.*

FIDDLES, OR VIOLINS (Ger. *Violinen, Geigen;* Du. *Vioolen;* Fr. *Violons;* It. *Violini;* Sp. *Violines;* Rus. *Skripizii*), musical instruments, too well known to need any particular description. The finest-toned violins are those made in Italy; they are usually called Cremonas, from the name of the town where they were formerly manufactured in the highest perfection: 50 or 60 guineas have not unfrequently been given for a Cremona violin.

FIGS (Ger. *Feigen;* Du. *Vygen;* Fr. *Figues;* It. *Fichi;* Sp. *Higos;* Lat. *Fici, Caricæ;* Arab. *Teen*), the fruit of the fig tree (*Ficus carica*), a native of Asia, but early introduced into Europe. It flourishes in Turkey, Greece, France, Spain, Italy, and Northern Africa, and even sometimes ripens its fruit in the open air in this country. Figs, when ripe, are, for the most part, dried in ovens to preserve them; and then packed very closely in the small chests and baskets in which we import them. The best come from Turkey; those of Kalamata, in the Morea, are said to be the most luscious. — (*Thomson's Dispensatory.*)

Dried figs form a very considerable article of commerce in Provence, Italy, and Spain; besides affording, as in the East, a principal article of sustenance for the population. In Spain, figs are chiefly exported from Andalusia and Valencia; but they are more or less abundant in every province. In the northern parts of France there are many fig gardens, particularly at Argenteuil.

Figs belong to that class of articles, the duties on which might be reduced, not only without any loss, but with very great advantage to the revenue. They are extensively used at the tables of the opulent; and would, there is no doubt, be much used by the middle classes, were their price lower. The importation, even with the present duty of 21*s.* 6*d.*, is about 20,000 cwt.; and as this duty is full 100 per cent. upon their price in bond, it may be fairly concluded, that were it reduced to 8*s.* or 10*s.* a cwt., the quantity imported would very soon be trebled, or more.

No abatement of duty is made on account of any damage received by figs.

FILE, FILES (Da. *File;* Du. *Vylen;* Fr. *Limes;* Ger. *Feilen;* It. *Lime*), an instrument of iron or forged steel, cut in little furrows, used to polish or smooth metals, timber, and other hard bodies.

FIR. See Pine.

FIRE-ARMS. Under this designation is comprised all sorts of guns, fowling-pieces, blunderbusses, pistols, &c. The manufacture of these weapons is of considerable importance; employing at all times, but especially during war, a large number of persons.

In consequence of the frequent occurrence of accidents from the bursting of insufficient barrels, the legislature has most properly interfered, not to regulate their manufacture, but to prevent all persons from using or selling barrels that have not been regularly *proved* in a public proof-house. The first act for this purpose was passed in 1813; but it was soon after superseded by a fuller and more complete one, the 55 Geo. 3. c. 59. This statute imposes a fine of 20*l.* on any person *using*, in any of the progressive stages of its manufacture, any barrel not duly proved; on any person *delivering* the same, except through a proof-house; and on any person *receiving*, for the purpose of making guns, &c. any barrels which have not passed through a proof-house. These penalties to be levied on conviction before 2 justices; with like penalties, to be similarly levied, on persons counterfeiting the *proof-marks*.

FIRE-WORKS. By 9 & 10 Will. 3., all sorts of fire-works are declared to be a common nuisance; and the *making*, *causing to be made*, *giving*, *selling*, or *offering* for sale, any squibs, rockets, serpents, or *other fire-works*, or any cases or implements for making the same, is made subject to a penalty of 5*l.*, to be recovered on conviction before a justice of the peace. Casting or firing any such fire-works, or permitting the same to be cast or fired, *from* any house or place, and casting or firing the same *into* any house, shop, street, highway, or river, is subjected to a penalty of 20*s.*, to be recovered in like manner; and if not immediately paid, the party to be imprisoned and kept to hard labour for any time not exceeding a month. But the statute provides, that it shall be lawful for the master, lieutenant, or commissioners of his Majesty's ordnance, or those authorised by them, to give orders for making any fire-works, to be used according to such orders.

FIRKIN, a measure of capacity, equal to 9 ale gallons, or $7\frac{1}{2}$ Imperial gallons, or 2,538 cubic inches. — (See Weights and Measures.)

FIRLOT, a dry measure used in Scotland. The Linlithgow wheat firlot is to the Imperial bushel as ·998 to 1; and the Linlithgow barley firlot is to the Imperial bushel as 1.456 is to 1. — (See Weights and Measures.)

FISH (Ger. *Fische;* Du. *Visschen;* Da. and Sw. *Fisk;* Fr. *Poissons;* It. *Pesci;* Sp. *Pescados;* Port. *Peixes;* Rus. *Rüb;* Pol. *Rybi;* Lat. *Pisces*), a term used in natural history to denote every variety of animal inhabiting seas, rivers, lakes, ponds, &c. that cannot exist for any considerable time out of the water. But in a commercial point of view, those fishes only are referred to, that are caught by man, and used either as food or for some other useful purpose. Of these, herring, salmon, cod, pilchard, mackarel, turbot, lobster, oyster, whale, &c. are among the most important. — (See the different articles under these titles.)

The supply of fish in the seas round Britain is most abundant, or rather quite inexhaustible. "The coasts of Great Britain," says Sir John Boroughs, "doe yield such a continued sea harvest of gain and benefit to all those that with diligence doe labour in the same, that no time or season of the yeare passeth away without some apparent meanes of profitable employment, especially to such as apply themselves to fishing; which, from the beginning of the year unto the latter end, continueth upon some part or other upon our coastes; and these in such infinite shoales and multitudes of fishes are offered to the takers, as may justly move admiration, not only to strangers, but to those that daily are employed amongst them." — "That this harvest," says Mr. Barrow, "ripe for gathering at all seasons of the year — without the labour of tillage, without expense of seed or manure, without the payment of rent or taxes — is inexhaustible, the extraordinary fecundity of the most valuable kinds of fish would alone afford abundant proof. To enumerate the thousands, and even millions of eggs, which are impregnated in the herring, the cod, the ling, and indeed in almost the whole of the esculent fish, would give but an inadequate idea of the prodigious multitudes in which they flock to our shores; the shoals themselves must be seen, in order to convey to the mind any just notion of their aggregate mass." — (For an account of the shoals of herrings, see Herring.)

But, notwithstanding these statements, there has been, for these some years past, a growing complaint of a scarcity of such fish as breed in the Channel; and it is affirmed, in the report of the Commons' committee of 1833, on the Channel fisheries, that the fact of such scarcity existing has been completely established. The committee ascribe it to various causes, but principally to the destruction of the spawn or brood of fish, by fishing with trawl or drag nets with small meshes, near the shore, during the breeding season; a practice prohibited by several statutes, which seem, however, to have fallen into disuse. The committee represent the fishermen as being generally in a very depressed state, and that the business is, for the most part, very unprofitable. We believe that this is the fact; but we do not know any period when the same might not have

been said with quite as much truth as at present. Smith has remarked, that from the age of Theocritus downwards, fishermen have been proverbially poor — (*Wealth of Nations*, vol. i. p. 167.); and a library might be filled with the acts, reports, plans, tracts, &c. that have been printed in this country during the last 2 centuries, containing regulations, schemes, suggestions, &c. for the improvement of fisheries and fishermen. But it is not too much to say, that not one of these well meant endeavours, notwithstanding the enormous expense incurred in carrying some of them into effect, has been productive of any material advantage; and we see no reason to think that the suggestions of the late committee, supposing they were to be acted upon, would have any better success.

The injury done to the breeding grounds might, perhaps, be obviated; but besides this, the committee lay much stress on the encroachments of the French and other foreign fishermen, and on the licence given to import foreign-caught turbot, &c. duty free! We confess, it appears to us quite visionary to suppose that these circumstances can have much influence. Our fishermen, living upon the very shores of the bays to which the French are said to resort, have advantages on their side sufficient, surely, to insure them a superiority, without the forcible expulsion, supposing that could be accomplished, of their foreign competitors. A man who does not succeed in a business carried on at his own door so well as one who resides 100 miles off, must look for the cause in his want of skill or industry; and should seek rather to improve himself than to discard his rival. The proposition for excluding turbot, &c. of foreign catch, is one that ought not to be listened to for a single moment. Such exclusion could not be of the slightest advantage to the British fishermen, unless it occasioned a rise in the price of the fish; and we need not say, that if the legislature be to interfere at all in the matter, its interference ought to have for its object the lowering, not the raising of prices.

All that it is possible to do for the fishery, by relieving it from tithes and other burdens, and facilitating the disposal of the fish in the markets of this and other countries, ought to be done; but except in so far as its interests may be promoted in this way, and, perhaps, by some new regulations for preserving the brood, we do not see what more is to be done by legislative interference. It will be seen, in our articles on the herring and whale fisheries, that the bounty system was attended with vast expense, without leading to any useful result.

Except in London and a few sea-port towns, the consumption of fish in England is not great. The price in the metropolis, though it has been a good deal reduced of late years, is still very high. This has been pretty generally believed to be in no small degree owing to the salesmen of Billingsgate market being able, in a great measure, to regulate both the supply of the article and its price. The late committee, however, declare, that though they have not minutely examined the subject, it does not appear that any improper monopoly or injurious regulations subsist either in the mode of supplying the market, or in the sale of the fish. Had any such existed, the recent establishment of the Hungerford market would have tended materially to counteract their influence.

Mr. Barrow, in a valuable article on the fisheries, in the *Supplement* to the *Encyclopædia Britannica*, has estimated the value of the entire annual produce of the foreign and domestic fisheries of Great Britain at 8,300,000*l*. But it is admitted by every one who knows any thing of the subject, that this estimate is very greatly exaggerated. We doubt much, whether the entire value of the fisheries can be reckoned so high as 3,500,000.

Regulations as to Importation. — Fresh fish, British taken, and imported in British ships; and fresh turbots and lobsters, however taken or imported; may be landed in the United Kingdom without report, entry, or warrant. — (3 & 4 *Will.* 4. c. 52. § 2.)

Fresh fish of every kind, of British taking, and imported in British ships; and fresh lobsters and turbots, however taken, or in whatever ships imported; and cured fish of every kind, of British taking and curing, imported in British ships; shall be imported *free of all duties*, and shall not be deemed to be included in any charge of duty imposed by any act hereafter to be made on the importation of goods generally; provided that before any *cured fish* shall be entered free of duty, as being of such taking and curing, the master of the ship importing the same shall make and subscribe a declaration before the collector or comptroller, that such fish was actually caught, taken in British ships, and cured, wholly by his Majesty's subjects. — § 44.

Fish of foreign taking or curing, or in foreign vessels, except turbots and lobsters, stockfish, live eels, anchovies, sturgeon, botargo, and caviare, prohibited to be imported on pain of forfeiture. — § 58.

FLAX (Ger. *Flachs*; Du. *Vlasch*; Fr. *Lin*; It. and Sp. *Lino*; Rus. *Len*, *Lon*; Pol. *Len*; Lat. *Linum*), an important plant (*Linum usitatissimum*) that has been cultivated from the earliest ages in Great Britain and many other countries; its fibres being manufactured into thread, and its seed crushed for oil. Generally, however, we have been in the habit of importing a large proportion of our supplies. The premiums given by the legislature to force the cultivation of flax, have had very little effect; the fact being, as Mr. Loudon has stated, that its culture is found to be, on the whole, less profitable than that of corn. When allowed to ripen its seed, it is one of the most severe crops.

The principal sorts of flax imported into this country are, Petersburgh, Narva, Riga,

Revel, Pernau, Liebau, Memel, Oberland, and Dutch flax. The Petersburgh and Narva flax are nearly of the same quality, the latter being but little inferior to the former. Both sorts come to us in bundles of 12, 9, and 6 heads. The Riga flax seems to deserve the preference of any imported from the Baltic. It is the growth of the provinces of Marienburg, Druania, Thiesenhausen, and Lithuania.

The best Marienburg is called simply Marienburg (M), or Marienburg clean; the second quality, cut (GM); and the third, *risten dreyband* (RD): of the three other provinces, the first quality bears the name of *rakitzer*; — as *Druania rakitzer* (DR), *Thiesenhausen rakitzer* (TR), and *Lithuania rakitzer* (LR). The cut flax of these three provinces is the second quality: and to the third quality belong the *badstub* and *badstub cut* (B and BG); the *paternoster* (PN); and *hafs three band* (HD). *Badstub* and *paternoster* are the refuse of the *rakitzer* flax, and the *three band* again the refuse of the former sorts, and consequently very ordinary. The Revel and Pernau consists of Marienburg, *cut*, *risten*, *hafs three band*, and *three band*. The Liebau and Memel growths are distinguished by the denomination of *four* and *three band*. These two sorts, as well as the Oberland flax, come from Königsberg, Elbing, &c., and are little esteemed in the British markets.

Flanders or Dutch flax is well dressed, and of the finest quality.

Flax is extensively cultivated in Egypt. Of late years, some of the Italian ports which used to be supplied from Russia, have been fully supplied on lower terms from Alexandria.

The *Phormium tenax*, or New Zealand flax, is said to exceed every other species in strength of fibre and whiteness; qualities which (if it really possess them in the degree stated) must make it peculiarly well fitted for being made into canvass and cordage. It has been obtained within these few years at second hand from Sydney and Van Diemen's Land; the imports from them having amounted, in 1831, to 15,725 cwt. Attempts are now making, but with what success remains to be seen, to raise it in this country.

When flax is brought to the principal Russian ports whence it is shipped, it is classified according to its qualities, and made up in bundles by sworn inspectors (*brackers*) appointed by government for the assortment of that and all other merchandise. These functionaries are said to perform their task with laudable impartiality and exactness. A ticket is attached to every bundle of assorted flax, containing the names of the inspector and owner, the sort of flax, and the period when it was selected or inspected. — (See HEMP.) Good flax should be of a fine bright colour, well separated from the tow, codilla, or coarser portion of the plant; and of a long, fine, and strong fibre. In purchasing flax, it is usual to employ agents wholly devoted to this peculiar business.

Of 936,411 cwt. of flax and tow imported into Great Britain in 1831, 623,256 cwt. were brought from Russia; 128,231 cwt. from the Netherlands; 101,729 cwt. from Prussia; 55,324 cwt. from France; 1,415 cwt. from Italy; 15,275 cwt. from New South Wales, &c. Almost the whole of this quantity was retained for home consumption. The duty was recently reduced, and is now only 1*d.* a cwt.

Flax, the produce or manufacture of Europe, not to be imported for home consumption, except in British ships, or in ships of the country of which it is the produce, or of the country from which it is imported, on pain of forfeiture of the goods and 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54.)

We subjoin an account of the charges on the importation of the different sorts of flax from Petersburgh and Riga.

Charges at Petersburgh on 12 Head Flax, per ton.

Circa, 16 bobbins = 63 poods = 1 ton.

	Rou.	*cop.*
Duty, 540 cop. per bercovitz	34	2
Quarantine duty, 1 per cent.	0	34
Additional duty, 10 per cent.	3	40
R.	37	76
Custom-house charges, 4 per cent.	1	51
Receiving and weighing, 40 cop. per bobbin	6	40
Bracking, 1 roub. per bercovitz	6	30
Binding, 75 cop. per ditto	4	72
Lighterage and attendance to Cronstadt, 8 roub. per 60 poods	8	40
Mats	8	0
Brokerage, 60 cop. per ton	0	60
Fixed charges *R.*	73	69

Brokerage, ½ per cent.
Commission and extra charges, 3 per cent.
Stamps, ¼ per cent. } ½ per cent.
Brokerage on bills, ¼ per cent. }
are charges varying according to the price paid.

Riga flax is bought at so much per shippound. 6⅙ shippound = 1 ton.

The charges of importation are the same, or nearly so, as on Petersburgh flax.

Charges here, per ton, taking the price at 45*l.*

	L.	*s.*	*d.*
Insurance, 12*s.* 6*d.* per cent. and policy, during the summer, for best risks	0	6	9
Sound dues	0	5	6
Freight, say 52*s.* 6*d.* per ton in full	2	12	6
Customs	0	1	8
Landing charges	1	11	0
Discount, 3¾ per cent. (being sold at 9 months' credit)	1	13	9
Brokerage, ½ per cent.	0	4	6
L.	5	15	8
Loss by tare, 2 per cent.	0	18	0
L.	6	13	8

9 Head Flax.

26 bobbins = 63 poods = 1 ton. *Rou.* *cop.*

Fixed charges at Petersburgh amount to 80 35

The other charges same as on 12 head; the charges of import may be called the same as on 12 head also, the difference being only on the value; which makes the insurance, discount, and brokerage, of less amount. The increase of fixed charges at Petersburgh is owing to the larger number of bobbins to the ton.

6 Head Flax.

47 bobbins = 63 poods = 1 ton. *Rou.* *cop.*

Fixed charges, per ton 91 52

Other charges, *vide suprà*.

FLAX-SEED, OR LINSEED (Fr. *Lin, Graine de Lin*; Ger. *Leinsaat*; Du. *Lynzaad*; It. *Linseme*; Sp. *Linaza*; Port. *Linhaca*; Pol. *Siemie, Iniane*; Rus. *Semja lenjanoe*; Lat. *Lini semen*), the seed of flax. It contains a great deal of oil, which it yields by expression; and is cultivated either that it may be used in sowing, or sent to the crushing mills to be converted into oil.

As the quality of the crop depends much on the seed employed, a good deal of care is requisite in selecting the best. Generally speaking, it should be [illegible] bright, brownish colour, oily to the feel, heavy, and [illegible] highest

estimation for sowing; it not only ripens sooner than any other that is imported, but produces larger crops, and of the quality that best suits our principal manufactures. American seed produces fine flax, but the produce is not so large as from Dutch seed. British flax-seed is sometimes used instead of Dutch; but the risk of the crop misgiving is so much greater, "that those only who are ignorant of the consequences, or who are compelled from necessity, are chargeable with this act of ill-judged parsimony."—(*Loudon's Ency. of Agriculture.*) Crushing seed is principally imported from Russia, but considerable quantities are also brought from Italy and Egypt. Of 2,759,103 bushels of linseed imported in 1831, 2,210,702 were brought from Russia, 172,099 from Prussia, 106,294 from the United States, 105,448 from Italy, 98,847 from Egypt, 53,738 from the Netherlands, &c. The duty is 1*s.* a quarter; and the price, in December, 1833, varied from 45*s.* to 54*s.* a quarter.

FLOTSAM, JETSAM, AND LAGAN. In order to constitute a legal wreck, the goods must come to land. If they continue at sea, the law distinguishes them by the foregoing uncouth and barbarous appellations: *flotsam* is when the goods continue swimming on the surface of the waves; *jetsam* is when they are sunk under the surface of the water; and *lagan* is when they are sunk, but tied to a cork or buoy to be found again.—(*Blackstone*, book i. c. 8.) Foreign liquors, brought or coming into Great Britain or Ireland, as derelict, flotsam, &c., are to pay the same duties and receive the same drawbacks as similar liquors regularly imported.

FLOUR (Ger. *Feines mehl, Semmelmehl*; Du. *Bloem*; Fr. *Fleur de farine*; It. *Fiore*; Sp. *Flor*), the meal of wheat corn, finely ground and sifted. There are three qualities of flour, denominated *first*, *seconds*, and *thirds*, of which the first is the purest.—(See Corn Laws and Corn Trade.)

FOOT, a measure of length, consisting of 12 inches.—(See Weights and Measures.)

FORESTALLING, the buying or contracting for any cattle, provision, or merchandise, on its way to the market, or dissuading persons from buying their goods there, or persuading them to raise the price, or spreading any false rumour with intent to enhance the value of any article. Several statutes had from time to time been passed, prohibiting forestalling under severe penalties. But as more enlarged views upon such subjects began to prevail, the impolicy of these statutes became obvious. They were consequently repealed in 1772. But forestalling is still punishable at common law by fine and imprisonment. It is doubtful, however, whether any jury would now convict an individual accused of such practices.—(*Wealth of Nations*, vol. ii. p. 409.)

FRANKINCENSE. See Rosin.

FREIGHT, the sum paid by the merchant or other person hiring a ship, or part of a ship, for the use of such ship or part, during a specified voyage or for a specified time.

The freight is most commonly fixed by the charterparty—(see Charterparty)—or bill of lading—(see Bill of Lading); but in the absence of any formal stipulations on the subject, it would be due according to the custom or usage of trade.

In the case of a charterparty, if the stipulated payment be a gross sum for an entire ship, or an entire part of a ship, for the whole voyage, the gross sum will be payable although the merchant has not fully laden the ship. And if a certain sum be stipulated for every ton, or other portion of the ship's capacity, for the whole voyage, the payment must be according to the number of tons, &c. which the ship is proved capable of containing, without regard to the quantity actually put on board by the merchant. On the other hand, if the merchant have stipulated to pay a certain sum per cask or bale of goods, the payment must be, in the first place, according to the number of casks and bales shipped and delivered; and if he have further covenanted to furnish a complete lading, or a specific number of casks or bales, and failed to do so, he must make good the loss which the owners have sustained by his failure.

If an entire ship be hired, and the burden thereof be expressed in the charterparty, and the merchant bind himself to pay a certain sum for every ton, &c. of goods which he shall lade on board, but does not bind himself to furnish a complete lading, the owners can only demand payment for the quantity of goods actually shipped. But if the merchant agree to load a full and complete cargo, though the ship be described as of less burden than she really is, the merchant must load a full cargo, according to the *real burden* of the ship, and he will be liable for freight according to what ought to be loaded.

The delivery of goods at the place of destination is in general necessary to entitle the owner to freight; but with respect to living animals, whether men or cattle, which may frequently die during the voyage, without any fault or neglect of the persons belonging to the ship, it is ruled, that if there be no express agreement whether the freight is to be paid for the lading, or for the transporting them, freight shall be paid as well for the dead as for the living: if the agreement be to pay freight for the *lading*, then death certainly cannot deprive the owners of the freight; but if the agreement be to pay freight

for *transporting* them, then no freight is due for those that die on the voyage, because is to them the contract is not performed. These distinctions have been made in the civil law, and have been adopted into the modern systems of maritime law.

Freight is most frequently contracted to be paid either by the whole voyage, or by the month, or other time. In the former case the owners take upon themselves the chance of the voyage being long or short: but in the latter the risk of the duration falls upon the merchant; and if no time be fixed for the commencement of the computation, it will begin from the day on which the ship breaks ground and commences her voyage, and will continue during the whole course of the voyage, and during all unavoidable delays *not occasioned by the act or neglect of the owners or master*, or by such circumstances as occasion a suspension of the contract for a particular period. Thus, the freight will be payable for the time consumed in necessary repairs during a voyage, provided it do not appear that the ship was insufficient at the outset, or that there was any improper delay in repairing her.

In the absence of an express contract to the contrary, the entire freight is not earned until the whole cargo be ready for delivery, or has been delivered to the consignee according to the contract for its conveyance.

If a consignee receive goods in pursuance of the usual bill of lading, by which it is expressed that he is to pay the freight, he, by such receipt, makes himself debtor for the freight, and may be sued for it. But a person who is only an agent for the consignor, and who is known to the master to be acting in that character, does not make himself personally answerable for the freight by receiving the goods, although he also enters them in his own name at the Custom-house.

In some cases freight is to be paid, or rather an equivalent recompence made to the owners, although the goods have not been delivered at the place of destination, and though the contract for conveyance be not strictly performed. Thus, if part of the cargo be thrown overboard for the necessary preservation of the ship and the remainder of the goods, and the ship afterwards reach the place of destination, the value of this part is to be answered to the merchant by way of general average, and the value of the freight thereof allowed to the owner. So, if the master be compelled by necessity to sell a part of the cargo for victuals or repairs, the owners must pay to the merchant the price which the goods would have fetched *at the place of destination;* and, therefore, are allowed to charge the merchant with the money that would have been due if they had been conveyed thither.

When goods are deteriorated during a voyage, the merchant is entitled to a compensation, provided the deterioration has proceeded from the fault or neglect of the master or mariners; and of course he is not answerable for the freight, unless he accept the goods, except by way of deduction from the amount of the compensation. On the other hand, if the deterioration has proceeded from a principle of decay naturally inherent in the commodity itself, whether active in every situation, or in the confinement and closeness of a ship, or from the perils of the sea, or the act of God, the merchant must bear the loss and pay the freight; for the master and owners are in no fault, nor does their contract contain any insurance or warranty against such an event. In our West India trade, the freight of sugar and molasses is usually regulated by the weight of the casks at the port of delivery here, which, in fact, is in every instance less than the weight at the time of the shipment; and, therefore, the loss of freight occasioned by the leakage necessarily falls upon the owners of the ship by the nature of the contract.

Different opinions have been entertained by Valin, Pothier, and other great authorities as to maritime law, with respect to the expediency of allowing the merchant to abandon his goods for freight in the event of their being damaged. This question has not been judicially decided in this country. "The only point," says Lord Tenterden, "intended to be proposed by me as doubtful, is the right to abandon for freight alone at the port of destination: and in point of practice, I have been informed that this right is never claimed in this country."—(*Law of Shipping*, part iii. c. 7.)

Freight being the return made for the conveyance of goods or passengers to a particular destination, no claim arises for its payment in the event of a total loss; and it is laid down by Lord Mansfield, that "in case of a total loss with salvage, the merchant may either take the part saved, or abandon."—(*Abbott*, part iii. c. 7.) But after the merchant has made his election, he must abide by it.

It often happens that a ship is hired by a charterparty to sail from one port to another, and thence back to the first—as, for example, from London to Leghorn, and from Leghorn back to London—at a certain sum to be paid for every month or other period of the duration of the employment. Upon such a contract, *if the whole be one entire voyage*, and the ship sail in safety to Leghorn, and there deliver the goods of the merchant, and take others on board to be brought to London, but happen to be lost in her return thither, nothing is due for freight, although the merchant has had the benefit of the voyage to Leghorn: but, *if the outward and homeward voyages be distinct*, freight will be

due for the proportion of the time employed in the outward voyage. "If," said Lord Mansfield, in a case of this sort, "there be *one entire voyage out and in*, and the ship be lost away on the homeward voyage, no freight is due; no wages are due, because the whole profit is lost; and by express agreement the parties may make the outward and homeward voyage one. Nothing is more common than two voyages: *wherever there are two voyages, and one is performed*, and the ship is lost on the homeward voyage, freight is due for the first."—(*K. B. Trin. Term*, 16 *Geo.* 3.)

It frequently happens that the master or owner fails to complete his contract, either by not delivering the whole goods to the consignee or owner, or by delivering them at a place short of their original destination; in these cases, if the owner or consignee of the goods *derive any benefit from their conveyance*, he is liable to the payment of freight according to the proportion of the voyage performed, or *pro ratâ itineris peracti*: and though contracts of this nature be frequently entire and indivisible, and the master or owner of the ship cannot, from their nature, sue thereon, and recover a rateable freight, or *pro ratâ itineris*; yet he may do so upon a fresh *implied* contract, for as much as he deserves to have, unless there be an express clause in the original charterparty or contract to the contrary. A fresh implied contract is inferred from the owner's or consignee's acceptance of the goods. Many difficulties have, indeed, arisen in deciding as to what shall amount to an acceptance: it is not, however, necessary actually to receive the goods; acceptance may be made by the express or implied directions, and with the consent, of the owner or consignee of the goods, but not otherwise.

It sometimes happens that the owner of the ship, who is originally entitled to the freight, sells or otherwise disposes of his interest in the ship; where a chartered ship is sold *before* the voyage, the vendee, and not the vendor or party to whom he afterwards assigns the charterparty, is entitled to the freight. But where a ship has been sold *during* the voyage, the owner, with whom a covenant to pay freight has been made, is entitled to the freight, and not the vendee. A mortgagee who does not take possession, is not entitled to the freight.

The time and manner of paying freight are frequently regulated by express stipulations in a charterparty, or other written contract; and when that is the case, they must be respected; but if there be no express stipulation contrary to or inconsistent with the right of *lien*, the goods remain as a security till the freight is paid; for the master is not bound to deliver them, or any part of them, without payment of the freight and other charges in respect thereof. But the master cannot detain the cargo on board the vessel till these payments be made, as the merchant would, in that case, have no opportunity of examining the condition of the goods. In England, the practice is, when the master is doubtful of payment, to send such goods as are not required to be landed at any particular wharf, to a public wharf, ordering the wharfinger not to part with them till the freight and other charges are paid. No right of lien for freight can exist, unless the freight be earned; if the freighter or a stranger prevent the freight from becoming due, the ship owner or master's remedy is by action of damages.

(For further information and details with respect to this subject, see the art. CHARTERPARTY, in this Dictionary; *Abbott* (Lord Tenterden) *on the Law of Shipping*, part iii. c. 7.; *Chitty's Commercial Law*, vol. iii. c. 9.; *Molloy de Jure Maritimo*, book ii. c. 4., &c.)

FRUIT (Ger. *Obst*, *Früchte*; Du. *Ooft*; Fr. *Fruit*; It. *Frutta*, *Frutte*; Sp. *Fruta*; Rus. *Owoschtsch*; Lat. *Fructum*). This appellation is bestowed by commercial men upon those species of fruit, such as oranges, lemons, almonds, raisins, currants, apples, &c., which constitute articles of importation from foreign countries.

FULLERS' EARTH (Ger. *Walkererde*; Du. *Vollaarde*; Fr. *Terre à foulon*; It. *Terra da purgatori*; Sp. *Tierra de batan*; Rus. *Schiffernaia*; Lat. *Terra fullonum*), a species of clay, of a greenish white, greenish grey, olive and oil green, and sometimes spotted colour. It is usually opaque, very soft, and feels greasy. It is used by fullers to take grease out of cloth before they apply the soap. The best is found in Buckinghamshire and Surrey. When good, it has a greenish white, or greenish grey colour, falls into powder in water, appears to melt on the tongue like butter, communicates a milky hue to water, and deposits very little sand when mixed with boiling water. The remarkable detersive property on woollen cloth depends on the alumina, which should be at least one fifth of the whole, but not much more than one fourth, lest it become too tenacious.—(*Thomson's Chemistry*; *Jameson's Mineralogy*.) Malcolm, in his *Survey of Surrey*, published in 1809, says that he took considerable pains in endeavouring to ascertain the consumption of fullers' earth, and that he found it to be about 6,300 tons a year for the entire kingdom, of which about 4,000 tons were furnished by Surrey.

FUNDS (PUBLIC), the name given to the public funded debt due by government.

The practice of borrowing money in order to defray a part of the war expenditure began, in this country, in the reign of William III. In the infancy of the practice, it was customary to borrow upon the security of some tax, or portion of a tax, set apart as a fund for discharging the principal and interest of the sum borrowed. This discharge

was, however, very rarely effected. The public exigencies still continuing, the loans were, in most cases, either continued, or the taxes were again mortgaged for fresh ones. At length the practice of borrowing for a fixed period, or, as it is commonly termed, upon *terminable* annuities, was almost entirely abandoned, and most loans were made upon *interminable* annuities, or until such time as it might be convenient for government to pay off the principal.

In the beginning of the funding system, the term fund meant the taxes or funds appropriated to the discharge of the principal and interest of loans; those who held government securities, and sold them to others, selling, of course, a corresponding claim upon some fund. But after the debt began to grow large, and the practice of borrowing upon interminable annuities had been introduced, the meaning attached to the term fund was gradually changed; and instead of signifying the security upon which loans were advanced, it has, for a long time, signified the principal of the loans themselves.

Owing partly, perhaps, to the scarcity of disposable capital at the time, but far more to the supposed insecurity of the Revolutionary establishment, the rate of interest paid by government in the early part of the funding system was, comparatively, high. But as the country became richer, and the confidence of the public in the stability of government was increased, ministers were enabled to take measures for reducing the interest, first in 1716, and again in 1749.

During the reigns of William III. and Anne, the interest stipulated for loans was very various. But in the reign of George II. a different practice was adopted. Instead of varying the interest upon the loan according to the state of the money market at the time, the rate of interest was generally fixed at *three* or *three and a half* per cent.; the necessary variation being made in the principal funded. Thus, suppose government were anxious to borrow, that they preferred borrowing in a 3 per cent. stock, and that they could not negotiate a loan for less than 4½ per cent.; they effected their object by giving the lender, in return for every 100*l.* advanced, 150*l.* 3 per cent. stock; that is, they bound the country to pay him or his assignees 4*l.* 10*s.* a year in all time to come, or, otherwise, to extinguish the debt by a payment of 150*l.* In consequence of the prevalence of this practice, the principal of the debt now existing amounts to nearly *two fifths* more than the sum actually advanced by the lenders.

Some advantages are, however, derivable, or supposed to be derivable, from this system. It renders the management of the debt, and its transfer, more simple and commodious than it would have been, had it consisted of a great number of funds bearing different rates of interest: and it is contended, that the greater field for speculation afforded to the dealers in stocks bearing a low rate of interest, has enabled government to borrow, by funding additional capitals, for a considerably less payment on account of interest than would have been necessary had no such increase of capital been made.

Were this a proper place for entering upon such discussions, it would be easy to show that the advantages now referred to are really of very trifling importance; and that the method of funding by an increase of capital has been a most improvident one, and most injurious to the public interests. But it would be quite foreign from the objects of this work to enter into any examination of such questions; our readers will, however, find them fully investigated in an article in the 93d No. of the *Edinburgh Review*. Here we have merely to consider funded property, or government securities, as transferable or marketable commodities. The following is an account of the progress of the national debt of Great Britain, from the Revolution to the present time: —

	Principal.	Interest.
	£	£
Debt at the Revolution in 1689	664,263	39,855
Excess of debt contracted during the reign of William III. above debt paid off	15,730,439	1,271,087
Debt at the accession of Queen Anne in 1702	16,394,702	1,310,942
Debt contracted during Queen Anne's reign	37,750,661	2,040,416
Debt at the accession of George I. in 1714	54,145,363	3,351,358
Debt paid off during the reign of George I. above debt contracted	2,053,125	1,133,807
Debt at the accession of George II. in 1727	52,092,238	2,217,551
Debt contracted from the accession of George II. till the peace of Paris in 1763, 3 years after the accession of George III.	86,773,192	2,634,500
Debt in 1763	138,865,430	4,852,051
Paid during peace	10,281,795	380,480
Debt at the commencement of the American war in 1775	128,583,635	4,471,571
Debt contracted during the American war	121,267,993	4,980,201
Debt at the conclusion of the American war in 1784	249,851,628	9,451,772
Paid during peace, from 1784 to 1793	10,501,380	243,277
Debt at the commencement of the French war in 1793	239,350,148	9,208,495
Debt contracted during the French war	[illegible]	24,645,971
Total funded and unfunded debt, 5th of January, 1817, when the and Irish Exchequers were consolidated		33,854,466

An Account of the Public Funded and Unfunded Debt of Great Britain and Ireland, and the Charge thereon, on the 5th of January, 1833 —
(*Finance Accounts for* 1832, pp. 140—141. &c.)

DEBT.

	Capital of Unredeemed Debt. £	s.	d.
Great Britain.			
Debt due to the South Sea Company, at 3 per cent.	3,662,784	8	6¼
Old South Sea annuities - - — -	3,497,870	2	7
New South Sea annuities - - — -	2,460,830	2	10
South Sea annuities, 1751 - - — -	525,100	0	0
Debt due to the Bank of England - — -	14,686,800	0	0
Bank annuities created in 1726 - — -	874,949	19	0
Consolidated annuities - - — -	347,458,931	7	0¼
Reduced annuities - - - — -	123,029,913	5	3
Total bearing interest at 3 per cent. -	496,195,179	5	2¾
Annuities at 3½ per cent., anno 1818 - -	12,350,801	16	1
Reduced annuities, do. - - - -	63,455,824	2	1
New 3½ per cent. annuities - - -	137,613,820	7	2
4*l.* per cent. annuities, created 1826 - -	10,796,340	0	0
New 5 per cent. annuities - - -	462,736	13	4
Great Britain -	£ 720,872,702	3	10¾
Ireland.			
Irish consolidated annuities, at 3 per cent. -	2,803,780	18	4
Irish reduced annuities, do. - - -	162,062	6	2
3*l.* 10*s.* per cent. debentures and stock - -	14,605,670	3	11
Reduced 3½ per cent. annuities - - -	1,234,509	4	3
New 3½ per cent. annuities - - -	11,784,394	14	0
Debt due to the Bank of Ireland, at 4 per cent. -	1,615,384	12	4
New 5 per cent. annuities - - -	6,661	1	0
Debt due to the Bank of Ireland, at 5 per cent. -	1,015,384	12	4
Ireland - -	£ 33,227,847	6	4
Total United Kingdom -	754,100,549	10	2¾
Exchequer bills outstanding, 5th Jan. 1833 - -	27,278,000	0	0
Total funded and unfunded debt, 5th Jan. 1833 -	£ 781,378,549	10	2¾

CHARGE.

		In Great Britain. £	s.	d.	In Ireland. £	s.	d.	Total Annual Charge. £	s.	d.
Due to the public creditor.	Annual interest on unredeemed capital	22,810,491	8	7½	1,171,553	0	11¾			
	Long annuities, expire 1860 - -	1,192,943	4	10	73	19	3			
	Annuities per 4 Geo. 4. c. 22., do. 1867 -	585,740	0	0						
	Annuities per 10 Geo. 4. c. 24., expire at various periods - - -	870,998	2	0						
	Annuities to the trustees of the Waterloo Subscription Fund, per 59 Geo. 3. c. 34., expire 5th of July, 1853 - -	7,900	0	0						
	Payable at the National Debt Office. Life annuities, per 48 Geo. 3. c. 148. and 10 Geo. 4. c. 24.	717,529	5	0						
	Tontines and other Life annuities per various acts - English	22,371	13	3						
	Irish -	34,230	8	7	6,823	7	3			
Interest of funded debt - - - -		£26,242,204	2	3½	1,178,450	7	5¾	27,420,654	9	9½
Management of debt - - - - -		-	-	-	-	-	-	271,333	1	10¼
Annual charge on account of public funded debt -		-	-	-	-	-	-	27,692,187	11	7½
Interest on Exchequer bills (1832) - - -		-	-	-	-	-	-	659,165	6	6
Total annual charge on account of funded and unfunded debt - - - -		-	-	-	-	-	- £	28,351,352	18	1½*

* Exclusive of 34,521*l.* 7*s.* 10*d.*, the annual charge on capitals and long annuities, standing in the names of the national debt commissioners, on account of stock unclaimed 10 years or upwards, and of unclaimed dividends; and also on account of donations and bequests.

The act 10 Geo. 4. c. 27. (abolishing the sinking fund) enacts, that the sum thenceforth annually applicable to the reduction of the national debt shall consist of the actual surplus revenue beyond the expenditure. In 1832, this surplus amounted to 614,758*l.* 18*s.* 8*d.*

Since 1817, a deduction has been made of about *sixty* millions from the principal of the debt, and about *five* millions from the annual charge on its account. This diminution has been principally effected by taking advantage of the fall in the rate of interest since the peace, and offering to pay off the holders of different stocks, unless they consented to accept a reduced payment; and had it not been for the highly objectionable practice, already adverted to, of funding large capitals at a low rate of interest, the saving in this way might have been incomparably larger. — (See Table on opposite page.)

We shall now subjoin some account of the different funds or stocks forming the public debt.

I. Funds bearing Interest at Three per Cent.

1. *South Sea Debt and Annuities.* — This portion of the debt, amounting, on the 5th of January, 1833, to 10,144,584*l.*, is all that now remains of the capital of the once famous, or rather infamous, South Sea Company. The Company has, for a considerable time past, ceased to have any thing to do with trade: so that the functions of the directors are wholly restricted to the transfer of the Company's stock, and the payment of the dividends on it; both of which operations are performed at the South Sea House, and not at the Bank. The dividends on the old South Sea annuities are payable on the 5th of April and 10th of October; the dividends on the rest of the Company's stock are payable on the 5th of January and 5th of July.

2. *Debt due to the Bank of England.* — This consists of the sum of 14,686,800*l.* lent by the Bank to the public at 3 per cent.; dividends payable on the 5th of April and 10th of October. This must not be confounded with the Bank capital of 14,553,000*l.*, on which the stockholders divide. The dividend on the latter has been 8 per cent. since 1823. — (See *antè*, p. 81.)

3. *Bank Annuities created in* 1726. — The civil list settled upon George I. was 700,000*l.* a year; but having fallen into arrear, this stock was created for the purpose of cancelling Exchequer bills that had been issued to defray the arrear. "The capital is irredeemable; and being small, in comparison with the other public funds, and a stock in which little is done on speculation, the price is generally at least 1 per cent. lower than the 3 per cent. consols."— (*Cohen's* edit. of *Fairman on the Funds*, p. 40.)

4. *Three per Cent. Consols, or Consolidated Annuities.* — This stock forms by much the largest portion of the public debt. It had its origin in 1751, when an act was passed, consolidating (hence the name) several separate stocks bearing an interest of 3 per cent. into one general stock. At the period when the consolidation took place, the principal of the funds blended together amounted to 9,137,821*l.*; but by the funding of additional loans, and parts of loans, in this stock, it amounted, on the 5th of January, 1833, to the immense sum of 347,458,931*l.*!

The consolidated annuities are distinguished from the 3 per cent. reduced annuities, by the circumstance of the interest upon them never having been varied, and by the dividends becoming due at different periods. This stock is, from its magnitude, and the proportionally great number of its holders, the soonest affected by all those circumstances which tend to elevate or depress the price of funded property. And, on this account, it is the stock which speculators and jobbers most commonly select for their operations. Dividends payable on the 5th of January and 5th of July.

5. *Three per Cent. Reduced Annuities.* — This fund was established in 1757. It consisted, as the name implies, of several funds which had previously been borrowed at a higher rate of interest; but, by an act passed in 1749, it was declared that such holders of the funds in question as did not choose to accept in future of a reduced interest of 3 per cent. should be paid off, — an alternative which comparatively few embraced. The debts that were thus reduced and consolidated, amounted, at the establishment of the fund, to 17,571,574*l.* By the addition of new loans, they now amount to 123,029,913*l.* Dividends payable on the 5th of April and 10th of October.

II. Funds bearing more than Three per Cent. Interest.

1. *Annuities at* $3\frac{1}{2}$ *per Cent.*, 1818. — This stock was formed in 1818, partly by a subscription of 3 per cent. consolidated and 3 per cent. reduced annuities, and partly by a subscription of Exchequer bills. It was made redeemable at par any time after the 5th of April, 1829, upon 6 months' notice being given. Dividends payable on the 5th of April and 10th of October. The capital of this stock amounts to 12,350,802*l.*

2. *Reduced* $3\frac{1}{2}$ *per Cent. Annuities.* — This stock was created in 1824, by the transfer of a stock bearing interest at 4 per cent. (Old 4 per cents.) It is redeemable at pleasure. Dividends payable 5th of April and 10th of October. Amount, on the 5th of January, 1833, 63,453,824*l.*

3. *New* $3\frac{1}{2}$ *per Cent. Annuities.* — This stock was formed by the act 11 Geo. 4. c. 12., out of the stock known by the name of "New 4 per cents.," amounting on the 5th of January, 1830, to 144,331,212*l.* The holders of this 4 per cent. stock had their option,

either to subscribe it into the new 3½ per cent. annuities, or into a new 5 per cent. stock, at the rate of 100*l.* 4 per cents. for 70*l.* 5 per cents. Dissentients to be paid off. Only 467,713*l.* new 5 per cent. stock was created under this arrangement. The sum required to pay dissentients was 2,610,000*l.* The new 3½ per cent. stock that was thus created, amounted, on the 5th of January, 1833, to 137,613,820*l.* Dividends payable 5th of January and 5th of July.

4. *Four per Cent. Annuities, created* 1826. — By virtue of the act 7 Geo. 4. c. 39. 3,000,000 of Exchequer bills were funded, at the rate of 107*l.* 4 per cent. annuities for every 100*l.* bills. In 1829 (10 Geo. 4. c. 31.), 3 additional millions of Exchequer bills were funded in this stock, at the rate of 101*l.* 10*s.* stock for every 100*l.* bills. Dividends payable 5th of April and 10th of October. Amount, 5th of January, 1833, 10,796,340*l.* A considerable sum has been transferred from this stock for the purchase of annuities under the 10 Geo. 4. c. 24.

5. *New 5 per Cent.* — Amount, 5th of January, 1833, 462,737*l.* — (See above, 3. *New 3½ per Cent. Annuities.*)

III. Annuities.

1. *Long Annuities.* — These annuities were created at different periods, but they all expire together in 1860. They were chiefly granted by way of premiums or douceurs to the subscribers to loans. Payable on the 5th of April and 10th of October.

2. *Annuities per* 4 *Geo.* 4. *c.* 22. — This annuity is payable to the Bank of England, and is commonly known by the name of the "Dead weight" annuity — (see *antè*, p. 80.). It expires in 1867. It is equivalent to a *perpetual* annuity of 470,319*l.* 10*s.*

3. *Annuities per* 48 *Geo.* 3. *and* 10 *Geo.* 4. *c.* 24. — These acts authorised the commissioners for the reduction of the national debt, to grant annuities for terms of years, and life annuities; accepting in payment either money or stock according to rates specified in Tables to be approved by the Lords of the Treasury. No annuities are granted on the life of any *nominee* under 15 years of age, nor in any case not approved by the commissioners. Annuities for terms of years not granted for any period less than *ten* years. These annuities are transferable, but not in parts or shares. Those for terms of years, payable 5th of January and 5th of July; and those for lives, 5th of April and 10th of October.

The annuities for terms of years granted under the above acts, amounted, on the 10th of October, 1830, to 772,758*l.*, being equal to a *perpetual* annuity of 491,058*l.* The life annuities amounted, at the same period, to 656,411*l.*, being equal to a *perpetual* annuity of 236,071*l.* — (*Parl. Paper*, No. 174. Sess. 1831.)

Irish Debt. — It seems unnecessary to enter into any details with respect to the public debt of Ireland. The various descriptions of stock of which it consists, and their amount, are specified above. The dividends on the Irish debt are paid at the Bank of Ireland; and in order to accommodate the public, stock may be transferred, at the pleasure of the holders, from Ireland to Great Britain, and from the latter to the former.

Exchequer Bills, are bills of credit issued by authority of parliament. They are for various sums, and bear interest (at present at the rate of 1½*d.* per diem, per 100*l.*) according to the usual rate at the time. The advances of the Bank to government are made upon Exchequer bills; and the daily transactions between the Bank and government are principally carried on through their intervention. Notice of the time at which outstanding Exchequer bills are to be paid off is given by public advertisement. Bankers prefer vesting in Exchequer bills to any other species of stock, even though the interest be for the most part comparatively low; because the capital may be received at the Treasury at the rate originally paid for it, the holders being exempted from any risk of fluctuation. Exchequer bills were first issued in 1696, and have been annually issued ever since. The amount outstanding, and *unprovided for*, on the 5th of January, 1833, was 27,278,000*l.*

India Stock and India Bonds, are always quoted in the lists of the prices of the public funds. The stock on which the East India Company divide is 6,000,000*l.*; the dividend on which has been, since 1793, 10½ per cent.; and is to remain at that rate during the continuance of the charter. India bonds are generally for 100*l.* each; and bear at present 2½ per cent. interest, payable 31st of March and 30th of September. In selling them, the interest due down to the day of sale is, with the premium, added to the amount of the bills; the total being the sum to be paid by the purchaser. The premium, which is, consequently, the only variable part of the price, is influenced by the circumstances which influence the price of stocks generally, — the number of bonds in circulation, &c.

The price of stocks is influenced by a variety of circumstances. Whatever tends to shake or to increase the public confidence in the stability of government, tends, at the same time, to lower or increase the price of stocks. They are also affected by the state of the revenue; and, more than all, by the facility of obtaining supplies of disposable capital, and the interest which may be realised upon loans to responsible persons.

From 1730 till the rebellion of 1745, the 3 per cents. were never under 89, and were once, in June, 1737, as high as 107. During the rebellion they sunk to 76; but in 1749 rose again to 100. In the interval between the peace of Paris, in 1763, and the breaking out of the American war, they averaged from 80 to 90; but towards the close of the war they sunk to 54. In 1792, they were, at one time, as high as 96. In 1797, the prospects of the country, owing to the successes of the French, the mutiny in the fleet, and other adverse circumstances, were by no means favourable; and, in consequence, the price of 3 per cents. sunk, on the 20th of September, on the intelligence transpiring of an attempt to negotiate with the French republic having failed, to 47⅜, being the lowest price to which they have ever fallen.

Prices of 3 per Cent. Consols, in February and August, each Year since 1820. — (*Report of Bank Committee.*)

Years.	Price of Consols.	Years.	Price of Consols.
1820. February	68¼ per cent.	1826. February	77⅛ per cent.
August	67⅜ —	August	79¼ —
1821. February	73⅛ —	1827. February	82⅛ —
August	76⅛ —	August	86⅛ —
1822. February	78⅜ —	1828. February	83⅞ —
August	80⅜ —	August	87⅛ —
1823. February	73 —	1829. February	86¾ —
August	82⅜ —	August	88½ —
1824. February	92⅜ —	1830. February	91⅛ —
August	93¼ —	August	90⅛ —
1825. February	93¼ —	1831. February	77¾ —
August	87⅛ —	August	81⅝ —

The following is a statement of the prices of the different descriptions of British funds during the 6 days commencing with Saturday, the 14th of December, 1833.

Description of Stock.	Saturday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
Bank stock, dividend 8 per cent.	210 11	210 11	210½ 11¼	210¾ 11¼	211¼ 11	211½ 11
3 per cent. reduced	87½ ⅝	87½ ⅝	87½ ⅝	87⅝	87½ ¾	87¾ 8
3 per cent. consols for account	88⅝ ¾	88½ ⅝	88⅝	88⅝	88¾	88⅞ 89⅜
3½ per cent. annuities, 1818	— —	— —	— —	96⅝		
3½ per cent. reduced	96⅜ ½	96⅜ ½	96¼ ½	96½ ⅜	96⅜ ⅝	96¾ 7
New 3½ per cent. annuities						
New 4 per cent. annuities, 1826	103⅜ ⅝	103⅜ ⅝	103⅝	103½ ¼	103½ ⅜	103¼ ⅛
New 5 per cent.	— —					
Long annuities, expire 5 Jan. 1860	16⅞ 15-16	— —	16⅞	16⅞ 15-16	16⅞ 15-16	16 15-16 17
New annuities, Jan. and July						
South Sea stock, dividend 3½ per cent.						
Do. old annuity, dividend 3 per cent.						
Do. new annuity, dividend 3 per cent.						
3 per cent. annuities, 1751						
India bonds, 2½ per cent.	22*s.* 24*s.* pm	22*s.* 24*s.* pm	22*s.* 21*s.* pm	20*s.* 22*s.* pm	20*s.* 21*s.* pm	21*s.*—*s.* pm
Exchequer bills, 1½*d.* 100*l.*	43*s.* 44*s.* pm	43*s.* 44*s.* pm	42*s.* — pm	41*s.* 42*s.* pm	41*s.* 42*s.* pm	41*s.* 42*s.* pm
Bank stock for account	210 11	210 11	211			
India stock, dividend 10½ per cent.						

Agreements for the sale of stock are generally made at the Stock Exchange, which is frequented by a set of middlemen called *jobbers*, whose business is to accommodate the buyers and sellers of stock with the exact sums they want. A jobber is generally possessed of considerable property in the funds; and he declares a price at which he will either sell or buy. Thus, he declares he is ready to buy 3 per cent. consols at 85½, or to sell at 85⅝; so that, in this way, a person willing to buy or sell any sum, however small, has never any difficulty in finding an individual with whom to deal. The jobber's profit is generally ⅛ per cent., for which he transacts both a sale and a purchase. He frequently confines himself entirely to this sort of business, and engages in no other description of stock speculation.

We borrow the following details from Dr. Hamilton's valuable work on the National Debt: —

"A bargain for the sale of stock, being agreed on, is carried into execution at the Transfer Office, at the Bank, or the South Sea House. For this purpose the seller makes out a note in writing, which contains the name and designation of the seller and purchaser, and the sum and description of the stock to be transferred. He delivers this to the proper clerk*; and then fills up a receipt, a printed form of which, with blanks, is obtained at the office. The clerk in the mean time examines the seller's accounts, and if he find him possessed of the stock proposed to be sold, he makes out the transfer. This is signed in the books by the seller, who delivers the receipt to the clerk; and upon the purchaser's signing his acceptance in the book, the clerk signs the receipt as witness. It is then delivered to the purchaser upon payment of the money, and thus the business is completed.

"This business is generally transacted by brokers, who derive their authority from their employers by powers of attorney. Forms of these are obtained at the respective offices. Some authorise the broker to

* The letters of the alphabet are placed round the room, and the seller must apply to the clerk who has his station under the initial of his name. In all the offices, there are supervising clerks who join in witnessing the transfer.

sell, others to accept a purchase, and others to receive the dividends. Some comprehend all these objects, and the two last are generally united. Powers of attorney authorising to sell must be deposited in the proper office for examination one day before selling: a stockholder acting personally, after granting a letter of attorney, revokes it by implication.

"The person in whose name the stock is invested when the books are shut, previous to the payment of the dividends, receives the dividend for the half year preceding; and, therefore, a purchaser during the currency of the half year has the benefit of the interest on stock he buys, from the last term of payment to the day of transfer. The price of stock, therefore, rises gradually, *cæteris paribus*, from term to term; and when the dividend is paid, it undergoes a fall equal thereto. Thus, the 3 per cent. consols should be higher than the 3 per cent. reduced by ¾ per cent. from the 5th of April to the 5th of July, and from the 10th of October to the 5th of January; and should be as much lower from the 5th of January to the 5th of March, and from the 5th of July to the 10th of October; and this is nearly the case. Accidental circumstances may occasion a slight deviation.

"The dividends on the different stocks being payable at different terms, it is in the power of the stockholders to invest their property in such a manner as to draw their income quarterly.

"The business of speculating in the stocks is founded on the variation of the price of stock, which it probably tends in some measure to support. It consists in buying or selling stock according to the views entertained, by those who engage in this business, of the probability of the value rising or falling.

"This business is partly conducted by persons who have property in the funds. But a practice also prevails among those who have no such property, of contracting for the sale of stock on a future day at a price agreed on. For example, A. may agree to sell B. 10,000*l.* of 3 per cent. stock, to be transferred in 20 days, for 6,000*l.* A. has, in fact, no such stock; but if the price on the day appointed for the transfer be only 58, he may purchase as much as will enable him to fulfil his bargain for 5,800*l.*, and thus gain 200*l.* by the transaction: on the other hand, if the price of that stock should rise to 62, he will lose 200*l.* The business is generally settled without any actual purchase of stock, or transfer; A. paying to B. or receiving from him the difference between the price of stock on the day of settlement, and the price agreed on.

"This practice, which amounts to nothing else than a wager concerning the price of stock, is not sanctioned by law; yet it is carried on to a great extent: and as neither party can be compelled by law to implement these bargains, their sense of honour, and the disgrace attending a breach of contract, are the principles by which the business is supported. In the language of the Stock Exchange, the buyer is called a *Bull*, and the seller a *Bear*, and the person who refuses to pay his loss is called a *Lame Duck*; and the names of these defaulters are exhibited in the Stock Exchange, where they dare not appear afterwards.

"These bargains are usually made for certain days fixed by a committee of the Stock Exchange, called *settling days*, of which there are about 8 in the year; viz. one in each of the months of January, February, April, May, July, August, October, and November; and they are always on Tuesday, Wednesday, Thursday, or Friday, being the days on which the commissioners for the reduction of the national debt make purchases. The settling days in January and July are always the first days of the opening of the Bank books for public transfer; and these days are notified at the Bank when the consols are shut to prepare for the dividend. The price at which stock is sold to be transferred on the next settling day, is called the price *on account*. Sometimes, instead of closing the account on the settling day, the stock is carried on to a future day, on such terms as the parties agree on. This is called a *continuation*.

"All the business, however, which is done in the stocks *for time*, is not of a gambling nature. In a place of so extensive commerce as London, opulent merchants, who possess property in the funds, and are unwilling to part with it, have frequently occasion to raise money for a short time. Their resource in this case is to sell for money, and buy for account; and although the money raised in this manner costs more than the legal interest, it affords an important accommodation, and it may be rendered strictly legal and recoverable."—(Third ed. pp. 514—517.)

It would be foreign to the object of this work to enter upon any examination of the comparative advantages and disadvantages of the funding system. Perhaps, on the whole, the latter preponderate; though it is not to be denied that the former are very considerable. The purchase of funded property affords a ready method of investment; and as neither the Bank of England, nor any of the London private banks, allows interest upon deposits, it is plain that, were it not for the facilities given by the funds, individuals unable to employ their savings in some branch of business, would derive no advantage from them, unless they resorted to the hazardous expedient of lending upon private credit. In Scotland, where the public and private banks are universally in the habit of allowing interest upon deposits, the advantages of funded investments are not quite so obvious, though probably as great; for it may be doubted whether the banks could afford interest, or whether, indeed, they could be conducted at all, without the aid of the funds.

The subjoined account of the number of dividend warrants issued in the half year ending with the 5th of January, 1833, is a very important document. The large number (87,176) of holders of sums not producing above 5*l.* of half-yearly dividend, is principally to be ascribed to the circumstances already mentioned as peculiar to the banking system of the metropolis; and there can be little doubt that their number would be materially diminished, were the Scotch system adopted in its stead. It is evident from this account, that the number of persons having a direct interest in the funds is much greater than it represents. The dividends upon the funded property belonging to the Equitable and other insurance companies, the different banking companies, &c. are paid upon single warrants, as if they were due to so many private individuals; whereas they are, really, paid to these individuals only because they act as factors or trustees for a vast number more. It is consequently quite absurd to pretend, as is sometimes done, that any interference with funded property would affect only 280,000 individuals out of a population of 25,000,000. Any attack upon the dividends would really be destructive, not merely of the interests of those to whom dividend warrants are issued, but of *all* who depend upon them: it would destroy our whole system of insurance and banking, and overspread the country with bankruptcy and ruin. Not only, therefore, is every proposal for an invasion of the property of the fundholders bottomed on injustice and robbery, but it would, were it acted upon, be little less ruinous to the community than to the peculiar class intended to be plundered.

An Account of the Total Number of Persons to whom a Half Year's Dividend was due at the last Half-yearly Payment thereof, on each Description of Public Stock, and on each Description of Terminable Annuities; distinguishing the Number respectively of those whose Dividends for the Half Year did not exceed 5*l.*, 10*l.*, 50*l.*, 100*l.*, 200*l.*, 300*l.*, 500*l.*, 1,000*l.*, 2,000*l.*, 3,000*l.*, 4,000*l.*, 5,000*l.*, and the Number of those whose Dividends exceed 5,000*l.*; distinguishing also, in those above 1,000*l.*, the Dividends due to any Public Company, or to more than a single Name.—(*Parl. Paper*, No. 202. Sess. 1833.)

	Not exceeding															
	5*l.*	10*l.*	50*l.*	100*l.*	200*l.*	300*l.*	500*l.*	1,000*l.*	2,000*l.*	Co. & Joint Accts.,2,000*l.*	3,000*l.*	Co. & Joint Accts.,3,000*l.*	4,000*l.*	Co. & Joint Accts.,4,000*l.*	5,000*l.* and upwards.	Total.
Number to whom dividends were payable																
On 3*l.* per cent. reduced annuities	10,347	4,745	11,681	3,473	2,175	742	453	231	53	24	9	5	5	3	12	33,958
On 3*l.* 10*s.* per cent. reduced annuities	7,019	4,362	10,173	2,909	1,561	411	251	112	15	21	5	4	nil	1	5	26,849
On 3*l.* 10*s.* per cent. annuities, 1818	* 198	162	399	211	127	57	38	30	3	3	nil	nil	nil	1	3	1,232
On 4*l.* per cent. annuities, 1826	1,601	993	2,044	512	312	92	59	15	4	1	2	1	nil	nil	nil	5,636
On long annuities	9,078	4,212	8,361	1,516	725	187	99	34	4	1	1	1	1	1	nil	24,221
On annuities for terms of years	1,519	787	1,632	351	178	56	32	20	4	nil	2	nil	nil	nil	2	4,583
On 3*l.* per cent. consolidated annuities	28,722	13,749	32,601	9,612	6,286	2,141	1,424	709	153	18	16	20	7	13	21	95,555
On 3*l.* per cent. annuities, 1726	120	74	180	40	27	4	2	nil	nil	nil	nil	nil	nil	nil	nil	447
On new 3*l.* 10*s.* per cent. annuities	† 26,881	14,698	29,370	6,648	3,129	765	431	204	28	20	4	1	2	4	9	82,194
On new 5*l.* per cent. annuities	35	31	107	36	20	3	4	nil	1	nil	nil	nil	nil	nil	nil	237
On annuities for terms of years	1,656	835	1,757	335	161	37	34	12	1	nil	1	3	nil	1	8	4,839
Totals	87,176	44,648	98,305	25,641	14,701	4,495	2,827	1,367	266	151	40	35	15	24	60	279,751

* Dividends payable 10th of October. † Dividends payable on 5th of January.

The following Table has been calculated, in order to show in which of the public funds money may be invested, so as to yield the greatest interest. It gives the prices, differing by 1 per cent. from 50 to 93 for 3 per cents. &c., at which they all must be, to yield the *same* interest; so that, supposing the 3 per cents. to be at 80, a sum invested in them, or in the $3\frac{1}{2}$ per cents., will yield the same interest, provided the latter be at $93\frac{1}{3}$: if the $3\frac{1}{2}$ per cents. be *below* this sum, it will of course be more advantageous, in so far at least as interest is concerned, to invest in them than in the 3 per cents.; while, if they be *above* $93\frac{1}{3}$, it will be less advantageous.

To get the *true value* of the different funds at any particular period, in order to compare them accurately together, it is necessary to deduct from each the amount of interest accruing upon it from the payment of the last dividend. — (For further details, see *antè*, p. 82. and p. 188.)

Table showing the Prices the different Funds must be at to produce an equal Interest; and also the annual Interest produced by 100*l.* Sterling invested at any of those Prices.

3 per Cent. Price.	3½ per Cent. Price.			4 per Cent. Price.			5 per Cent. Price.			Interest.			3 per Cent. Price.	3½ per Cent. Price.			4 per Cent. Price.			5 per Cent. Price.			Interest.		
£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
50	58	6	8	66	13	4	83	6	8	6	0	0	72	84	0	0	96	0	0	120	0	0	4	3	3
51	59	10	0	68	0	0	85	0	0	5	17	7	73	85	3	4	97	6	8	121	13	4	4	2	2
52	60	13	4	69	6	8	86	13	4	5	15	4	74	86	6	8	98	13	4	123	6	8	4	1	0
53	61	16	8	70	13	4	88	6	8	5	13	2	75	87	10	0	100	0	0	125	0	0	4	0	0
54	63	0	0	72	0	0	90	0	0	5	11	1	76	88	13	4	101	6	8	126	13	4	3	18	11
55	64	3	4	73	6	8	91	13	4	5	9	0	77	89	16	8	102	13	4	128	6	8	3	17	11
56	65	6	8	74	13	4	93	6	8	5	7	1	78	91	0	0	104	0	0	130	0	0	3	16	11
57	66	10	0	76	0	0	95	0	0	5	5	3	79	92	3	4	105	6	8	131	13	4	3	15	11
58	67	13	4	77	6	8	96	13	4	5	3	5	80	93	6	8	106	13	4	133	6	8	3	15	0
59	68	16	8	78	13	4	98	6	8	5	1	8	81	94	10	0	108	0	0	135	0	0	3	14	0
60	70	0	0	80	0	0	100	0	0	5	0	0	82	95	13	4	109	6	8	136	13	4	3	13	2
61	71	3	4	81	6	8	101	13	4	4	18	4	83	96	16	8	110	13	4	138	6	8	3	12	3
62	72	6	8	82	13	4	103	6	8	4	16	9	84	98	0	0	112	0	0	140	0	0	3	11	5
63	73	10	0	84	0	0	105	0	0	4	15	2	85	99	3	4	113	6	8	141	13	4	3	10	7
64	74	13	4	85	6	8	106	13	4	4	13	8	86	100	6	8	114	13	4	143	6	8	3	9	9
65	75	16	8	86	13	4	108	6	8	4	12	3	87	101	10	0	116	0	0	145	0	0	3	8	11
66	77	0	0	88	0	0	110	0	0	4	10	10	88	102	13	4	117	6	8	146	13	4	3	8	2
67	78	3	4	89	6	9	111	13	4	4	9	6	89	103	16	8	118	13	4	148	6	8	3	7	4
68	79	6	8	90	13	4	113	6	8	4	8	2	90	105	0	0	120	0	0	150	0	0	3	6	8
69	80	10	0	92	0	0	115	0	0	4	6	11	91	106	3	4	121	6	8	151	13	4	3	5	11
70	81	13	4	93	6	8	116	13	4	4	5	8	92	107	6	8	122	13	4	153	6	8	3	5	2
71	82	16	8	94	13	4	118	6	8	4	4	6	93	108	10	0	124	0	0	155	0	0	3	4	6

FURS, in commerce, the skins of different animals, covered, for the most part, with thick fine hair, the inner side being converted by a peculiar process into a sort of leather. Furs, previously to their undergoing this process, are denominated *peltry*.

Beaver fur, from its extensive use in the hat manufacture, is a very important commercial article. That made use of in this country is almost entirely brought from North America. It is gradually becoming scarcer and dearer, being now obtainable only in

considerable quantities from the most northerly and inaccessible districts. The fur of the middle-aged or young animal, called cub beaver, is most esteemed. It is the finest, most glossy, and takes the best dye. Fitch, or the fur of the fitchet or polecat, is principally imported from Germany: it is soft and warm, but the unpleasant smell which adheres to it depresses its value. Marten and mink (a diminutive species of otter) are principally imported from the United States and Canada. The fur of the musquash or musk rat (a diminutive species of beaver) is imported in vast quantities from our possessions in North America; which also supply us with considerable quantities of otter skins. Nutria skins are principally brought from Buenos Ayres. The more valuable furs, as ermine, sable, &c., come principally from Russia.

FUR TRADE. We are indebted for the following details with respect to the fur trade to one of the most extensive and intelligent fur merchants of London.

"Though practically engaged in the fur trade, I fear I shall be able to say little with regard to it not already known to you; but were I to write on the subject, I should divide the trade into 2, or rather 3 classes.

"1. The 1st class would comprise articles of necessity; among which I should principally number an immense variety of lamb skins, varying so widely from each other in size, quality, colour, and value, that, to most persons, they would appear as the produce of so many different species of animals. These lamb skins are produced in all parts of the globe, and are every where consumed; but they form, in particular, an essential part of the dress of thousands among the lower classes in Russia, Poland, East Prussia, Hungary, Bohemia, and Saxony. In Russia and other cold climates, the skins of various other animals may be considered as articles of actual necessity.

"2. The 2d class would in a measure form part of the first, as it also comprises furs which through habit and fashion have now become articles of necessity. I should here enumerate all those different skins commonly called *hatting furs*. Few who are not acquainted with this branch of the fur trade can form an idea of its extent. It spreads, of course, over all parts of the globe where hats are worn, and requires very superior judgment and considerable capital to conduct it successfully. The furs now used for hat making are beaver, musquash, otter, nutria, hare, and rabbit; but each of these may be subdivided into 20 different sorts or classes.

"Neutria, or nutria, is comparatively a new article. It began first to be imported in large quantities about 1810, from the Spanish possessions in South America. — (See NUTRIA.) The skin is used for different purposes, being either dressed as a peltry, or cut (shorn) as a hatting fur; and if well manufactured and prepared, it bears some resemblance to beaver fur, and is used for similar purposes.

"3. Under the 3d and last class I should bring all those furs, which, though continually sold, and used in immense quantities, must still be considered mere articles of fashion, as their value varies according to the whims and fancies of different nations. There are, however, exceptions among these; and many furs may be considered as standard articles, since they are always used, though their price is much influenced by changes of fashion.

"This class comprises an endless variety of furs, as under it may be brought the skins of most animals in existence; almost all of them appearing occasionally in the trade.

"Furs being entirely the produce of nature, which can neither be cultivated nor increased, their value is not influenced by fashion alone, but depends materially on the larger or smaller supplies received. The weather has great influence on the quality and quantity of furs imported from all quarters of the globe; and this circumstance renders the fur trade more difficult, perhaps, and precarious than any other. The quality, and consequently the price, of many furs will differ every year. It would be completely impossible to state the value of the different articles of furs, the trade being the most fluctuating imaginable. I have often seen the same article rise and fall 100, 200, and 300 per cent. in the course of a twelvemonth; nay, in several instances, in the space of 1 month only.

"Among the furs which always rank very high (though, like all the rest, they change in value), may be specified the Siberian sable, and the black and silver fox. These articles are at all times comparatively very scarce, and command high prices.

"The chief supplies of peltries are received from Russia (particularly the Asiatic part of that empire), and from North America. But many other countries produce very beautiful and useful furs; and though we are most indebted to Asia and America, Europe furnishes a very considerable quantity. Africa and Australia are of little importance to the fur trade, as, from their situation, they furnish but few articles, and consume still less. From the former we draw leopard and tiger skins (the most beautiful of that species), while the *only* production of the latter is the kangaroo; this, however, is never used as a fur being chiefly consumed by leather dressers and tanners for the sake of its pelt.

"Besides numerous private traders, there are several fur companies of very old standing, who in various countries do a great amount of business. Among these, the Hudson's Bay Company (in London) deserves to be mentioned first, not only from the extent of their business, but because it is one of the oldest chartered companies in England.

"The American Fur Company (in New York) stands next. They chiefly trade to London, whither they send the produce of the United States and other parts of North America.

"The 3d company is the Russian American (in Moscow). They trade to the Russian possessions on the western coast of North America, whence they draw their supplies, which are chiefly consumed in Russia.

"The 4th and last company of any consequence is the Danish Greenland Company (in Copenhagen). They do but a very limited business; exposing their goods for sale once a year in Copenhagen.

"The principal consumption of the furs which I should bring under the head of the 3d class, is in China, Turkey, and Russia, and among the more civilised countries of Europe, particularly in England. Germany consumes a considerable quantity. The consumption of America is comparatively little. In Africa, none but the Egyptians wear fur. In Australia, none is consumed.

"Hatting furs are used throughout Europe (with the exception of Turkey and Greece), and in America; but by far the principal trade in these articles is carried on in London and New York.

"Most of the companies sell their goods by public sale, and the principal fur fairs are held at Kiachta (on the borders of China); Nishnei Novogorod, between Moscow and Casan, in Russia; and twice a year at Leipsic. — (See FAIRS.)

"It is a remarkable feature of the fur trade, that almost every country or town which produces and exports furs, imports and consumes the fur of some other place, frequently the most distant. It is but seldom that an article is consumed in the country where it is produced, though that country may consume furs to a very great extent."

The following details with respect to the North American fur trade may not be uninteresting: —

This trade was first practised by the early French settlers at Quebec and Montreal; and consisted then, as now, in bartering fire-arms, ammunition, cloth, spirits, and other articles

in demand among the Indians, for beaver and other skins. In 1670, Charles II. established the Hudson's Bay Company, to which he assigned the exclusive privilege of trading with the Indians in and about the vast inlet known by the name of Hudson's Bay. The Company founded establishments at Forts Churchill and Albany, Nelson River, and other places on the west coast of the bay. But the trade they carried on, though said to be a profitable one, was of very limited extent; and their conduct on various occasions shows how thoroughly they were "possessed with that spirit of jealousy which prevails in some degree in all knots and societies of men endued with peculiar privileges." — (*European Settlements*, vol. ii. p. 268.) Mr. Burke has, in the same place, expressed his astonishment that the trade has not been thrown open. But as the Company's charter was never confirmed by any act of parliament, all British subjects are lawfully entitled to trade with those regions; though, from the difficulties attached to the trade, the protection required in carrying it on, and the undisguised hostility which private traders have experienced from the agents of the Company, the latter have been allowed to monopolise it with but little opposition. In 1783–4, the principal traders engaged in the fur trade of Canada formed themselves into an association known by the name of the North-West Company, having their chief establishment at Montreal. This new company prosecuted the trade with great enterprise and very considerable success. The course of their proceedings in their adventurous undertakings has been minutely described by Mr. Mackenzie, one of the agents of the Company, in his *Voyage from Montreal, through the Continent of America.* This gentleman informs us, that some of those engaged in this trade are employed at the astonishing distance of upwards of 4,000 miles north-west of Montreal! A very numerous caravan, if we may so call it, sets out every year for *Le Grand Portage*, on Lake Superior, where they meet those who have wintered in the remoter establishments, from whom they receive the furs collected in the course of the season, and whom they, at the same time, furnish with fresh supplies of the various articles required in the trade. Fort Chepeywan, on the Lake of the Hills, in lon. 110° 26′ W., used to be one of the most distant stations of the servants of the North-West Company; but many of the Indians who traded with the fort came from districts contiguous to, and sometimes even beyond, the Rocky Mountains.

The competition and success of the North-West Company seem to have roused the dormant energies of the Hudson's Bay Company. The conflicting interests and pretensions of the two associations were naturally productive of much jealousy and ill-will. Under the auspices of the late Earl of Selkirk, who was for a considerable period at the head of the Hudson's Bay Company, a colony was projected and founded on the Red River, which runs into Lake Winnipec. The North-West Company regarded this establishment as an encroachment upon their peculiar rights; and the animosities thence arising led to the most violent proceedings on the part of the servants of both companies. At length, however, the more moderate individuals of each party began to perceive that their interests were not materially different; and the rival companies, wearied and impoverished by their dissensions, ultimately united under the name of the *Hudson's Bay Fur Company*, which at present engrosses most of the fur trade of British America. The most important part of the trade is still carried on from Montreal in the way described by Mr. Mackenzie.

The *North American Fur Company*, the leading directors of which reside in the city of New York, have long enjoyed the principal part of the Indian trade of the great lakes and the Upper Mississippi. But, with the exception of the musk rat, most of the fur-clad animals are exterminated in the vicinity of the lakes. The skins of racoons are of little value; and the beaver is now scarce on this side the Rocky Mountains. The further north the furs are taken, the better is their quality.

According to Mr. Bliss, the number and value of the furs and peltries exported from British America to all parts, in 1831, were —

	No.	£	s.	d.	£	s.	d.		No.	£	s.	d.	£	s.	d.
Beaver	126,944	at 1	5	0	158,680	0	0	Racoon	325	at 0	1	6	24	7	6
Bear	3,850	— 1	0	0	3,850	3	0	Tails	2,290	— 0	1	0	114	10	0
Deer	645	— 0	3	0	96	15	0	Weasel	34	— 0	0	6	0	17	0
Fox	8,765	— 0	10	0	4,382	10	0	Wolverine	1,744	— 0	3	0	261	12	0
Lynx	58,010	— 0	8	0	23,204	0	0	Wolf	5,947	— 0	8	0	2,378	16	0
Minx	9,298	— 0	2	0	929	16	0								
Musk rat	375,731	— 0	0	6	9,393	5	6						£ 203,316	9	0

Undescribed from Halifax and St. John's estimated at the average annual value of	15,000	0	0
Exported to the United States by inland trade	16,146	0	0
	234,462	9	0
Sterling	£ 211,016	4	2

(*Statistics of Trade and Industry of British America*, p. 29.)

According to Mr. M'Gregor, the value of the furs annually exported from British America, amounted, at an average of the 5 years ending with 1832, to about 210,000*l.* sterling a year. — (*British North America*, 2d edit. vol. ii. p. 594.)

Account of the principal Furs imported in 1831, the Countries whence they were brought, and the Quantity furnished by each Country.

Countries.	Bear.	Beaver.	Fitch.	Marten.	Mink.	Musquash.	Nutria.	Otter.
Prussia - -	- -	- -	2,108					
Germany - -	- -	115	186,429	21,139	688	7,028		
Netherlands -	- -	53	24,418	817	- -		- -	44
France - -	- -	- -	30,820	27,676	- -	762	2,000	
British N. American colonies	3,994	93,199	-	112,068	30,742	737,746	- -	21,636
United States -	13,480	7,429	-	50,083	70,120	27,000	52,130	1,401
Buenos Ayres -	- -	- -	- -	- -	- -	- -	429,906	
All other places	128	118	-	2,354	2,011	157	9,971	117
Total -	17,602	100,944	243,705	214,107	103,561	772,693	494,067	23,198

Of these imports, the beaver, fitch, and marten were mostly retained for home consumption. A large number of bear and otter skins were re-exported to Germany; and no fewer than 592,117 musquash skins were exported, in 1831, to the United States.—(*Parl. Paper*, No. 550. Sess. 1833.)

The imports of ermine are inconsiderable, having only amounted, at an average of 1831 and 1832, to 2,197 skins a year.

The duty on furs produced, in 1832, 34,079*l.*; and that on skins, not being furs, 18,093*l.* 13*s.* 6*d.*

China is one of the best markets for furs. The Americans began, with their characteristic activity, to send furs to Canton very soon after their flag had appeared in the Eastern seas in 1784; and they still prosecute the trade to a considerable extent, though it has rapidly declined within the last 3 or 4 years. The Americans procure the furs intended for the China markets, partly from the American Fur Company already alluded to, and partly from Canada; but they have also been in the habit of sending out ships to the north-west coast of America, which, having purchased large quantities of skins from the natives, carry them direct to Canton. Recently, however, this trade has been materially diminished, in consequence, it is said, of the regulations of the Russian government, who do not permit the American traders to cruise so far north as they did formerly.

FUSTIAN (Ger. *Barchent*; Du. *Fustein*; Fr. *Futaine*; It. *Fustagno, Frustagno*; Sp. *Fustan*; Rus. *Bumasea*; Pol. *Barchan*), a kind of cotton stuff, wealed or ribbed on one side.

FUSTIC (Ger. *Gelbholz, Fustick*; Du. *Geelhout*; Fr. *Bois jaune de Brésil*; It. *Legno giallo de Brasilio*; Sp. *Palo del Brasilamarillo*), the wood of a species of mulberry (*Morus tinctoria*), growing in most parts of South America, in the United States, and the West India islands. It is a large and handsome tree; and the timber, though, like most other dye woods, brittle, or at least easily splintered, is hard and strong. It is very extensively used as an ingredient in the dyeing of yellow, and is largely imported for that purpose. Of 6,335 tons of fustic imported into Great Britain in 1831, 1,683 tons were brought from the British West Indies, 1,354 ditto from Cuba and the foreign West Indies, 1,013 ditto from the United States, 990 ditto from Mexico, 510 ditto from Colombia, 705 ditto from Brazil. Fustic from Cuba fetches full 35 per cent. more in the London market than that of Jamaica or Colombia. At present, the price of the former varies from 10*l.* to 12*l.* a ton, while the latter varies from 8*l.* to 9*l.* a ton. The consumption amounts to about 6,000 tons a year.

Zante, or *young* fustic, is really a species of sumach (*Rhus cotinus* Lin.), and is quite distinct from the *morus tinctoria*, or *old* fustic; the latter being a large American tree, while the former is a small European shrub. It grows in Italy and the south of France, but is principally exported from Patras in the Morea. It imparts a beautiful bright yellow dye to cottons, &c., which, when proper mordants are used, is very permanent. It is conveniently stowed amongst a cargo of dry goods, as it may be cut into pieces of any length without injury. Only a small quantity of this species of sumach is imported. Its price fluctuates considerably. In August, 1833, it was worth, in the London market, from 9*l.* to 11*l.* a ton.

G.

GALANGAL (Ger. *Galgant*; Du. and Fr. *Galanga*; Rus. *Kalgan*; Lat. *Galanga*; Arab. *Kusttulk*; Chin. *Laundon*), the root of the *galanga*, brought from China and the East Indies in pieces about an inch long, and hardly ½ an inch thick. A larger root of the same kind (*Greater Galangal*), an inch or more in thickness, is to be rejected. It has an aromatic smell, not very grateful; and an unpleasant, bitterish, extremely hot, biting taste. It should be chosen full and plump, of a bright colour, very firm and sound: 12 cwt. are allowed to a ton.—(*Lewis's Mat. Med.*; *Milburn's Orient. Com.*)

GALBANUM (Fr. *Galbanum*; Ger. *Mutterharz*; It. *Galbano*; Lat. *Galbanum*; Arab. *Barzud*), a species of gum resin obtained from a perennial plant (*Galbanum officinale*) growing in Africa, near the Cape of Good Hope, and in Syria and Persia. It is brought to this country from the Levant in cases or chests containing from 100 to 300 lbs. each. The best is in ductile masses, composed of distinct whitish tears agglutinated together by a pale brown or yellowish substance. It is generally much mixed

with stalks, seeds, and other impurities. The separate tears are considered as the best. When the colour is dark brown or blackish, it is to be rejected. It has a strong peculiar odour, and a bitterish, warm, acrid taste. — (*Thomson's Dispensatory.*)

GALLON, a measure of capacity, both for dry and liquid articles, containing 4 quarts. By 5 Geo. 4. c. 74., "the Imperial gallon shall be the standard measure of capacity, and shall contain 10 lbs. avoirdupois weight of distilled water, weighed in air at the temperature of 62° of Fahrenheit's thermometer, the barometer being at 30 inches, or 277·274 cubic inches; and all other measures of capacity to be used, as well for wine, beer, ale, spirits, and all sorts of liquids, as for dry goods, not measured by heaped measure, shall be derived, computed, and ascertained from such gallon; and all measures shall be taken in parts, or multiples, or certain proportions, of the said Imperial standard gallon." The old English gallon, wine measure, contained 231 cubic inches; and the old English gallon, ale measure, contained 282 cubic inches. Hence the Imperial gallon is about $\frac{1}{3}$ larger than the old wine gallon, and about $\frac{1}{60}$ less than the old ale gallon. By the 6 Geo. 4. c. 58. § 6. it is enacted, that from and after the 5th of January, 1826, whenever any gallon measure is mentioned in any act of parliament relative to the excise, it shall be taken and deemed to be a gallon Imperial standard measure. — (See WEIGHTS AND MEASURES.)

GALLS, OR GALL-NUTS (Fr. *Galles, Noix de galle;* Ger. *Gallapfel, Gallus;* It. *Galle, Galluze;* Lat. *Galæ;* Arab. *Afis;* Hind. *Majouphal;* Pers. *Mazu*), are excrescences produced by the attacks of a small insect, which deposits its eggs in the tender shoots of a species of oak (*Quercus infectoria* Lin.), abundant in Asia Minor, Syria, Persia, &c. Galls are inodorous, and have a nauseously bitter and astringent taste. They are nearly spherical, and vary in magnitude from the size of a pea to that of a hazel nut. When good, they are of a black or deep olive colour; their surface is tubercular, and almost prickly; they are heavy, brittle, and break with a flinty fracture. They are known in commerce by the names of *white, green,* and *blue.* The white galls are those which have not been gathered till after the insect has eaten its way out of the nidus and made its escape. They are not so heavy as the others, are of a lighter colour, and do not fetch so high a price. The green and blue galls are gathered before the insect has escaped; they are heavier and darker than the former, and are said to afford about one third more of colouring matter.

Galls are of great importance in the arts, being very extensively used in dyeing, and in the manufacture of ink, of which they form one of the principal ingredients. They are the most powerful of all the vegetable astringents; and are frequently used with great effect in medicine.

The ancients reckoned the gall-nuts of Syria superior to every other, and they still retain their pre-eminence. They are principally exported from Aleppo, Tripoli, Smyrna, and Said; those brought from the first come chiefly from Mosul, on the western bank of the Tigris, about ten days' journey from Aleppo. The real Mosul galls are unquestionably the best of any; but all that are gathered in the surrounding country are sold under this name. Those from Caramania are of a very inferior quality. The galls met with in India are carried thither from Persia by Arabian merchants.

It is not unusual to dye the whitish gall-nuts blue, in order to increase their value. The fraud is, however, detected by the deeper blue tinge that is thus imparted to them; and by their being perforated, and lighter than the genuine blue galls.

The price of galls in bond varies in the London market from 65*s.* to 85*s.* a cwt. The duty is 5*s.* a cwt. — (*Rees's Cyclopædia; Bancroft on Colours; Ainslie's Mat. Indica, &c.*)

GAMBOGE (Fr. *Gomme gutte;* Ger. *Gummigutt;* It. *Gomma gutta;* Lat. *Gummi guttæ, Cambogia;* Arab. *Ossararewund;* Siamese and Cambojan, *Rong*), a concrete vegetable juice, or gum resin, the produce of the *Garcinia Cambogia,* a forest tree of the genus which affords the mangostein, the most exquisite fruit of the East. The districts which yield gamboge lie on the east side of the Gulf of Siam, between the latitudes of 10° and 12° north, comprising a portion of Siam and the kingdom of Camboja, whence its English name. It is obtained by making incisions in the bark of the tree, from which it exudes, and is collected in vessels placed to receive it. In these it assumes a firm consistence; and being formed into orbicular masses, or more frequently cylindrical rolls, it is at once fit for the market. It is of a bright yellow colour, opaque, brittle, breaks vitreous, has no smell, and very little taste. Specific gravity 1·22. When taken internally, it operates as a most violent cathartic. It forms a beautiful yellow pigment; for which purpose it is principally used. The Dutch began to import it about the middle of the seventeenth century. The greater part of the gamboge of commerce first finds its way to Bangkok, the Siamese capital, or to Saigon, the capital of lower Cochin China; from these it is carried by junks to Singapore, whence it is shipped for Europe. Its price at Singapore varies, according to quality, from 30 to 80 dollars per picul. Dark coloured pieces should be rejected. — (*Crawford's Embassy to Siam,* p. 425.; *Thomson's Chemistry.*)

GARNET, GARNETS (Fr. *Grenats;* Ger. *Granaten, Granatstein;* It. *Granati;* Lat. *Granati;* Rus. *Granatnoi kamen;* Sp. *Granadas*). There are two species of garnet, the precious and the common. The colour of the first is red; and hence the name of the mineral, from its supposed resemblance to the flower of the pomegranate: passes from Columbine red, to cherry and brown red; commonly crystallised. External

lustre glistening, internal shining, vitreous; transparent, sometimes only translucent; specific gravity 4·08 to 4·35. The colour of the common garnet is of various shades of brown and green. Different colours often appear in the same mass: translucent; black varieties nearly opaque: specific gravity from 3·66 to 3·75. — (*Thomson's Chemistry.*) The finest varieties come from India, and some good specimens have been received from Greenland. When large and free from flaws, garnets are worth from 2*l.* to 5*l.* or 6*l.*, and even more; but stones of this value are of rare occurrence, and always in demand. — (*Mawe on Diamonds*, &c. 2d ed. p. 113.)

GAS COMPANIES, the term usually applied to designate the companies or associations established in most large towns for lighting the streets and houses with gas.

Every one must have remarked that most species of coal, when ignited, give out large quantities of gas, which burns with much brilliancy, yielding a great quantity of light as well as of heat. Dr. Clayton seems to have been the first who attempted, about 1736, to apply this gas to the purposes of artificial illumination; but his experiments were upon a very limited scale, and no further attention was paid to the subject till more than half a century afterwards. At length, however, Mr. Murdoch, of Soho, instituted a series of judicious experiments on the extrication of gas from coal; and, by his ingenuity and sagacity, succeeded in establishing one of the most capital improvements ever made in the arts. Mr. Murdoch found that the gas might be collected in reservoirs, purified, conveyed by pipes to a great distance from the furnace where it was generated; and that it affords, by its slow combustion, when allowed to escape through small orifices, a beautiful and steady light. This great discovery, which places Mr. Murdoch in the first rank among the benefactors of mankind, was first brought into practice at Redruth, in Cornwall. In 1802, it was applied to light Mr. Murdoch's manufactory at Soho; in 1805, it was adopted by Messrs. Philips and Lee, of Manchester, in the lighting of their great cotton mill; and is now employed in the lighting of the streets, theatres, and other public buildings, factories, &c. of *all* the considerable towns of the empire; and also in most considerable towns of the Continent and America.

Gas light is indebted, for its rapid diffusion, not more to its peculiar softness, clearness, and unvarying intensity, than to its comparative cheapness. According to Dr. Thomson (*Supp. to Ency. Brit.* art. *Gas Lights*), if we value the quantity of light given by 1 lb. of tallow in candles at 1*s.*, an equal quantity of light from coal gas will not cost more than 2¾*d.*, being less than a *fourth part* of the cost of the former.

Oil and other substances have been used in furnishing gas for the purpose of illumination, but none of them has answered so well as coal. Most of the oil gas establishments have been abandoned.

The construction of gas works on a large scale, and the carrying of pipes through the streets and into houses, &c., is very expensive, and requires a large outlay of capital. Hence most of the gas lights in the different towns are supplied by joint stock companies. Many of them have turned out to be very profitable concerns.

The subjoined Table contains a statement of the most important particulars connected with the principal gas companies; viz. the number of shares in each, the nominal amount of each share, the sums actually paid up, the market price of shares, the dividend payable on them, &c. — (From the *Share List* of Mr. Charles Edmonds, Broker, of Change Alley, Cornhill, 12th of October, 1833.)

Number of Shares.	Names of Companies.	Amount of Shares.	Paid up.	Price per Share.	Dividend per Annum.	Dividends payable.
		£	£ s.	£ s.		
12,000	Gas Light and Coke Chart. Company	50	50 0	50 0	6 per cent.	May, Nov.
5,000	Ditto, New (London)	50	10 0	10 0	6 per cent.	May, Nov.
1,000	City (London)	100	100 0	195 0	10 per cent.	Mar. Sept.
1,000	Ditto, New (London)	100	60 0	120 0	10 per cent.	Mar. Sept.
10,000	Imperial (London)	50	50 0	48 15	5 per cent.	April, Oct.
76,500*l.*	Ditto debentures	100	100 0	100 0	4 per cent.	Jan. July.
9,000	Phœnix, or South London	50	39 0	43 0	6 per cent.	Feb. Aug.
5,000	British (London)	40	16 0	21 12	1*l.* per share.	April, Oct.
5,000	Ditto (Country)	20	19 0	22 0	1*l.* per share.	April, Oct.
	Ditto debentures	100	- -	103 0	5 per cent.	Jan. July.
2,000	Independent	30	30 0	45 0	6 per cent.	Mar. Sept.
4,000	Equitable	50	25 0	24 0	4 per cent.	April, Oct.
8,200	General United Gas Light Company	50	44 0	44 0	5 per cent.	Mar. Sept.
4,000	Imperial Continental	100	51 5	36 0	1*l.* 16*s.* per sh.	Feb. Aug.
600	Bradford	25	20 0	45 0	10 per cent.	May.
600	Brentford	50	50 0	25 0		
2,500	Bath	20	16 0	33 15	10 per cent.	Feb. Aug.
600	Barnsley	10	10 0	10 0		Mar. Sept.
704	Birmingham	50	50 0	110 0	10 per cent.	Mar. Sept.
2,400	Birmingham and Staffordshire	50	50 0	100 0	4*l.* per sh.	April, Oct.
1,500	Brighton	20	20 0	14 0		
750	Brighton New	20	18 0	12 0		
——	Brighton General	20	- -	18 0	3½ per cent.	
1,312	Blackburn	10	10 0	12 0	5 per cent.	
4,250	Bristol	20	- -	41 10	10 per cent.	Feb. Aug.

Number of Shares.	Names of Companies.	Amount of Shares.	Paid up.	Price per Share.	Dividend per Annum.	Dividends payable.
240	Canterbury	50	- -	60 0	5 per cent.	Jan. July.
300	Cheltenham	50	50 0	75 0	7½ per cent.	
800	Coventry	25	- -	20 0	5 per cent.	
200	Derby	50	50 0	55 0	5 per cent.	
180	Dover	50	- -	51 0	5 per cent.	
600	Dudley	20	- -	22 0	6 per cent.	
240	Exeter	50	- -	70 0	5*l.*	
780	Great Yarmouth	20	18 0	13 0	3½ per cent.	July, Jan.
——	Guilford	25	25 0	23 0	1*l.*	
600	Halifax	25	21 0	36 0		
1,200	Ipswich	10	- -	12 0	12*s.*	Mar. Sept.
800	Isle of Thanet	25	20 0	22 0	5 per cent.	Jan. July.
160	Kidderminster	50	- -	53 0	5 per cent.	
201	Leeds	100	100 0	195 0	10*l.*	
——	Leicester	50	50 0	65 0	3*l.* 10*s.*	January.
220	Lewes	25	25 0	23 0	4 per cent.	January.
500	Liverpool	100	100 0	450 0	22*l.*	Feb. Aug.
200	Maidstone	50	50 0	100 0	9 per cent.	Mar. Sept.
200	Newcastle-under-Line	25	- -			
320	Newport, Isle of Wight	50	- -	18 0	1*l.*	
542	Northampton	20	19 0	26 10		
320	Nottingham	50	50 0	96 0	8 per cent.	
120	Oxford	150	130 0			
3,200	Paisley	50	- -			
600	Poplar	50	- -	27 0		
600	Portsea Island	50	53 0	47 0	5 per cent	Jan. July.
2,500	Portable	100	20 0	18 10dis.		
10,000	Plymouth	50	- -	70 0	5*l.*	July.
1,000	Ratcliff	100	60 0	46 0	4 per cent.	Mar. Sept.
480	Rochdale	25	15 0	par		
240	Rochester	50	50 0	58 0	3*l.*	
1,600	Sheffield	25	18 5	58 0	10 per cent.	
1,000	Shrewsbury	10	- -	12 10	12*s.*	January.
144	Stockton	55	- -			
294	Warwick	50	- -	50 0	5 per cent.	March.
400	Wakefield	25	- -		2*l.* 10*s.*	
100	Warrington	20	- -	29 0	10 per cent.	
1,000	Wigan	10	- -			
240	Woolwich	50	30 0		10 per cent.	
550	Wolverhampton	20	20 0	20 0		
600	Worcester	20	- -	16 0	4 per cent.	

GENEVA (Du. *Genever;* Fr. *Genièvre;* Ger. *Gaud, Genever;* It. *Acqua di Ginepro;* Lat. *Juniperi aqua;* Sp. *Agua de Enebro*), a spirit obtained by distillation from grain, rectified, with the addition of juniper berries. The latter give to the spirit that peculiar flavour by which it is distinguished, and are also said to render it diuretic. Geneva is a corruption of *genièvre*, the French term for the juniper berry.

By far the best geneva is made in Holland, where its manufacture is carried on to a very great extent. The distilleries of Schiedam have long been famous, and are at present in a very prosperous condition. Schiedam geneva is made solely of spirit obtained from rye and barley, flavoured with juniper berries. It becomes milder, and acquires, as it gets old, an oily flavour disliked by the Hollanders; hence nearly the whole of the "Schiedam" is exported, principally to the East Indies. There are no fewer than 300 distilleries in Schiedam, 100 in other parts of Holland, and not more than 40 in Belgium. The entire annual produce of the distillery in Holland is estimated at 2,000,000 ankers, or 20,500,000 wine gallons, of which about two thirds are exported. — (*Cloet, Description Géographique des Pays Bas*, p. 92.)

In nothing, perhaps, has the destructive effect of heavy taxation been so strongly exhibited, as in the trade of geneva. It appears from the *Parl. Paper*, No. 248. Sess. 1826, that during the 10 years ending with 1786, when the duty on geneva was about 10*s.* the wine gallon, the average annual consumption in Great Britain amounted to about 80,362 gallons. But in 1786, Mr. Pitt reduced the duties to 5*s.* a gallon; and the effect of this wise and politic measure was such, that in the next decennial period the average imports for home consumption amounted to 444,891 gallons! From 1796 to 1806, the duties fluctuated from 7*s.* 6*d.* to 14*s.*; but as the taste for geneva had been formed, and as the duties on other spirits had been increased in about the same proportion, the consumption went on increasing, having been, at an average of the 10 years, as high as 724,351 gallons a year. This was the maximum of consumption. Mr. Vansittart soon after began his inauspicious career, and immediately raised the duty from 14s. to 20*s.* 8*d.*; the consequence of this increase being, that in the 10 years ending with 1816, the average consumption amounted to only 272,898 gallons. Since then the duties have continued stationary, being at this moment 22*s.* 6*d.* the Imperial gallon, on an article which may be bought in bond for 2*s.* 3*d.* or 2*s.* 6*d.*! The duties on rum and British spirits having been materially reduced during the last 10 years, the consumption of geneva has gone on progressively diminishing, till it now amounts, as appears from the subjoined official statement, to no more than 22,800 gallons; being only *one thirty-fourth* part of what it amounted to during the 10 years ending with 1806!

In Ireland, the effects of this *felo de se* system have been more injurious than appears from this Table. During the 4 years ending with 1803, the books of the Irish Custom-house show that there were, at an average, 82,828 gallons of geneva entered for home consumption, producing, at the then duty of 7*s.* 3¾*d.*, 39,923*l.* a year; whereas, notwithstanding the vast increase of population, the consumption of geneva in Ireland, in 1832, was only 1,402 gallons, and the revenue only 1,577*l.*

To make any lengthened commentary on such statements would be useless. Our policy, if we may apply this term to so revolting a display of short-sighted rapacity, has had no other effect than to lessen the public revenue and enjoyments of the people, to injure our trade with Holland, and to foster and pro-

mote the ruinous and destructive practice of smuggling. The exorbitant duties on geneva, brandy, and tobacco, have led to the formation of the coast guard and the preventive water guard, costing together between 400,000*l.* and 500,000*l.* a year; and yet, notwithstanding this enormous outlay, and notwithstanding the innumerable penalties and punishments to which he is exposed, the trade of the smuggler is not put down, but is, on the contrary, in a peculiarly flourishing condition; and so it will continue, in despite of every thing that can be done for its suppression, till these duties be adequately reduced.

We believe our gin manufacturers have nothing to apprehend from a reduction of the duties on geneva to 10*s.* a gallon. The lower classes, who are the great consumers, prefer English gin to every other stimulant; and now that the duties on juniper berries — (see BERRIES) — are reduced, its quality may be materially improved. But nothing would have so much influence in this respect as the admission of geneva at a moderate duty. It would also have the beneficial effect of putting an end to the manufacture of the spurious compounds sold under its name.

The regulations as to the importation, &c. of geneva are similar to those affecting BRANDY; which see.

An Account of the Number of Gallons (Imperial Measure) of Geneva entered for Home Consumption in Great Britain and Ireland, the Rates of Duty on the same, and the entire Nett Produce of the Duty, each Year since 1814.

Years.	Quantities retained for Home Consumption.			Nett Produce of Duty (Customs and Excise).									Rates of Duty per Imperial Gallon (Customs and Excise).					
	Great Britain.	Ireland.	United Kingdom.	Great Britain.			Ireland.			United Kingdom.			Gt. Britain.			Ireland.		
	Imp. Gall.	*Imp. Gall.*	*Imp. Gall.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
1814	149,302	6,072	155,374	168,559	13	3	5,581	18	5	174,141	11	8	1	2	6¾	0	17	3¾
1815	124,508	4,446	128,954	139,798	13	3	4,029	8	11	143,798	2	2						
1816	103,973	1,305	105,278	116,967	12	11	1,459	15	8	118,327	8	7						
1817	105,483	2,174	107,657	118,837	19	10	2,012	16	0	120,850	15	10						
1818	113,255	3,032	116,287	127,503	18	11	2,772	3	3	130,275	2	2						
1819	102,523	3,124	105,647	114,799	15	7	2,795	2	9	117,594	16	4	1	2	7½			
1820	105,067	3,383	108,450	114,903	15	2	2,943	17	11	117,847	13	1						
1821	89,443	3,324	92,767	100,965	15	9	2,940	2	10	103,905	18	7						
1822	88,670	2,917	91,587	99,981	16	2	2,523	14	3	102,505	10	5						
1823	82,784	8,164	90,948	93,442	0	0	7,020	14	5	100,462	14	5	-			1	2	8
1824	19,605	412	90,017	101,089	12	3	472	7	11	101,562	0	2						
1825	83,709	1,000	84,709	94,463	2	1	1,145	17	11	95,609	0	0						
1826	67,079	2,081	69,160	75,553	5	10	2,337	10	11	77,890	16	9	1	2	6	1	2	6
1827	50,760	1,908	52,668	57,204	11	11	2,147	12	6	59,352	4	5						
1828	43,037	2,223	45,260	48,433	9	1	2,500	11	10	50,934	0	11						
1829	35,301	1,845	37,146	39,647	17	2	2,075	12	6	41,723	9	8						
1830	29,006	1,793	30,799	32,650	0	0	2,018	0	0	34,668	0	0						
1831	22,510	1,388	23,898	25,332	0	0	1,562	0	0	26,894	0	0						
1832	20,899	1,402	22,301	23,514	0	0	1,577	0	0	25,091	0	0						

GENOA, a maritime city of Italy, once the capital of the famous republic of that name, now of a province of the kingdom of Sardinia. It is situated at the bottom of the extensive gulf to which it gives its name; the light-house being in lat. 44° 24′ 40″ N., lon. 8° 52′ 55″ E. Population 80,000. Genoa is one of the finest cities of Europe. In general, the streets are inconveniently narrow; but some of the principal ones are moderately wide, and consist almost entirely of public buildings, and private palaces erected during the period of her prosperity. Being built on a rising ground, in the form of an amphitheatre, the appearance of the town from the sea is most magnificent, and justifies the epithet given to her of "*la superba.*"

Port. — The harbour is semicircular, the diameter being about 1,000 fathoms. It is artificial, being formed by two gigantic moles having opposite directions. That on the east side, called the old mole (*molo vecchio*), projects from the centre of the city W. by S. It is about 200 fathoms in length, and has a battery near its middle. The new mole (*molo nuovo*), on the opposite side of the port, adjoins the southern extremity of the suburb of S. Pietro d'Arena, projecting about 210 fathoms from shore in an E. S. E. direction. The mole heads bear from each other N. E. by E. and S. W. by W., the distance between them, forming the entrance to the harbour, being about 350 fathoms. The light-house is without the port, on the west side, near the extremity of a point of land, and contiguous to the bottom of the new mole. It is a lofty square tower; and as it stands on a high rock, and is painted white, it is visible in clear weather at a great distance. There is also a harbour light at the extremity of the new mole. There is no difficulty in entering the harbour; the ground is clean, and there is plenty of water, particularly on the side next the new mole; care, however, must be taken, in coming from the west, to give the light-house point a good offing. Moderate sized merchantmen commonly anchor inside the old mole, contiguous to the *porto franco*, or bonded warehouses, having a hawser made fast to the mole, and an anchor ahead. Men of war and the largest class of merchantmen may anchor inside the new mole, but they must not come too near the shore. Ships sometimes anchor without the harbour in from 10 to 25 fathoms, the light-house bearing N. ¾ W., distant 2 or 3 miles. The S. W. winds occasion a heavy swell but the bottom is clay and holds well. Within the town are two rather shallow basins designed for gallies and small trading vessels. There is also an arsenal.

Money. — Accounts were formerly kept at Genoa in lire of 20 soldi, each soldo containing 12 denari; and money was divided into *banco* and *fuori di banco*. But since the 1st of January, 1827, the ancient method of reckoning has ceased, and accounts are now kept in lire Italiane, divided into cents. The weight and fineness of the new coins are precisely the same as those of France: so that the par of exchange = 24·78 lire per pound sterling, if estimated in silver; and 25·20, if estimated in gold. 6 old lire di banco are equal to 5 new lire very nearly. — (*Manuel de Nelkenbrecher.*) Sales of merchandise continue, however, to be, for the most part, made in the old currency. The prices given in a subsequent part of this article are in it.

The Bank of Genoa, or of St. George, was one of the most ancient and celebrated banks of circulation and deposit in Europe. Until 1746, when the bank was pillaged by the Austrians, it was customary to make all bills of exchange drawn upon Genoa payable in *banco;* but since then they have generally been made payable in money *fuori di banco.* In 1800, when the French were besieged in Genoa by the Austrians, they took the treasure of the bank to pay their troops. The establishment has never recovered from this blow; some warehouses, and a part of the town's revenue, were assigned to it, but they yield a very poor dividend. It is no longer used as a place of deposit for money.

Weights and Measures. — The pound is of two sorts; the *peso sottile* = 4,891½ English grains, and the *peso grosso.* The latter is 10 per cent. heavier than the former: hence the cantaro of 100 lbs. peso sottile = 69·89 lbs. avoirdupois; and the cantaro of 100 lbs. peso grosso = 76·875 lbs. avoirdupois. The latter is

used for weighing bulky commodities; the former is used [illegible] r, and of all commodities of small bulk.

Corn is measured by the mina of 8 quarte or 96 gombette; 1 mina = 3⅛ Winchester bushels nearly. Salt is sold by the mondino of 8 mine.

Of liquid measure, 100 pinte = 1 barilla.
2 barilli = 1 mezzarola = 39¼ English wine gallons. The barilla of oil = 17 English gallons.

Of long measures, the palmo = 9·725 English inches. The canna is of 3 sorts: the canna piccola, used by tradesmen and manufacturers, = 9 palme, or 87·5 English inches; the canna grossa, used by merchants, = 12 palmi = 116·7 English inches; and the canna used at the Custom-house = 10 palmi = 97·25 English inches. The braccio = 2⅓ palmi.

Trade, &c. — Genoa is the *entrepôt* of a large extent of country; and her commerce, though inferior to what it once was, is very considerable, and has latterly been increasing. She is a free port; that is, a port where goods may be warehoused and exported free of duty. The exports consist partly of the raw products of the adjacent country, such as olive oil (an article of great value and importance), rice, fruits, cheese, rags, steel, argol, &c.; partly of the products of her manufacturing industry, such as silks, damasks, and velvets (for the production of which she has been long famous), thrown silk, paper, soap, works in marble, alabaster, coral, &c.; the printed cottons of Switzerland, and the other products of that country and of the western parts of Lombardy, intended for the south of Europe and the Levant; and partly of the various foreign products brought by sea, and placed in *porto franco*. The imports principally consist of cotton and woollen stuffs; cotton wool, mostly from Egypt; corn from the Black Sea, Sicily, and Barbary; sugar, salted fish, spices, coffee, cochineal, indigo, hides, iron, and naval stores from the Baltic; hardware and tin plates from England; wool, tobacco, lead (principally from Spain), wax, &c. Corn, barilla, Gallipoli oil, cotton, valonia, sponge, galls, and other products of the countries adjoining the Black Sea, Sicily, the Levant, &c., may in general be had here, though not in so great abundance as at Leghorn. The various duties and Custom-house fees formerly charged on the transit of goods through Genoa and the Sardinian territories have recently been abolished. This will have a very beneficial influence on the trade of this port, particularly as regards the importation of raw cotton for Switzerland and Milan, as well as of the different descriptions of colonial produce.

Statement of the Principal Articles of Raw Produce exported from Genoa, with their Prices there on the 1st of January, 1833, in *Porto franco* (Bond), in Italian Money, Weights, and Measures, and free on Board in English Money, Weights, and Measures. — (From the *Circular of Grants, Balfour, and Co.*)

Exports.	Genoa Rates in Porto franco.			Price in English Money, and Weights, free on board.				Exports.	Genoa Rates in Porto franco.			Price in English Money, and Weights, free on board.			
				Lbs.	*L.*	*s.*	*d.*					*L.*	*s.*	*d.*	
Almonds, sweet, Sicily, liv.	64	to	0	100	3	8	10	cwt.	Oil, Genoa, superfine liv.	104	to 106	brl.	53	19	2	tun of
Argol, white - - —	46	—	48	150	1	15	2	—	fine - - —	88	— 90	—	45	16	3	236
red garbled - —	42	—	44	—	1	12	3	—	middling - - —	76	— 80	—	40	14	5	O. gal.
Barilla, Sicilian - —	14	—	0	—	0	10	4	—	Gallipoli, Sicily, and Levant - - —	61	— 62	—	29	7	9	—
Brimstone, rough - —	7½	—	8	—	5	7	7	ton	Opium - - —	15	— 16	lb.	0	14	3	lb.
roll - - —	13	—	14	—	9	8	3	—	Paper, Floretta, 14 lbs. —	7	— 7½	p. rm.	0	4	11	rm. of
Cantharides - - —	7	—	7½	1	0	6	10	lb.	Media, 14 lbs. - —	5	— 5⅓	of 475	0	3	6	475
Cheese, Parmesan - —	150	—	160	150	0	0	11·8	—	Almasso, 16 lbs. - —	8½	— 9⅓	sheets	0	6	3	sheets
Cotton, Makò - - —	105	—	109	—	0	0	7·9	—	Quicksilver - sols	42	— 0	lb.	0	2	0	lb.
Cream of tartar - sols	10	—	11	1	2	19	7	cwt.	Rice, Lombardy - liv.	20	— 21	150lb.	0	15	11	cwt.
Essence of bergamot liv.	8½	—	9	—	0	8	9	lb.	Safflower, new - sols	36	— 0	lb.	0	1	2	lb.
lemon - - —	7	—	0	—	0	6	10	—	Saffron - - liv.	35	— 36	—	1	12	4	—
orange - - —	4¾	—	5	—	0	4	11	—	Soap, white - - —	46	— 48	150lb.	1	15	0	cwt.
Galls, Turkey, blue sols	25	—	26	—	6	13	1	cwt.	marbled - - —	44	— 46	—	1	13	7	—
in sorts - - —	11	—	12	—	3	1	5	—	Shumac, Sicily - —	22	— 0	225lb.	0	10	9	—
Gum Arabic, picked - —	34	—	44	—	11	3	8	—	Sponges, fine and super. —	4	— 6	lb.	0	5	4	lb.
in sorts - - —	16	—	20	—	5	1	8	—	Steel, Milan, No. 00. —	29	— 31	150lb.	1	2	6	cwt.
Hemp, Bologna, dressed, 1st - - liv.	75	—	76	150	54	1	7	ton	No. 0. —	29	— 31	—	1	2	6	—
2d - - - —	70	—	71	—	50	10	5	—	No. 1 and 2. —	27	— 0	—	0	19	7	—
garden - - —	48	—	0	—	34	3	1	—	Tallow - - —	50	— 52	—	1	15	7	—
cordage, 1st - —	38	—	40	—	28	9	3	—	Valonia - - —	10	— 18	—	0	12	9	—
2d - - - —	36	—	37	—	26	6	7	—								
Piedmont, 1st - —	36	—	37	—	26	6	7	—	Grain, wheat, Black Sea, soft - - —	20	— 23	mina	2	1	7	quart
Liquorice paste, Calabria—	56	—	57	100	2	18	10	cwt.	ditto, hard - —	22½	— 23	—	2	1	7	Imp.
Sicilian - - —	44	—	45	—	2	3	5	—	Beans, Alexandria, new - - —	13	— 0	—	1	3	6	—
Linseed - - —	14	—	0	150	1	19	2	qr.	old - - —	11	— 0	—	0	19	10	—
Madder roots, Cyprus, and Smyrna - sols	7½	—	8	1	2	1	2	cwt.	Corn, Indian - - —	14	— 18	—	1	12	6	—
Tripoli - - —	7½	—	8	—	2	1	2	—								
Manna in flakes - —	60	—	80	—	0	3	8	lb.								
in sorts, Geraci - —	29	—	30	—	0	1	4	—								

Statement of the Quantities of some of the Principal Articles of Colonial and other Raw Produce imported into Genoa in 1830, 1831, 1832, with the Stocks on Hand on the 1st of January, 1832 and 1833.

Articles imported.	1830.	1831.	1832.	Stock, 1st Jan. 1832.	Stock, 1st Jan. 1833.	Articles imported.	1830.	1831.	1832.	Stock, 1st Jan. 1832.	Stock, 1st Jan. 1833.
Cocoa, all quals. bgs.	13,500	8,500	5,200	3,400	1,550	Spices, Pepper lbs.	2,050,000	900,000	1,500,000	- -	35,000
Coffee, ditto tons	1,996	1,330	2,930	110	680	Pimento - —	132,000	145,000	150,000	- -	95,000
Cotton, ditto bales	8,370	13,700	10,600	4,150	1,650	Cassia lignea, ca.	790	550	820	- -	40
Cochineal - lbs.	15,200	29,000	75,000	35,000	64,000	ditto - mats	1,100				
Fish, Codfish, quint.	36,900	31,800	54,000	750		Sugars, loaves, casks	310	175	85	30	45
Stockfish —	20,800	15,900	22,000	1,800		crushed —	2,780	2,080	2,850	150	310
Pilchards, hhds.	2,550	3,050	5,200			Havannah, bxs.	8,200	13,500	15,600	2,150	4,500
Herrings barls.	5,100	450	690			Brazil cases	6,110	6,100	4,800	880	1,040
Hides, dried and dry salted - numb.	118,400	62,500	86,400	5,000	3,200	ditto - bags	4,900	6,400	11,300	2,100	2,500
Indigo, Bengal, case	570	660	640	390	180	E. India —	2,500	12,200	24,000		
Spanish serons	545	275	762	1,070	1,120	Porto Rico, csks.	4,570	2,400	4,500	490	470
Lead - pigs	24,500	23,500	21,500	16,200	17,000	Tin plates boxes	4,950	2,800	6,500	850	1,700

Tares. — Those of usage are, — on cotton, fish, tallow, and valonea, 4 per cent.; hemp, 1 per cent.; wood, 116 for 100 lbs.; almonds, wax, and galls, 104 for 100 lbs.; ginger, 112 for 100 lbs.; sugar in loaves, 2 per cent.; raw silk, 1 ounce per lb. Alum, argol, anchovies, barilla, brandy, flour, iron, lead, saltpetre, figs, hides, pepper, juniper berries, pumice stone, rags, raisins, rice, cream of tartar, essences, quicksilver, shumac, steel, and soap, have no tare; for all other articles sold by weight, 106 lbs. are given for every 100 lbs.

The loss of weight on importations from the place of growth, partly arising from difference of tare, varies as follows: —

	Per cent.	
Sugar in chests from Rio de Janeiro, loses	1 to 3	taking 3½
bags, ditto	3 — 4	arrobas as
chests from Pernambuco	4 — 6	equal to 1
chests from Bahia	6 — 10	cwt. Eng.
boxes from Havannah and Cuba	4 — 6	taking 4½
muscovado in casks from Cuba and Porto Rico	12 — 15	ditto.

Importations from other quarters where the tares allowed are on a par with those of Genoa, generally render full weight; Havannah box sugars from the United States render 1 to 2 per cent. more than full weight.

Navigation, &c. — In 1831, there entered the different ports of the Sardinian states, 3,704 ships; but the greater number of these must have been small coasting vessels, as their aggregate burden did not exceed 331,217 tons. If we deduct about a third for Sardinia, by far the largest proportion of the remainder must have entered and cleared out at Genoa. — (*Archives du Commerce*, tom. ii. p. 39.) — In 1832, 84 British ships, of the burden of 13,478 tons, arrived at Genoa.* — (*Parl. Paper*, No. 756. Sess. 1833.)

GENTIAN (Ger. *Enzian;* Fr. *Gentiane;* It. *Genziana;* Sp. *Jenciana;* Rus. *Enzian;* Lat. *Gentiana*), the roots of two alpine plants, *Gentiana lutea* and *Gentiana purpurea*, found growing in Switzerland and Austria, the Apennines, the Pyrenees, and in North America. Those brought to this country come from Germany. They are in pieces of various lengths and thickness, twisted, wrinkled on the outside, and covered with a brownish grey cuticle. They have no particular odour; and the taste is intensely bitter, without being nauseous. — (*Thomson's Dispensatory.*)

GHEE. See Butter.

GIBRALTAR, a famous fortress near the southernmost extremity of Spain, and contiguous to the narrowest part of the strait, to which it gives its name, joining the Atlantic and Mediterranean, in lat. 36° 6′ 30″ N., lon. 5° 21′ 12″ W. It is situated on the west side of a rocky mountain or promontory, the *Mons Calpe* of the ancients, projecting into the sea, in a southerly direction, about 3 miles, being from ½ to ¾ of a mile in width. The southernmost extremity of the rock is called Europa Point. Its northern side, fronting the isthmus which connects it with Spain, is almost perpendicular, and wholly inaccessible; the east and south sides are so rugged and precipitous, as to render any attack upon them, even if they were not fortified, next to impossible; so that it is only on the west side, fronting the bay, where the rock declines to the sea and the town is built, that it can be attacked with the least chance of success. Here, however, the strength of the fortifications, and the magnitude of the batteries, are such, that the fortress seems to be impregnable, even though attacked by an enemy having the command of the sea. It was taken by the English in 1704, but the fortifications were then very inferior to what they are at present. Towards the end of the American war, it was attacked by a most formidable armament fitted out jointly by Spain and France; but the strength of the place, and the bravery of the garrison, defeated all the efforts of the combined powers. Population about 17,000, exclusive of the troops, which usually amount, in time of peace, to from 3,000 to 4,000.

The bay of Gibraltar is spacious; and, being protected from all the more dangerous winds, affords a convenient station for ships. Two moles have been constructed at a vast expense, for the protection of the shipping. The old mole projects from the north end of the town, N. W. by N., 1,100 feet into the sea: the new mole is 1½ mile more to the south, extending outwards about 700 feet; it has an elbow formed by the shore, and in winter large vessels anchor inside; the farthest out in from 5 to 6 fathoms. The plan on the opposite page gives a better idea of the position of Gibraltar, as well as of the Straits, than could be derived from any description. It is taken from Captain Smyth's beautiful chart of the Mediterranean.

Trade, Political Importance, &c. — Gibraltar is of considerable consequence as a commercial station. Being a free port, subject to no duties and few restrictions, it is a convenient *entrepôt* for the English and other foreign goods destined for the supply of the contiguous Spanish and African provinces. In this respect, however, it has greatly fallen off. This has been owing to a variety of causes: partly, and principally perhaps, to the insecurity and apprehension occasioned by the fear of pestilential diseases, the place never having recovered from the effects of the dreadful contagion by which it was visited in 1804; partly to large quantities of those goods being now kept at Malta and Genoa, that were formerly kept at Gibraltar; and, more recently, to the making of Cadiz a free port. This measure has, however, been revoked; but, notwithstanding, it is not at all probable that Gibraltar will ever again be of much importance as a trading station. In 1831, the *declared* value of the various articles of British produce and manufacture exported to Gibraltar, was 367,285*l.*; the *official* value of the foreign and colonial products exported to it during the same year being 121,342*l.* The trade with Gibraltar, or any British dependency in the Mediterranean, may be regulated by an order in council; and any goods imported or exported contrary to such order shall be forfeited, together with the ship importing or exporting the same. — (6 *Geo.* 4. c. 114. § 73.)

* We are not sure that this is the correct reading, the title to the account being drawn up in so slovenly a way, that it is not easy to say whether it means that 84 ships arrived and 84 departed, or that 42 arrived and 42 departed

References to Plan. — A, point and light-house of Tariffa, in lat. 36° 0′ 30″ N., lon. 5° 35′ 15″ W. The light-house was erected in 1813, and the light revolves. B, Cabrita Point. C, Europa Point, the extremity of the rock of Gibraltar. D, town and fortress of Ceuta, on the African coast. E, Little Ceuta Bay. F, Point Leona. G, Point Cires. The soundings and the direction of the currents are marked in the chart. Variation in the Straits, 22° 31′.

The real value of Gibraltar to Great Britain consists in its importance in a military and naval point of view; in its being, in fact, the key of the Mediterranean; and in its affording a convenient and secure station for the outfit, refreshment, repair, and accommodation of our ships of war and merchantmen. The revenue collected in the town amounts to from 30,000*l.* to 40,000*l.*, which is about sufficient to defray the public civil expenditure of the place. The expense annually incurred in Great Britain on account of the garrison, in time of peace, amounts to about 200,000*l.* — a small sum compared with the important political and commercial advantages it is the means of securing.

Money. — The effective or hard dollar = 4*s.* 4*d.*; the current dollar being estimated at $\frac{2}{3}$ hard dollars = 2*s.* $10\frac{2}{3}$*d.* Reals and quartos of both hard and current dollars are the same, being, the former = $4\frac{1}{3}$*d.*, and the latter = $1\frac{1}{15}$*d.*

Accounts are kept in current dollars (pesos), divided into 8 reals of 16 quartos each; 12 reals currency

make a coh or hard dollar, by which goods are bought and sold; and 3 of these reals are considered equal to 5 Spanish reals vellon.

Gibraltar draws on London in effective dollars of 12 reals, and London on Gibraltar in current dollars of 8 reals.

The exchange of Gibraltar on Cadiz, and other cities of Spain, is in hard dollars at a percentage, which varies considerably, and mostly in favour of Gibraltar.

Weights and Measures are those of England, excepting the arroba = 25 lbs. English: grain is sold by the fanega, 5 of which make 1 Winchester quarter; wine is sold by the gallon, 100 of which are equal to 109 4 English wine gallons. — (See *Papers laid before Finance Committee; Edinburgh Gazetteer; Inglis's Spain in* 1830, vol. ii. p. 169. &c.)

GILD, or GUILD, a company of merchants or manufacturers, whence the halls of such companies are denominated Gild or Guild Halls.

GILL, a measure of capacity. See Weights and Measures.

GIN. English geneva, or gin, is made of spirit obtained from oats, barley, or malt, rectified, or redistilled, with the addition of juniper berries, oil of turpentine, &c. All spirits manufactured in England, and most of the Scotch and Irish spirits imported into England, are subjected to the process of rectification. English gin is said to be one of the most wholesome spirits. — (See Spirits.)

GINGER (Ger. *Ingwer*; Du. *Gember*; Fr. *Gingembre*; It. *Zenzero*; Sp. *Jenjibre, Ajengibre*; Rus. *Inbir*; Lat. *Zingiber*; Pers. *Zungebeel*; Arab. *Zingebeel*), the roots of a plant (*Amomum Zingiber*), a native of the East Indies and China, but which was early carried to and succeeds very well in the West Indies. After the roots are dug, the best are selected, scraped, washed, and dried in the sun with great care. This is called *white ginger*; while the inferior roots, which are scalded in boiling water before being dried, are denominated *black ginger*. Preserved ginger is made by scalding the green roots, or the roots taken up when they are young and full of sap, till they are tender; then peeling them in cold water, and putting them into a thin syrup, from which they are shifted into the jars in which they come to us, and a rich syrup poured over them. Dried ginger has a pungent aromatic odour, and a hot, biting taste. It is imported in bags, each containing about a cwt. The white brings the highest price, being more pungent and better flavoured. The external characters of goodness in both sorts of dried ginger are, soundness, or the being free from worm holes, heaviness, and firmness; the pieces that are small, light, and soft, or very friable and fibrous, should be rejected. The best preserved ginger is nearly translucent; it should be chosen of a bright yellow colour; rejecting that which is dark-coloured, fibrous, or stringy. — (*Milburn's Orient. Commerce; Thomson's Dispensatory.*)

* The consumption of ginger is but trifling, not exceeding 5,000 cwt. a year. This is principally to be ascribed to the oppressive duties with which it is burdened, they being no less than 2*l.* 13*s.* a cwt. on foreign ginger, and 11*s.* on that brought from a British possession. The revenue derived from it is about 3,250*l.* a year; a sum which might be doubled by reducing the duties on all descriptions of ginger to 7*s.* a cwt. Of 5,315 cwt. of ginger imported in 1831, 3,551 came from the British West Indies, 819 from the East India Company's possessions and Ceylon, 897 from the Netherlands, and 106 from Western Africa.

GINSENG (Du. *Ginseng, Ginsem*; Fr. *Ginseng*; Ger. *Kraftwerzel, Ginseng*; It. *Ginseng*; Sp. *Jinseng*; Chin. *Yansam*; Tart. *Orhota*), the root of a small plant (*Panax quinquefolium* Lin.), growing in China, Tartary, and several parts of North America. The latter is what we generally see in England, and is an article of trade to China, which is its only market. Large quantities were formerly exported from this country; but it is now carried direct to China by the Americans. It is sometimes exported crude, and sometimes cured or clarified. Within these few years, it has been discovered in the Himalaya mountains, and small quantities have been thence sent to Canton; but the speculation has not succeeded. It is only about 30 years since it began to be sent from America to China. Previously to the present century, the Chinese drew their supplies from the wilds of Tartary, and the root brought an exorbitant price. Crude ginseng now sells in the Canton market at from 60 to 70 dollars per picul, and prepared at from 70 to 80 dollars. In 1832, there were sent from the United States to China, 407,067 lbs. of ginseng, valued at 99,303 dollars. — (*Private information.*)

GLASS (Ger. and Du. *Glas*; Fr. *Vitre, Verre*; It. *Vetro*; Sp. *Vidrio*; Rus. *Steklo*; Lat. *Vitrum*), a transparent, brittle, factitious body. It is formed by mixing together some sort of siliceous earth, as fine sand, or pounded flint, with an alkali, such as soda, potash, or pearlash, and subjecting them to a strong heat. By this means they are melted into a transparent, soft, tenacious mass, that may, when hot, be formed into thin plates, bent and shaped in every possible way. When cool, it becomes brittle, and is denominated glass. Litharge, minium, borax, the black oxide of manganese, &c. are sometimes used in the manufacture of glass, according to the purposes to which it is to be applied.

The kinds of glass, and their ingredients, are stated by Dr. Ure as follows: —

"There are 5 distinct kinds of glass at present manufactured: — 1. Flint glass, or glass of lead; 2. Plate glass, or glass of pure soda; 3. Crown glass, the best window glass; 4. Broad glass, a coarse window glass; 5. Bottle, or coarse green glass.

"1. *Flint Glass*, so named because the siliceous ingredient was originally employed in the form of ground flints. It is now made of the following composition: —

Purified Lynn sand	- -	100 parts.
Litharge, or red lead	- -	60 —
Purified pearlash	- -	30 —

"To correct the green colour derived from combustible matter, or oxide of iron, a little black oxide of manganese is added, and sometimes nitre and arsenic. The fusion is accomplished usually in about 30 hours.

"2. *Plate Glass.* — Good carbonate of soda, procured by decomposing common salt with pearlash, is employed as the flux. The proportion of the materials is —

Pure sand	- -	43·0
Dry subcarbonate of soda	-	25·5
Pure quicklime	- -	4·0
Nitre	- - -	1·5
Broken plate glass	- -	25·0 — 100·0.

About 70 parts of good plate glass may be run off from these materials.

"3. *Crown, or fine Window Glass.* — This is made of sand vitrified by the impure barilla manufactured by incineration of sea weed on the Scotch and Irish shores. The most approved composition is —

	By Measure.	By Weight.
Fine sand purified	- 5	- 200
Best kelp ground	- 11	- 330

"4. *Broad Glass.* — This is made of a mixture of soap-boilers' waste, kelp, and sand. The first ingredient consists of lime used for rendering the alkali of the soap-boiler caustic, the insoluble matter of his kelp or barilla, and a quantity of salt and water, all in a pasty state. The proportions necessarily vary. 2 of the waste, 1 of kelp, and 1 of sand, form a pretty good broad glass. They are mixed together, dried, and fritted.

"5. *Bottle Glass* is the coarsest kind. It is made of soapers' waste and river sand, in proportions which practice must determine according to the quantity of the waste; some soap-boilers extracting more saline matter, and others less, from their kelps. Common sand and lime, with a little common clay and sea salt, form a cheap mixture for bottle glass."

1. *Historical Notices with respect to Glass.* — The manufacture of glass is one of the very highest beauty and utility. It is most probable that we are indebted for this wonderful art, as we are for the gift of letters, to the Phœnicians. According to Pliny (*Hist. Nat.* lib. xxxvi. c. 26.), glass had been made for many ages, of sand found near the mouth of the small river Belus in Phœnicia. "The report," says he, "is, that the crew of a merchant ship laden with nitre (fossil alkali) having used some pieces of it to support the kettles placed on the fires they had made on the sand, were surprised to see pieces formed of a translucent substance, or glass. This was a sufficient hint for the manufacture. Ingenuity (*astuta et ingeniosa solertia*) was immediately at work, to improve the process thus happily suggested. Hence the magnetical stone came to be added, from an idea that it contained not only iron, but glass. They also used clear pebbles, shells, and fossil sand. Indian glass is said to be formed of native crystal, and is on that account superior to every other.* Phœnician glass is prepared with light dry wood, to which copper and nitre are added, the last being principally brought from Ophir. It is occasionally tinged with different colours. Sometimes it is brought to the desired shape by being blown, sometimes by being ground on a lathe, and sometimes it is embossed like silver." Sidon, he adds, is famous for this manufacture. It was there that mirrors were first invented. In Pliny's time, glass was made in Italy, of fine sand on the shore between Cumæ and the Lucrine bay.

Glass was manufactured at Rome into various articles of convenience and ornament. Pliny mentions that Nero gave 6,000 sesterces (50,000*l.* according to the ordinary method of reckoning) for two glass cups, each having two handles! These, however, must have been of an immense size and of exquisite workmanship; for glass was then in common use for drinking vessels, and was used even in the form of bottles in which to keep wine. — (*Mart. Epig.* lib. ii. 22. 40., and lib. iv. 86.)

There is no authentic evidence of glass being used in windows previously to the third or fourth century; and then, and for long after, it was used only in churches and other public buildings. In this country, even so late as the latter part of the sixteenth century, glass was very rarely met with. In a survey of Alnwick Castle, made in 1573, it is stated — "And, because throwe extreme winds, the glasse of the windowes of this and other my lord's castles and houses here in the country dooth decay and waste, yt were good the whole leights of everie windowe, at the departure of his lordshippe from lyinge at any of his said castels, and houses, and dowring the tyme of his lordship's absence, or others lyinge in them, were taken doune and lade up in safety: And at sooche time as ather his lordshippe or anie other sholde lye at anie of the said places, the same might then be set uppe of newe, with smale charges, whereas now the decaye thereof shall be verie costlie and chargeable to be repayred." — (*North. Housh. Book*, xvii.) Sir F. M. Eden thinks it probable that glass windows were not introduced into farmhouses in England much before the reign of James I. They are mentioned in a lease in 1615, in a parish in Suffolk. In Scotland, however, as late as 1661, the windows of ordinary country houses were not glazed, and only the upper parts of even those in the king's palaces had glass; the lower ones having two wooden shutters, to open at pleasure, and admit the fresh air. From a passage in Harrison's *Description of England*, it may be inferred that glass was introduced into country houses in the reign of Henry VIII. He says, — "Of old time," (meaning, probably, the beginning of the century,) "our countrie houses instead of glasse did use much lattise, and that made either of wicker or fine rifts of oke in checkerwise. I read also that some of the better sort, in and before the time of the Saxons, did make panels of horne instead of glasse, and fix them in wooden calmes (casements); but as horne in windowes is now (1584) quite laid downe in everie place, so our lattises are also growne into disuse, because glasse is

* If this be a correct description of the glass of India in the age of Pliny, it has since fallen off very much; Indian glass being now about the very worst that is made. At present, the Hindoos manufacture it of fragments of broken glass, quartz sand, and impure soda,—an article found native in many parts of India, particularly in the south. The furnaces are so bad that they cannot melt our common bottle glass. — (*Hamilton's Mysore*, vol. iii. p. 370.) The glass of China is much better than that of India, though still very inferior to that of Europe.

come to be so plentiful, and within verie little so good, cheape, if not better than the other." Glass is now introduced into the windows of almost every cottage of Great Britain; and in this cold, damp climate, it ought rather to be considered as a necessary of life, than as the most elegant and useful of conveniences. What Dr. Johnson has said as to glass deserves to be quoted. — "By some fortuitous liquefaction was mankind taught to produce a body at once in a high degree solid and transparent, which might admit the light of the sun, and exclude the violence of the wind; which might extend the sight of the philosopher to new ranges of existence, and charm him at one time with the unbounded extent of the material creation, and at another with the endless subordination of animal life; and, what is yet of more importance, might supply the decays of nature, and succour old age with subsidiary sight. Thus was the first artificer in glass employed, though without his own knowledge or expectation. He was facilitating and prolonging the enjoyment of light, enlarging the avenues of science, and conferring the highest and most lasting pleasures; he was enabling the student to contemplate nature, and the beauty to behold herself." — (*Rambler*, No. 9.)

Venice, for a long time, excelled all Europe in the manufacture of glass, but was subsequently rivalled by France. The manufacture was early introduced into England; but it was not carried on to any extent previously to the 16th century. The first plates for looking-glasses and coach windows were made in 1673, at Lambeth, by Venetian artists under the protection of the Duke of Buckingham. The British Plate Company was incorporated in 1773, when it erected its extensive works at Ravenhead, near St. Helen's, in Lancashire. The manufacture was at first conducted by workmen from France, whence we had previously brought all our plate glass. But that which is now made at Ravenhead, at Liverpool, and London, is equal or superior to any imported from the Continent.

It is difficult to form any precise estimate of the value of the glass annually produced in Great Britain. We believe, however, that it cannot amount to less than 2,000,000*l.*; and that the workmen employed in the different departments of the manufacture exceed 50,000.

2. *Duties on Glass.*—The glass manufacture is subjected to the excise; and it is difficult to say whether the regulations under which the duty is charged, or the duty itself, be most oppressive. The wealth and population of the country have more than doubled since 1790; and we are well convinced that, had the glass manufacture not been interfered with, it would have increased in a still greater ratio. But instead of advancing, it has positively declined; and is actually less at this moment than it was 40 years ago! So extraordinary a result is wholly to be ascribed to the exorbitant excess to which the duties have been carried. Instead, however, of submitting any remarks of our own in vindication of this view of the subject, we shall take the liberty of laying before the reader the following extract from the speech delivered by Mr. Poulett Thomson in the House of Commons, 26th of March, 1830, — a speech which combines, in a degree rarely exhibited, a familiar knowledge of practical details and of sound scientific principles. That the administration of which the Right Hon. Gentleman is a distinguished member, has not yet proposed the repeal of this oppressive tax, is not, we are sure, owing to his colleagues differing in opinion with him as to its impolicy, but is wholly to be ascribed to other causes — to the *res dura et regni novitas*— the difficulty of finding a substitute, and the urgency of the claims for relief advanced by others.

"The gross duty on glass for the year 1828 amounted, in Great Britain (exclusive of Ireland), to 930,103*l.*, and the nett duty to 586,770*l.*; the difference being, either returned, or sacrificed in the collection. And here I would entreat the House to remark, that for the sake of such a sum as 500,000*l.*, a charge of collection on nearly 1,000,000*l.* is incurred. The duty is 6*d.* per pound on flint, but equal to 7*d.* from the mode of its collection; in other words, upwards of 100 per cent.; the glass, when made, selling for 1*s.* to 1*s.* 2*d.* This duty, too, is very much reduced from what it was; and here the House will observe an admirable illustration of the effect of heavy duties on consumption, and consequently on revenue. In 1794, the last year in which the duty was 1*l.* 1*s.* 5*d.* per cwt. for plate and flint, and other kinds in proportion, the quantities paying duty were as follow:—

Flint and Plate.	Broad.	Crown.	Bottle.
Cwt. 67,615	20,607	83,940	227,476

The duties were successively raised to 2*l.* 9*s.*; and at last, by Mr. Vansittart, in pursuit of his favourite theory, in 1813, to 3*l.* 18*s.*! and let us see the result. In 1816, the consumption had declined to

Plate.	Broad.	Crown.	Bottle.
Cwt. 29,600	6,140	55,502	155,595

In 1825, government saw a part of their error, and reduced the duty by one half, still leaving it too high; but mark the effect. In 1828, the last year for which I have the returns, the consumption rose to

Plate.	Broad.	Crown.	Bottle.
Cwt. 68,134	6,956	90,603	224,864

Still, however, only about the same as in 1794. It appears, therefore, that notwithstanding the increase of population and general luxury, the consumption has been kept down by your improvident system, and is actually now less than it was 35 years ago. But here, again, the duty is far from being the greatest evil. Let any one turn to the act: he will find 52 clauses of regulations, penalties, and prohibitions; all vexatious to the manufacturer, and all to be paid for by the public. I have said that the duty on flint glass is 6*d.* per pound; the glass, when made, selling for 1*s.* But the excise officer has the power of imposing the duty, either when the glass is in the pot, 3*d.* per pound, or after it has been turned out, at 6*d.*; the glass, when turned out, gaining 100 per cent. It is found more advantageous to the revenue to exact the duty on glass in the pot, at 3*d.*; and in this way the duty is raised to 7*d.* Nor is this all. The manufacturer is driven by this method into the necessity of producing frequently an article which he does not want. He makes the fine glass from the middle; the coarser from the top and bottom of the pot. He frequently wants only fine glass, and he would re-melt the flux of the coarser parts if he had not paid duty upon it; but of course he is unable to do so. All the glass manufacturers whom I have consulted, agree that the whole cost of the excise to the consumer, besides the duty, which is 100 per cent. is 25 per cent.; and besides, there is great inconvenience and oppression from the frauds that are daily taking place. And observe the effect which is produced upon your trade, both at home and abroad.

"A manufacturer who has lately travelled through France, the Netherlands, and Germany, has assured me that our manufacturers could advantageously cope with foreigners, were it not for the duties

imposed by the government. Labour is as cheap in this country, our ingenuity is greater, and the materials are also as cheap; it is, then, the vexatious onerous duty alone that gives the foreign manufacturer the advantage over the English. But the effect of the duty goes further: it operates to prevent all improvement in the article; because, to improve, experiments must be made; but a man with a duty of 125 per cent. over his head is not very likely to make many experiments. This argument applies especially with respect to colours. A manufacturer has assured me that he has never been able to produce a beautiful red, because the duties have prevented his trying the necessary experiments, without his incurring a great risk or loss. Thus a miserable duty, amounting to only 500,000*l.*, and upon which a charge of 10 per cent. is made for collecting, is allowed to impede our native industry, and to put a stop to all improvement, and be a source of endless oppression and fraud. I really cannot believe that the legislature will resist such an appeal as the manufacturers of this article could make to them, or refuse to relieve them from the gratuitous injury which is inflicted on them."

The following accounts show, better than any reasoning, the injurious influence of the existing duties. — Instead of increasing, as it certainly would have done, had it not been crushed by exorbitant duties, the glass manufacture has gone on progressively declining from the period when Mr. Thomson made the excellent speech now quoted, down to the present day. The falling off in the bottle glass department is particularly striking. The duties being so very high, the necessity of giving drawbacks on the glass exported opens a wide door to every species of fraud. If the duty must be kept up, it ought, at all events, to be reduced a half, and simplified as much as possible. This would materially relieve the manufacture; and would not, we feel confident, occasion the smallest loss of revenue. It is monstrous, indeed, to see destructive duties tenaciously defended on the stale and stupid pretence of their being necessary to the preservation of the revenue, when, in point of fact, there is not a single instance in which they have been reduced, that the revenue has not increased.

I. Account of the Number of Glass-houses respectively employed in the Manufacture of Broad, Crown, Flint, Plate, and common Bottle Glass, in each Year, from 1829 to 1832 inclusive, in the United Kingdom.

Years.	Broad Glass.	Crown.	Flint.	Plate.	Common Bottle Glass.
1829	2	28	54	3	42
1830	2	25	54	2	39
1831	2	24	55	2	36
1832	2	28	59	2	39

II. Account of the Quantities of Flint, Plate, Broad, Crown, and Bottle Glass, charged with the Duty in each Year, from 1829 to 1832, respectively, with the Rates of Excise Duty and Revenue accruing thereon.

Years.	Flint Glass.	Rate of Duty	Plate.	Rate of Duty	Broad.	Rate of Duty	Crown.	Rate of Duty	Bottle Glass.	Rate of Duty	Gross Duty.	Drawback.	Revenue.
	Cwt.	*s.*	*Cwt.*	*s.*	*Cwt.*	*s.*	*Cwt.*	*s. d.*	*Cwt.*	*s.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
1829	79,250	56	14,484	60	6,864	30	114,862	73 6	382,894	7	831,809 18 10	224,794 17 2	607,015 1 8
1830	72,942		13,301		4,845		96,565		340,793		725,597 1 3	182,678 4 8	542,918 16 7
1831	75,619		15,067		5,915		100,086		293,868		736,512 0 1	204,152 2 0	532,359 18 1
1832	75,771		12,270		5,304		103,902		316,365		748,097 3 11	189,565 7 8	558,531 16 3

III. Account of the Quantities of British-made Glass retained for Home Consumption, with the Imports of Foreign Glass entered for Home Consumption; the Amount of Customs Duty on the latter, and the Nett Revenue arising from British Glass, in each Year, from 1829 to 1832, both inclusive.

	British.					Foreign.				
Years.	Flint.	Plate.	Broad.	Crown.	Bottle.	Plate.	Crown.	Bottle.	Revenue on Foreign Glass.	Nett Revenue on British Glass.
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Sq. Feet.*	*Cwt.*	*Quarts.*	*L.*	*L. s. d.*
1829	49,004	14,299	6,864	97,134	209,862	1,763	152	764,778	16,708	610,307 1 8
1830	48,063	13,057	4,845	84,178	165,549	1,436	104	743,768	16,411	526,507 16 7
1831	48,887	14,796	5,915	83,527	143,989	863	104	693,454	15,841	516,518 18 1
1832	49,552	11,990	5,304	90,253	151,705	717	25	645,526	14,532	543,999 16 3

(Compiled from the *Parl. Papers*, Nos. 364. and 747. Sess. 1833.)

3. *Regulations as to the Manufacture of Glass.* — The excise regulations with respect to glass are numerous, complex, and enforced under heavy penalties. We can notice only a few of the leading regulations. All glass makers must take out a licence, renewable annually, which costs 20*l.* for each glass-house; and they must make entry at the next excise office of all workhouses, furnaces, pots, pot-chambers, annealing arches, warehouses, &c., under a penalty of 200*l.* No pot is to be charged without giving *twelve* hours' previous notice, in writing, of the time of beginning, the weight of metal, and species of glass, on pain of 50*l.* If, after notice given and a gauge taken by the officer, any material or preparation be put into any pot, a penalty of 50*l.* is incurred; but if the manufacture be of flint glass, the penalty is 200*l.* Manufacturers of flint glass are allowed 3 hours for beginning to charge their pots after the time specified in their notices. Entries of the quantities made are to be made in writing, upon oath, and the duties paid monthly in London, and every 6 weeks in the country. Duty upon materials lost or spoiled is allowed for, upon due proof being made of the fact. Officers at all times, by day and night, are to have access to workhouses, &c., to gauge the materials, and mark the pots as they think fit; any attempt to obstruct the officers so employed incurs a penalty of 200*l.*: the counterfeiting, altering, or effacing any marks made by the officers is visited with a penalty of 500*l.*; a penalty of 200*l.* being also imposed upon any one procuring or conniving at its being done. Officers are entitled to take samples, not exceeding 4 ounces in all, out of each pot; paying for them, if demanded, ½*d.* an ounce. The whole of the metal intended to be manufactured into common glass bottles is to be worked within 16 hours next after the same shall be begun; and when the bottles are deposited in the annealing arches, manufacturers are again, in the presence of the officer, to charge each pot with fresh materials, other than broken glass, not less than 50 lbs. weight; and declarations are to be delivered, in writing, of the number of such bottles, on penalty of 100*l.*

Manufacturers of glass bottles are to affix proper hooks or staples, with scales and weights, to be approved of, in writing, by the surveyor or supervisor, under a penalty of 50*l.*; the using any false or insufficient scales or weights in the weighing of bottles, incurs a penalty of 100*l.*

Notices are not to be given for drawing out bottles, but only between 8 o'clock in the morning and 6 in the afternoon.

No crown glass, or German sheet glass, or broad or spread window glass, shall be made of greater thickness, excluding the centre or bullion and the selvage or rim thereof, than one ninth part of an inch, unless notice shall have been given that it was intended to manufacture the metal into plate glass, and the duty on plate glass be paid thereon. — (See the Statutes in *Burn's Justice*, Marriott's ed. vol. ii. pp. 186–228.)

For an account of the duties on foreign glass imported into Great Britain, and the drawback, &c. allowed upon the exportation of British-made glass, see TARIFF.

4. *Exportation of Glass.* — It is enacted by stat. 6 Geo. 4. c. 117., that no flint glass shall be entitled to the drawback on exportation, if it be not of the specific gravity of 3,000, that of water being 1,000; and if it be not worth at least 11*d.* a pound for home consumption at the time when it is entered for exportation. All flint glass entered for exportation, of less specific gravity than 3,000, or of less value than 11*d.* per pound, is forfeited, and may be seized by any officer of excise. — Sects. 24, 25.

The exporter of glass is to make oath that he believes it to be entirely of British manufacture, and that the duties imposed upon it by law have been paid. Persons wilfully taking a false oath in this matter are liable to the pains and penalties of perjury.—(55 *Geo.* 3. c. 13. sect. 3.)

Security by bond is to be given (usually for a larger sum and a greater quantity of goods than are intended to be exported), that glass, on the exportation of which a drawback is allowed, shall be shipped within 1 month after the date of such security; but if the commissioners be satisfied that the shipment of the glass within the specified time has been prevented by some unavoidable accident, they may grant further time, not exceeding 3 months, for the shipment thereof.—Sect. 7.

No drawback is to be allowed upon the exportation of used, old, or second hand glass.—Sect. 9.

By stat. 54 Geo. 3. c. 97. sect. 6. it is enacted, that no drawback shall be allowed for any regular panes, squares, or rectangular figures of spread glass or other window glass, any part of which shall consist of or include the bullion or thick centre part of the table from which such panes, squares, or rectangular figures shall have been cut or taken, or any part of the said bullion, unless no side of any such panes, &c. shall measure less than 8 inches; nor shall any drawback be allowed for any lozenges, any part whereof shall consist of or include the bullion or thick centre part of the table from which such lozenges shall have been taken, or any part of the bullion, unless no side of any such lozenge shall measure less than 8 inches; nor unless the distance between the two obtuse angles of each such lozenge shall measure 8 inches at the least; nor shall any drawback be allowed for any lozenges not containing the bullion or thick centre part of the table from which such lozenges shall have been cut or taken, or any part of the bullion, unless the distance between the two obtuse angles of every such lozenge shall measure 5½ inches at least; and all window glass, any part whereof shall include or consist of the bullion or thick centre part of the table from which the same shall have been cut or taken, and which shall be of any other shape or of less dimensions than as aforesaid, shall be deemed to be *waste glass*; and if any person shall knowingly enter or ship for exportation, in order to obtain any drawback, any panes, squares, or rectangular figures or lozenges of spread window glass, commonly known by the name of *broad glass*, or other window glass, not being spread glass as aforesaid, containing or including the bullion or thick part of the table from which such panes, squares, rectangular figures, or lozenges of spread glass or other window glass respectively, which shall not be of the dimensions in that behalf aforesaid, such person shall, for every package containing any such glass so entered or shipped contrary to this act, forfeit 100*l.*

By 52 Geo. 3. c. 77. sect. 6. it is enacted, that no glass whatsoever made in Great Britain, or made in Ireland and imported into Great Britain, shall be packed for exportation or drawback, in any package made with any void space in or between the component parts thereof, but all such glass shall be packed for exportation in casks, boxes, or chests only, and in which the exporter shall, previous to the packing of such glass, therein, have cut or sunk a sufficient number of circular cavities, each thereof not less than ½ of an inch, nor more than 1½ inch in diameter, to receive the seal directed to be put on each package, and for the purpose of protecting such seal from being destroyed, defaced, broken, or damaged; and where any such glass shall be packed for exportation in any cask, box, or chest, each such cavity shall be cut and sunk, one part thereof on the edge of the lid or cover, and the other on the side of such box or chest, so that each such seal may be conveniently placed by the proper officer of excise, part on the wood of such lid or cover, and the residue on the wood of the side of each such box or chest; and no drawback shall be paid for any glass not packed in a cask, box, or chest as aforesaid, nor for any glass packed in any box or chest not having a sufficient number of such cavities: provided that nothing herein shall prohibit the packing of whole or half tables of spread glass, or of crown glass, or any common bottles made of common bottle metal, in any crate or other package whatsoever.

Fraudulent Packing.—If any person shall place any brick, stone, or any other heavy substance, other than flint glass, or phial glass, or broad glass, or crown glass, in any cask, box, or chest containing flint glass, &c. packed or packed for exportation on drawback, the person so offending shall for each such offence forfeit 200*l.*, and all such glass, brick, stone, or other heavy substance contained therein shall be forfeited.—(52 *Geo.* 3. c. 77. sect. 7.)

Any person altering or defacing any marks on any cask, box, &c. containing glass for exportation, expressing the weight and tare of such cask, &c., or the weight of the glass therein, or the time or place of packing, or the number of the cask, &c., shall for each offence forfeit 200*l.*, with the glass.—Sect. 8.

The officers of excise are to brand or mark every cask, box, &c. of glass for exportation with the letters E. G.; and if any cask, &c. of glass so branded be not put on board within 12 hours after the branding thereof, or if any cask, &c. so branded be found on land after 12 months from the time when such glass was packed for exportation, the same shall be forfeited. Any person obliterating, defacing, altering, &c. the aforesaid letters, to forfeit 200*l.*—Sect. 9.

By 56 Geo. 3. c. 108. it is enacted, that no drawback shall be paid for the exportation of any ground or polished plate glass made in Great Britain, unless such glass be exported in rectangular plates of the size of 6 inches in length by 4 inches in breadth at the least, and unless each plate of such glass be free from stains and blisters, and be perfect and fit for immediate use, as and for ground and polished plate glass; and if any person shall pack or ship for exportation on drawback, any plate of plate glass as ground and polished plate glass made in Great Britain, which is not plate glass, or has not been ground and polished, or which shall be foreign glass, or of less dimension or thickness throughout than aforesaid, or shall be stained, or blistered, or imperfect, or not immediately fit for use as ground and polished plate glass, or any other sort of glass with any ground and polished plate glass, the same, and all the glass therewith, shall be forfeited, and the person so offending shall forfeit for each such package 100*l.*

Any person packing for exportation on drawback any unground or unpolished plate glass of less or greater dimensions in thickness and size than as last aforesaid, or any foul, imperfect, or unmerchantable unground or unpolished plate glass, in any package, with or amongst any other kind of glass, the same, and all the glass therewith, shall be forfeited, and the person so offending shall forfeit for each such package 100*l.*—(56 *Geo.* 3. c. 108. sect. 4.)

By 17 Geo. 3. c. 39. it is enacted, that if glass shipped for drawback be fraudulently unshipped or relanded, every person in anywise concerned or assisting in the same shall, over and above all other penalties, forfeit for every such offence 100*l.*; and every person knowingly entering any *broken or waste glass* for exportation upon a drawback shall, exclusive of all other pains and penalties, forfeit 100*l.*—Sect. 37.

By 6 Geo. 4. c. 117. it is enacted, that every person shipping or intending to ship, or being about to ship, in Ireland, any plate glass, broad glass, or crown glass, for exportation on drawback, or for the removal thereof to Great Britain, shall give 24 hours' notice of such intention, and of the place of shipping, to the nearest collector or officer of excise; and such collector and officer are required thereupon to attend, and to cause all such glass to be weighed and measured; and in case such glass has not been charged with the respective duties under the provisions of this act, and is about to be removed to Great Britain, it shall be lawful for such collector or officer, and he is required to charge all such glass with duty at the respective rates of duty made payable by this act on such sort or kind of glass respectively; and upon payment of such duty, it shall be lawful for such collector or officer to grant a certificate of the payment of such duty, to accompany such glass upon such removal, and to be produced at the port of entry in Great Britain; and in case any such glass which shall have been duly charged with the respective duties payable by this act shall be entered for exportation to foreign parts upon drawback, or be sent and removed to Great Britain, it shall be lawful for such collector or officer, upon proof that such duties have been paid, or have been charged and duly secured to be paid, to grant a certificate of the payment of such duty, or a certificate that such duty has been charged and is duly secured to be paid, to accompany such glass upon such exportation to foreign parts or such removal to Great Britain, and to be there produced as aforesaid; and if at any time any person shall export or enter for exportation from Ireland, upon drawback, or shall remove or send from Ireland to be brought into Great Britain, or shall bring into Great Britain, any plate glass, broad glass, or crown glass, unaccompanied by such certificate, containing such particulars as aforesaid; or if any person shall refuse to produce such certificate at the port of entry in Great Britain, or shall forge or counterfeit any certificate required in this act, or shall make use of or deliver any false or untrue certificate as and for a certificate required by this act; all such glass respectively shall be forfeited, and may be seized by any officer of excise, and the person so offending shall forfeit 500*l.*: provided always, that if any plate glass, broad glass, crown glass, which shall have been previously sent to Ireland from Great Britain, on drawback, shall at any time afterwards be sent or removed to Great Britain, the rate of duty to be charged thereon as aforesaid shall be equal and according to the rate of drawback now payable thereon respectively when exported to foreign parts.—Sect. 7.

GLOVES (Ger. *Handschuhe;* Fr. *Gants;* It. *Guanti;* Sp. *Guantes;* Rus. *Rukawizii, Pertschatki, Golizii*), well known articles of dress used for covering the hands, usually made of leather, but frequently also of cotton, wool, silk, &c. The leather used in the manufacture of gloves is not, properly speaking, tanned, but prepared by a peculiar process that renders it soft and pliable. Some sorts of leather gloves admit of being washed, and others not. Woodstock and Worcester, but particularly the former, are celebrated for the manufacture of leather gloves of a superior quality; in which a great number of women and girls, as well as men, are employed. The produce of the Worcester manufacture has been estimated at about 42,000 dozen pairs of oil leather, or beaver gloves; and 470,000 dozen pairs of kid and lamb-skin gloves; the value of the whole, when finished, being about 375,000*l.* Besides Worcester and Woodstock, London, Yeovil, Ludlow, and Leominster are the principal seats of the leather glove manufacture. Gloves are sometimes sewed by machinery; but this is done only to improve the work by rendering the stitches more correctly equidistant, as it is not cheaper than manual labour. Limerick used to be famous for the manufacture of a sort of ladies' gloves, called chicken gloves. Large quantities of cotton gloves are made at Nottingham and Leicester.

Influence of Repeal of Prohibition of Importation. — The importation of leather gloves and mitts was formerly prohibited, under the severest penalties. This prohibition had the effect, by preventing all competition and emulation with the foreigner, to check improvement, and to render British gloves at once inferior in quality and high in price. This system was, however, permitted to continue till 1825, when the prohibition was repealed, and gloves allowed to be imported on payment of duties, which, though high, are not prohibitory. This measure was vehemently opposed; and many predictions were made of the total ruin of the manufacture; but in this, as in every similar instance, experience has shown that the trade had not been really benefited; but that, on the contrary, it had been injured by the prohibition. The wholesome competition to which the manufacturers now felt themselves, for the first time, exposed, made them exert all their energies; and it is admitted on all hands, that there has been a more rapid improvement in the manufacture during the last half dozen years than in the previous half century. There is still, no doubt, a great deal of complaining of a decay of trade among the leather glove manufacturers; but we are assured that, if there be any real foundation for their complaints, it is ascribable far more to the growing use of home-made cotton gloves than to the importation of foreign leather gloves; and had it not been for the improved fabric, and greater cheapness of British leather gloves, that has grown out of the new system, it is abundantly certain that cotton gloves would have gained still more rapidly on them. In point of fact, however, it does not appear that there has been any falling off in the leather glove trade. On the contrary, the fair inference seems to be that it has materially increased: at all events, there has been a very considerable increase in the number of skins brought from abroad to be used in the manufacture, and consequently in the number of pairs of gloves produced from such skins; and there is no reason for thinking that it is at all different with the other departments.

Leather gloves must be imported in packages, containing each 100 dozen pairs at least, and in vessels of 70 tons burden or upwards, on penalty of forfeiture. — (7 *Geo.* 4. c. 48. § 7.)

Account of the Number of Dozen Pairs of Habit Gloves, Men's Gloves, and Women's Gloves and Mitts, imported into the United Kingdom; the Amount of Duty paid thereon during the Years 1828, 1829, and 1830; and the Rates of Duty.

Years.	Habit Gloves.		Men's Gloves.		Women's Gloves and Mitts.		Total Quantity of Leather Gloves and Mitts imported.		Total Receipt of Duty on Leather Gloves and Mitts.		
	Dozen.	*Pairs.*	*Dozen.*	*Pairs.*	*Dozen.*	*Pairs.*	*Dozen.*	*Pairs.*	*L.*	*s.*	*d.*
1828	69,564	7	27,668	10	3,025	8	100,259	1	21,653	3	8
1829	45,679	5	23,635	6	2,781	6	72,096	5	15,510	15	8
1830	62,925	10	25,013	3	3,187	8	91,126	9	19,488	1	7
1831	-	-	-	-	-	-	99,705	5	21,848	0	0
1832	-	-	-	-	-	-	126,386	0	27,106	0	0
Rates of duty throughout the whole period -	4*s.* per doz. pair.		5*s.* per doz. pair.		7*s.* per doz. pair.						

Account of the Number of Lamb and Kid Skins entered for Home Consumption in the Twelve Years ending with 1831, with an Estimate of the Quantity of Gloves which such Skins would produce, on the Supposition that from each 120 Skins there would be manufactured 18 Dozen Pairs of Gloves.

Years.	Number of Lamb Skins.	Number of Kid Skins.	Total Lamb and Kid.	Doz. Gloves produced each Year.	Years.	Number of Lamb Skins.	Number of Kid Skins.	Total Lamb and Kid.	Doz. Gloves produced each Year.
1820	932,817	286,443	1,219,260	182,889	1826	1,743,778	575,533	2,319,311	347,886
1821	1,202,029	242,996	1,445,025	216,756	1827	2,749,397	640,863	3,390,260	508,536
1822	1,908,651	408,523	2,317,174	347,562	1828	2,917,476	904,639	3,822,115	573,300
1823	1,974,143	497,444	2,471,587	370,728	1829	1,930,390	698,604	2,628,994	394,344
1824	2,201,295	631,995	2 833,290	424,980	1830	1,859,850	1,086,209	2,946,059	441,900
1825	2,098,553	771,522	2,870,075	430,506	1831	2,892,934	1,008,307	3,901,241	585,180

GOLD (Ger. *Gold;* Du. *Goud;* Da. and Sw. *Guld;* Fr. *Or;* It. and Sp. *Oro;* Port. *Oiro, Ouro;* Rus. *Soloto;* Pol. *Zloto;* Lat. *Aurum;* Arab. *Tibr* and *Zeheb;* Sans. *Swarna;* Malay, *Mās*), the most precious of all the metals, seems to have been known from the earliest antiquity. It is of an orange red, or reddish yellow colour, and has no perceptible taste or smell. Its lustre is considerable, yielding only to that of platinum, steel, silver, and mercury. It is rather softer than silver. Its specific gravity is 19·3. No other substance is equal to it in ductility and malleability. It may be beaten out into leaves so thin, that one grain of gold will cover $56\frac{3}{4}$ square inches. These leaves are only $\frac{1}{282003}$ of an inch thick. But the gold leaf with which silver wire is covered has only $\frac{1}{12}$ of that thickness. An ounce of gold upon silver is capable of being extended more than 1,300 miles in length. Its tenacity is considerable, though in this respect it yields to iron, copper, platinum, and silver. From the experiments of Seckingen, it appears that a gold wire 0·078 inch in diameter, is capable of supporting a weight of 150·07 lbs. avoirdupois without breaking. It melts at 32° of Wedgwood's pyrometer. When melted, it assumes a bright bluish green colour. It expands in the act of fusion, and consequently contracts while becoming solid more than most metals; a circumstance which renders it less proper for casting in moulds. — (*Thomson's Chemistry.*)

For the quantities of gold produced, and the places where it is produced, see Precious Metals.

GOMUTI, or EJOO, a species of palm (*Borassus Gomutus*), growing in the Indian islands. A valuable product is obtained from this palm, resembling *black horse hair;* it is found between the trunk and the branches, at the insertion of the latter, in a matted form, interspersed with long, hard, woody twigs of the same colour. When freed from the latter, it is manufactured by the natives into cordage. Its fibres are stronger and more durable, but less pliant, than those of the cocoa nut, or coir —

(see Coir); and is, therefore, fitter for cables and standing rigging, but less fit for running rigging. The native shipping of the Eastern islands of all kinds are chiefly equipped with cordage of the gomuti; and the largest European shipping in the Indies use cables of it. It undergoes no preparation but that of spinning and twisting; no material similar to our tar or pitch, indispensable to the preservation of hempen cordage, being necessary with a substance that, in a remarkable degree, possesses the quality of resisting alternations of heat and moisture. The gomuti of Amboyna, and the other Spice islands, is the best. That of Java has a coarse ligneous fibre. Gomuti is generally sold in twisted shreds or yarns, often as low as 1 dollar a picul, and seldom more than 2. Were European ingenuity applied to the improvement of this material, there seems little doubt that it might be rendered more extensively useful. — (*Crawfurd's East. Archip.* vol. iii. p. 425.)

GOOD HOPE, CAPE OF. See Cape Town.

GOTTENBURGH, or, more properly, GOTHABORG, on the south-west coast of Sweden, bordering the Cattegat, near the mouth of the river Götha, lat. 57° 42′ 4″ N., lon. 11° 57′ 45″ E. Population 21,000 *, and increasing. Vessels do not come close to the city, but lie in the river or harbour at a short distance from the shore, goods being conveyed from and to them by lighters that navigate the canals by which the lower part of the town is intersected. The depth of water in the port is 17 feet, and there is no tide, bar, or shallow. A vessel entering the Götha must take a pilot on board, whose duty it is to meet her ½ a league west of Wingo beacon. After Stockholm, Gottenburgh has the most extensive commerce of any town in Sweden. Iron and steel, the former excellent, but the latter inferior to that made in England, form the principal articles of export. They are brought from the rich mines of Wermeland, distant about 200 miles; being conveyed partly by the lake Wener, partly by the Tröllhætta canal — (see Canals), — and partly by the river Götha. The exports of iron, in 1831, amounted in all to 21,639 tons, of which 15,400 tons were taken by the United States, and 4,511 tons by England. The original cost of iron is supposed to be increased about 5 per cent. by the expense of its conveyance to Gottenburgh; and the shipping charges, inclusive of the export duty, are about 10 per cent. additional. The next great article of export is timber, particularly deals, which are also furnished by Wermeland. Of these, the exports, in 1831, were 52,866 dozen, of which 40,600 dozen went to Great Britain, and the residue to France, Holland, &c. The other articles of export are, linen, sail-cloth, tar, copper, alum, glass, cobalt, manganese, linseed, oak bark, bones, juniper berries, cranberries, rock moss for dyeing, &c. Grain is sometimes imported and sometimes exported. The principal articles of import are sugar, coffee, tobacco, cotton yarn and twist, salt, indigo, and dye woods, South Sea oil, rice, herrings, wine, spices, &c. In 1831, 529 ships, of the burden of 63,075 tons, entered Gottenburgh. Of these, 68 ships, carrying 16,770 tons, were American; and 41 ships, carrying 5,131 tons, British. The rest belonged, for the most part, to Sweden, Norway, and Denmark. About 80 vessels, of the burden of 14,000 tons, belong to the port; but the native shipping is decreasing.

Herring Fishery. — Gottenburgh used, at no distant period, to be one of the principal seats of the herring fishery; but at present this branch of industry is quite extinct, and it has always been very capricious. From 1556 to 1588, great quantities of herrings were taken; from 1588 to 1660, they left the coast; during the next 15 years they were again abundant; but from 1675 to 1747, they entirely disappeared. From 1747 to 1770, they were abundant, 186,614 barrels being taken in 1763, and 151,483 in 1768. From 1786 to 1799, the fishery was very good, from 110,000 to 190,000 barrels being annually exported. In 1804, the export was 79,512 barrels. In 1808 and 1809, fish were very scarce; and in 1812 they entirely disappeared, and have not hitherto returned; so that Gottenburgh, instead of exporting, at present imports considerable supplies of herrings.

The customs duties produced, in 1831, 749,732 dollars banco, or 53,552*l.* Both iron and timber pay duties on exportation, but they are not very heavy.

Custom-house Regulations and Port Charges. — On arriving in port, no person is allowed to board or to leave a vessel till she be in custody of the officers; who, having inspected the manifest and papers, send them to the Custom-house. An officer is appointed to superintend the unloading and also the loading. The public charges of all sorts on a Swedish ship and on a foreign ship not privileged, each of 300 tons burden, unloading and loading mixed cargoes at Gottenburgh, would be, on the former 24*l.* 5*s.* 7*d.*, on the latter 49*l.* 5*s.* 7*d.* On a privileged foreign ship the charges are the same as on a Swedish ship.

Warehousing System. — Goods may be bonded for any length of time, on paying ½ per cent. *ad valorem* for the first 2 years, and ½ per cent. annually thereafter.

Commission, Credit, &c. — The usual rate of commission is 2 per cent. Goods are commonly sold on credit. Raw sugar at 9 months, with 3 months' interest to the seller. Other goods at 3, 4, and 6 months.

Banking, &c. — There are no public or private banking establishments at Gottenburgh for the issue of notes; but the national bank has two offices here which advance limited sums of money, at 5 per cent. on the security of goods, and in discount of bills. Some of the English insurance companies have agents here, who do a good deal of business.

Sea Stores, Water, &c. — These may be had here of excellent quality and cheap. Beef 1½*d.* per lb., best rye bread 2½*d.* per lb., and butter 6*d.* per lb.

Freight to London, in 1832, iron, 10*s.* a ton; deals, per Petersburgh standard hundred, 2*l.* 10*s.*

Money, Weights, Measures, &c., same as at Stockholm, which see.

In compiling this article, we have made use of the *Consul's Answers*, dated 19th of January, 1833; *Coxe's Travels in the North of Europe*, vol. iv. pp. 267—275.; *Oddy's European Commerce*, p. 314.; and some valuable *private communications*.

Commercial Policy. — But for the perverse policy of its government, the trade of Gottenburgh, and of Sweden in general, would be far greater than it is. Its rich and exhaustless mines and forests furnish an ample supply of equivalents for whatever might be imported into the country; but instead of allowing the energies of the nation to be employed in this safe and natural channel, government has attempted, by a system of prohibitions and heavy duties, to raise, *coute qui coute*, a manufacturing inter-

* This is the population as given in the *Weimar Almanac* for 1832; according to the Consul's report it is under 18,000.

est, and to make Sweden independent of foreigners! In consequence, a good many cotton and woollen mills have been established in different parts of the country. It would, however, be absurd to imagine that they should ever be able to furnish products at so cheap a rate as they may be imported for from this and other countries, enjoying superior facilities for the prosecution of manufacturing industry. This forced system is, therefore, doubly injurious to Sweden; first, by lessening the foreign demand for her peculiar products, and secondly, by diverting capital and industry into the least productive channels, forcing the inhabitants to pay an artificially enhanced price for some highly necessary articles, and encouraging smuggling. But, pernicious as the system is, so great a proportion of the scanty capital of Sweden is now embarked under its ægis, that the return to a better order of things will be a work of much difficulty. It need not surprise us to learn that the imposition in this country of oppressive discriminating duties on timber from the north of Europe had a material influence in stimulating the Swedes to endeavour to dispense with foreign, that is, with British, manufactured articles!

GRACE, DAYS OF. See EXCHANGE.

GRAPES (Ger. *Trauben;* Fr. *Raisins;* It. *Grappoli, Grappi;* Sp. *Ubas, Racimos;* Lat. *Uvæ*), a well known fruit, produced from the vine. France, Spain, Portugal, and Italy, as well as some parts of Germany and Hungary, produce grapes which yield wines of various qualities and flavour, many of them excellent. We import green grapes from Malaga and some other parts of Spain; they are brought packed in jars, and secured from damage by means of saw-dust, plentifully strewed between the layers of fruit. The grapes grown in Great Britain in the open air are much smaller, and by no means so luscious, as those of foreign countries; but those raised in hot-houses are quite equal, if not superior, to the former. Grapes are imported not only in their natural state, but dried and preserved, in which latter state they are denominated RAISINS; which see.

GRINDSTONES, flat circular stones of different diameters and thickness, mounted on spindles or axles, and made to revolve with different degrees of velocity, employed to polish steel articles, to give an edge to cutting instruments, &c. Grindstones not in constant use are commonly turned by winch handles; but at Sheffield and other places, where polished articles and cutlery are extensively manufactured, large numbers of grindstones, being mounted in buildings appropriated to that purpose, called grind or blade mills, are turned by straps, acting on their axles, the moving power being either water or steam. The stone best suited to form grindstones is what is called a sharp-grit; it being chosen finer or coarser grained according to the purposes for which they are destined. The principal grindstone quarry in England is at Gateshead Fell, in the county of Durham; where they are produced in vast numbers, not only for home use, but for exportation to all parts of the world. But those principally in use at Sheffield are mostly quarried at Wickersley, in Yorkshire.

They are classed in eight different sizes, called *foots*, according to their dimensions, as in the following Table: —

Denominations.	Diameter.	Thickness.	No. in a Chaldron.	Denominations.	Diameter.	Thickness.	No. in a Chaldron.
	Inches.	*Inches.*			*Inches.*	*Inches.*	
1 Foot	10	2	36	5 Foots	35	5	5
2 Foots	14	2½	27	6 Foots	42	6	3
3 Foots	20	4	18	7 Foots	50	6	1½
4 Foots	28	4	9	8 Foots	56	8	1

A grindstone foot is 8 inches: the size is found by adding the diameter and thickness together. Thus, a stone 56 inches diameter by 8 thick, making together 64 inches, is an 8-foot stone, of 8 inches each foot.

Besides the above sizes, grindstones are made, when ordered, of any intermediate dimensions: many are made much larger than any of the above sizes; some as large as 76 inches diameter, and 14 or 15 inches thick, which are a great weight, a cubic foot weighing 1 cwt. 1 qr. 14 lbs. — (*Rees's Cyclopædia; Bailey's Survey of Durham*, p. 43.)

Grinding is an unhealthy and dangerous employment. For some purposes, the stones are made to revolve with an extreme degree of velocity; which makes them occasionally fly in pieces. But the greatest annoyance to which the grinder is exposed, is from his inhaling the minute particles of stone, and of iron and steel, that are always flying about, particularly in the process termed dry grinding. Contrivances have been suggested for obviating this serious inconvenience; but whether it be owing to their unsuitableness, or to the carelessness of the workmen, none of them has succeeded in practice. — (*Treatise on Iron and Steel, Lardner's Cyclopædia*, p. 293.)

GUAIACUM, OR LIGNUM VITÆ (Fr. *Gayac, Bois saint;* Ger. *Pockhaln;* It. *Guajaco;* Lat. *Guaiacum, Lignum vitæ;* Sp. *Guagaco*), the wood of a tree, a native of Jamaica, Hayti, and the warmer parts of America. It is a dark-looking evergreen, growing to from 40 to 50 feet in height, and from 14 to 18 inches in diameter. The bark is hard, smooth, and brittle; the wood is externally yellowish, and internally of a blackish brown colour. Lignum vitæ is the weightiest timber with which we are acquainted, its specific gravity being 1·333. It is exceedingly hard, and difficult to work. It can hardly be split, but breaks into pieces like a stone, or crystallised metal. It is full of a resinous juice (*guaiac*), which prevents oil or water from working into it, and renders it proof against decay. Its weight and hardness make it the very best timber for stampers and mallets; and it is admirably adapted for the sheaves or pulleys of blocks, and for friction rollers or castors. It is extensively used by turners.

The *guaiac*, or gum, spontaneously exudes from the tree, and concretes in very pure tears. It is imported in casks or mats; the former containing from 1 to 4 cwt., the latter generally less than 1 cwt. each. Its colour differs considerably, being partly brownish partly reddish, and partly greenish; and it always becomes green when left exposed to

the light in the open air. It has a certain degree of transparency, and breaks with a vitreous fracture. When pounded, it emits a pleasant balsamic smell, but has scarcely any taste, although when swallowed it excites a burning sensation in the throat. When heated, it melts, diffusing, at the same time, a pretty strong fragrant odour. Its specific gravity is 1·229. — (See *Veget. Sub., Lib. of Entert. Knowledge; Thomson's Chemistry, &c.*)

GUERNSEY. For the peculiar regulations to be observed in trading with Guernsey, Jersey, &c., see IMPORTATION AND EXPORTATION.

GUMS, RESINS, GUM-RESINS. In commerce, the term gum is not only applied to gums properly so called, but also to resins and gum-resins. But though these substances have many properties in common, they are yet sufficiently distinct.

I. *Gum* is a thick transparent fluid that issues spontaneously from certain species of plants, particularly such as produce stone fruit, as plum and cherry trees. It is very adhesive, and gradually hardens by exposure to the atmosphere. It is usually obtained in small pieces, like tears, moderately hard and somewhat brittle while cold; so that it can be reduced by pounding to a fine powder. When pure, it is colourless: but it has commonly a yellowish tinge; it is not destitute of lustre; it has no smell; its taste is insipid; its specific gravity varies from 1·3161 to 1·4317; it readily dissolves in water, but is insoluble in alcohol. Gum is extensively used in the arts, particularly in calico printing, to give consistence to the colours, and to hinder them from spreading. It is also used in painting, in the manufacture of ink, in medicine, &c.

The only important gums, in a commercial point of view, are *gum Arabic* and *gum Senegal*.

1. *Gum Arabic* (Fr. *Gomme Arabique*; It. *Gomma Arabica*; Ger. *Arabische gummi*; Arab. *Tolh*), the produce of the *Acacia vera*, a tree growing in Arabia, and in many parts of Africa. The gum exudes naturally from the trunk and branches, and hardens by exposure to the air. "The more sickly the tree appears, the more gum it yields; and the hotter the weather, the more prolific it is. A wet winter and a cool or mild summer are unfavourable to gum." — (*Jackson's Morocco*, p. 84.) It is in irregularly shaped pieces, hard, brittle, and semi-transparent. When pure it is almost colourless, or of a pale yellowish hue; being insipid, inodorous, and dissolving completely in the mouth. Specific gravity 1·31 to 1·43. It is often mixed with gum Senegal. East India gum Arabic is, though a useful, a spurious article, not being the produce of the *acacia vera*, but of other species of plants. The best gum is either imported direct from Alexandria, Smyrna, Tripoli, Mogadore, Tangiers, &c., or at second hand from them through Gibraltar, Malta, and the Italian ports. The price depends principally on its whiteness and solubility, increasing and diminishing, according as the article has more or less of these qualities. — (*Thomson's Dispensatory*, and *private information*.)

At an average of the 3 years ending with 1831, the gum Arabic entered for consumption amounted to 13,574 cwt. a year. Previously to last year (1832), the duty on gum Arabic from a British possession was 6*s.* a cwt., and from other parts 12*s.*; but the duty on it and all other gums is now fixed at 6*s.* a cwt. without regard to origin. Of 7,784 cwt. of gum Arabic imported in 1830, Tripoli, Barbary, and Morocco furnished 2,963; Egypt, 570; Gibraltar, 1,587; Italy, 1,007; Malta, 367; the East Indies, 1,962, &c. The reduction of the duty on foreign gum will most probably occasion an increase of the imports from the Mediterranean and Mogadore. The price of gum Arabic in bond in the London market was, in December, 1833, — East India, from 34*s.* to 65*s.* per cwt.; Turkey, from 100*s.* to 211*s.* per do.; and Barbary, from 50*s.* to 100*s.* per do.

2. *Gum Senegal*, principally brought from the island of that name on the coast of Africa, is obtained from various trees, but chiefly from two: one called *Vereck*, which yields a white gum; the other called *Nebuel*, which yields a red gum; varieties of the *acacia gummifera*. Gum Arabic is very often mixed with gum Senegal. The latter is nearly as pure as the former, but it is usually in larger masses, of a darker colour, and more clammy and tenacious. It is the sort of gum principally employed by calico printers. It was worth, in December, 1833, duty (6*s.*) paid, from 75*s.* to 78*s.* a cwt. — (*Thomson's Chemistry, Thomson's Dispensatory, Ainslie's Materia Indica, &c.*)

II. *Resins*, for the most part, exude spontaneously from trees, though they are often obtained by artificial wounds, and are not uncommonly, at first, combined with volatile oil, from which they are separated by distillation. They are solid substances, naturally brittle; have a certain degree of transparency, and a colour most commonly inclining to yellow. Their taste is more or less acrid, and not unlike that of volatile oils; but they have no smell, unless they happen to contain some foreign body. They are all heavier than water, their specific gravity varying from 1·0182 to 1·1862. They differ from gums in being insoluble in water, whether cold or hot; while they are, with a few exceptions, soluble in alcohol, especially when assisted by heat. When heated, they melt; and if the heat be increased, they take fire, burning with a strong yellow flame, and emitting a vast quantity of smoke. Common *rosin* furnishes a very perfect example of a resin, and it is from this substance that the whole genus have derived their name. Rosin is, indeed, frequently denominated resin. The principal resins are *Animi, Elemi, Copal, Lac, Labdanum, Mastic, Rosin, Sandarach, Tacamahac*, &c.; which see, under their respective names. — (*Thomson's Chemistry.*)

III. *Gum-resins*, a class of vegetable substances consisting of gum and resin. They differ from resins in this—that they never exude spontaneously from the plant, being obtained either by bruising the parts containing them, and expressing the juice, which is always in a state of emulsion, generally white, but sometimes of a different colour, or by making incisions in the plant, from which the juice flows. The juice, being exposed to the action of the sun, is condensed and inspissated, till it forms the gum-resin of commerce. Gum-resins are usually opaque, or, at least, their transparency is inferior to that of resins. They are always solid, and most commonly brittle, and have, sometimes, a fatty appearance. When heated, they do not melt as resins do; neither are they so combustible. Heat, however, commonly softens them, and causes them to swell. They burn with a flame. They have almost always a strong smell, which, in several instances, is alliaceous. Their taste, also, is often acrid, and always much stronger than that of resins. They are usually heavier than resins. They are partially soluble in water, but the solution is always opaque, and usually milky. Alcohol partially dissolves them, the solution being transparent.

The most common gum-resins are *Aloes*, *Ammonia*, *Euphorbium*, *Galbanum*, *Gamboge*, *Myrrh*, *Olibanum*, *Sagapenum*, *Scammony*, &c.; which see, under their respective names. —(*Loudon's Ency. of Agricult.*; *Thomson's Chemistry.*)

GUNPOWDER (Ger. *Pulver*, *Schiesspulver*; Du. *Buskruid*; Da. *Krudt*, *Pulver*; Sw. *Krut*; Fr. *Poudre*; It. *Polvere*; Sp. and Port. *Polvora*; Rus. *Poroch*; Pol. *Proch*; Lat. *Pulvis pyrius*). This well known inflammable powder is composed of nitre, sulphur, and charcoal, reduced to powder, and mixed intimately with each other. The proportion of the ingredients varies very considerably; but good gunpowder may be composed of the following proportions; viz. 76 parts of nitre, 15 of charcoal, and 9 of sulphur. These ingredients are first reduced to a fine powder separately, then mixed intimately, and formed into a thick paste with water. After this has dried a little, it is placed upon a kind of sieve full of holes, through which it is forced. By this process it is divided into grains, the size of which depends upon the size of the holes through which they have been squeezed. The powder, when dry, is put into barrels, which are made to turn round on their axis. By this motion the grains of gunpowder rub against each other, their asperities are worn off, and their surfaces are made smooth. The powder is then said to be glazed. —(*Thomson's Chemistry.*)

Dr. Thomson, whose learning is equal to his science, has the following remarks with respect to the introduction of gunpowder into warlike operations:—"The discoverer of this compound, and the person who first thought of applying it to the purposes of war, are unknown. It is certain, however, that it was used in the fourteenth century. From certain archives quoted by Wiegleb, it appears that cannons were employed in Germany before the year 1372. No traces of it can be found in any European author previously to the thirteenth century; but it seems to have been known to the Chinese long before that period. There is reason to believe that cannons were used in the battle of Cressy, which was fought in 1346. They seem even to have been used three years earlier, at the siege of Algesiras; but before this time they must have been known in Germany, as there is a piece of ordnance at Amberg, on which is inscribed the year 1303. Roger Bacon, who died in 1292, knew the properties of gunpowder; but it does not follow that he was acquainted with its application to fire-arms."—(*Thomson's Chemistry.*) For further particulars as to the introduction of cannon, see that article.

The manufacture and sale of gunpowder is regulated by several statutes. By the 12 Geo. 3. c. 61. it is enacted, that no person shall use mills or other engines for making gunpowder, or manufacture the same in any way, except in mills and other places which were *actually in existence* at the time of passing the act, or which, if erected afterwards, have been sanctioned by a licence, under pain of forfeiting the gunpowder, and 2*s*. a pound. It is further enacted, that no mill worked by a pestle, and usually termed a pestle mill, shall be used in making gunpowder, under the above-mentioned penalty; and that no more than 40 lbs. of gunpowder, or materials to be made into gunpowder, shall be made at any one time under a single pair of mill-stones, on pain of forfeiting all above 40 lbs., and 2*s*. for every pound; nor shall more than 40 cwt. be dried in any one stove or place at any one time, under forfeiture of all above that quantity, and 2*s*. for every pound thereof. The powder mills erected at Battle, Crowhurst, Saddlescombe, and Brede, in Sussex, previously to 1772, are exempted from the above regulations so far as relates to the making of fine fowling powder.

No dealer is to keep more than 200 lbs. of powder, nor any person not a dealer, more than 50 lbs., in the cities of London or Westminster, or within 3 miles thereof, or within any other city, borough, or market town, or 1 mile thereof, or within 2 miles of the king's palaces or magazines, or ½ a mile of any parish church, on pain of forfeiture, and 2*s*. per lb.; except in licensed mills, or to the amount of 300 lbs. for the use of collieries, within 200 yards of them.

Not more than 25 barrels are to be carried by any land carriage, nor more than 200 barrels by water, unless going by sea or coastwise, each barrel not to contain more than 100 lbs.

All vessels, except his Majesty's, coming into the Thames, are to put on shore, at or below Blackwall, all the gunpowder they have on board exceeding 25 lbs. Vessels outward bound are not to receive on board more than 25 lbs. of gunpowder previously to their arrival at Blackwall. The Trinity House have authority to appoint searchers to inspect ships, and search for gunpowder. All the gunpowder found above 25 lbs., and the barrels containing it, and 2*s*. for every lb. above that quantity, are forfeited. Any person obstructing an officer searching for concealed gunpowder is liable to a penalty of 10*l*. The places of deposit for gunpowder are regulated by the 54 Geo. 3. c. 159.

The exportation of gunpowder may be prohibited by order in council. Its importation is prohibited on pain of forfeiture, except by licence from his Majesty; such licence to be granted for furnishing his Majesty's stores only. —(6 *Geo.* 4. c. 107.)

The act 1 Will. 4. c. 44. prohibits the manufacture and keeping of gunpowder in Ireland by any person who has not obtained a licence from the Lord Lieutenant; such licences may be suspended on notice from the chief secretary, and any one selling gunpowder during the suspension of such licence shall forfeit 500*l*. Gunpowder makers under this act are to return monthly accounts of their stock, &c. to the chief secretary. This act, which contains a variety of restrictive clauses, was limited to one year's duration, but has been prolonged.

GUNNY (Hind. *Tāt;* Ben. *Gūni*), a strong coarse sackcloth manufactured in Bengal for making into bags, sacks, and packing generally, answering at once the two purposes for which canvass and *bast* are used in Europe. The material from which this article is manufactured, is the fibre of two plants of the genus Corchorus; viz. *Corchorus olitorius*, and *Corchorus capsularis* (Bengali, *pat*); both, but particularly the first, extensively cultivated throughout Lower Bengal. Besides a large domestic consumption of gunny, the whole rice, paddy, wheat, pulses, sugar, and saltpetre of the country, as well as the pepper, coffee, and other foreign produce exported from Calcutta, are packed in bags or sacks made of this article. There is also a considerable exportation of manufactured bags, each commonly capable of containing two maunds, or about 160 lbs. weight, to Prince of Wales Island, Malacca, Singapore, Java, and Bombay. In 1828–29, the number exported from Calcutta was 2,205,206, of the value of 166,109 sicca rupees, or about 16,000*l*. sterling, showing the price of each sack to be less than 2*d*. — (*Wallich; Roxburgh; Bell's Review of the External Commerce of Bengal.*)

GYPSUM, or SULPHATE OF LIME, is found in various parts of the Continent, and in Derbyshire and Nottinghamshire. When reduced to a powder, and formed into a paste with water, it is termed *plaster of Paris*, and is much used for forming casts, &c. It is also used for laying floors; and has been advantageously employed as a manure.

H.

HAIR, Human (Ger. *Haare, Menschen-haar;* Du. *Hair;* Fr. *Cheveux;* It. *Capelli umani;* Sp. *Cabellos;* Lat. *Capilli*). "Human hair makes a very considerable article in commerce, especially since the mode of perruques has obtained. Hair of the growth of the northern countries, as England, &c., is valued much beyond that of the more southern ones, as Italy, Spain, the southern parts of France, &c. Good hair is well fed, and neither too coarse nor too slender; the bigness rendering it less susceptible of the artificial curl, and disposing it rather to frizzle; and the smallness making its curl of too short duration. Its length should be about 25 inches; the more it falls short of this, the less value it bears." — (*Ency. Brit.*)

Hair of Beasts (Ger. *Haare, Hahaare;* Du. *Hair;* Fr. *Poil;* It. and Sp. *Pelo;* Lat. *Pelles*). The hair of horses is extensively used in the manufacture of chairs, sofas, saddles, &c.; while the hair or wool of beavers, hares, rabbits, &c. is much employed in the manufacture of hats, &c.

HAIR-POWDER (Ger. *Puder;* Fr. *Poudre à poudrer;* It. *Polvere di cipri;* Sp. *Polvos de peluca*), is used as an ornament for the hair, and generally made from starch pulverised, and sometimes perfumed. A tax of 1*l*. 3*s*. 6*d*. a year is laid upon all persons who wear hair-powder. Different statutes prohibit the mixing of hair-powder with starch or alabaster. And hair-powder makers are prohibited having alabaster in their custody.

HALIFAX, the capital of Nova Scotia, on the south-east coast of that province, lat. 44° 36′ N., lon. 63° 28′ W. It is situated on a peninsula on the west side of Chebucto Bay, and has one of the finest harbours in America. Population, exclusive of the military, about 18,000. The town is irregularly built, and most of the houses are of wood. The government-house is one of the most splendid edifices in North America. Halifax was founded in 1749.

Port. — The best mark in sailing for Halifax is Sambro light-house, on a small island off the cape of the same name, on the west side of the entrance to the harbour, in lat. 44° 30′, lon. 63° 32′. The light, which is fixed, is 210 feet above the level of the sea; and a detachment of artillery, with two 24-pounders, is upon duty at the light-house, firing at regular intervals during the continuance of the dense fogs with which this part of the coast is very much infested. — (*Coulier, Tables des Principales Positions Géographiques*, p. 78.) The course into the harbour for large shipps, after assing Sambro light, is between the main land on the west and Macnab's Island on the east. On a spit projecting from the latter, a light-house has recently been constructed; and when this is seen, ships may run in without fear. The harbour is defended by several pretty strong forts. Ships usually anchor abreast of the town, where the harbour is rather more than a mile in width. After gradually narrowing to about ¼ of that width, it suddenly expands into a noble sheet of water, called Bedford Basin, completely land-locked, with deep water throughout, and capable of accommodating the whole navy of Great Britain. The harbour is accessible at all times, and is rarely impeded by ice. There is an extensive royal dock-yard at Halifax; which during war is an important naval station, being particularly well calculated for the shelter, repair, and outfit of the fleets cruising on the American coast and in the West Indies. Mr. M'Gregor has severely, and, we believe, justly, censured the project for the removal of the dock-yard from Halifax to Bermuda.

Trade, &c. of Halifax and Nova Scotia. — Halifax is the seat of a considerable fishery; but the British colonists seem to be, for what reason it is not easy to say, both less enterprising and less successful fishers than the New Englanders. The principal trade of the town and province is with the West Indies, Great Britain, and the United States. To the former they export dried and pickled fish, lumber, coals, grindstones

cattle, flour, butter, cheese, oats, potatoes, &c. They export the same articles to the southern ports of the United States, and gypsum to the eastern ports of New England. To Great Britain they send timber, deals; whale, cod, and seal oil; furs, &c. The principal exports of timber are from Pictou on the St. Lawrence. The imports consist principally of colonial produce from the West Indies; all sorts of manufactured goods from Great Britain; and of flour, lumber, &c. from the United States, principally for exportation to the West Indies.

The government packets sail regularly once a month from Halifax to Falmouth; but packet ships to Liverpool have recently been established, which are, in all respects, superior to the former. There are also regular packets from Halifax to Boston, New York, and the West Indies. A steam-boat plies constantly between Halifax and the little town of Dartmouth, on the opposite side of the harbour.

In 1826 a company was formed for making a canal across the country from Halifax to the basin of Minas, which unites with the bottom of the Bay of Fundy. The navigation is formed, for the most part, by Shûbenacadie lake and river. The legislature gave 15,000*l.* to this undertaking; but it has not hitherto been completed. The excavated part of the canal is 60 feet wide at top, 36 feet at bottom, and is intended to admit vessels drawing 8 feet water. It seems very questionable whether this canal will be profitable to the shareholders; but there can be no doubt that it would, if finished, be of considerable service to the trade of Halifax.

There are 2 private banking companies at Halifax. Accounts are kept in pounds, shillings, and pence, the same as in England, and the weights and measures are also the same.

About 100 large square-rigged vessels, and about the same number of large schooners, with several smaller craft, belong to Halifax.

The total revenue of Nova Scotia for the year 1831, including balances and arrears, was 85,018*l.*; the expenditure during the same year, exclusive of that incurred on account of the garrison, being 94,876*l.*

We borrow from the valuable work of Mr. M'Gregor the following statements as to the trade of Nova Scotia in 1832:—

Produce of the Fisheries exported in the Year ending 5th of January, 1833.	L.	s.	d.
160,640 cwt. dry fish, at 10*s.*	80,320	0	0
37,154 barrels pickled fish, at 15*s.*	27,865	10	0
8,641 boxes smoked herrings, at 3*s.*	1,296	3	0
704 tuns oil, at 20*l.*	14,080	0	0
51,918 seal skins, at 1*s.* 6*d.*	3,893	17	0
Total	127,455	10	0

Produce of Agriculture.	L.	s.	d.
Barley and oats, 3,478 bushels, at 2*s.*	347	16	0
Potatoes and turnips, 64,712, at 1*s.* 6*d.*	4,853	12	0
Oatmeal, 7 barrels, at 20*s.*	7	0	0
Flax-seed, 10 bushels	2	10	0
Horned cattle, horses, sheep, and swine, 926, value	4,630	0	0
Butter, cheese, and lard, 85,724 lbs., value	4,286	4	0
Cranberries, 496 gallons	24	6	0
Apples, 260 barrels	130	0	0
Beef and pork, 434 barrels	1,302	0	0
Total	15,583	8	0

Produce of the Mines, exported.	L.	s.	d.
Coals, 12,020 chaldrons, at 25*s.*	15,025	0	0
Ditto, from Cape Breton, 30,677 chaldrons	38,371	15	0
Gypsum, 45,508 tons, at 10*s.*	22,754	0	0
Ditto, from Cape Breton, 628½ tons	318	5	0
Grindstones, 19,240, at 30*s.*	28,860	0	0
Total	105,329	0	0

Produce of the Forests.	L.	s.	d.
Square timber, 38,191 tons, at 15*s.*	29,643	5	0
Deals and inch boards, 9,984,000	24,280	0	0
Lathwood, 228 loads	228	0	0
Staves, 2,714,000	3,569	0	0
Shingles, 3,042,000	2,281	10	0
Handspikes, 2,300	115	0	0
Oars, poles, &c., 3,894	45	0	0
Masts and spars, 642	200	0	0
Hoops, 228,150	114	1	3
Value of timber shipped from Cape Breton	1,972	0	0
Total	62,447	16	3

The balance of exports consists of various articles, transhipped, principally West India produce, tea from China, &c.

Account of Vessels entered inwards in the Port of Halifax and Nova Scotia generally, in the Year ending 5th of January, 1833; and of those cleared outwards from the same.

Countries.	Inwards.			Outwards.		
	Ships.	Tons.	Men.	Ships.	Tons.	Men.
United Kingdom	110	17,454	2,317	104	25,429	1,174
Bordeaux	2	254	16			
Oporto	1	160	9	1	112	6
Guernsey and Jersey	3	379	22			
Cadiz	-	-	-	1	90	6
Smyrna	2	251	15			
Memel	4	992	41			
British West Indies	289	27,023	1,563	292	27,430	1,724
Petersburgh	1	227	12			
British N. A. colonies	1,046	63,945	3,784	1,104	69,166	4,048
Azores and Madeira	2	187	12	4	350	19
Malaga and Gibraltar	7	834	46	2	237	13
Foreign vessels from India or Europe	-	-	-	1	150	13
United States, British vessels	397	31,443	1,559	398	31,666	1,598
Ditto, foreign vessels	77	7,921	413	75	9,549	461
Brazil	6	1,381	98	10	1,584	82
Mauritius	1	187	10			
Canton	1	594	48			
Africa	-	-	-	1	90	7
Rio Janeiro	1	151	8			
Havannah	-	-	-	2	191	11
Totals	1,950	163,385	9,973	1,995	166,047	9,162

(See *M'Gregor's British America*, 2d ed. vol. i. p. 481. 483. &c.; *Moorsom's Letters from Nova Scotia, passim; Papers laid before the Finance Committee, &c.*)

HAMS (Ger. *Schinken*; Du. *Hammen*; Fr. *Jambons*; It. *Prosciutti*; Sp. *Jamones*; Rus. *Okorokii*), the thighs of the hog salted and dried. York, Hants, Wilts, and Cumberland, in England, and Dumfries and Galloway in Scotland, are the counties most famous for producing fine hams. Those of Ireland are comparatively coarse and without flavour. — (See BACON.) The hams of Portugal, Westphalia, and Virginia, are exquisitely flavoured, and are in high estimation. The imports of bacon and hams, prin-

cipally the latter, amount to about 1,350 cwt. a year. The duty is very heavy, being no less than 28*s.* a cwt.

HAMBURGH, a free Hanseatic city, on the north bank of the river Elbe, about 70 miles from its mouth, in lat. 53° 32′ 51″ N., lon. 9° 58′ 37″ E. Population, 125,000. Hamburgh is the greatest commercial city of Germany, and, perhaps, of the Continent. She owes this distinction principally to her situation. The Elbe, which may be navigated by lighters as far as Prague, renders her the *entrepôt* of a vast extent of country. Advantage, too, has been taken of natural facilities that extend still further her internal navigation; a water communication having been established, by means of the Spree and of artificial cuts and sluices, between the Elbe and the Oder, and between the latter and the Vistula; so that a considerable part of the produce of Silesia destined for foreign markets, and some even of that of Poland, is conveyed to Hamburgh. — (See CANALS.) There is, also, a communication by means of a canal with the Trave, and, consequently, with Lubeck and the Baltic, by which the necessity of resorting to the difficult and dangerous navigation of the Sound is obviated. Vessels drawing 14 feet water come up to the town at all times; and vessels drawing 18 feet may come safely up with the spring tides. The largest vessels sometimes load from and unload into lighters at Cuxhaven. The trade of Hamburgh embraces every article that Germany either sells to or buys from foreigners. The exports principally consist of linens, grain of all sorts, wool and woollen cloths, leather, flax, glass, iron, copper, smalts, rags, staves, wooden clocks and toys, Rhenish wines, spelter, &c. Most sorts of Baltic articles, such as grain, flax, iron, pitch and tar, wax, &c., may generally be bought as cheap at Hamburgh, allowing for difference of freight, as in the ports whence they were originally brought. The imports consist principally of sugar; coffee, which is the favourite article for speculative purchases; cotton wool, stuffs, and yarn; tobacco, hides, indigo, wine, brandy, rum, dye woods, tea, pepper, &c. Being brought from many different places, there is a great variety of quality in the grain found at Hamburgh; but a large proportion of the wheat is inferior. Some of the barley is very good, and fit for malting. The oats are feed of various qualities. The customs revenue is found to amount, one year with another, to from 30,000*l.* to 35,000*l.* The rate may, perhaps — (see *post*), be taken, on imports and exports, at a rough average, at 5*s.* 3*d.* per cent., which would give, at a medium, 12,380,000*l.* a year for the value of the trade in articles subjected to duties; and adding 2,000,000*l.* for the trade in articles exempted from duties, we have 14,380,000*l.* as the total annual value of the import and export trade of the port! And, as the largest portion of this immense trade is in our hands, it will be necessary that we should be a little fuller than ordinary in our details as to this great emporium.

Money. — Accounts are kept at Hamburgh in *marcs*, divided into 16 sols or schillings lubs, and the schilling into 12 pfenings lubs.

Accounts are also kept, particularly in exchanges, in pounds, schillings, and pence Flemish. The pound consisting of 2⅓ crowns, 3⅓ thalers, 7½ marcs, 20 schillings Flemish, and 240 grotes Flemish.

The monies in circulation at Hamburgh are divided into *banco* and *current money*. The former consists of the sums inscribed in the books of the bank opposite to the names of those who have deposited specie or bullion in the bank. *Banco* is intrinsically worth about 23 per cent. more than *currency*, but the *agio* is constantly varying. — (For an account of the Bank of Hamburgh, see BANKS (FOREIGN).)

Of the coins in circulation at Hamburgh, the rixdollar banco and the rixdollar current are the most common. The weight of the former is not uniform; but Dr. Kelly estimates it, at a medium, at 391·6 Eng. grains pure silver = 4*s.* 6¾*d.* The current rixdollar = 318·3 grains = 3*s.* 8½*d.* very nearly. The Hamburgh gold ducat = 9*s.* 4*d.*

Taking the mean value of the rixdollar banco at 54¾*d.* sterling, it follows, that 1*l.* sterling = 13 marcs 2·7 schillings banco, or 1*l.* sterling = 35*s.* 1*d.* Flemish banco. No fixed *par* of exchange can, however, be established between London and Hamburgh, on account of the fluctuation of banco. 1*l.* sterl. = 16 marcs 2 schillings Hamburgh currency, or 1 marc current = 14·8*d.* sterl. — (*Kelly's Cambist, Hamburgh.*)

Weights and Measures. — The commercial weights are,

2 Loths = 1 Ounce.	14 Pounds = 1 Lispound.	2½ Centners = 1 Shippound.
16 Ounces = 1 Pound.	8 Lispounds = 1 Centner.	

100 Hamburgh pounds = 106·8 lbs. avoirdupois = 129·8 lbs. Troy = 48·43 kilogrammes = 98 lbs. of Amsterdam. A stone of flax is 20 lbs. A stone of wool or feathers is 10 lbs.

In estimating the carriage of goods, the shippound is reckoned at 380 lbs.

The measures for liquids are,

2 Oessels = 1 Quartier.	2 Stubgens = 1 Viertel.	6 Ahms or 24 Ankers = 1 Fuder.
2 Quartiers = 1 Kanen.	4 Viertels = 1 Eimer.	
2 Kanens = 1 Stubgen.	5 Eimers = 1 Ahm or 4 Ankers.	

The ahm is equal to 38¼, and the fuder to 229½ English wine gallons.

A fass of wine = 4 oxhoft = 6 tierces. The oxhoft or hogshead is of various dimensions. 1 oxhoft French wine = 62 to 64 stubgens; an oxhoft of brandy = 60 stubgens. A pipe of Spanish wine = 96 to 100 stubgens. A tun of beer is 48 stubgens. A pipe of oil is 820 lbs. nett. Whale oil is sold per barrel of 6 steckan = 32 Eng. wine gallons.

The dry measures are,

4 Spints = 1 Himtems.	3 Fass = 1 Scheffel.	2 Wisps = 1 Last.
2 Himtems = 1 Fass	10 Scheffels = 1 Wisp.	1½ Last = 1 Stock.

The last = 11·2 Winchester quarters. A keel of coals yields from 8 to 9 lasts.

The Hamburgh foot = 11·289 English inches. The Rhineland foot, used by engineers and land surveyors, = 12·36 inches. The Brabant ell, most commonly used in the measurement of piece goods, = 27·585 inches.

A ton in the lading of a ship is generally reckoned at 40 cubic feet. Of things that are sold by number, a gross thousand = 1,200; a gross hundred = 120; a ring = 240; a common or small thousand = 1,000; a shock = 60; a steigs = 20; a gross = 12 dozen.

Imports. — We subjoin an account of the imports, consumption, exports, stocks, and prices, of some of the principal articles imported into Hamburgh, during each of the 10 years ending with the 1st of Jan., 1833.

Table of the principal Imports, Stocks, Exports, Consumption, and Prices at the Port of Hamburgh, from 1823 to 1832 inclusive.

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
	Lbs.	*Lbs.*	*Lbs.*	*Domingo. Schillings.*
Coffee - 1823	4,000,000	24,875,000	23,500,000	7¾ to 8¼
1824	5,375,000	36,500,000	32,375,000	6¼ - 6¾
1825	9,500,000	33,250,000	34,500,000	6 - 6½
1826	8,000,000	37,000,000	32,250,000	5½ - 5·9
1827	13,250,000	50,000,000	39,000,000	4 - 4½
1828	24,000,000	47,250,000	44,250,000	3¾ - 4¼
1829	27,000,000	39,000,000	42,000,000	3·7 - 3·9
1830	24,000,000	45,250,000	45,250,000	3½ - 4
1831	24,000,000	42,750,000	50,750,000	5¾ - 6¼
1832	16,000,000	53,750,000	47,250,000	5½ - 5·9
In 10 years -	- -	413,625,000	391,125,000	
Stock, Jan. 1. 1833	- -	- -	22,500,000	
Annual average from 1815 to 1822 - -			26,000,000	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
	Lbs.	*Lbs.*	*Lbs.*	*Br. & yel. Hav. Grotes.*
Sugar - - 1823	22,000,000	80,000,000	72,000,000	6 to 7½
1824	30,000,000	78,000,000	86,000,000	7 - 8
1825	22,000,000	81,250,000	78,250,000	7¾ - 9
1826	25,000,000	52,250,000	69,250,000	8¾ - 9¾
1827	8,000,000	85,000,000	81,000,000	8¼ - 9¾
1828	12,000,000	97,750,000	79,750,000	6¾ - 8½
1829	30,000,000	77,250,000	95,250,000	5¾ - 7¾
1830	14,000,000	101,000,000	86,000,000	4¼ - 6¾
1831	29,000,000	109,250,000	117,250,000	4¾ - 6·1
1832	21,000,000	109,750,000	100,750,000	5 - 6¼
In 10 years - -	- -	893,500,000	863,500,000	
Stock, Jan. 1. 1833	- -	-	30,000,000	
Annual average from 1815 to 1822 - -			74,500,000	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
	Pieces.	*Pieces.*	*Pieces.*	*Buenos Ayres. Schillings.*
Hides - - 1823	8,750	63,825	49,375	8½ to 10½
1824	23,200	47,497	65,157	8½ - 11½
1825	5,540	62,805	50,945	10 - 12
1826	17,400	82,630	68,630	8½ - 10½
1827	32,000	36,084	52,284	8¼ - 10¼
1828	15,800	16,610	25,290	8½ - 9½
1829	7,150	65,857	60,507	8½ - 9¾
1830	10,560	106,212	89,112	7¾ - 9¼
1831	27,600	127,522	108,522	7½ - 9
1832	46,600	103,101	129,201	7½ - 9
In 10 years - -	- -	718,923	698,423	
Stock, Jan. 1. 1833	- -	- -	20,000	
Annual average from 1815 to 1822 - -			108,100	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
	Lbs.	*Lbs.*	*Lbs.*	*Carolina. Marcs.*
Rice - - 1823	4,125,000	5,750,000	7,250,000	11 to 14
1824	2,625,000	4,875,000	6,500,000	14 - 16
1825	1,000,000	5,250,000	5,000,000	13 - 17
1826	1,250,000	4,875,000	4,750,000	14 - 18
1827	1,375,000	6,000,000	5,875,000	13 - 15½
1828	1,500,000	10,000,000	6,500,000	12½ - 16
1829	5,000,000	7,625,000	8,875,000	8½ - 13
1830	3,750,000	6,500,000	7,250,000	10 - 13½
1831	3,000,000	11,000,000	10,000,000	11 - 13
1832	4,000,000	5,250,000	8,250,000	13 - 15½
In 10 years - -	- -	71,250,000	70,250,000	
Stock, Jan. 1. 1833	- -	- -	1,000,000	
Annual average from 1815 to 1822 - -			8,750,000	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
	Lbs.	*Lbs.*	*Lbs.*	*Sumatra. Schillings.*
Pepper - 1823	500,000	1,470,000	1,070,000	5
1824	900,000	490,000	850,000	5½
1825	540,000	1,250,000	1,090,000	5¼
1826	700,000	2,400,000	1,900,000	4
1827	1,200,000	2,120,000	2,070,000	3½
1828	1,250,000	1,160,000	1,160,000	3
1829	1,250,000	1,150,000	1,150,000	3
1830	1,250,000	980,000	1,130,000	3·1
1831	1,100,000	1,630,000	1,930,000	3·1
1832	800,000	1,500,000	1,720,000	3·4 to 3½
In 10 years - -	-	14,650,000	14,070,000	
Stock, Jan. 1. 1833	-	- -	580,000	
Annual average from 1815 to 1822 - -			1,280,000	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
	Chs. ser.	*Chs. ser.*	*Chs. ser.*	*Fine blue Bengal. Marcs.*
Indigo - 1823	515 145	2 446 505	2,681 250	7¾
1824	280 400	5,315 655	5,390 875	12
1825	205 180	4,391 289	4,176 339	10½
1826	420 150	5,416 320	5,086 240	10
1827	750 210	4,047 842	4,052 457	8¾
1828	745 595	6,781 345	6,511 435	8¼
1829	1,015 505	5,483 306	5,298 556	6¾
1830	1,200 455	5,864 672	6,269 607	6
1831	795 520	4,695 536	4,915 546	5½
1832	575 510	8,054 269	8,044 339	4½ to 5
In 10 years - -	- -	51,007 4,884	50,422 4,414	
Stock, Jan. 1. 1833	- -	- -	585 440	
Annual average from 1815 to 1822 - -			3,880 450	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
	Hogsheads.	*Hogsheads.*	*Hogsheads.*	*Ord. Virg. Schillings.*
Tobacco - 1823	1,200	5,250	4,500	1¾ to 2¼
1824	1,950	5,168	5,368	1½ - 2
1825	1,750	3,204	3,854	3 - 3¼
1826	1,100	3,524	3,724	2¾ - 3
1827	900	5,378	4,978	2·1 - 2·4
1828	1,300	7,137	5,637	2 - 2·1
1829	2,800	3,361	4,111	2 - 2¼
1830	2,050	3,140	5,640	2 - 2·1
1831	1,550	5,166	4,566	1¾ - 2
1832	2,150	5,297	6,047	1·9 - 2
In 10 years - -	- -	47,825	46,425	
Stock, Jan. 1. 1833	- -	- -	1,400	
Annual average from 1815 to 1822 - -			3,850	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
	Bales.	*Bales.*	*Bales.*	*Geo. Upland. Schillings.*
Cotton - 1823	14,520	15,567	17,357	6¾ to 9½
1824	12,730	15,547	20,657	8½ - 10¼
1825	7,620	16,677	18,552	8¼ - 11
1826	5,745	25,068	22,213	6¾ - 8¾
1827	8,600	25,179	23,844	5¾ - 6¾
1828	9,935	29,518	29,513	6 - 7¼
1829	9,940	38,901	56,431	5 - 6¾
1830	12,410	21,288	25,453	6 - 7
1831	8,245	24,453	26,658	5½ - 6½
1832	6,040	36,828	37,003	6 - 7
In 10 years - -	- -	263,546	257,681	
Stock, Jan. 1. 1833	- -	- -	5,865	
Annual average from 1815 to 1822 - -			14,910	

	Stock, Jan. 1.	Import.	Consumption and Export.	Price in December.
	Puncheons.	*Puncheons.*	*Puncheons.*	*Leewards. Dollars.*
Rum - 1823	3,000	4,941	5,471	28 to 32
1824	2,470	3,828	3,798	26 - 27
1825	2,500	2,609	4,109	40 - 45
1826	1,000	3,750	3,250	39 - 42
1827	1,500	4,096	4,096	38 - 42
1828	1,500	4,947	4,747	32 - 37
1829	1,700	5,158	4,558	26 - 32
1830	2,300	4,759	5,059	24 - 30
1831	2,000	6,921	6,871	23 - 27
1832	2,050	5,593	6,643	24 - 28
In 10 years -	- -	49,602	48,602	
Stock, Jan. 1. 1833	- -	- -	1,000	
Annual average from 1815 to 1822 - -			6,320	

Exports. — We regret that no materials exist by which it is possible to give any account of the quantity and value of the different articles exported from Hamburgh. — (For some particulars as to the corn trade, see CORN LAWS AND CORN TRADE.) Linens are one of the most important articles of export. They are generally sold by the piece; but there are great differences in the dimensions of pieces of different denominations. The following Table is, therefore, of importance, as it exhibits the various descriptions of linen usually met with at Hamburgh, with the length and breadth of the different pieces. It also gives their cost on board in sterling, on 1st of March, 1833.

Descriptions.	Length.	Width.	Sold.	Cost on Board, in Sterling.
	Yards.	Yards.		£ s. d. £ s. d. £ s. d.
Platillas royales	35	15/16	per piece.	0 16 8 to 1 10 11 to 2 0 5
Brown Silesias	35	13/16	—	0 13 6 — 0 18 0 — 1 1 0
Britannias	7	15/16	—	0 3 11 — 0 7 7 — 0 9 5
Ditto	7	7/8	—	0 8 2 — 0 12 0 — 0 15 8
Dowlas	67½	15/16	—	1 12 10 — 2 2 0 — 2 17 11
Creas à la Morlaix	67½	15/16	—	1 15 2 — 2 14 0 — 3 15 0
Listados	43	7/8	—	1 1 0 — 1 7 0 — 1 16 0
White sheetings	50	5/4	—	2 3 5 — 2 14 0 — 3 2 11
Plain lawns	8¼	15/16	—	0 6 0 — 0 15 0 — 1 1 0
Clear, figured, and worked lawns	8¼	15/16	—	0 7 7 — 0 9 0 — 0 12 0
Arabias	21½	7/8	—	0 9 0 — 0 12 0 — 0 16 5
Checks, No. 2.	17½	3/4	—	0 5 3 — 0 6 0 — 0 6 7
Striped and checked books	43	3/4	per 3 pieces.	0 13 6 — 0 18 0 — 0 19 6
Hessia rolls	35	5/4	per piece.	0 8 7 — 0 12 0 — 0 16 5
Linen for coarse bags	35	19/16	—	0 9 0 — 0 12 0 — 0 13 6
Osnaburghs	—	—	per 100 double ells	1 12 10 — 3 7 4 — 4 2 6
Tecklenburghs	—	—	—	2 18 5 — 3 6 0 — 3 12 0

The Platillas and Britannias come principally from Silesia; the Creas from Lusatia, &c. Osnaburghs are made of flaxen, and Tecklenburghs of hempen, yarn. Linens are sold with a discount of 1 per cent.

Shipping. — The ships arriving at Hamburgh in the undermentioned years (ending 30th of September), have been as under: —

From the	1827.	1828.	1829.	1830.	1831.	1832.
East Indies	9	12	8	13	8	8
Brazil	83	71	85	82	94	93
West Indies	90	115	84	102	129	113
United States	40	42	40	23	42	44
Mediterranean	46	62	63	61	61	54
Spain	21	15	20	20	24	20
Portugal	30	18	16	28	16	13
France	62	86	61	65	47	107
Great Britain	570	529	587	710	652	672
Netherlands	346	342	395	375	290	387
Baltic	281	292	338	443	385	385
Totals	1,578	1,584	1,697	1,922	1,748	1,896

Navigation of the Elbe, Pilotage, &c. — The mouth of the Elbe is encumbered with sand banks. The channel leading to Cuxhaven is bounded on the north by the Vogel Sands and North Grounds, and on the south by the Schaarhorn Sands and Neuwerk Island. On the latter there are 2 light-houses and 2 beacons, and on the Schaarhorn is another beacon. The light-houses on Neuwerk Island are about 700 yards apart; the most southerly, which is also the most elevated, being in lat. 53° 54′ 57″ N., lon. 8° 29′ 40″ E. It is 128 feet high, being twice the height of the other. The channel is, in some places, hardly ¾ of a mile wide. The outer red buoy in the middle of the channel, at its mouth, bears from Heligoland S.E. by S., distant nearly 20 miles. But the best mark in entering the Elbe is the floating light, or signal ship, moored 2 miles N.W. by N. of the red buoy, in 11 fathoms at low water. This vessel never leaves her station, unless compelled by ice in the winter season. By night she exhibits a lantern light, 38 feet above deck, and in foggy weather rings a bell every quarter of an hour. A second signal ship is stationed 5½ miles S.E. by E. from the first, at the westernmost point of a sand bank dividing the fair way of the river. She is rigged like a galliot, to distinguish her by day from the first signal ship; and during night she exhibits *two* lights, one 18 feet above the other. The distance from the outer red buoy to Cuxhaven is about 16 miles; thence to Glückstadt the course is east, 28 miles; from the latter to Stade the course is south-easterly, 9 miles; and then easterly to Hamburgh, 18 miles. The channel throughout is marked with black and white buoys, which are numbered and specified in the charts. The black ones are to be left, in passing up the river, on the starboard or right hand side, and the white on the larboard side.

Every vessel coming from sea into the Elbe, and drawing 4 feet water, is directed to take a pilot on board, and must pay pilotage, though she do not take one. However well the signals, lights, beacons, and buoys may be arranged, an experienced pilot is very necessary, in case of a fog in the night, or of a storm. To take in a pilot, a vessel must heave to by the pilot galliot, which lies, in good weather, near the red buoy, and in bad weather, N.N.E. from Neuwerk, and is known by having at the flagstaff an admiral's flag, and a long streamer flying at the top. If the pilot boat have no pilot on board, or if the weather be so bad that the pilot cannot leave her, she lowers her flag, and then the vessel coming in must sail, with the signal for a pilot hoisted, to Cuxhaven, and heave to there, where she is certain of getting one.

There are no docks or quays at Hamburgh; and it is singular, considering the great trade of the port, that none have been constructed. Vessels moor in the river outside of piles driven into the ground a short distance from shore; and in this situation they are not exposed to any danger unless the piles give way, which rarely happens. There is a sort of inner harbour, formed by an arm of the Elbe which runs into the city, where small craft lie and discharge their cargoes. Larger vessels load and unload from their moorings, by means of lighters. These carry the goods from and to the warehouses which front the various small arms and channels of the river, and the canals carried from it into different parts of the city. The charges on account of lighterage are extremely moderate.

Port Charges. — The charges of a public nature payable by vessels entering the port of Hamburgh, unloading and loading, are pilotage and lastage. The separate items of which are given in the following Table.

Pilotage and Lastage. — The Hamburgh pilots, generally speaking, take charge of vessels only from the *Red Buoy* to *Freyburgh* or *Glückstadt*, the pilotage for which is regulated by law of the 18th of February, 1750, as follows: —

	For each Foot Hamburgh Measure which a Vessel draws.*			
	During the Six Summer Months, from 1st Mar. to 1st Sept.	During the remaining Six Winter Months.		
	Marks Currency.		English Money.	
			s. *d.*	*s.* *d.*
Vessels coming northwards, and colliers	2 0	3 0	2 4	3 6
All vessels, smacks, and kayen drawing more than 4 feet water, and in ballast	2 0	3 0	2 4	3 6
Vessels laden with salt or corn, wheresoever they may come from	3 0	4 8	3 6	5 3
Vessels which, besides salt, corn, or ballast, have one third of the cargo consisting of piece goods	4 0	6 0	4 8	7 0
Vessels laden with herrings	2 0	3 0	2 4	3 6
All vessels laden with wine, oil, vinegar, train oil, iron, lead, packages, or bags, and all vessels coming from foreign parts, whether laden or not	4 0	6 0	4 8	7 0
All smacks going between Holland, Friesland, and Hamburgh with piece goods	4 0	6 0	4 8	7 0

Half Pilotage only. — *N.B.* In case the Hamburgh pilots enter a vessel only within the first buoy beyond the Rosshacken, Strangfly, or Cuxhaven, half the above mentioned pilotage is paid. Also half pilotage must be paid at all events, whether the vessel has taken a pilot from the pilot galliot or not.

Pilotage earned. — The above pilotage is earned if vessels are brought as far as *Freyburgh* or [illegible] and when from stress of wind or weather, which seldom happens, the Hamburgh pilots take vessels to *Wittenbergh* or *Neumühlen*, they are to pay, without distinction —

	Marcs currency.	*d. stg.*
To Wittenbergh	1 0	14 0
— Neumühlen	1 8	21 0

Pilotage all the Way. — For pilotage the whole way from Cuxhaven to Hamburgh, there is no table of rates, for, generally speaking, the Hamburgh pilots do not take vessels up beyond *Boesch*.

From Boesch to Hamburgh. — Vessels are generally piloted from Boesch to Hamburgh by Danish or Hanoverian pilots, to whom it is customary to pay 3 marcs.

Harbour-master's Charges. — By a Custom-house order of the 16th of December, 1816, the Hamburgh harbour-master is not entitled to fees.

Lastage and Custom-house Charges. — British and other foreign vessels pay the same as Hamburgh vessels. For clearing in and clearing out, no separate charges are made; visiting the port is considered as *one* voyage, and the charges on vessels are paid as follows: —

For vessels arrived with cargoes from the undermentioned places: viz. —

Places.	For every Commercial Last.	Sterling.
	Marcs.	*L.* *s.* *d.*
The East Indies	3 0	0 3 6
West Indies, North and South America	2 8	0 3 5
Portugal, Spain, and the Mediterranean	2 0	0 2 4
The rest of the European ports	1 8	0 1 9
Holland, East Friesland, the Weser, Eyder, and Jutland	0 12	0 0 10½
For vessels under 20 commercial lasts * without distinction	0 4	0 0 3½
Vessels arriving and departing in ballast, of upwards of 20 commercial lasts	0 8	0 0 7

For all vessels laden with coals, wood, or turf, no lastage is paid, provided they do not take return cargoes.

Half Lastage. — Vessels arriving in ballast and departing with a cargo pay half the above lastage, according to their destination.

N.B. — Exclusive of the above dues, which are all remarkably moderate, vessels coming to the port of Hamburgh are obliged to pay certain dues to Hanover, called Stade or Brunshausen dues. These are rated according to the number of the vessel's masts, and are over and above the Stade duties on the cargo. — (For the items, see STADE.)

* Sixteen feet English are equal to 17 feet Hamburgh.

* It is difficult to determine the exact ratio of a last to a ton, but it may be taken at about 3 or 2¾ to 1. But in Hamburgh all vessels are measured by the harbour-master; and it is upon his report that the lastage is calculated.

Tariff. — The customs duties at Hamburgh are as moderate as possible, being only ⅛ per cent. *ad valorem* on exports, and ½ per cent. on imports; but in truth they are not quite so much, being calculated in money of one value and paid in money of less value. The duty is, in fact, estimated in banco marcs, while it is paid in current marcs, which are more than 20 per cent. under the former; so that in reality the import duty is only about 2-5ths per cent. A few years ago it was 1½ per cent.*, but the competition of the Altona merchants, where there are no duties, obliged the authorities at Hamburgh to reduce these duties to the present level. There is no inspection of goods at the Custom-house. The merchant makes oath to the nett weight of the article, and to its value at the current prices of the day, and on this the duty is assessed.

The following articles are free from both import and export duties, viz. —

1. Linen, rags, flax yarn, hemp yarn, cotton yarn, raw sheep and lamb's wool.
2. Wheat, rye, oats, barley, buckwheat, and malt.
3. Unwrought copper and brass, plates of copper, raw zinc, tinned and untinned iron plates.
4. Cash and coin, unwrought gold and silver, and scrapings of the precious metals.
5. Pamphlets and printed works.

Articles free from Import Duty.

1. Timber, staves, and fire wood brought down the Elbe or in carriages into the city, the latter with the exception of that coming from the sea.
2. Merchandise coming by post, if the goods for the same individual do not exceed the value of 50 marcs banco.

Articles free from Export Duty.

1. All articles manufactured in Hamburgh, and all foreign manufactures worked up in the city.
2. Small packages of 100 lbs. weight and under, provided their value do not exceed 100 marcs banco.

N.B. — An import duty of 4 schillings current is payable upon lemons and oranges, for the whole chest to 1,000; 2 schillings current for the ½ chest to 500; and for casks in the same proportion.

The duties are the same whether the importation be effected by Hamburgh or by foreign ships. Exclusive of the above or customs duties, most articles of provision imported for the consumption of the town are subject to an excise duty.

Stade Duties. — Besides the duties levied at Hamburgh, all articles passing up the Elbe to Hamburgh, whether for transit or not, pay duties to Hanover at Brunshausen, near Stade. These duties are rated according to a tariff, and are computed from the ship's manifest, bills of lading, and cockets, which have all to be sent on shore for that purpose. On some articles, particularly those of British manufacture, these duties are very heavy, being frequently much larger than the Hamburgh duties! They are particularly grievous, too, from heavy penalties being attached even to the slightest unintentional mistakes. It is really surprising, considering the source of this nuisance, that it should not have been abated long ago. It might, at all events, have been expected that British ships and goods would have been exempted from such a tax. We do hope that some portion of the public attention will be directed to this crying evil. With what face can we protest against the conduct of Prussia and other German states in throwing obstacles in the way of the free navigation of the Elbe, when we submit, without a murmur, to similar proceedings on the part of Hanover? — (For further particulars, see STADE.)

* It was so stated by mistake in the former edition of this work.

Transit Goods are totally exempted from duty. They are such only as arrive at Hamburgh *direct*, and which are neither sold nor exchanged while in the city. The liberty of transit is limited to the term of 3 months from the time of receiving the transit ticket; but, upon application being made for a prolongation of the term previously to the expiration of the first 3 months, it is granted on payment of ¼ per cent. on the banco value of the goods; but under no circumstances is the term extended beyond 6 months. If the goods be not then exported, they become liable to the ordinary duties.

Warehousing System. — This has not been introduced at Hamburgh; nor, from the smallness of the duties, is it necessary, though it would seem that the time during which goods are allowed to be in *transitu* might be advantageously extended. The warehouse rent of a quarter of wheat may be about 1¼*d.* sterling per month, and of a ton of sugar, about 9*d.*; but there are no fixed rates.

Custom-house Regulations. — On passing Stade, the masters of vessels must send their papers, including the manifest, bills of lading, and cockets, on shore, that the amount of the Stade duties may be calculated. On the vessel's arrival at Hamburgh, the broker reports her to the Custom-house, and gives his guarantee for payment of the duties; he either delivers her papers, or undertakes to deliver them as soon as they can be got from Stade, and, upon a receipt being produced for the Stade duties by the Hanoverian authorities at Hamburgh, the vessel is allowed to unload. On clearing, a manifest of the outward cargo, together with the consul's certificate of the regularity of the ship's papers, must be produced at the Custom-house by the broker, who obtains in return a clearance certificate, authorising the vessel to go to sea.

Quarantine is enforced, when occasion requires, at Hamburgh, and is performed near Cuxhaven.

Credit, Brokerage, &c. — Almost all goods are sold for ready money, with an allowance of 1 per cent. for discount. Sometimes, but not frequently, sales are made at 2 or 3 months' credit, and in such cases a higher price is obtained than for cash. Sometimes sugar is sold to the sugar baker at this credit.

Brokers are positively forbidden to act as merchants or factors. They are licensed by the Senate, and must conform to the established regulations.

Brokerage is paid wholly by the seller, and amounts to —

"Five sixths per cent. on cotton, cotton twist, cocoa, cochineal, copper, hides, indigo, manufactured goods, muskeets, sugar, and tea*.

"One per cent. on annotto, camphire, cinnamon, cardamoms*, cassia*, cloves*, drugs not denominated*, deer skins, dye woods, ginger*, jalap*, mace*, nutmegs*, pepper, pimento, potashes, Peruvian bark, quercitron bark, rice*, saltpetre, sarsaparilla*, shellac*, tamarinds*, tobacco in leaves* and tobacco stems* of the growth of the United States of America, whale oil*, vasellos*.

"*N.B.*— Tobacco stems* of all other origin, segars, and other manufactured tobacco, pay 2 per cent.; all other leaf and roll tobacco*, 1½ per cent.

"One and a half per cent. on wine, brandy, rum, and arrack, if sold in parcels amounting to 5,000 marcs banco and upwards.

"Two per cent. on ditto, for sales of and under 5,000 marcs banco.

"In auction the selling broker is entitled to 1½ per cent. and the purchasing broker to 2 per cent., without regard to the amount."

All articles marked (*) pay the brokerage before-mentioned, if the quantity sold amounts to 900 marcs banco, or higher; for smaller lots of less than 900 marcs banco, and down to 150 marcs banco, the brokerage is paid, with the addition of one half, and under 150 marcs banco, the double is allowed. All other merchandise pays 1½ per cent. at least for sales not exceeding 150 marcs banco.

It is, however, to be observed, that all augmentations, in proportion to the amount sold, are only to be understood for sale by private contract, and not for those by auction; and even not for such private sales, where a broker has made the purchase of a larger quantity of goods above the said amount of 900 marcs banco, and has afterwards divided it into smaller lots.

Conditions of Sale. — *Imports.* — Coffee is sold per pound in schill. banco; discount, 1 per cent.; good weight is ½ per cent. Tare is as follows: viz. on casks, real weight; on bags of 130 lbs. or less, 2 lbs.; above 130 lbs. and not above 180 lbs., 3 lbs.; above 180 lbs. and not exceeding 200 lbs., 4 lbs. On Mocha bales of about 300 lbs., 14 lbs.; of 600 lbs., 30 lbs. On Bourbon single bales, 2 lbs.; on double, 4 lbs.

Cotton is sold per lb. in schill. banco; discount, 1 per cent.; good weight, 1 per cent.; tare on bales, West Indian and North American, 4 per cent.; on square bales, 6 per cent.; on Bombay and Surat bales, 8 per cent.; on Bourbon bales and Manilla serons, 6 per cent.; on Caraccas and Guiana small serons, 10 per cent. For the regulation of the Stade duty, all packages should be called bags, and not bales, in the bill of lading.

East India piece goods are sold per piece, in marcs banco; discount, 1 per cent. For saving in the Stade duty, if more than 30 pieces are in a bale, the number of pieces should not be mentioned in the bill of lading, but only the number of bales.

Flour is sold per 100 lbs. in marcs currency, uncertain agio; discount 1 per cent.; good weight, 1 per cent.; tare, 20 lbs. per barrel.

Fustic is sold per 100 lbs. in marcs currency; agio, 20 per cent.; discount, 1 per cent.; good weight, 1 per cent.; and frequently an allowance in weight is made, if the wood is not very solid.

Indigo is sold per lb. in schill. banco; discount, 1 per cent.; good weight, ½ per cent.; tare, if in serons upwards of 120 lbs., 22 lbs.; in ½ serons less than 120 lbs., 20 lbs.; in chests, real tare.

Logwood is sold like fustic. — *N.B.* To avoid a high Stade duty, the nett weight of all dye woods should be stated in the bills of lading.

Pepper is sold per lb. in schill. banco; discount, 1 per cent.; good weight, ½ per cent.; tare, if in single bales of 300 lbs., 3 lbs.; in double bales, 6 lbs.

Quercitron bark is sold per 100 lbs. in marcs currency; agio, 20 per cent.; discount, 2 per cent.; good weight, 1 per cent. To determine the tare, the American tare is reduced to Hamburgh weight.

Rice is sold per 100 lbs. in marcs banco; discount, 1 per cent.; good weight, 1 per cent.; tare, real; and super-tare for tierces, 4 lbs.; for ½ tierces, 2 lbs.

Rum is sold per 30 quarts in rixdoll. currency, agio uncertain.

Sugar, raw and clayed, is sold per lb. in banco groats, with a rebate of 8 2-3ds per cent.; discount, 1 per cent., and sometimes 1½ per cent.; Brazil or Havannah chest, good weight, ¾ per cent.; real tare; super-tare, 10 lbs. for Brazil, and 5 lbs. for Havannah sugar, per chest. Muscovados in casks, good weight, 1 per cent.; tare, if the casks weigh upwards of 1,000 lbs., 18 per cent.; if less, 20 per cent. Clayed sugars, good weight, 1 per cent.; tare, 16 per cent. East India sugars, in bags, good weight, ¾ per cent.; tare for white, 4 to 5 lbs.; for brown, 6 to 7 lbs.

Tea, per lb. in schill. currency, agio uncertain; discount, 1 per cent.; good weight, ½ per cent. Tare of bohea, in chests of 400 lbs., 70 lbs.; of 150 to 180 lbs., 45 lbs. All black tea, 28 lbs. tare; green, 24 lbs. For the regulation of the Stade duty, the nett weight should likewise be mentioned in the bill of lading.

Tobacco. — Leaf tobacco is sold per lb. in schill. banco, agio uncertain; discount, 1½ per cent.; good weight, 1 per cent.; tare per cask, 80 lbs. Brazil leaf in serons; tare 5 per cent. In rolls; canister, in baskets of about 100 lbs.; good weight, 1 lb. per basket; tare, 14 lbs. if the basket is packed up in linen, and 12 lbs. if without linen. Porto Rico rolls, good weight, 1 per cent.; no tare, as the rolls are weighed by themselves. Brazil rolls, in serons of 400 to 600 lbs., are sold per lb., in schillings banco; good weight, ¾ per cent.; tare, 8 lbs. per seron. Tobacco stems per 100 lbs., in marcs currency, agio uncertain; discount, 1½ per cent.; good weight, 1 per cent.; tare, if in casks, real weight; if packed up with cords, 2 to 4 per cent. according to the thickness of the rope. As there is a great difference in the Stade duty for the different sorts of tobacco, it is necessary that, on shipping leaf tobacco, there should be inserted in the bill of lading, *Leaf Tobacco*, omitting the weight. With tobacco in rolls, only the number of packages containing roll tobacco, and the nett weight, without mentioning the number of rolls, should appear in the bill of lading.

Glass (window) is sold per chest, in marcs currency, agio uncertain; other glass ware per piece, dozen, or hundred, in schillings or marcs currency, with uncertain agio; discount, 1 per cent.

Hares' wool is sold per 2 lbs., in marcs currency agio uncertain; discount, 1 per cent.

Hare skins (German, grey) are sold per 100 pieces, in rixdoll. banco. Russian, grey, per 104 pieces, in rixdoll. banco. White, in marcs currency, agio uncertain; discount, 1 per cent.

Iron is sold per 100 lbs., in schill. currency, agio uncertain, discount, 1 per cent.

Copper is sold per 100 lbs. in schill. banco; discount, 1 per cent.

The exchange business done at Hamburgh is very great; for besides the business of the place, most of the merchants in the inland towns have their bills negotiated there.

The usual charge for commission is, on sales 2 per cent. and 1 per cent. for *del credere*, if such guarantee be required; on purchases, 2 per cent. Under particular agreements, the rates sometimes vary considerably from the above

Citizenship. — Foreigners cannot establish themselves as merchants, or carry on any business in their own names, at Hamburgh, without becoming burghers; and to be manufacturers, they must also enter the guild or corporation peculiar to the trade they mean to follow. But to become a burgher one has only to comply with certain forms and pay certain fees, which do not, in all, exceed 10*l.* He then becomes, in the eye of the law, a Hamburgh subject; and enjoys all the rights and privileges of a native.

Banking, Insurance, &c. — For an account of the Bank of Hamburgh, see BANKS (FOREIGN). All sorts of insurances are effected at Hamburgh. A municipal regulation compels the insurance of all houses within the city, the rate varying according to the number of fires, and the amount of loss. Marine insurance is principally effected by joint stock companies, of which there are several; their competition has reduced the premiums to the lowest level, and the business is not understood to be profitable. The high duties on policies of insurance in this country has led to the insuring of a good many English ships at Ham-

burgh. Life insurance is not prosecuted in Germany to any considerable extent; but some of the English companies have agents here, who are said not to be very scrupulous.

Bankruptcy. — Considering the vast number of merchants and trades'people at Hamburgh, bankruptcy does not seem to be of frequent occurrence. During the 3 years ending with 1831, the number of declared bankrupts and the amount of their debts were as under: —

1829.		1830.		1831.	
Number of Bankrupts.	Amount of Debts.	Number of Bankrupts.	Amount of Debts.	Number of Bankrupts.	Amount of Debts.
	L.		*L.*		*L.*
69	109,948	93	118,251	117	277,615

But this account does not include the failures settled by private compromise, and of which no public notice is taken. The increase in 1831 is owing, in a great measure, to the failure, for 111,000*l.*, of a company which had lent their money improvidently on houses, &c. Much of the business transacted at Hamburgh being on commission and for account of houses abroad, the failure of foreign merchants is a prevalent source of bankruptcy. Another source of bankruptcy is losses on goods imported or exported on speculation, and occasionally losses in the funds, in which a good deal of gambling goes on here. Expensive living is not nearly so prevalent a source of bankruptcy here as in London and other places.

The law of Hamburgh makes 3 classes of bankrupts; — the unfortunate, the careless, and the fraudulent. The first class consists of those whose books show that misfortune alone has occasioned the bankruptcy; that the party has all along lived within his probable income, and can account to his assignees completely for all his losses. Whoever is adjudged by the court to belong to this class (which contains but few in number), is considered entirely free from his debts, and is not subject to be called upon hereafter. The second and most numerous class, contains those termed "careless" bankrupts. These are persons who have entered into speculations exceeding their means, who have gone on for a considerable time after they found their affairs in arrear, who have lived beyond their income, have not kept their books in good order, and so forth. They are liable to be confined in prison for a period of 3 or 6 months; and, provided they have not paid a dividend of 40 per cent., may be called upon for payment of their debt after 5 years from their discharge. If a claim be made by any creditor after this lapse of time, the bankrupt is obliged to pay whatever sum he is able for the benefit of his creditors. He must swear that he cannot pay any thing, or not above a certain sum, without depriving himself and his family of necessaries. Every 5 years the claim may be repeated. All careless bankrupts are disabled from holding offices of honour. The third class contains the "fraudulent" bankrupts, who are liable to be imprisoned according to the extent of their frauds, for a limited period or even for life, besides being rendered incapable of holding any office whatever. Should a bankrupt abscond, he is called upon by public advertisement to appear by a certain day, in default of which he is adjudged a fraudulent bankrupt, and his name is posted up on a black board on the Exchange.

Repair of Ships, Sea Stores, &c. — Materials and labour being cheap, Hamburgh may be regarded, in so far as respects expense, as a favourable place for careening and repairing ships; but, having no docks, these operations are inconveniently performed. All articles of provision may be obtained in great abundance and at moderate prices.

An Account of the Prices of the principal Articles of Ships' Provision at Hamburgh in 1831, stated in Imperial Weights and Measures, and in Sterling Money.

	Pork.	Beef.	Butter (equal to Cork Thirds)	Ship Bread.	Seconds Flour.	Eydam Cheese.	Peas.	Jamaica Rum.
	Per Barrel of 200 lbs. Nett.	Per Barrel of 220 lbs. Nett.	Per Cwt.	Per Bag of 112 lbs. Nett.	Per Barrel of 196 lbs. Nett.	Per lb.	Per Imperial Quarter.	Per Imperial Gallon.
	s. d. *s. d.*	*s. d.* *s. d.*	*s. d.* *s. d.*	*s. d.* *s. d.*	*s. d.* *s. d.*	*d.* *d.*	*s. d.* *s. d.*	*s.* *d.* *s.* *d.*
January - -	48 0 to 50 0	45 0 to 0 0	61 0 to 70 0	13 6 to 14 6	27 0 to 28 0	4 to 4½	34 0 to 37 0	3 1 to 3 7
April - -	56 0 — 58 0	48 0 — 50 0	62 0 — 69 0	15 0 — 17 0	30 0 — 32 0	4½ — 4¾	31 0 — 33 6	3 2 — 4 1
July - -	57 0 — 64 0	45 0 — 48 0	45 0 — 56 0	13 0 — 14 0	24 0 — 27 0	4¾ — 4¾	27 0 — 29 0	2 9 — 3 10
October - -	none.	42 0 — 45 6	50 0 — 74 0	12 0 — 0 0	23 0 — 0 0	4 — 4¼	29 0 — 33 6	2 6 — 3 4
December - -	59 0 — 60 0	42 0 — 45 0	54 0 — 68 0	11 6 — 12 0	23 0 — 0 0	4 — 5	29 0 — 34 0	2 3 — 3 3

Fuel.—Coals. 19 marcs current, or about 22*s.* 6*d.* per ton, British weight, in large quantities.
Do. 23 marcs current, or about 27*s.* 6*d.* per ton, British weight, in small quantities, free on board.
Fresh beef, 25*s.* 6*d.* to 30*s.* per cwt.
Fresh pork, 4*s.* 2*d.* to 5*s.* 1*d.* per 14 lbs.

N. B. — The prices include the cost of the packages of all the articles, excepting cheese and peas. In September and October no pork was to be had in a wholesale way.

Freights. — The different ship agents engaged in the trade with Great Britain have published a Table of freights; but as they are, notwithstanding, materially influenced by the demand at the time, the season, &c., it seems unnecessary to insert it.

General Remarks. — The trade of Hamburgh is, in a great measure, passive; that is, it depends more on the varying wants and policy of others than on its own. There is nothing of such vital importance as the free navigation of the Elbe to the prosperity of Hamburgh, and, indeed, of all the countries through which it flows. This, too, is a matter of paramount consequence as respects our interests; for the Elbe is the grand inlet by which British manufactures find their way into some of the richest and most extensive European countries. The principle that the navigation of the Elbe, the Rhine, the Weser, &c. should be quite free along their whole course, was distinctly laid down by the Congress of Vienna in 1815. But no general tariff of duties being then established, this declaration has hitherto had no practical effect. Prussia, who is endeavouring to bolster up a system of home manufactures, has laid heavy transit duties on articles passing by the Elbe, and has prevailed on Anhalt, and some of the smaller states, to follow her example. These duties amount, on some of the coarser sorts of British woollen goods, to no less than 60 per cent. *ad valorem*, and are, even when lightest, a great obstacle to trade. It is to be hoped that a just sense of their own real interests may, at no distant period, open the eyes of the German governments to the impolicy of such proceedings. It is in an especial manner for the interest of Saxony, Austria, and England, that these duties should be abolished; and their influence in the diet, if properly exerted, might countervail that of Prussia. So long, however, as the Stade duties are kept up, it would be folly to imagine that much attention should be paid to our remonstrances against the Prussian duties. If we cannot prevail on Hanover to emancipate our commerce from oppressive restrictions and burdens, we need hardly expect to succeed with any other power. Were the Stade duties and those in the upper parts of the Elbe wholly abolished, we have little doubt that, in a dozen years, the trade of Hamburgh would be nearly doubled; an increase which, however advantageous to her, would be far more advantageous to the extensive countries of which she is the grand emporium.

In compiling this article we have made use of *Oddy's European Commerce*, pp. 412—439.; *Rordansz's European Commerce*, pp. 305—330.; the *Dictionnaire de Commerce* (*Ency. Méthodique*), tome i. pp. 44—53.; and of the *Circulars* of *Berenberg, Gossler and Co., Anderson, Hober, and Co.*, and other eminent merchants. We have also been much indebted to *Mr. Consul Canning's Answers to the Circular Queries*. That functionary has replied to the various questions submitted to him in a way that does equal credit to his industry and intelligence. From the circumstance of no official returns being published or obtainable at Hamburgh, the returns of imports given above must not be regarded as quite accurate, though the errors they involve cannot be material. They are principally taken from *Berenberg and Co.'s Circular*.

HANSEATIC LEAGUE, an association of the principal cities in the north of Germany, Prussia, &c., for the better carrying on of commerce, and for their mutual safety and defence. This confederacy, so celebrated in the early history of modern Europe, contributed in no ordinary degree to introduce the blessings of civilisation and good government into the North. The extension and protection of commerce was, however, its main object; and hence a short account of it may not be deemed misplaced in a work of this description.

Origin and Progress of the Hanseatic League. — Hamburgh, founded by Charlemagne in the ninth, and Lubeck, founded about the middle of the twelfth century, were the earliest members of the League. The distance between them not being very considerable, and being alike interested in the repression of those disorders to which most parts of Europe, and particularly the coast of the Baltic, were a prey in the twelfth, thirteenth, and fourteenth centuries, they early formed an intimate political union, partly in the view of maintaining a safe intercourse by land with each other, and partly for the protection of navigation from the attacks of the pirates, with which every sea was at that time infested. There is no very distinct evidence as to the period when this alliance was consummated; some ascribe its origin to the year 1169, others to the year 1200, and others to the year 1241. But the most probable opinion seems to be, that it would grow up by slow degrees, and be perfected according as the advantage derivable from it became more obvious. Such was the origin of the Hanseatic League, so called from the old Teutonic word *hansa*, signifying an association or confederacy.

Adam of Bremen, who flourished in the eleventh century, is the earliest writer who has given any information with respect to the commerce of the countries lying round the Baltic. And from the errors into which he has fallen in describing the northern and eastern shores of that sea, it is evident they had been very little frequented and not at all known in his time. But from the beginning of the twelfth century, the progress of commerce and navigation in the North was exceedingly rapid. The countries which stretch along the bottom of the Baltic, from Holstein to Russia, and which had been occupied by barbarous tribes of Sclavonic origin, were then subjugated by the kings of Denmark, the dukes of Saxony, and other princes. The greater part of the inhabitants being exterminated, their place was filled by German colonists, who founded the towns of Stralsund, Rostock, Wismar, &c. Prussia and Poland were afterwards subjugated by the Christian princes and the Knights of the Teutonic Order. So that, in a comparatively short period, the foundations of civilisation and the arts were laid in countries whose barbarism had ever remained impervious to the Roman power.

The cities that were established along the coast of the Baltic, and even in the interior of the countries bordering upon it, eagerly joined the Hanseatic confederation. They were indebted to the merchants of Lubeck for supplies of the commodities produced in more civilised countries, and they looked up to them for protection against the barbarians by whom they were surrounded. The progress of the League was in consequence singularly rapid. Previously to the end of the thirteenth century, it embraced every considerable city in all those vast countries extending from Livonia to Holland, and was a match for the most powerful monarchs.

The Hanseatic confederacy was at its highest degree of power and splendour during the fourteenth and fifteenth centuries. It then comprised from 60 to 80 cities, which were distributed into 4 classes or circles. Lubeck was at the head of the first circle, and had under it Hamburgh, Bremen, Rostock, Wismar, &c. Cologne was at the head of the second circle, with 29 towns under it. Brunswick was at the head of the third circle, consisting of 13 towns. Dantzic was at the head of the fourth circle, having under it 8 towns in its vicinity, besides several that were more remote. The supreme authority of the League was vested in the deputies of the different towns assembled in congress. In it they discussed all their measures; decided upon the sum that each city should contribute to the common fund; and upon the questions that arose between the confederacy and other powers, as well as those that frequently arose between the different members of the confederacy. The place for the meeting of congress was not fixed, but it was most frequently held at Lubeck, which was considered as the capital of the League, and there its archives were kept. Sometimes, however, congresses were held at Hamburgh, Cologne, and other towns. They met once every 3 years, or oftener if occasion required. The letters of convocation specified the principal subjects which would most probably be brought under discussion. Any one might be chosen for a deputy; and the congress consisted not of merchants

only, but also of clergymen, lawyers, artists, &c. When the deliberations were concluded, the decrees were formally communicated to the magistrates of the cities at the head of each circle, by whom they were subsequently communicated to those below them; and the most vigorous measures were adopted for carrying them into effect. One of the burgomasters of Lubeck presided at the meetings of congress; and during the recess the magistrates of that city had the sole, or at all events the principal, direction of the affairs of the League.

Besides the towns already mentioned, there were others that were denominated confederated cities, or allies. The latter neither contributed to the common fund of the League, nor sent deputies to congress; even the members were not all on the same footing in respect to privileges: and the internal commotions by which it was frequently agitated, partly originating in this cause, and partly in the discordant interests and conflicting pretensions of the different cities, materially impaired the power of the confederacy. But in despite of these disadvantages, the League succeeded for a lengthened period, not only in controlling its own refractory members, but in making itself respected and dreaded by others. It produced able generals and admirals, skilful politicians, and some of the most enterprising, successful, and wealthy merchants of modern times.

As the power of the confederated cities was increased and consolidated, they became more ambitious. Instead of limiting their efforts to the mere advancement of commerce and their own protection, they endeavoured to acquire the monopoly of the trade of the North, and to exercise the same sort of dominion over the Baltic that the Venetians exercised over the Adriatic. For this purpose they succeeded in obtaining, partly in return for loans of money, and partly by force, various privileges and immunities from the northern sovereigns, which secured to them almost the whole foreign commerce of Scandinavia, Denmark, Prussia, Poland, Russia, &c. They exclusively carried on the herring fishery of the Sound, at the same time that they endeavoured to obstruct and hinder the navigation of foreign vessels in the Baltic. It should, however, be observed, that the immunities they enjoyed were mostly indispensable to the security of their commerce, in consequence of the barbarism that then prevailed; and notwithstanding their attempts at monopoly, there cannot be the shadow of a doubt that the progress of civilisation in the North was prodigiously accelerated by the influence and ascendancy of the Hanseatic cities. They repressed piracy by sea and robbery by land, which must have broken out again had their power been overthrown before civilisation was fully established; they accustomed the inhabitants to the principles, and set before them the example, of good government and subordination; they introduced amongst them conveniences and enjoyments unknown by their ancestors, or despised by them, and inspired them with a taste for literature and science; they did for the people round the Baltic, what the Phœnicians had done in remoter ages for those round the Mediterranean, and deserve, equally with them, to be placed in the first rank amongst the benefactors of mankind.

"In order," as has been justly observed, "to accomplish their purpose of rendering the Baltic a large field for the prosecution of commercial and industrious pursuits, it was necessary to instruct men, still barbarous, in the rudiments of industry, and to familiarise them in the principles of civilisation. These great principles were laid by the confederation, and at the close of the fifteenth century the Baltic and the neighbouring seas had, by its means, become frequented routes of communication between the North and the South. The people of the former were enabled to follow the progress of the latter in knowledge and industry. The forests of Sweden, Poland, &c. gave place to corn, hemp, and flax; the mines were wrought, and in return the produce and manufactures of the South were imported. Towns and villages were erected in Scandinavia, where huts only were before seen: the skins of the bear and the wolf were exchanged for woollens, linens, and silks: learning was introduced; and printing was hardly invented before it was practised in Denmark, Sweden, &c." — (*Catteau, Tableau de la Mer Baltique*, tom. ii. p. 175.)

The kings of Denmark, Sweden, and Norway were frequently engaged in hostilities with the Hanse towns. They regarded, and, it must be admitted, not without pretty good reason, the privileges acquired by the League, in their kingdoms, as so many usurpations. But their efforts to abolish these privileges served, for more than 2 centuries, only to augment and extend them.

"On the part of the League there was union, subordination, and money; whereas the half-savage Scandinavian monarchies were full of divisions, factions, and troubles; revolution was immediately followed by revolution, and feudal anarchy was at its height. There was another circumstance, not less important, in favour of the Hanseatic cities. The popular governments established amongst them possessed the respect and confidence of the inhabitants, and were able to direct the public energies for the good of the state. The astonishing prosperity of the confederated cities was not wholly the effect of commerce. To the undisciplined armies of the princes of the North — armies composed of

vassals without attachment to their lords — the cities opposed, besides the inferior nobles, whose services they liberally rewarded, citizens accustomed to danger, and resolved to defend their liberties and property. Their military operations were combined and directed by a council composed of men of tried talents and experience, devoted to their country, responsible to their fellow citizens, and enjoying their confidence. It was chiefly, however, on their marine forces that the cities depended. They employed their ships indifferently in war or commerce, so that their naval armaments were fitted out at comparatively small expense. Exclusive, too, of these favourable circumstances, the fortifications of the principal cities were looked upon as impregnable; and as their commerce supplied them abundantly with all sorts of provisions, it need not excite our astonishment that Lubeck alone was able to carry on wars with the surrounding monarchs, and to terminate them with honour and advantage; and still less that the League should long have enjoyed a decided preponderance in the North." — (*L'Art de vérifier les Dates*, 3me partie, tom. viii. p. 204.)

The extirpation of piracy was one of the objects which had originally led to the formation of the League, and which it never ceased to prosecute. Owing, however, to the barbarism then so universally prevalent, and the countenance openly given by many princes and nobles to those engaged in this infamous profession, it was not possible wholly to root it out. But the vigorous efforts of the League to abate the nuisance, though not entirely successful, served to render the navigation of the North Sea and the Baltic comparatively secure, and were of signal advantage to commerce. Nor was this the only mode in which the power of the confederacy was directly employed to promote the common interests of mankind. Their exertions to protect shipwrecked mariners from the atrocities to which they had been subject, and to procure the restitution of shipwrecked property to its legitimate owners*, though, most probably, like their exertions to repress piracy, a consequence of selfish considerations, were in no ordinary degree meritorious; and contributed not less to the advancement of civilisation than to the security of navigation.

Factories belonging to the League. — In order to facilitate and extend their commercial transactions, the League established various factories in foreign countries; the principal of which were at Novogorod in Russia, London, Bruges in the Netherlands, and Bergen in Norway.

Novogorod, situated at the confluence of the Volkof with the Imler Lake, was, for a lengthened period, the most renowned emporium in the north-eastern parts of Europe. In the beginning of the eleventh century, the inhabitants obtained considerable privileges that laid the foundation of their liberty and prosperity. Their sovereigns were at first subordinate to the grand dukes or czars of Russia; but as the city and the contiguous territory increased in population and wealth, they gradually usurped an almost absolute independency. The power of these sovereigns over their subjects seems, at the same time, to have been exceedingly limited; and, in effect, Novogorod ought rather to be considered as a republic under the jurisdiction of an elective magistrate, than as a state subject to a regular line of hereditary monarchs, possessed of extensive prerogatives. During the twelfth, thirteenth, and fourteenth centuries, Novogorod formed the grand *entrepôt* between the countries to the east of Poland and the Hanseatic cities. Its fairs were frequented by an immense concourse of people from all the surrounding countries, as well as by numbers of merchants from the Hanse towns, who engrossed the greater part of its foreign commerce, and who furnished its markets with the manufactures and products of distant countries. Novogorod is said to have contained, during its most flourishing period, towards the middle of the fifteenth century, upwards of 400,000 souls. This, however, is most probably an exaggeration. But its dominions were then very extensive; and its wealth and power seemed so great and well established, and the city itself so impregnable, as to give rise to a proverb, Who can resist the Gods and great Novogorod? *Quis contra Deos et magnam Novogordiam?* — (*Coxe's Travels in the North of Europe*, vol. ii. p. 80.)

But its power and prosperity were far from being so firmly established as its eulogists, and those who had only visited its fairs, appear to have supposed. In the latter part of the fifteenth century, Ivan Vassilievitch, czar of Russia, having secured his dominions against the inroads of the Tartars, and extended his empire by the conquest of some of the neighbouring principalities, asserted his right to the principality of Novogorod, and supported his pretensions by a formidable army. Had the inhabitants been animated by the spirit of unanimity and patriotism, they might have defied his efforts; but their dissensions facilitated their conquest, and rendered them an easy prey. Having entered the city at the head of his troops, Ivan received from the citizens the charter of their

* A series of resolutions were unanimously agreed to by the merchants frequenting the port of Wisby, one of the principal emporiums of the League, in 1287, providing for the restoration of shipwrecked property to its original owners, and threatening to eject from the "*consodalitate mercatorum*," any city that did not act conformably to the regulations laid down.

liberties, which they either wanted courage or inclination to defend, and carried off an enormous bell to Moscow, that has been long regarded with a sort of superstitious veneration as the palladium of the city. But notwithstanding the despotism to which Novogorod was subject, during the reigns of Ivan and his successors, it continued for a considerable period to be the largest as well as most commercial city in the Russian empire. The famous Richard Chancellour, who passed through Novogorod in 1554, in his way from the court of the czar, says, that "next unto Moscow, the city of Novogorod is reputed the chiefest of Russia; for although it be in majestie inferior to it, yet in greatness it goeth beyond it. It is the chiefest and greatest mart town of all Muscovy; and albeit the emperor's seat is not there, but at Moscow, yet the commodiousness of the river falling into the Gulf of Finland, whereby it is well frequented by merchants, makes it more famous than Moscow itself."

But the scourge of the destroyer soon after fell on this celebrated city. Ivan IV., having discovered, in 1570, a correspondence between some of the principal citizens and the King of Poland, relative to a surrender of the city into his hands, punished them in the most inhuman manner. The slaughter by which the bloodthirsty barbarian sought to satisfy his revenge was alike extensive and undiscriminating. The crime of a few citizens was made a pretext for the massacre of 25,000 or 30,000. Novogorod never recovered from this dreadful blow. It still, however, continued to be a place of considerable trade, until the foundation of Petersburgh, which immediately became the seat of that commerce that had formerly centred at Novogorod. The degradation of this ill-fated city is now complete. It is at present an inconsiderable place, with a population of about 7,000 or 8,000; and is remarkable only for its history and antiquities.

The merchants of the Hanse towns, or Hansards, as they were then commonly termed, were established in London at a very early period, and their factory here was of considerable magnitude and importance. They enjoyed various privileges and immunities; they were permitted to govern themselves by their own laws and regulations; the custody of one of the gates of the city (Bishopsgate) was committed to their care; and the duties on various sorts of imported commodities were considerably reduced in their favour. These privileges necessarily excited the ill-will and animosity of the English merchants. The Hansards were every now and then accused of acting with bad faith; of introducing commodities as their own that were really the produce of others, in order to enable them to evade the duties with which they ought to have been charged; of capriciously extending the list of towns belonging to the association; and obstructing the commerce of the English in the Baltic. Efforts were continually making to bring these disputes to a termination; but as they really grew out of the privileges granted to and claimed by the Hansards, this was found to be impossible. The latter were exposed to many indignities; and their factory, which was situated in Thames Street, was not unfrequently attacked. The League exerted themselves vigorously in defence of their privileges; and having declared war against England, they succeeded in excluding our vessels from the Baltic, and acted with such energy, that Edward IV. was glad to come to an accommodation with them, on terms which were any thing but honourable to the English. In the treaty for this purpose, negotiated in 1474, the privileges of the merchants of the Hanse towns were renewed, and the king assigned to them, in absolute property, a large space of ground, with the buildings upon it, in Thames Street, denominated the Steel Yard, whence the Hanse merchants have been commonly denominated the Association of the Steel Yard; the property of their establishments at Boston and Lynn was also secured to them; the king engaged to allow no stranger to participate in their privileges; one of the articles bore that the Hanse merchants should be no longer subject to the judges of the English Admiralty Court, but that a particular tribunal should be formed for the easy and speedy settlement of all disputes that might arise between them and the English; and it was further agreed that the particular privileges awarded to the Hanse merchants should be published as often as the latter judged proper, in all the sea-port towns of England, and such Englishmen as infringed upon them should be punished. In return for these concessions, the English acquired the liberty of freely trading in the Baltic, and especially in the port of Dantzic and in Prussia. In 1498, all direct commerce with the Netherlands being suspended, the trade fell into the hands of the Hanse merchants, whose commerce was in consequence very greatly extended. But, according as the spirit of commercial enterprise awakened in the nation, and as the benefits resulting from the prosecution of foreign trade came to be better known, the privileges of the Hanse merchants became more and more obnoxious. They were in consequence considerably modified in the reigns of Henry VII. and Henry VIII., and were at length wholly abolished in 1597. — (*Anderson's Hist. Com.* Anno 1474, *&c.*)

The different individuals belonging to the factory in London, as well as those belonging to the other factories of the League, lived together at a common table, and

were enjoined to observe the strictest celibacy. The direction of the factory in London was intrusted to an alderman, 2 assessors, and 9 councillors. The latter were sent by the cities forming the different classes into which the League was divided. The business of these functionaries was to devise means for extending and securing the privileges and commerce of the association; to watch over the operations of the merchants; and to adjust any disputes that might arise amongst the members of the confederacy, or between them and the English. The league endeavoured at all times to promote, as much as possible, the employment of their own ships. In pursuance of this object, they went so far, in 1447, as to forbid the importation of English merchandise into the confederated cities, except by their own vessels. But a regulation of this sort could not be carried into full effect; and was enforced or modified according as circumstances were favourable or adverse to the pretensions of the League. Its very existence was, however, an insult to the English nation; and the irritation produced by the occasional attempts to act upon it, contributed materially to the subversion of the privileges the Hanseatic merchants had acquired amongst us.

By means of their factory at Bergen, and of the privileges which had been either granted to or usurped by them, the League enjoyed for a lengthened period the monopoly of the commerce of Norway.

But the principal factory of the League was at Bruges in the Netherlands. Bruges became, at a very early period, one of the first commercial cities of Europe, and the centre of the most extensive trade carried on to the north of Italy. The art of navigation in the thirteenth and fourteenth centuries was so imperfect, that a voyage from Italy to the Baltic and back again could not be performed in a single season; and hence, for the sake of their mutual convenience, the Italian and Hanseatic merchants determined on establishing a magazine or store-house of their respective products in some intermediate situation. Bruges was fixed upon for this purpose; a distinction which it seems to have owed as much to the freedom enjoyed by the inhabitants, and the liberality of the government of the Low Countries, as to the conveniency of its situation. In consequence of this preference, Bruges speedily rose to the very highest rank among commercial cities, and became a place of vast wealth. It was at once a staple for English wool, for the woollen and linen manufactures of the Netherlands, for the timber, hemp, and flax, pitch and tar, tallow, corn, fish, ashes, &c. of the North; and for the spices and Indian commodities, as well as their domestic manufactures imported by the Italian merchants. The fairs of Bruges were the best frequented of any in Europe. Ludovico Guicciardini mentions, in his *Description of the Low Countries*, that, in the year 1318, no fewer than 5 Venetian galleases, vessels of very considerable burden, arrived in Bruges in order to dispose of their cargoes at the fair. The Hanseatic merchants were the principal purchasers of Indian commodities; they disposed of them in the ports of the Baltic, or carried them up the great rivers into the heart of Germany. The vivifying effects of this commerce were every where felt; the regular intercourse opened between the nations in the north and south of Europe made them sensible of their mutual wants, and gave a wonderful stimulus to the spirit of industry. This was particularly the case with regard to the Netherlands. Manufactures of wool and flax had been established in that country as early as the age of Charlemagne; and the resort of foreigners to their markets, and the great additional vent that was thus opened for their manufactures, made them be carried on with a vigour and success that had been hitherto unknown. These circumstances, combined with the free spirit of their institutions, and the moderation of the government, so greatly promoted every elegant and useful art, that the Netherlands early became the most civilised, best cultivated, richest, and most populous country of Europe.

Decline of the Hanseatic League. — From the middle of the fifteenth century, the power of the confederacy, though still very formidable, began to decline. This was not owing to any misconduct on the part of its leaders, but to the progress of that improvement it had done so much to promote. The superiority enjoyed by the League resulted as much from the anarchy, confusion, and barbarism that prevailed throughout the kingdoms of the North, as from the good government and order that distinguished the towns. But a distinction of this sort could not be permanent. The civilisation which had been at first confined to the cities, gradually spread from them, as from so many centres, over the contiguous country. Feudal anarchy was every where superseded by a system of subordination; arts and industry were diffused and cultivated; and the authority of government was at length firmly established. This change not only rendered the princes, over whom the League had so frequently triumphed, superior to it in power; but the inhabitants of the countries amongst which the confederated cities were scattered, having learned to entertain a just sense of the advantages derivable from commerce and navigation, could not brook the superiority of the association, or bear to see its members in possession of immunities of which they were deprived: and in addition to these circumstances, which must speedily have occasioned the dissolution

of the League, the interests of the different cities of which it consisted became daily more and more opposed to each other. Lubeck, Hamburgh, Bremen, and the towns in their vicinity, were latterly the only ones that had any interest in its maintenance. The cities in Zealand and Holland joined it, chiefly because they would otherwise have been excluded from the commerce of the Baltic; and those of Prussia, Poland, and Russia did the same, because, had they not belonged to it, they would have been shut out from all intercourse with strangers. When, however, the Zealanders and Hollanders became sufficiently powerful at sea to be able to vindicate their right to the free navigation of the Baltic by force of arms, they immediately seceded from the League; and no sooner had the ships of the Dutch, the English, &c. begun to trade directly with the Polish and Prussian Hanse towns, than these nations also embraced the first opportunity of withdrawing from it. The fall of this great confederacy was really, therefore, a consequence of the improved state of society, and of the development of the commercial spirit in the different nations of Europe. It was most serviceable so long as those for whom its merchants acted as factors and carriers were too barbarous, too much occupied with other matters, or destitute of the necessary capital and skill, to act in these capacities for themselves. When they were in a situation to do this, the functions of the Hanseatic merchants ceased as a matter of course; their confederacy fell to pieces; and at the middle of the seventh century the cities of Lubeck, Hamburgh, and Bremen were all that continued to acknowledge the authority of the League. Even to this day they preserve the shadow of its power; being acknowledged in the act for the establishment of the Germanic confederation, signed at Vienna, the 8th of June, 1815, as free Hanseatic cities. — (From an article in No. 13. of the *Foreign Quarterly Review*, contributed by the author of this work.)

HARBOUR, HAVEN, OR PORT, a piece of water communicating with the sea, or with a navigable river or lake, having depth sufficient to float ships of considerable burden, where there is convenient anchorage, and where ships may lie, load, and unload, screened from the winds, and without the reach of the tide.

Qualities of a good Harbour. — There is every variety in the form and quality of harbours. They are either natural or artificial; but, however formed, a good harbour should have sufficient depth of water to admit the largest ships at all times of the tide; it should be easy of access, without having too wide an entrance; the bottom should be clean and good; and ships should be able to lie close alongside quays or piers, that the expense and inconvenience of loading and unloading by means of lighters may be avoided. Ships lying in a harbour that is land-locked, and surrounded by high grounds or buildings, are, at once, without the reach of storms, tides, and currents; and may, in most cases, be easily protected from hostile attacks. Bar harbours are those that have bars or banks at their entrances, and do not, therefore, admit of the ingress or egress of large ships except at high water. These are most commonly river harbours; the sand and mud brought down by the stream, and driven back by the waves, naturally forming a bar or bank at their mouths.

Best British Harbours. — Good harbours are of essential importance to a maritime nation; and immense sums have been expended in all countries ambitious of naval or commercial greatness in their improvement and formation. Portsmouth, Milford Haven, and the Cove of Cork are the finest harbours in the British islands, being surpassed by very few, if any, in the world. Of these, Portsmouth is entitled to the pre-eminence. This admirable harbour is about as wide at its mouth as the Thames at Westminster Bridge, expanding within into a noble basin, almost sufficient to contain the whole navy of Great Britain. Its entrance is unobstructed by any bar or shallow; and it has, throughout, water adequate to float the largest men of war at the lowest tides. The anchorage ground is excellent, and it is entirely free from sunken rocks, sand banks, or any similar obstructions. The western side of the harbour is formed by the island of Portsea; and on its south-western extremity, at the entrance to the harbour, is situated the town of Portsmouth, and its large and important suburb Portsea. Here are docks and other establishments for the building, repair, and outfit of ships of war, constructed upon a very large scale, and furnished with every conveniency. The fortifications that protect this great naval *dépôt*, are superior, both as respects strength and extent, to any other in the kingdom. "Thus," to use the words of Dr. Campbell, "it appears that Portsmouth derives from nature all the prerogatives the most fertile wits and most intelligent judges could devise or desire; and that these have been well seconded by art, without consideration of expense, which, in national improvements, is little to be regarded. Add to all this the striking excellence of its situation, which is such as if Providence had expressly determined it for that use to which we see it applied, — the bridling the power of France, and, if I may so speak, the peculiar residence of Neptune." — (*Survey of Great Britain*, vol. i. p. 370.)

Portsmouth harbour has the additional and important advantage of opening into the

celebrated road of Spithead, between the Hampshire coast and the Isle of Wight, forming a safe and convenient retreat for the largest fleets.

Milford Haven deeply indents the southern part of Pembrokeshire. It is of great extent, and has many subordinate bays, creeks, and roads. The water is deep, and the anchorage ground excellent; and being completely land-locked, ships lie as safely as if they were in dock.

Cork harbour has a striking resemblance to that of Portsmouth, but is of larger extent; it has, like it, a narrow entrance, leading into a capacious basin, affording a secure asylum for any number of ships.

Plymouth, which, after Portsmouth, is the principal naval *dépôt* of England, has an admirable double harbour. The roadstead in Plymouth Sound has recently been much improved by the construction, at a vast expense, of a stupendous breakwater more than 1,700 yards in length. This artificial bulwark protects the ships lying inside from the effects of the heavy swell thrown into the Sound by southerly and south-easterly winds.

London stands at the head of the river ports of Great Britain. Considering the limited course of the Thames, there is, probably, no river that is navigable for large ships to so great a distance from sea, or whose mouth is less obstructed by banks. London is mainly indebted for the unrivalled magnitude of her commerce to her favourable situation on this noble river; which not only gives her all the advantages of an excellent port, accessible at all times to the largest ships, but renders her the emporium of the extensive, rich, and populous country comprised in the basin of the Thames.

The Mersey, now the second commercial river in the empire, is more incommoded by banks than the Thames; and is in all respects inferior, as a channel of navigation, to the latter. Still, however, it gives to Liverpool very great advantages; and the new channel that has recently been discovered in the banks promises to be of much importance in facilitating the access to and from the port. This channel will be found laid down in the map of Liverpool and its environs, attached to the article Docks in this work.

Bristol and Hull are both river ports. Owing to the extraordinary rise of the tide in the Bristol Channel, the former is accessible to the largest ships. The Humber is a good deal impeded by banks; but it also is navigable as far as Hull, by very large vessels. The Tyne admits vessels of very considerable burden as far as Newcastle, which, next to London, is the most important port, for the extent of the shipping belonging to it, of any in the empire.

The shallowness of the Clyde from Greenock up to Glasgow has been a serious drawback upon the commercial progress of the latter. Large sums have been expended in attempts to contract the course and to deepen the bed of the river; and they have been so far successful, that vessels of 150 tons burden may now, generally speaking, ascend to the city, at all times of the tide. But there seems little probability of its ever becoming suitable for the navigation of ships of pretty large burden.

Generally speaking, the harbours on the east coasts, both of Great Britain and Ireland, are, with the exception of the Thames, very inferior to those on the south and west coasts. Several harbours on the shores of Sussex, Kent, Lincoln, &c., that once admitted pretty large ships, are now completely choked up by sand. Large sums have been expended upon the ports of Yarmouth, Boston, Sunderland, Leith, Dundee, Aberdeen, &c. Dublin harbour being naturally bad, and obstructed by a bar, a new harbour has been formed, at a great expense, at Kingstown, without the bar, in deep water. There has also been a large outlay upon the harbours of Donaghadee, Portpatrick, &c.

For an account of the shipping belonging to the different ports of Great Britain and Ireland, the reader is referred to the article Ships in this work. The charges on account of Docks, Pilotage, &c. are specified under these articles.

Foreign Harbours and Ports. — The reader will find the principal foreign commercial harbours described in this work at considerable length under their respective titles. The principal French ports for the accommodation of men of war are Brest, Toulon, and Cherbourg. The latter has been very greatly improved by the construction of a gigantic breakwater, and the excavation of immense basins. Besides Cadiz, the principal ports for the Spanish navy are Ferrol and Carthagena. Cronstadt is the principal rendezvous of the Russian navy; Landscrona of that of Sweden; and the Helder of that of Holland.

Law of England as to Harbours. — The anchorage, &c. of ships was regulated by several statutes. But most of these regulations have been repealed, modified, or re-enacted, by the 54 Geo. 3. c. 149.

This act authorises the Admiralty to provide for the moorings of his Majesty's ships; and prohibits any private ship from fastening thereto. It further authorises the Admiralty to prohibit the *breaming* of any ship or vessel at any place or places on shore they may think fit; and to point out the places where private ships shall deposit the gunpowder they may have on board exceeding 5 lbs. — (§ 6.) It prohibits the use of any fire on board any ship or vessel that is being breamed in any port, harbour, or haven, between the hours of 11 in the evening and 5 in the morning, from the 1st of October to the 31st of March inclusive; and between the hours of 11 in the evening and 4 in the morning, from the 1st of April to the 30th of September inclusive: and it prohibits the melting or boiling of any pitch, tar, tallow, &c. within

250 yards of any of his Majesty's ships, or of his Majesty's dock-yards. By another section, the keeping of guns shotted, and the firing of the same in any port, is prohibited under a penalty of 5*s.* for every gun kept shotted, and 10*s.* for every gun discharged. — (§ 9.) The sweeping or creeping for anchors, &c. within the distance of 150 yards of any of his Majesty's ships of war, or of his Majesty's moorings, is prohibited under a penalty of 10*l.* for every offence. — (§ 10.) The loading and unloading of ballast is also regulated by this statute; but for the provisions with respect to it, see BALLAST.

HARDWARE (Ger. *Kurze waaren;* Du. *Yzerkramery;* Da. *Isenkramvarer;* Sw. *Järnkram;* Fr. *Clinquaillerie, Quincaillerie;* It. *Chincaglio;* Sp. *Quinquilleria;* Port. *Quincalharia;* Rus. *Mjelotzchnue towarii*), includes every kind of goods manufactured from metals, comprising iron, brass, steel, and copper articles of all descriptions. Birmingham and Sheffield are the principal seats of the British hardware manufactures; and from these, immense quantities of knives, razors, scissars, gilt and plated ware, fire-arms, &c. are supplied, as well for exportation to most parts of the world, as for home consumption.

The hardware manufacture is one of the most important carried on in Great Britain; and from the abundance of iron, tin, and copper ores in this country, and our inexhaustible coal mines, it is one which seems to be established on a very secure foundation. The late Mr. Stevenson, in his elaborate and excellent article on the statistics of England, in the *Edinburgh Encyclopædia*, published in 1815, estimated the value of all the articles made of iron at 10,000,000*l.*, and the persons employed in the trade at 200,000. Mr. Stevenson estimated the value of all the articles made of brass and copper at 3,000,000*l.*, and the persons employed at 50,000: and he further estimated the value of steel, plated, and hardware articles, including toys, at 4,000,000*l.*, and the persons employed at 70,000. So that, assuming these estimates to be nearly correct, the total value of the goods produced from different sorts of metals in England and Wales, in 1815, must have amounted to the sum of 17,000,000*l.*, and the persons employed to 320,000.

There is reason to believe that this estimate, in so far, at least, as respects the value of the manufacture, was at the time rather too high; but at this moment it is most probably within the mark. There has been a very extraordinary augmentation of the quantity of bar and pig iron produced within the last 15 years; and the rapid increase of Birmingham and Sheffield, as well as of the smaller seats of the hardware manufacture, shows that it has been increased in a corresponding proportion. We have been assured, by those well acquainted with most departments of the trade, that if to the iron and other hardware manufactures of England be added those of Scotland, their total aggregate value cannot now be reckoned at less than 17,500,000*l.* a year, affording *direct* employment, in the various departments of the trade, for at least 360,000 persons.

Fall of Prices. — Owing partly to the reduced cost of iron, but incomparably more to improvements in manufacturing, a very extraordinary fall has taken place in the price of most hardware articles during the last 12 or 15 years. In some articles the fall exceeds 80 per cent.; and there are few in which it does not exceed 30 per cent. In consequence, the poorest individuals are now able to supply themselves with an infinite variety of commodious and useful articles, which, half a century ago, were either wholly unknown, or were too dear to be purchased by any but the richer classes. And those who reflect on the importance of the prevalence of habits of cleanliness and neatness will readily agree with us in thinking that the substitution of the convenient and beautiful hardware and earthenware household articles, that are now every where to be met with, for the wooden and horn articles used by our ancestors, has been in no ordinary degree advantageous. But it is not in this respect only that the cheapness and improvement of hardware is essential. Many of the most powerful and indispensable tools and instruments used by the labourer come under this description; and every one is aware how important it is that they should be at once cheap and efficient.

Account of the real or declared Value of the different Articles of Hardware exported from Great Britain to Foreign Countries, during the Year ended 5th of January, 1833.

	£	s.	d.
Brass and copper manufactures	916,226	4	9
Hardware and cutlery	1,433,297	17	5
Iron and steel, wrought and unwrought	1,189,250	10	2
Mathematical and optical instruments	16,430	18	5
Plate, plated ware, jewellery, and watches	173,617	13	1
Tin and pewter wares (exclusive of unwrought tin)	243,191	5	10
Total	£ 3,972,014	9	8

The exports of the same articles during the year ended 5th of January, 1820, were as follows: —

	£	s.	d.
Brass and copper manufactures	653,859	13	5
Hardware and cutlery	1,459,510	19	7
Iron and steel, wrought and unwrought (mathematical instruments not specified)	924,448	8	1
Tin and pewter wares (exclusive of unwrought tin)	187,811	10	7
Total	£2,915,630	11	8
Increase of the exports of 1832 over those of 1819	£ 1,056,383	18	0

The East Indies and China are by far the most important markets for our brass and copper manufactures. The total exports of these articles, in 1831, amounted to 803,124*l.*; of which they took 348,045*l.*, the United States 169,563*l.*, and France 91,580*l.* Of the total exports of hardware and cutlery in 1831, amounting to 1,622,429*l.* the United States took no less than 998,469*l.*! The British possessions in North America and the West Indies were the next most important customers; but the exports to them both did not amount to 190,000*l.* The United States, and the possessions now referred to, take the greatest quantity of our iron and steel; the exports to the former, in 1831, being 248,707*l.*, and those to the latter 245,223*l.* The United States take nearly a half of our exports of plate and plated ware, &c.

HARPOONER, the man that throws the harpoon in fishing for whales. By 35 Geo. 3. c. 92. § 34., no harpooner, line manager, or boat steerer, belonging to any ship or vessel fitted out for the Greenland or Southern whale fisheries, shall be impressed from the said service; but shall be privileged from being impressed so long as he shall belong to, and be employed on board, any ship or vessel whatever in the fisheries aforesaid.

HATS (Ger. *Hüte*; Du. *Hoeden*; Fr. *Chapeaux*; It. *Cappelli*; Sp. *Sombreros*; Rus. *Schlopii*), coverings for the head in very general use in Great Britain and many other countries, and known to every body. They are made of very various forms and sorts of material. They may, however, be divided into two great classes, viz. those made of fur, wool, silk, &c., and those made of straw; the former being principally worn by men, and the latter by women.

HATS (FUR, WOOL, ETC.). — The manufacture of this description of hats, which is one of very considerable importance and value, was first noticed as belonging to England in the 14th century, in reference to the exportation of rabbit or coney skins from the Netherlands. About a century afterwards (1463), the importation of hats was prohibited. A duty of 10*s.* 6*d.* a hat was substituted for this absolute prohibition in 1816, and is still continued. The following instructive details with respect to the species of hats manufactured, their value, &c., have been obtained from the highest practical authority; and may, we believe, be safely relied on:—

1. *Stuff Hats.*—This term is applied by the trade only to the best description of hats, or to those brought to the highest perfection in London. Since the introduction of "waterproofing," it is found unnecessary to use so valuable a material as beaver in the foundation or frame-work of the best hats. Instead of it, fine seasoned backs of English coney wool, red Vigonia wool, Dutch carroted coney wool, and a small quantity of fine Saxony lamb's wool, are employed with equal advantage.

The covering, *i. e.* the "napping," of the best qualities is a mixture of *cheek* beaver, with white and brown stage beaver, or seasoned beaver, commonly called "*wooms*." Inferior stuffs are napped with mixtures of stage beaver, nutria, hares' wool, and musquash.

Of late years, hats have been much reduced in weight. This is principally owing to the new method of "waterproofing," which is effected in the bodies of the hats prior to their being napped. The elastic properties of the gums employed for this purpose, when dissolved in pure spirits of wine, give a body to the stuffs which allows a good deal of their weight to be dispensed with.

Not 20 years ago, 96 ounces of stuff were worked up into 1 dozen ordinary sized hats for gentlemen; at present, from 33 to 54 ounces only are required to complete the same quantity. It is proper to observe that the heavy duty on English spirits of wine is very injurious to the manufacture, as it causes the employment of inferior dissolvents, as naphtha and gas spirit, which injure the gums.

The manufacture of the best hats employs in London nearly 1,000 makers and finishers, besides giving employment to nearly 3,000 men in Gloucestershire and Derbyshire, in body-making and ruffing. The gross returns amount to about 640,000*l.*

2. *Plated Hats.*—Next to fine hats are those designated "plated," so called from the *plate*, or napping, being of a distinct and superior nature to the foundation or body. The latter is generally formed of Kent, Spanish, or Shropshire wool; while the former consists of a mixture of fine beaver, hares' wool, musquash, nutria, and English back wool. From the cheapness of coal and the purity of the water in Lancashire, Cheshire, and Staffordshire, the whole of the plating trade is engrossed by them. The men employed in the 3 counties, including apprentices, do not exceed 3,000. The total amount of returns amount to about 1,080,000*l.*, inclusive of bonnets, and children's fancy beaver hats.

3. *Felt Hats* and *Cordies* are the coarsest species, being made wholly of Kent, Shropshire, and Italian wools. Cordies are distinguished by a fine covering of camel or goat hair. A very large trade was at one time carried on in these articles; but since the introduction of caps, and the manufacture of inferior plates, the returns have sunk from 1,000,000*l.* to scarcely 150,000*l.*! Atherstone, Rudgeley, Bristol, and Newcastle-under-Line, are the principal places where they are manufactured.

4. *Silk Hats*, made from silk, plush, or shag, manufactured in Coventry, Banbury, and Spitalfields, form, at present, a very important branch of the hat trade. Many thousand dozen are exported to Italy, Gibraltar, the Cape, Sydney, and Van Diemen's Land. Little progress was made in this article for the first quarter of a century after its invention, in consequence of the hard appearance which the cane and willow frame-work necessarily gave the hats; but now that beaver hat bodies have been used, as well as those of lawn and muslin, this difficulty has been overcome, and silk hats have as soft an outline and as great a variety of shapes as beaver hats. London alone produces nearly 150,000 dozen silk hats annually; and the quantity manufactured in Manchester, Liverpool, Birmingham, and Glasgow, is estimated at upwards of 100,000 dozen more, making a total of above 250,000 dozen. Large quantities of the wool shells, used as the foundations or frame-work, are made in Ireland by the aid of machinery. The workmen are distinct from beaver hatters; and, owing to the competition of labourers, the trade has advanced in a greater ratio. This branch gives employment to about 3,000 men.

5. *Machinery, as applied to Hats.*—Mr. Williams, an American, introduced, a few years since, machinery for the bowing, breaking up, and felting wools for hats. The opposition of the journeymen body-makers, who refused to assist in the necessary process termed *basining*, caused it to be laid aside: it is now used only in the preparation of the shells required for silk hats, which, as already observed, are principally made in Ireland.

Mr. Edward Ollerenshaw, of Manchester, began, in 1824, the finishing of hats by the aid of machinery, but the pertinacious opposition of the men prevented his accomplishing this desirable object. Lately, Mr. Johnson of Edinburgh obtained a patent for machinery calculated to effect very important improvements in the art of ruffing or covering the bodies of hats. But we understand that the opposition of the workmen has, also, made him lay aside his invention.

6. *Summary of Results.*

Hats.	*Value.* L.	s.	d.
Plated	1,080,000	0	0
Stuffs	640,000	0	0
Wools*	160,000	0	0
Silk	540,000	0	0
	L. 2,420,000	0	0

* Including felted caps for soldiers.

Declared value of hats exported, 1832.

	L.	s.	d.
All sorts, 62,854 dozen	170,188	0	0
Official Value.			
Beaver and felts	114,963	0	0
All other	14,377	0	0

Total number of men employed in the manufacture of beaver hats	17,000
Ditto, silk hats	3,000

HATS (STRAW).—It is most probable that the idea of *plaiting straws* was first suggested by the making of baskets of osiers and willow, alluded to by Virgil, in his Pastorals, as one of the pursuits of the agricultural population of Italy. We are ignorant of the period when the manufacture of straw plait first became of importance in that country; but it appears from Coryat's *Crudities*, published in 1611, that "the most delicate strawen hats" were worn by both men and women in many places of Piedmont, "many of them having at least an hundred seames." It is evident, therefore, that the art of straw plaiting must have arrived at great perfection upwards of two centuries since; but it does not appear to have been followed in England for more than 60 or 70 years, as it is within the remembrance of some of the old inhabitants of the straw districts, now alive, that the wives and daughters of the farmers used to plait straw for making their own bonnets, before straw plaiting became established as a manufacture. In fact, the custom, among the women in England, of wearing bonnets at all, is comparatively modern: it is not yet 100 years since "*hoods and pinners*" were generally worn, and it was only the ladies of quality who wore small silk hats.—(See *Malcolm's Manners and Customs.*)

British Plait.—The *straw plait district* comprises the counties of Bedford, Hertford, and Buckingham, being the most favourable for the production of the wheat straw, which is the material chiefly used in England. The manufacture is also followed in some places in Essex and Suffolk, but very partially in other counties. During the late war, the importation of straw hats from Leghorn having in a great measure ceased, an extraordinary degree of encouragement was given to our domestic manufacture, and a proportional degree of comfort was derived by the agricultural labourers in these places, by the wives and children of whom it was chiefly followed. This produced competition, and led to an improvement of the plait by *splitting* the straw, which had formerly been used entire—to a more careful selection of the straw itself—and also to improvements in finishing and bleaching. So successful was straw plaiting at this period, that it has been ascertained that women have earned as much as 22*s.* a week for their labour. (See *Evidence on the Poor Laws*, p. 277.) But at the conclusion of the war, Leghorn hats again came into the market; and from their superiority in fineness, colour, and durability, they speedily acquired a preference over our home manufacture, which consequently began to decline. Still the wages continued good, as the fashion of wearing Dunstable straw hats had gradually established itself over the country, which kept up the demand for them; and many individuals abandoned the working of *pillow lace* (another domestic manufacture peculiar to Bedford and Bucks, which in 1820 had fallen into decay, owing to the application of machinery), and betook themselves to straw plaiting, as a more profitable employment. With the view of improving the condition of the straw plaiters, who from their increased numbers were reduced to great distress, and enabling them to meet the foreign competition, the Society of Arts, in the years 1822 to 1827, held out premiums for the successful application of some of our native grasses or straw, other than the wheat straw in general use, and for improvements in plaiting, finishing, and bleaching. Many specimens were sent to the Society; and, amongst other candidates, Mr. Parry, of London, in 1822, received the large silver medal for an imitation and description of the mode of plaiting the Leghorn hats. Mr. Cobbett, also, who had contributed samples of plaiting, made from 15 different sorts of grass indigenous to England, received a similar reward. The publication of these contributions in the Society's Transactions was followed by the most beneficial results to the British manufacture. Our native grasses were not found to promise much success, owing to the brittleness of their stems and the unevenness of their colour; but Mr. Parry's communication was of especial importance, as the straw of Tuscany speedily became an article of import. He immediately set the example, by teaching and employing above 70 women and children to plait the straw by the Italian method; and it is peculiarly gratifying to observe, as an evidence of its success, that while the importation of Leghorn hats has, during the last few years, been on the decline, *the unmanufactured material has been progressively on the increase.* This straw, which is imported at a nominal duty of 1*d.* a cwt., is chiefly plaited in our straw districts; and the Tuscan plait, which pays a duty of 17*s.* per lb., has likewise been largely imported, and made up into bonnets in this country, of equal fineness and beauty to the genuine Leghorn hat.

There is, perhaps, no manufacture more deserving of encouragement and sympathy than that of straw plait, as it is quite independent of machinery, and is a domestic and healthful employment, affording subsistence to great numbers of the families of agricultural labourers, who without this resource would be reduced to parish relief. By the estimate of an intelligent individual, intimately acquainted with the manufacture, it is considered that every score (or 20 yards) of plait consumes a pound of straw in the state in which it is bought of the farmer; that, at an average, every plaiter makes 15 yards per diem; that in the counties of Hertford, Bedford, and Bucks, there are, at an average, 10,000 scores brought to market every day, to make which 13,300 persons (women and children) must be employed. In Essex and Suffolk, it is estimated that 2,000 scores are the daily produce, to make which about 3,000 persons are employed; and about 4,000 persons more must be employed to convert these quantities into bonnets. Including other places where the manufacture is carried on in England, there are, perhaps, in all, about 30,000 persons engaged in it. The earnings of the women and children vary from 3*d.* to 3*s.* 6*d.* per score, or from 1*s.* 6*d.* to 10*s.* per week. There are 7 descriptions of plait in general use; viz. *whole Dunstable* (the first introduced), plaited with 7 entire straws; *split straw*, introduced about 30 years since; *patent Dunstable*, or double 7, formed of 14 split straws, every 2 wetted and laid together, invented about 25 years since; *Devonshire*, formed of 7 split straws, invented about 16 years since; *Luton plait* (an imitation of whole Dunstable), formed of double 7, and coarser than patent Dunstable, invented about 10 years since; *Bedford Leghorn*, formed of 22 or double 11 straws, and plaited similarly to the Tuscan; and *Italian*, formed of 11 split straws. But there are other varieties in fancy straw plait, not generally in demand for the home trade, but chiefly required for exportation; such as the *backbone*, of 7 straws; the *lustre*, of 17 straws; the *wave*, of 22 straws; and *diamond*, of 23 straws. There were other plaits, called *rustic*, of 4 coarse straws split; and *pearl*, of 4 small straws entire; but these are now superseded. The principal markets are Luton, Dunstable, and St. Alban's, where the plait is usually brought every morning by the plaiters, and bought by the dealers.

But the advantages which followed the publication, by the Society of Arts, of the various attempts to improve the trade, were not confined to England. Messrs. J. & A. Muir, of Greenock, (who subsequently sent specimens to the Society, and received 2 different medals), were in consequence attracted to the manufacture, and in 1823 established straw plaiting, in imitation of Leghorn, in the Orkney Islands, with singular success, adopting *rye* straw, dwarfed by being grown on poor land, as the material best suited for the purpose. In the estimation of persons largely employed in the trade in London, hats manufactured in Orkney are quite equal, both in colour and quality, to those of Leghorn; indeed, some of the plait sent to the Society was so fine, as to be capable of making a hat of 80 rows in the brim, being equal to 10 or 11 rows in an inch; but we learn with regret that the prevalence of mildew in that humid climate is so inauspicious to the bleaching of the straw, that it is equal to 50 per cent. on the value of the crop. To this circumstance, and to the low prices of Leghorn hats of late years, is to be ascribed the difficulty they have had, even with the protecting duty of 5*l.* 8*s.* per dozen, in withstanding the competition of the foreign manufacturer. In their letter to the Society of Arts, of the 10th of February, 1826, Messrs. Muir stated,—"We had last year about 5 acres of straw, which will produce about 12,000 score of plait,—suppose on the average of 3 score to the hat, will be 4,000 hats, not more. We think them one hundredth part of the consumption of the United Kingdom. These 4,000 hats may give to the manufacturer, including his profit, 5,000*l.* For seed and straw 7 acres of land would be required, and in manufacturing 500 persons would be constantly employed all the year. We suppose the consumption of Leghorn hats to be not less than 500,000*l.* in the United Kingdom: now, were these all made by our own industrious population, 700 acres of poor land would be required, and 50,000 persons would be employed in the manufacture."—(*Trans. of Soc. Arts.*) The plaiters in Orkney were earning, in 1827, only from 2*s.* to 2*s.* 6*d.* per week, and since that period the trade, it is understood, has declined.

Italian Plait.—In Italy, the manufacture is principally followed in the neighbourhood of Florence, Pisa, Sienna, and the Val d'Arno, in the Duchy of Tuscany; and it is also established at Venice and other places. There, as in England, it is purely a domestic manufacture, and the produce is collected by dealers who go round the country. There is no means of estimating, with any degree of accuracy, the number of individuals employed, as the government is entirely unprovided with statistical data, and is even opposed to any being collected. But supposing that England took about a third of the Italian manufacture (and it is believed that we have taken nearer a half), it would not appear that, even in the most prosperous times, more than 30,000 persons could have been engaged in it.

The description of straw used, which is cultivated solely for the purposes of the manufacture, and not for the grain, is the *triticum turgidum*, a variety of bearded wheat, which seems to differ in no respect from the spring wheat grown in the vale of Evesham and other parts of England.—(*Trans. of Soc. Arts.*) After undergoing a certain preparatory process, the upper parts of the stems (being first sorted as to colour and thickness) are formed into a plait of generally 13 straws, which is afterwards knitted together at the edges into a circular shape called a "flat," or hat. The fineness of the flats is determined by the number of rows of plait which compose them (counting from the bottom of the crown to the edge of the brim), and their relative fineness ranges from about No. 20. to 60., being the rows contained in the breadth of the brim, which is generally 8 inches. They are afterwards assorted into 1st, 2d, and 3d qualities, which are determined by the *colour* and *texture*; the most faultless being denominated the 1st, while the most defective is described as the 3d quality. These qualities are much influenced by the season of the year in which the straw is plaited. Spring is the most favourable, not only for plaiting, but for bleaching and finishing. The dust and perspiration in summer, and the benumbed fingers of the workwomen in winter, when they are compelled to keep within their smoky huts, plaiting the cold and wet straw, are equally injurious to the colour of the hats, which no bleaching can improve. The flats are afterwards made up in cases of 10 or 20 dozen, assorted in progressive numbers or qualities, and the price of the middle or average number governs the whole. The *Brozzi* make bears the highest repute, and the *Signa* is considered secondary; which names are given to the flats, from the districts where they are plaited. Florence is the principal market, and the demand is chiefly from England, France, Germany, and America; but the kinds mostly required are the lower numbers; the very finest hats, and particularly of late, being considered too expensive by the buyers.

The importation of Leghorn straw hats has very sensibly decreased of late years, owing to the change of fashion in favour of silk bonnets, and also the prevailing and increasing practice of English dealers, from the high duty on the manufactured article, importing the straw plait, and the straw itself for the purpose of being knitted, plaited, and finished in this country. This has been attended with serious consequences to the poor straw plaiters of Tuscany, many of whom have abandoned the trade and betaken themselves to other occupations, particularly to the working of red woollen caps for Greece and Turkey; immense quantities of which have been exported from Leghorn since the peace. With the view of counteracting the ruinous effects which our high duty entailed on their trade, the merchants and dealers in Tuscany, interested in the straw hat manufacture, petitioned their government, in 1830, to remonstrate with ours on the subject; but this remonstrance, if ever made, was not likely, from the condition of our own population, to be very favourably received.

The following prices of different numbers and qualities of Leghorn hats are considered such as would encourage the work-people in Tuscany to produce good work:—

	First Quality.				Second Quality.				Third Quality.			
	Tuscan.	*English.*			*Tuscan.*	*English.*			*Tuscan.*	*English.*		
		£	*s.*	*d.*		£	*s.*	*d.*		£	*s.*	*d.*
No. 30.	11 lire	= 0	7	4	10 lire	= 0	6	8	8 lire	= 0	5	4
40.	21 —	= 0	14	0	20 —	= 0	13	4	18 —	= 0	12	0
45.	26 —	= 0	17	4	25 —	= 0	16	8	23 —	= 0	15	4

The straw for plaiting a No. 30. at 8 lire, costs 2 lire, about 1*s.* 4*d.* English; for bleaching and finishing, 1 lira = 8*d.*; the estimated loss of rows in a mass, that either go up into the crown in the process of finishing and pressing, or that must be taken from the brim to reduce it to London measure (22 inches), may be calculated at 1 lira more, or 8*d.* As it requires not less than 6 days for plaiting and knitting the hat, there therefore remains only 4 lire, *or 2s. 8d. English, for a week's work!* Cheap as subsistence may be on the Continent, surely this miserable pittance is not calculated to excite the envy of the poorest labourer in England. But the earnings of the straw plaiters solely depend on their abilities and industry. The straw is furnished to them to be plaited and knitted, and they are paid according to the number or fineness of the hat. Some of the *Brozzi* women have earned as much as 4 lire, or about 2*s.* 9*d.* to 3*s.* per day, when hats were at the highest, (calculating the time in which they can plait and knit a hat, at 8 days for a No. 30., and a fortnight for a No. 40.); and these chosen few still earn about 1*s.* 6*d.* per day; but taking the whole plaiters, the following, in the opinion of a house largely interested in the trade in Italy, may be considered as a fair calculation of the average wages which have been paid during the last 15 years:—

Women earned per diem, in the year 1817, 1*s.* 6*d.*; 1819–20, 8*d.*; 1823–5, 1*s.* 6*d.*; 1826-7, 6*d.*; 1828-32) 5*d.* Men, for ironing the hats, 4*s.* a day; ditto, for pressing and washing, 1*s.* 6*d.* to 2*s.*; women, for picking straw, 1*s.* to 1*s.* 2*d.*

The following statement shows the imports into England of Italian straw plait, and unmanufactured straw, during the last 13 years:—

Years.	Hats or Bonnets of Straw.				Plaiting of Straw.				Unmanufact. Straw.	
	Imported.	Exported.	Consumption.	Nett Revenue.	Imported.	Exported.	Consumption.	Nett Revenue.	Imported.	Nett Revenue.
	No.	*No.*	*No.*	*L.*	*Lbs.*	*Lbs.*	*Lbs.*	*L.*	*Lbs.*	*L.*
1820	62,510	2,652	71,929	20,468	2	- -	2	2		
1821	141,412	2,633	120,068	34,365	44	- -	50	26		
1822	143,225	12,595	117,020	34,537	518	- -	525	447		
1823	129,902	19,950	121,651	35,360	4,254	- -	3,034	2,579		
1824	199,432	5,075	195,568	55,771	4,233	- -	4,906	4,170		
1825	327,040	9,281	247,447	69,047	14,037	- -	11,850	10,073	629	82
1826	231,607	13,433	204,974	58,145	8,856	955	6,916	5,884	435	36
1827	255,853	12,334	255,640	72,468	3,928	904	3,947	3,350	787	79
1828	384,072	8,377	274,906	77,784	5,502	283	5,100	4,335	4,199	420
1829	160,195	27,030	234,254	66,393	6,282	487	5,340	2,834	6,050	605
1830	162,660	34,132	168,525	47,760	6,183	756	7,884	6,669	18,586	1,859
1831	84,066	24,980	93,947	26,644	25,354	2,102	16,450	13,287	22,344	2,232
1832	169,433	35,271	60,830	17,280	19,109	1,605	17,911	15,174	48,054	811
	The duty on hats of less than 22 inches in diameter was, during the above period, 3*l.* 8*s.* per dozen; above 22 inches, 6*l.* 16*s.*				The rate of duty, during the above period, was 17*s.* per lb.				The duty, from 1820 to 1825, was 20 per cent.; from 1825 to 1832, 10 per cent. It is now 1*d.* per cwt.	

We are indebted for this very excellent article on straw hats to Mr. Robert Slater, of Fore Street, London.

HAVANNAH, or HAVAÑA, a large and flourishing city, situated on the north coast of the noble island of Cuba, of which it is the capital, the Morro castle being, according to Humboldt, in lat. 23° 8′ 15″ N., lon. 82° 22′ 45″ W. The population, exclusive of troops and strangers (which may amount to 25,000), is probably not far short of 115,000. In 1817, the resident population amounted to 83,598; viz. 37,885 whites, 9,010 free coloured, 12,361 free blacks, 2,543 coloured slaves, and 21,799 black slaves. The port of Havannah is the finest in the West Indies, and one of the best in the world. The entrance is narrow, but the water is deep, without bar or obstruction of any sort, and within it expands into a magnificent bay, capable of accommodating 1,000 large ships; vessels of the greatest draught of water coming close to the quays. The city lies along the entrance to, and on the west side of, the bay. The suburb Regla is on the opposite side. The Morro and Punta castles, the former on the east, and the latter on the west, side of the entrance of the harbour, are strongly fortified, as is the entire city; the citadel is also a place of great strength; and fortifications have been erected on such of the neighbouring heights as command the city or port. The arsenal and dock-yard lie toward the western angle of the bay, to the south of the city. In the city the streets are narrow, inconvenient, and filthy; but in the suburbs, now as extensive as the city, they are wider and better laid out. Latterly, too, the police and cleanliness of all parts of the town have been materially improved. — (See *Plan of Havannah*, in the *Map of Central America and the West Indies*, in this work.)

From its position, which commands both inlets to the Gulf of Mexico, its great strength, and excellent harbour, Havannah is, in a political point of view, by far the most important maritime station in the West Indies. As a commercial city it also ranks in the first class; being, in this respect, second to none in the New World, New York only excepted. For a long period, Havannah engrossed almost the whole foreign trade of Cuba; but since the relaxation of the old colonial system, various ports, such, for instance, as Matanzas*, that were hardly known 30 years ago, have become places of great commercial importance. The rapid extension of the commerce of Havannah is, therefore, entirely to be ascribed to the freedom it now enjoys, and to the great increase of wealth and population in the city, and generally throughout the island.

The advance of Cuba, during the last half century, has been very great; though not more, perhaps, than might have been expected, from its natural advantages, at least since its ports were freely opened to foreigners, in 1809. It is at once the largest and the best situated of the West India islands. It is about 605 miles in length; but its breadth from north to south no where exceeds 117 miles, and is in many places much less. Its total area, exclusive of that of the numerous keys and islands attached to it, is about 31,500 square miles. The climate is, generally speaking, delightful; the refreshing sea breezes preventing the heat from ever becoming excessive, and fitting it for the growth of a vast variety of products. Hurricanes, which are so destructive in Jamaica and the Caribbee Islands, are here comparatively rare; and, when they do occur, far less violent. The soil is of very various qualities: there is a considerable extent of swampy marshes and rocks unfit for any sort of cultivation; but there is much soil that is very superior, and capable of affording the most luxuriant crops of sugar, coffee, maize, &c. The ancient policy, now fortunately abandoned, of restricting the trade of the island to 2 or 3 ports, caused all the population to congregate in their vicinity, neglecting the rest of the island, and allowing some of the finest land and best situations for planting to remain unoccupied. But since a different and more liberal policy has been followed, population has begun to extend itself over all the most fertile districts, wherever they are to be met with. The first regular census of Cuba was taken in 1775, when the whole resident population amounted to 170,370 souls. Since this period the increase has been as follows:—1791, 272,140; 1817, 551,998; and 1827, 704,867; exclusive of strangers. We subjoin a

* In 1827, Matanzas had a population of 15,000 souls. During the same year, its imports were valued at 1,387,500 dollars, and its exports at 1,717,347 dollars; and 231 vessels entered, and 251 cleared from its port. We have looked into our latest Gazetteers, but to no purpose, for any notice of this place. Those, indeed, who know that the best of these publications sets down the population of Havannah at 25,000, will probably think that this was very unnecessary labour.

Classification of the Population of Cuba according to the Censuses of 1775 and 1827.

	1775.			1827.		
	Male.	*Female.*	*Total.*	*Male.*	*Female.*	*Total.*
Whites - -	54,555	40,864	95,419	168,653	142,398	311,051
Free mulattoes -	10,021	9,006	19,027	28,058	29,456	57,514
Free blacks - -	5,959	5,629	11,588	23,904	25,079	48,980
Slaves - -	28,774	15,562	44,336	183,290	103,652	286,942
Total -	99,309	71,061	170,370	403,905	300,582	704,487

We readily discover, from this Table, that, in the term of 52 years, from 1775 to 1827, the increase of the different classes of the population has been as follows: —

	From	To	Per ct.
The white male population increased	54,555	168,653, or	209
The white female —	40,864	142,398, —	248
The free mulatto male population	10,021	28,058, —	180
The free mulatto female —	9,006	29,456, —	227
The free black male —	5,959	23,904, —	301
The free black female —	5,629	25,076, —	345
The slave (black and mulatto), male	28,774	183,290, —	537
The slave (black and mulatto), female	15,562	103,652, —	556

A very large part of the rapid increase of the black population is to be ascribed to the continuance of the slave trade; which, unfortunately for the real interests of the island, has been prosecuted of late years to an extent, and with a vigour, unknown at any former period. From 1811 to 1825, there were imported into Cuba 185,000 African slaves; of which number 115,000 are said to have been entered at the Havannah Custom-house, between 1811 and 1820! Since 1825, the imports of slaves are understood to have increased; and were believed, indeed, to be about as great in 1832 as ever, notwithstanding the trade was to have entirely ceased in 1820. — (*Report of* 1832 *on West India Colonies, Minutes of Evidence*, p. 64.) It is, besides, supposed that the slaves were under-rated in the census of 1827; so that, perhaps, the entire population of the island is, at present, little, if at all, under 900,000. The planters of Cuba derive considerable assistance from free labourers, mostly of an Indian mixed breed, who work for moderate wages. They are not much employed in the fields, but in other branches of labour; and particularly in bringing the sugar from the interior to the shipping ports.

The articles principally exported from Cuba are, sugar of the finest quality, coffee, tobacco, bees' wax, honey, molasses, &c. Of these, the first is decidedly the most important. The following statements shew the astonishing increase that has taken place in the exportation of this staple article: —

Account of the Exportation of Sugar from Havannah, from 1790 to 1833.

	Boxes, at 400 lbs.		*Lbs.*
From 1760 to 1767	13,000	=	5,200,000
1786 — 1790	68,150		27,260,000
1790 — 1800	110,091		44,036,400
1800 — 1810	177,998		71,199,200
1810 — 1820	207,895		83,158,000
1820 — 1825	250,384		100,153,600
In 1826	271,013½		108,405,200
1827	264,934½		105,973,800
1828	268,386		107,354,400
1829	280,847		112,338,800
1830	294,732		117,892,800
1831	276,350		110,539,600
1832	297,557		119,022,800
1833	284,025		113,610,000

But Havannah having ceased to be the only port for the exportation of sugar, as it was in former times, we must advert to the trade of the other ports, to obtain a correct account of the whole exports of sugar. The following are the Custom-house returns for 1827: —

Exports of sugar from Havannah -	99,354,137	lbs.
— Santiago - -	6,032,673	—
— Nuevitas -	375,275	—
— Matanzas - -	30,364,844*	—
— Trinidad - -	10,361,357	—
— Holguin - -	351,450	—
— Jagua - -	12,500	—
— Manzanilla -	120,800	—
Total -	149,973,106	lbs.
But as the Custom-house reports are founded upon the assumption that a box of sugar weighs but 15 *arrobas* (375 lbs.), while its true weight is, after deducting the tare, at least 16 *arrobas* (400 lbs.), they add to their amount one sixteenth (it should be one fifteenth), viz. - -	9,135,818	lbs.
Making a total of -	156,158,924	lbs.

This is, however, only the Custom-house report. A great deal of sugar has been smuggled out of the country. The exports from Santiago in 1827, as given above, are certainly much under their real amount; for at that period, and for 3 or 4 years after, the customs officers connived with the planters to defraud the revenue, and carried their depredations to such an extent, that the duties became nominal merely, and the official returns are in no degree to be depended upon. Subsequently, however, these officers were dismissed; and there is reason to think that the returns have since been more accurate. But smuggling is still extensively practised, particularly from the unlicensed ports.

It appears from the subjoined account (No. III.), that there has been, since 1827, a great increase in the exports of sugar, the quantity shipped from the various licensed ports of the island having amounted, in 1833, to 7,624,553 arrobas, or 190,613,825 lbs. But to this we may safely add at least one fourth part for shipments from the unlicensed ports, and what was otherwise sent out of the country without any official notice; so that the entire export of sugar from Cuba, at present, cannot be less than 250,000,000 lbs., or rather more than 110,000 tons!

Next to sugar, coffee is the most valuable production of Cuba. Its cultivation has increased with unprecedented rapidity. In 1800, there were but 80 plantations in the island; in 1817, there were 779; and in 1827, there were no fewer than 2,067, of at least 40,000 trees each! In 1804, the exportation from Havannah was 1,250,000 lbs.; in 1809, it amounted to 8,000,000 lbs.; from 1815 to 1820, it averaged annually 18,186,200 lbs.; and, in 1827, it amounted to 35,837,175 lbs.! The exports from the other ports have increased with equal rapidity. They amounted, in 1827, to 14,202,406 lbs.; making the total exportation for that year 50,039,581 lbs. The low prices seem to have checked the growth, or, at all events, to have diminished the exports of coffee from Cuba in 1828, 1829, and 1830; but since the last mentioned year, they have more than recovered their old level. The total exports in 1833 amounted, according to the Custom-house returns, to 2,566,359 arrobas, or 64,259,975 lbs.; but, as in the case of sugar, considerable additions must be made to this quantity to get the true export. In the Custom-house estimates, coffee bags are supposed uniformly to weigh 150 lbs., though it is well known that they frequently exceed that limit. The exports in 1833 were distributed as follows: viz. from the Havannah, 47,333,100 lbs.; Matanzas, 6,423,075 lbs.; all other ports, 10,503,800 lbs.

Tobacco differs much in quality; but the cigars of Cuba are esteemed the finest in the world. — (See Tobacco.) Formerly, the culture and sale of this important plant were monopolised by Government; but since 1821 this monopoly has been wholly relinquished †, there being no longer any restrictions either on the growth or sale of the article. The cultivator pays a duty, which, however, is to a great extent evaded, of 1 per cent. *ad valorem* upon his crop. In consequence of the freedom thus given to the business, the culture and exportation of tobacco are both rapidly extending; so much so, that the exports of cigars, which amounted in 1826 to only 197,194 arrobas, had increased to 617,713 arrobas in 1833!

Of 95,768 hhds. of molasses exported in 1833, 46,632 were from Havannah, and 31,620 from Matanzas.

Wax and honey of excellent quality are largely produced in Cuba, and form considerable articles of trade.

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* The exports from Matanzas in 1833 were 57,746,400 lbs.

† In the former edition of this work, the tobacco monopoly was inadvertently represented as still subsisting.

The principal imports consist of corn and grain of all sorts, chiefly from the United States and Spain; cotton, hardware, and earthenware goods, from England; linens from Hamburgh, Bremen, the Netherlands, Ireland, &c.; silver and gold from Mexico and South America; indigo and cochineal from ditto; wines, spirits, liqueurs, fruits, &c., from France and Spain; lumber, dried fish, and salt provisions, from the United States, Newfoundland, &c.; with every article, in short, that an opulent community, in a tropical climate, without manufactures, requires.

I. An Account of the Value of the Trade between Cuba and other Countries in 1833, as ascertained by the Customs' Returns.

Countries.	Imports.	Exports.	Countries.	Imports.	Exports.
	L.	*L.*		*L.*	*L.*
Spain	836,193	565,317	Netherlands	42,417	55,681
South America	285,688	4,099	Portugal	9,401	4,548
The Hanse Towns	196,325	313,356	Russia	10,971	207,335
The United States	929,481	913,934	Sweden and Denmark	7,138	15,867
Great Britain	338,577	189,787	Turkey		13,833
France	195,327	110,691	Foreign produce in ships		
Italy	10,755	47,640	of Cuba	99,495	265,425

But a considerable portion of the imports, especially of those from Spain, are not intended for consumption in Cuba, but are sent there merely *en entrepôt*, or till it be found convenient to ship them for other markets.

II. Classified Account of the Articles of all Sorts, and their Value, imported into Cuba in 1831, 1832, and 1833.

Articles.	1831.	1832.	1833.
	L.	*L.*	*L.*
Liquids, viz. — Wines, spirits, beer, oil, &c.	265,552	276,562	329,202
Provisions, viz. — Pork, beef, jerked beef, &c.	204,180	165,733	261,602
Spices, viz. — Cinnamon, cloves, pepper, &c.	11,715	14,129	18,209
Fruits, viz. — Olives, almonds, raisins, &c.	31,220	22,434	28,830
Agricultural, viz. — Flour, rice, peas, beans, potatoes, &c.	597,520	573,373	726,543
Groceries, viz. — Lard, butter, cheese, candles, soap, &c.	264,104	21,260	272,306
Fish, viz. — Herrings, cod, anchovies, &c.	56,205	64,577	63,135
Cottons and mercery	314,337	382,763	386,288
Woollens	50,039	52,770	62,143
Linens	472,548	514,194	372,714
Leather goods	118,906	93,514	79,243
Silks	94,641	115,909	82,389
Wood, viz. — Deals, hoops, casks, &c.	124,257	125,919	155,036
Hardware	117,270	133,662	162,261
Metals, viz. — Copper, iron, lead, &c.	30,502	18,557	15,223
Gold coin	177,298	77,858	192,853
Silver coin	22,065	41,346	302,113
Glass ware	19,583	20,560	16,156
Earthenware	31,211	27,817	19,169
Dye stuffs, as logwood, indigo, &c.	49,518	31,894	50,621
Cordage	382	10,596	30,518
Books and paper	34,100	42,869	43,348
Medicines	30,756	25,100	28,789
Perfumery	8,429	8,830	8,949
Jewellery	7,417	6,084	8,131
All other articles	115,691	107,820	140,635
Total	3,249,446	2,976,130	3,866,396

III. Account of the Quantities of the principal Articles of Produce exported from the various licensed Ports of the Island of Cuba, from 1826 to 1833, both inclusive.

Years.	Sugar.	Rum.	Molasses.	Coffee.	Wax.	Leaf Tobacco.	Cigars.
	Arrobas.	*Pipes.*	*Pipes.*	*Arrobas.*	*Arrobas.*	*Arrobas.*	*Arrobas.*
1826	6,237,390	2,567	68,880	1,773,798	22,918	79,581	197,194
1827	5,878,924	2,457	74,083	2,001,583	22,403	79,106	167,361
1828	5,967,066	2,864	86,891	1,284,088	21,404	70,031	210,335
1829	6,588,428	4,518	63,537	1,736,257	23,481	125,502	243,443
1830	7,868,881	5,595	66,219	1,798,598	38,741	160,358	407,152
1831	7,133,381	3,838	83,001	2,130,582	29,850	117,454	331,439
1832	7,583,413	3,429	100,178	2,048,890	30,203	76,430	448,123
1833	7,624,553	3,227	95,768	2,566,359	41,536	92,475	617,713

IV. Account of the Number of Vessels that entered the Port of Havannah from Foreign Countries in 1831, 1832, and 1833, specifying the Countries to which such Vessels belonged, and their Tonnage.

Flags.	1831.		1832.		1833.	
	Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*
Spanish	334	41,758½	325	38,636¾	379	46,247
American	496	85,105⅓	489	84,957½	509	91,624½
Hanse Towns	25	4,226⅔	34	6,344	26	4,500
Danish	8	1,078	12	2,313	10	1,729
French	19	3,975	18	4,067	48	10,162½
Netherlands	8	1,067⅔	26	4,764	8	1,477
English	54	6,403¼	69	12,558½	46	9,067½
Portuguese	2	142	4	548	5	494
Prussian	2	293¾	1	221½	1	290
Sardinian	4	762¾	1	222⅔	6	939½
Swedish	1	280	1	280	6	1,061½
Hanoverian	-	-	1	256	2	366⅓
Tuscan	-	-	1	193¾		
Mecklenburgh	-	-	-	-	1	159
Russian	-	-	-	-	1	176
Totals	953	145,092½	982	155,362½	1,048	168,293½

Duties. — A customs duty is charged on most articles exported and imported. In 1828, the duties on imports produced 4,194,425 dollars, being equal to an *ad valorem* duty of 18½ per cent. on the imports of that year. The duties on exports during the same year produced 1,114,641 dollars, equal to an *ad valorem* duty of 18¼ per cent. on their amount. According to the tariff, the duties on most imported articles are fixed at either 24 or 30 per cent. *ad valorem*; but all Spanish products imported from the peninsula in Spanish bottoms (except flour, which pays 1½ dollar per barrel), pay only 6½ per cent. duty; and when imported in foreign bottoms, they pay 12 per cent. less than the duties on corresponding foreign articles. These products make about a third part of the imports. Until lately, the export duty on sugar was much complained of, being so high as 2¾ dollars a box; but in the course of 1833 it was reduced to little more than 1 dollar, — a reduction which has been of material consequence to the planters. Merchandise that has once paid the duties on importation, pays nothing on exportation.

Custom-house Regulations. — Every master of a vessel is bound to have, on his arrival, ready for delivery to the boarding officers of the revenue, two manifests, containing a detailed statement of his cargo; and, in the act of handing them over, is to write thereon the hour when he so delivers them, taking care that they be countersigned by the boarding officers. Within 12 hours from that time he may make any alterations he pleases in the said manifests, or deliver in new ones corrected. After the expiration of these 12 hours, no alteration will be permitted. Goods not manifested will be confiscated without remedy; and, if their value should not exceed 1,000 dollars, masters of vessels will be liable to pay a penalty of double the amount of such non-manifested goods: if they do exceed that sum, and belong to the master, or come consigned to him, his vessel, freight, and other emoluments, will be forfeited to the revenue. Goods over-manifested will pay duties as if they were on board. Goods not manifested, but claimed in time by a consignee, will be delivered up to the latter; but the master, in this case, will be subject to a fine equal in amount to that of such goods. Gold and silver, not manifested by either captain or consignee, are liable to a duty of 4 per cent. Goods falling short of the quantity manifested, when landed, and not being included in any invoice of a consignee, will render the master liable to a penalty of 200 dollars for each package so falling short. Every consignee is obliged to present his invoice or note of goods, within 48 hours after the arrival of a vessel; if not, such goods are liable to 2 per cent. extra duty. The same is the case, if such note do not contain a statement of the number of pieces, contents, quantity, weight, and measure. All goods imported in vessels exceeding 80 tons burthen, except perishable provisions, bulky articles, and liquors, may be put in deposit for an indefinite term, paying 1 per cent. inward and 1 per cent. outward duty on the value, each year. When entered for home consumption, they are liable to the corresponding duty. If sold in deposit, the exporter pays the outward duty.

Tonnage Duties. — Spanish vessels, 5 reals per ton. Other nations, 20 reals per ton: in case of arrival and departure in ballast, none; arriving in distress, 4 reals per ton, but full duties if the cargo be landed or taken in.

Wharf Duties. — Spanish vessels, 6 reals per day. Other nations, 19 reals per day for each 100 tons of their register measurement.

Monies. — One dollar = 8 reals plate = 20 reals vellon. One doubloon = 17 dollars. The merchants reckon 444 dollars = 100*l.*, or 1 dollar = 4*s.* 6*d.* very nearly. There is an export duty of 1 per cent. on gold, and 2 per cent. on silver.

Weights and Measures. — One quintal = 100 lbs., or 4 arrobas of 25 lbs.; 100 lbs. Spanish = 101¾ lbs. English, or 46 kilogrammes. 108 varas = 100 yards, 140 varas = 100 French ells or aunes; 81 varas = 100 Brabant ells; 108 varas = 160 Hamburgh ells. 1 fanega = 3 bushels nearly, or 100 lbs. Spanish. An arroba of wine or spirits = 4·1 English wine gallons nearly.

The Spanish authorities disgraced themselves by the countenance which they gave to piratical banditti that infested many of the ports of Cuba during the late contest between Spain and her revolted colonies, and, on pretence of cruising against the Mexicans and Columbians, committed all sorts of enormities. The commerce of the United States suffered so much from their attacks, that they were obliged to send a considerable squadron to attack the banditti in their strongholds, and to obtain that redress they had in vain sought from the government of the island; but we are not sure that the nuisance is as yet entirely abated.

In compiling this article, we have consulted Humboldt's standard work, the *Essai Politique sur l'Isle de Cuba*, Paris, 1826; and the Supplement (*Tableau Statistique*) thereto, Paris, 1831; the excellent abstract of the *Cuadro Estadistico de Cuba*, published at Havannah in 1829, in the *American Quarterly Review* for June 1830; the *Bulletin des Sciences Géographiques*, tom. xxii. p. 333.; *Poinsett's Notes on Mexico*, pp. 279—298. (Eng. ed.); *Papers published by Board of Trade*, part iii. pp. 648—652.; and *private communications* from intelligent British merchants established at Havannah.

HAVRE, or HAVRE DE GRACE, a commercial and strongly fortified sea-port town of France, on the English channel, near the mouth of the Seine, on its northern bank, in lat. 49° 29″ 14′ N., lon. 0° 6′ 38″ E. Population 24,000.

Harbour. — The harbour of Havre consists of 2 basins, inclosed within the walls of the town, affording accommodation for about 450 ships. Cape de la Heve, forming the northern extremity of the Seine, lies N. N. W. from Havre, distant about 2½ miles. It is elevated 390 feet above the level of the sea, and is surmounted by 2 light-houses 50 feet high. These, which are 328 feet apart, exhibit powerful fixed lights. There is also a brilliant harbour-light at the entrance to the port, on the extremity of the western jetty. Havre has 2 roadsteads. The great or outer road is about a league from the port, and rather more than ½ league W. S. W. from Cape de la Heve: the little or inner road is about ½ league from the port, and about ¾ of a mile S. S. E. from Cape de la Heve. They are separated by the sand bank called Leclat; between which and the bank called *Les Hauts de la Route* is the west passage to the port. The Hoc, or southern passage, lies between the last mentioned bank and that of Amfar. In the great road there is from 6 to 7½ fathoms water at ebb; and in the little, from 3 to 3½. Large ships always lie in the former. The rise of the tide is from 22 to 27 feet; and by taking advantage of it, the largest class of merchantmen enter the port. The water in the harbour does not begin perceptibly to subside till about 3 hours after high water, — a peculiarity ascribed to the current down the Seine, across the entrance to the harbour, being sufficiently powerful to dam up for a while the water in the latter. Large fleets, taking advantage of this circumstance, are able to leave the port in a single tide, and get to sea, even though the wind should be unfavourable. — (See *Plan of Havre*, published by *Mr. Laurie*; *Annuaire du Commerce Maritime for* 1833, p. 211.; *Coulier sur les Phares*, p. 59. &c.)

Trade, &c. — Havre being, in fact, the principal sea-port of Paris, most of the colonial and other foreign products destined for the consumption of that city are imported into it. It has also a considerable trade of its own. The principal articles of export are silk and woollen stuffs, lace, gloves, trinkets, perfumery, Burgundy, Champagne, and other wines, brandy, books, &c. Besides colonial products and spices, the imports principally consist of cotton, indigo, tobacco, hides, dye woods, iron, tin, dried fish, &c. Grain and flour are sometimes imported and sometimes exported.

Monies, Weights, and *Measures* same as those of the rest of France. — (See Bordeaux, and Weights and Measures.)

It is estimated that the entire value of the different articles imported into Havre, in 1829, amounted to 250,000,000 francs, or about 10,000,000*l.* sterling. Of this sum, the cotton imported was estimated at 26,000,000 fr.; the sugars of the French colonies at 44,000,000 fr., and those of foreign countries at 8,000,000 fr.; coffee 14,000,000 fr.; indigo 2,000,000 fr.; tobacco 4,000,000 fr., &c. The customs duties at Havre during the same year amounted to 25,876,535 fr., being nearly 11 per cent. upon the estimated value of the imports. There entered the port, in the same year, 1,481 French and other ships, coming from foreign countries and the colonies of France, and 2,925 coasting vessels, including those navigating the river: 62 ships entered *en relâche* and in ballast. — (*Bulletin des Sciences Géographiques*, tom. xvi. p. 390. and tom. xxiii. p. 370.)

Arrivals. — In 1833, there entered the port, 44 ships from Martinique, 78 from Guadaloupe, 213 from the United States, 30 from Brazil, 1 from Peru and Chili, 23 from Hayti, 6 from Mexico, 11 from Monte-Video and Buenos Ayres, 2 from Colombia, 10 from the Havannah and St. Iago, 1 from St. Thomas, 2 from Cayenne, 3 from Senegal, 4 from the Isle de Bourbon and the Mauritius, 6 from the East Indies, 2 from China, and 11 from the whale fishery; in all, 447. — (*Annuaire du Commerce Maritime*, tom. ii. p. 345.)

The total arrivals at Havre in 1833 were —

	Ships.	*Tonnage.*	*Crews.*
French ships from foreign countries	250	44,934	2,535
——— French colonies	150	32,721	1,643
———, coasters	2,521	159,093	9,328
——— from the cod and whale fishery	14	4,940	424
Foreign vessels	495	125,029	
Totals	3,410	366,717	

In respect to the imports of cotton, Havre is to the other French ports, what Liverpool is to the other ports of England. We subjoin an

Account of the Imports of Cotton into France in 1833 and 1834, &c., specifying in detail the Imports and Stocks of Havre and Marseilles.

	1833.					1834.				
	United States.	Brazil.	Egypt.	Other Sorts.	Total in different Ports.	United States.	Brazil.	Egypt.	Other Sorts.	Total in different Ports.
Stock, 1st Jan.	*Bales.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*
Havre - -	16,270	549	-	181	17,000	29,832	3,340	-	828	34,000
Marseilles -	1,150	-	750	1,300	3,200	3,911	350	6,632	4,107	15,000
Other Ports -	950	-	-	850	1,800	1,400	100	-	1,500	3,000
	18,370	549	750	2,331	22,000	35,143	3,790	6,632	6,435	52,000
Imports.										
Havre - -	181,611	22,410	-	6,283	210,304	184,057	14,258	-	3,134	201,447
Marseilles -	21,470	2,127	37,280	16,012	76,889	19,667	2,822	20,243	11,519	54,251
Other Ports -	14,239	726	-	4,285	19,250	18,074	792	-	5,108	23,974
	217,320	25,263	37,280	26,580	306,443	221,798	17,872	20,243	19,761	276,674
Sold.										
Havre - -	168,049	19,619	-	5,636	193,304	194,180	15,598	-	3,662	213,440
Marseilles -	18,709	1,777	31,398	13,205	65,089	23,078	3,172	23,375	13,626	63,251
Other Ports -	13,789	626	-	3,635	18,050	18,874	742	-	5,358	24,974
	200,547	22,022	31,398	22,476	276,443	236,132	19,512	23,375	22,646	301,665

	United States.	Brazil.	Egypt.	Other Sorts.	Total.
Stock, 1st Jan. 1835.	*Bales.*	*Bales.*	*Bales.*	*Bales.*	*Bales.*
Havre - -	19,700	2,000	- -	300	30,000
Marseilles - -	500	- -	3,500	2,000	
Other Ports - -	600	150	- -	1,250	

According to the American official accounts, there were shipped for France, during the year ended 30th of September, 1833, 76,832,449 lbs. of cotton, valued at 8,845,359 dollars. The exports to England during the same year were 238,241,746 lbs., valued at 26,254,970 dollars! — (*Papers laid before Congress*, 22d of April, 1834.)

For the quantities of sugar and coffee imported into Havre in the years 1829, 1830, 1831, and 1832, see *post*. We avail ourselves of this opportunity to lay before our readers the following official statements as to the

Foreign Trade and Navigation of France for 1833.

Summary Statement of the Commerce of France, during the Year 1833.

IMPORTS AND EXPORTS.

Imports.	Merchandise imported. (General Commerce.)			Merchandise entered for Consumption. (Special Commerce.)		Exports.	French Merchandise. (General Commerce.)			French Merchandise. (Special Commerce.)	
	By Sea.	By Land.	Total.	Value.	Duty received.		By Sea.	By Land.	Total.	Value.	Duty received.
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*		*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Mat. for manuf.	303,280,562	136,347,233	439,627,795	344,524,041	41,831,677	Raw	205,328,084	58,501,568	263,829,652	154,653,027	828,877
For cons. Raw -	136,021,198	14,575,987	150,597,185	111,914,600	53,626,584	Man.	345,080,475	157,406,185	502,486,660	404,772,027	427,502
Wrought	27,815,419	75,235,353	103,050,772	34,698,830	6,178,555						
Total	467,117,179	226,158,573	693,275,752	491,137,471	101,636,816	Total	550,408,559	215,907,753	766,316,312	559,425,054	1,256,379

NAVIGATION.

Arrivals.	Ships.	Tonnage.	Merchandise imported. (General Commerce.)			Departures.	Ships.	Tonnage.	French and Foreign Merchandise. (General Commerce.)		
			French Colonies.	Foreign.	Total.				French Colonies.	Foreign.	Total.
	No.	*Tons.*	*Francs.*	*Francs.*	*Francs.*		*No.*	*Tons.*	*Francs.*	*Francs.*	*Francs.*
French - -	3,561	358,157	64,095,215	214,058,139	278,153,354	French -	3,675	318,840	42,629,861	197,318,494	239,948,358
Foreign -	5,115	622,735	- -	188,963,825	188,963,825	Foreign -	4,580	464,028	- -	310,460,201	310,460,201
Totals -	8,676	980,892	64,095,215	403,021,964	467,117,179	Totals -	8,255	782,868	42,629,864	507,778,695	550,408,559

WAREHOUSE TRADE.

Value of merchandise: —				*Francs.*	*Francs.*
In warehouse on the 31st of December, 1832					97,254,577
Entered during the year 1833	By importation	direct		405,295,487	440,239,127
		transit		10,901,069	
	By change of warehouse			21,012,571	
			Total		537,493,704
Withdrawn from warehouse during the year 1833	For consumption			276,812,954	424,533,593
	For re-exportation	by sea		67,740,708	
		transit		47,152,349	
	By change of warehouse			32,827,582	
In warehouse on the 31st of December, 1833					112,960,111

TRANSIT TRADE.

Exports.	Value of Articles, which, passing through France *in transitu*, have been despatched in 1833.			
	By French Ships.	By Foreign Ships.	By Land.	Total.
	Francs.	*Francs.*	*Francs.*	*Francs.*
Raw prod.	25,662,961	1,011,950	20,358,112	47,033,023
Manufac.	9,762,189	27,236,083	23,839,760	60,838,032
Totals	35,425,150	28,248,033	44,197,872	107,871,055

BOUNTIES, COIN, &c.

Bounties: —			*Francs.*
Value of exports, with bounty			99,260,916
Received for bounties			18,485,634
Coin and bullion: —			
The trade in coin and bullion is not taken into account in the above statement of imports and exports.			
Value of imports and exports of coin and bullion	imports		199,506,830
	exports		99,945,131
Seizures: —			
Amount of seizures on importation			1,171,560

I. Summary of Imports and Exports in 1833.

Account of the Value of the different Descriptions of Goods (exclusive of Coin and Bullion) imported into and exported from France in 1833, specifying the Mode in which they were imported and exported; the Value of the imported Goods entered for Home Consumption, with the Duty thereon, and on the Exports. — (*Administration des Douanes*, 1833, p. 4.)

Description of Merchandise.	IMPORTS.						EXPORTS.					
	Goods imported.				Goods entered for Consumption.		French and Foreign Goods.				French Goods.	
	By Sea.		By Land.	Total.	Duty.	Duty received.	By Sea.		By Land.	Total.	Value.	Duty received.
	French Ships.	Foreign Ships.					French Ships.	Foreign Ships.				
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Live animals	178,052	247,026	9,388,192	9,763,270	9,635,356	1,719,765	1,428,929	368,401	7,384,732	9,180,062	8,794,864	76,276
Products and parts of animals	36,736,323	19,295,715	97,389,426	153,419,462	107,041,296	9,574,755	36,167,159	19,574,356	6,023,563	61,765,458	11,296,833	201,639
Fish	8,843,385	3,725,971	1,416,537	14,055,773	13,129,922	342,713	454,978	428,911	801,195	1,685,084	1,049,184	2,949
Animal substances belonging to medicine and perfumery	673,229	221,410	1,284,246	2,178,885	1,791,042	116,134	103,474	118,878	92,188	314,540	255,796	532
Hard substances fit for cutting, &c. (ivory, &c.)	2,272,994	731,093	290,305	3,294,392	2,862,932	172,707	222,487	126,350	84,144	432,981	92,876	2,217
Farinaceous articles	2,846,255	6,705,197	1,107,314	10,658,766	5,270,850	755,450	5,191,836	2,589,506	1,000,880	9,782,222	5,121,227	46,171
Fruits	3,736,643	14,872,003	3,916,600	22,525,246	19,550,622	1,954,029	2,112,646	6,090,919	1,673,715	9,877,280	8,417,318	54,898
Colonial products	75,369,678	17,721,435	45,147	93,136,260	70,011,211	45,448,572	6,869,955	9,643,506	7,633,804	24,188,264	2,431,083	2,794
Vegetable juices (gums, &c.)	46,130,332	3,454,629	802,447	50,387,403	40,459,596	14,161,702	6,818,138	9,250,391	2,311,994	18,380,523	11,161,770	22,060
Vegetable matters suitable for medicine	2,581,597	494,547	403,345	3,479,489	1,607,288	225,171	540,847	1,107,647	382,696	2,031,190	819,676	1,102
Common wood	966,294	17,667,576	8,882,938	27,516,808	24,173,418	571,170	2,333,544	2,705,454	1,962,816	7,001,813	3,793,248	25,334
Fine wood	4,306,075	687,849	2,056	4,995,980	3,773,512	889,466	432,626	980,692	213,512	1,546,830	51,857	1,379
Fruits, stalks, and filaments, as cotton, flax, raw silk, &c.	18,433,310	64,172,467	530,388	83,136,165	67,236,854	8,258,528	2,407,307	2,810,018	6,574,269	11,791,819	2,130,870	65,587
Stuffs for tanning	1,401,585	2,950,644	930,315	5,282,544	2,355,672	346,664	1,094,443	5,015,106	6,649,053	12,759,602	10,595,881	155,810
Various leguminous products	310,469	782,340	1,461,931	2,054,740	1,801,033	341,269	458,532	580,697	1,540,563	2,579,892	2,386,140	65,318
Stones and minerals	648,259	2,380,356	11,727,103	14,756,718	14,218,688	3,041,248	809,103	1,062,200	2,371,355	4,242,704	3,947,871	8,787
Metals	19,580,950	12,112,886	5,512,389	37,006,225	35,600,484	3,642,434	1,682,167	2,017,898	4,003,073	7,703,138	4,166,622	51,422
Chemical products	3,094,565	3,065,017	229,945	6,389,527	5,101,136	2,088,145	1,912,769	4,431,030	2,293,471	8,637,270	7,792,318	5,050
Prepared dye stuffs (indigo, cochineal, &c.)	32,447,699	1,077,093	86,457	33,611,249	19,004,697	1,160,870	2,128,233	1,922,707	3,721,137	7,772,077	451,707	4,754
Colours	63,085	261,592	421,338	746,015	699,510	89,638	404,648	273,261	979,958	1,657,867	1,568,298	25,102
Different compounds (perfumery, soap, compound medicines, &c.)	672,908	341,211	141,569	1,155,688	63,513	20,935	9,535,226	9,792,522	6,559,071	25,886,819	25,149,851	68,165
Liquids (wines, brandy, &c.)	977,347	1,549,525	15,116	2,541,988	664,402	271,192	20,077,964	46,927,637	6,058,569	73,064,170	70,053,321	111,546
Glass and pottery	205,687	253,327	1,081,004	1,540,018	937,301	345,672	5,218,257	4,997,644	2,714,853	12,890,734	11,867,254	662
Thread	4,071,542	1,373,252	5,058,452	10,503,246	9,966,795	419,596	1,015,026	760,742	2,313,043	4,088,811	3,426,155	43,255
Wove goods and felt	8,416,871	9,133,543	57,810,327	75,360,741	19,811,003	3,096,312	83,934,573	145,630,146	108,583,520	336,148,239	261,316,685	29,822
Paper	186,464	344,331	426,705	957,400	818,085	67,374	4,703,352	2,792,202	4,209,530	11,705,084	11,233,215	151,084
Various prepared substances	3,251,926	3,774,002	15,402,086	22,428,014	13,378,013	2,538,880	41,900,994	30,581,875	27,049,570	99,532,439	89,266,545	
Total value of goods F.	278,153,354	188,963,825	226,158,573	693,275,752	491,137,471	101,636,816	239,948,358	310,460,201	215,907,753	766,316,312	559,425,054	1,256,379

II. Transit and Warehouse Trade of France for 1833. — (*Ibid.* p. 301.)

Places.	Stock, 31st Dec. 1832.	Entered in Warehouse in 1833.			Total.	Taken from Warehouse in 1833.				Total.	Stock, 31st Dec. 1833.
		Imported.		Change of Warehouse.		For Consumption.	For Re-exportation.		Change of Warehouse.		
		Direct.	Transit.				By Sea.	Transit.			
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Bordeaux	20,644,775	45,678,397	2,184,679	1,193,476	69,701,327	30,973,640	10,893,556	1,858,107	7,830,792	51,556,095	18,145,232
Havre	25,094,744	125,541,513	2,488,052	2,226,084	155,350,393	94,922,987	9,968,749	6,292,539	7,697,980	118,882,255	36,468,138
Marseilles	35,634,680	130,504,028	560,369	4,558,305	171,257,382	79,328,107	36,939,969	6,056,870	10,229,582	132,554,528	38,702,854
Other Ports	15,880,378	103,571,549	5,667,969	16,074,806	141,184,602	71,588,220	9,938,434	32,944,833	7,069,228	121,540,615	19,643,887
Totals F.	97,254,577	405,295,487	10,901,069	24,042,571	537,493,704	276,812,954	67,740,708	47,152,349	32,827,582	424,533,593	112,960,111

III. Import Trade of France during the Year 1833.

Account of the Imports into France in 1833, specifying the Value of the Imports from each Country; distinguishing between General and Special Commerce. — (*Administration des Douanes*, 1833, p. 2.)

Countries from which imported.	General Commerce.				Special Commerce.					
	Materials of Manufacture.	For Consumption.		Total.	Materials of Manufacture.	For Consumption.		Total.	Duties received.	Coin and Bullion imported.
		Raw.	Manufactured.			Raw.	Manufactured.			
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Europe: — Russia	16,387,298	6,538,397	178,105	23,103,800	14,789,451	4,612,713	121,314	19,523,508	1,301,088	6,000
Sweden	4,004,154	76	76,899	4,081,129	3,786,043	202	18,459	3,804,704	920,755	
Norway	9,183,046	39,176	101,063	9,323,285	9,260,148	13,562	84,656	9,358,366	261,576	152,865
Denmark	138,674	2,701,927	1,704	2,842,305	103,366	2,564,712	1,580	2,669,658	217,452	
Prussia	7,072,007	2,897,192	10,522,093	20,491,292	6,679,925	2,244,780	3,581,533	12,506,238	1,434,791	2,100
Hanseatic Towns	6,144,252	1,183,463	1,234,060	8,561,775	3,519,311	1,048,513	187,948	4,755,772	879,173	
Holland	2,013,188	2,956,234	511,256	5,480,678	1,613,438	2,365,252	124,717	4,103,407	853,780	
Belgium	33,750,448	5,692,500	29,401,985	68,844,933	32,287,650	5,448,067	15,817,297	53,553,014	8,524,285	40,151,756
England (United Kingdom, Gibraltar, Malta, Ionian Isles)	23,154,194	1,116,407	15,471,058	39,741,659	18,506,514	463,707	3,446,950	22,417,151	3,724,508	115,264,860
Portugal (including Madeira, Cape de Verde Islands, and the Azores)	1,152,019	654,996	4,563	1,811,978	695,623	356,814	6,668	1,059,105	188,788	4,100
Spain (including the Canary isles)	34,736,858	5,613,176	3,494,561	43,844,595	26,547,075	3,167,099	1,206,252	30,920,426	7,718,021	380,170
Austria (including the kingdom of Lombardy)	47,114,773	459,222	669,384	48,243,379	4,250,562	239,911	204,771	4,695,244	291,636	
Sardinia (including island and continent)	44,394,656	19,366,052	4,876,892	68,637,600	58,412,144	15,538,726	758,885	74,709,755	9,439,608	3,996,897
Two Sicilies	12,552,624	2,148,534	426,709	15,127,867	8,067,699	1,369,535	67,479	9,504,713	1,326,984	208,500
Tuscany, Modena, Parma, Roman States, Lucca	5,856,418	438,122	3,244,123	9,538,663	4,998,103	289,231	1,777,219	7,064,553	1,029,464	831,551
Switzerland	9,131,614	1,444,244	20,592,145	31,168,003	7,905,362	1,299,775	2,722,576	11,927,713	1,103,268	3,726,388
Germany	15,180,549	4,974,733	8,211,856	28,367,138	12,780,142	4,744,718	4,132,713	21,657,573	2,973,905	10,126,536
Greece (including the islands in the Archipelago)	183,223	635,031	5,370	823,624	117,396	3,306	5,712	126,414	22,285	555,540
Turkey (including the islands in the Archipelago)	15,689,038	1,264,893	210,980	17,164,911	10,944,840	74,033	29,692	11,048,565	910,977	4,833,745
Africa: — Egypt	4,848,720	2,721	26,188	4,877,629	3,628,685	2,651	7,627	3,638,963	585,917	1,829,400
Algiers	1,591,307	49,141	137,945	1,778,393	697,562	20,199	26,763	744,524	171,492	333,762
States of Barbary	8,196,063	138,466	38,029	8,372,558	7,390,662	38,955	16,192	7,445,809	2,342,413	544,700
English possessions (Cape of Good Hope, Mauritius)	7,225	17,135	40,336	64,696	89,858	24,766	817	115,441	25,309	
Other territories on the coast	193,860	118,186	141	312,187	323,556	15,482	141	339,179	80,347	
Asia: — India — English possessions	22,865,725	4,252,985	287,428	27,406,138	13,931,839	2,038,046	26,297	15,996,182	1,911,821	61,900
Dutch do.	212,990	3,029,195	3,054	3,245,219	186,570	1,247,860	2,892	1,437,322	643,093	80,000
French do.	22,744	86	243,405	266,235	109,446	9,916	41	119,403	11,245	11,300
China	633	2,371,313	9,052	2,380,998	9,602	479,610	28,804	518,016	143,217	
Cochin China, Philippines, &c.	- -	1,822	2,583	4,265	5,012	209,008	1,471	215,491	98,742	15,550
America: — United States	86,105,445	11,058,187	1,915,580	99,079,212	70,413,153	3,418,278	54,474	73,885,905	9,498,079	1,080,090
Hayti	1,090,815	2,371,090	50,203	3,512,108	903,002	1,779,499	2,048	2,684,549	2,362,421	28,350
English possessions (Canada, Nova Scotia, Newfoundland, Antilles, and Guiana)	37,029	141	319	37,489	37,029	2,288	- -	59,317	6,746	
Spanish possessions (Cuba, Porto Rico)	766,170	5,465,292	473,479	6,704,941	980,019	1,955,341	3,587	2,938,947	2,980,894	120,209
Danish possessions (St. Thomas)	271,295	666,027	12,904	950,226	310,087	108,890	1,061	420,038	171,448	330,832
Dutch possessions (St. Eustache, Curaçoa, &c.)	- -	- -	48	48	- -	- -	48	48	4	
Swedish (Saint Barthélémy)	- -	- -	- -	- -	- -	2,660	- -	2,660	2,720	
Brazil	6,752,351	2,258,222	28,049	9,038,622	5,711,137	822,956	11,532	6,545,625	1,310,575	921,683
Mexico	4,045,522	1,287,677	7,608	5,340,807	1,617,768	961,146	5,722	2,584,636	181,600	5,552,035
Columbia	802,207	338,684	1,366	1,142,257	374,957	217,332	228	592,517	276,669	41,622
Peru (Lower Peru)	218,165	573	- -	218,738	158,307	23	- -	158,330	90,090	500,910
Bolivia (Upper Peru)	- -	- -	250	250						
Chili	2,041,723	39,632	1,433	2,082,788	1,530,735	33,849	1,434	1,566,018	422,737	5,778,700
Rio de la Plata (Monte Video and Buenos Ayres)	4,652,242	1,597	22,497	4,676,336	4,491,666	4,241	3,753	4,499,660	178,195	163,134
French Colonies: — Guadaloupe	228,694	20,867,092	65,644	21,161,430	201,185	19,162,627	7,301	19,371,113	15,342,764	784,150
Martinique	559,372	14,156,586	45,845	14,761,803	336,634	12,925,002	8,176	13,269,812	10,267,932	901,375
Bourbon	373,808	15,664,683	139,745	16,178,236	289,822	14,692,681	9,590	14,992,093	8,437,472	48,460
Senegal	2,133,841	1,888	3,679	2,139,408	1,776,856	15,051	3,969	1,795,876	89,275	69,700
French Guiana (Cayenne)	847,276	1,304,461	6,003	2,157,740	853,621	925,807	5,703	1,785,131	776,380	48,020
St. Pierre, Miquelon, and French fisheries	2,799,443	4,894,517	2,638	7,696,598	2,761,528	4,841,092	1,544	7,604,164	7,033	7,000
Epaves et Sauvetages	124,097	115,351	250,355	489,783	108,951	114,688	201,184	424,823	97,242	
Totals — *F.*	439,627,795	150,597,185	103,050,772	693,275,752	344,524,041	111,914,600	34,698,830	491,137,471	101,636,816	199,506,830

IV. Export Trade of France during the Year 1833.

Account of the Exports from France in 1833, specifying the Value of those sent to each Country; distinguishing between General and Special Commerce. — (*Administration des Douanes*, 1833, p. 3.)

Countries to which exported.	General Commerce.			Special Commerce.				
	Raw Products.	Manufactured Products.	Total.	Raw Products.	Manufactured Products.	Total.	Duties received.	Coin and Bullion exported.
	Francs.	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*	*Francs.*
Europe: — Russia	4,777,445	5,778,346	10,555,791	5,549,980	4,487,017	8,036,997	59,368	
Sweden	1,027,176	340,642	1,367,818	671,403	280,021	951,424	7,372	
Norway	1,178,157	660,460	1,838,917	951,282	653,065	1,601,067	5,129	
Denmark	1,791,082	677,289	2,468,371	1,402,873	547,425	1,950,298	6,785	
Prussia	4,641,185	2,759,275	7,401,060	4,108,285	2,640,695	6,748,280	45,010	16,800
Hanseatic Towns	13,456,206	4,588,865	18,045,071	10,440,712	3,787,782	14,228,494	25,798	36,780
Holland	7,636,019	8,434,152	16,070,201	6,622,006	4,988,198	11,613,204	12,638	54,000
Delgium	23,414,858	28,933,300	52,348,158	15,370,928	27,642,733	43,163,661	167,720	31,598,920
England (United Kingdom, Gibraltar, Malta, and Ionian Islands)	70,741,571	45,454,287	116,195,858	32,048,623	36,864,509	67,913,132	304,995	5,807,700
Portugal (including Madeira, Cape de Verde Islands, and the Azores)	462,576	1,549,148	2,011,724	358,104	1,429,979	1,788,083	6,028	
Spain (including the Canaries)	13,297,707	49,193,883	62,491,590	7,507,244	36,698,410	44,205,654	99,834	22,868,200
Austria (including Lombardy)	3,795,711	2,861,690	6,657,401	1,114,449	2,534,374	3,648,823	15,841	64,000
Sardinia (isle and continent)	16,646,068	33,041,054	49,687,122	6,368,898	23,824,810	30,193,708	71,480	14,183,200
Two Sicilies	3,448,420	7,478,725	10,927,145	1,212,905	5,966,668	7,179,573	8,093	4,736,000
Tuscany, Modena, Parma, Roman States, Lucca	3,435,622	8,255,607	11,691,229	1,615,221	6,914,401	8,529,622	15,197	1,410,100
Switzerland	24,349,743	33,941,756	58,191,499	9,827,383	22,465,763	32,293,146	87,171	12,929,784
Germany	8,197,410	33,748,360	41,945,770	6,379,999	31,443,415	37,823,414	63,218	1,067,677
Greece (including the islands in the Archipelago)	747,536	1,218,003	1,965,539	266,627	1,183,654	1,450,331	1,353	103,200
Turkey (including the islands in the Archipelago)	3,319,068	11,099,811	14,418,779	436,043	8,747,693	9,183,736	7,195	427,000
Africa: — Egypt	919,702	2,581,442	3,501,144	452,588	2,358,531	2,811,119	5,662	144,000
Algiers	8,079,225	11,986,177	20,065,402	4,327,666	11,192,650	15,520,316	20,072	619,420
States of Barbary	1,334,463	3,013,977	4,348,440	312,516	2,412,575	2,724,890	3,587	2,265,000
English possessions (Cape of Good Hope, Mauritius)	707,102	834,828	1,541,930	500,689	725,395	1,226,084	3,334	194,600
Other territories on the coast of Africa	150,609	290,969	441,578	121,795	107,455	229,250	732	
Asia: — India - English possessions	1,448,209	3,756,903	5,205,112	1,287,533	3,174,771	4,462,304	10,283	85,000
Dutch do.	505,299	497,308	1,002,607	380,402	459,266	839,668	2,272	347,200
French do.	65,998	72,501	138,499	63,922	71,115	135,037		
China	2,416	74,315	76,731	1,576	60,715	62,291	57	
Cochin China, Philippines, &c.	201,136	1,605,427	1,806,563	114,983	245,449	360,432	745	95,000
America: — United States	17,568,925	117,396,336	134,965,261	13,718,725	94,265,428	107,984,153	114,860	178,800
Hayti	1,021,106	5,316,918	6,338,024	762,611	4,933,054	5,695,665	10,087	32,000
English possessions (Canada, Nova Scotia, Newfoundland, Antilles, Guiana)	151,482	57,812	209,294	130,626	25,063	155,689	574	
Spanish possessions (Cuba, Porto Rico)	1,715,552	6,999,450	8,715,002	1,532,819	5,199,728	6,732,547	12,287	196,000
Danish do. (St. Thomas)	619,696	2,500,198	3,119,894	460,695	2,278,020	2,738,715	5,522	
Dutch do. (St. Eustache, Curaçoa, and Dutch Guiana)	- -	28,852	28,852	- -	28,852	28,852	2	
Swedish do. (St. Barthélémy)	338	- -	338	338	- -	338		
Brazil	5,576,263	12,616,120	18,192,383	4,171,447	8,610,557	12,782,004	16,818	
Mexico	1,375,986	13,650,684	15,026,670	943,862	10,461,734	11,405,596	15,703	5,600
Guatimala	64,467	112,797	177,264	63,041	90,868	153,909	481	
Columbia	164,162	491,295	655,457	122,750	459,744	582,494	1,302	
Peru (Lower Peru)	511,792	3,776,947	4,288,739	419,571	3,483,611	3,903,182	3,817	
Bolivia (Upper Peru)	2,391	- -	2,391	120	- -	120		
Chili	342,786	2,189,328	2,532,114	248,502	1,689,289	1,937,791	3,572	
Rio de la Plata (Monte Video and Buenos Ayres)	1,111,665	3,922,051	5,033,716	723,683	3,271,989	3,995,672	7,326	
French Colonies: — Guadaloupe	3,815,930	8,480,171	12,296,101	3,761,172	8,474,329	12,235,501	- -	27.000
Martinique	4,144,322	8,293,966	12,438,288	4,109,280	8,289,585	12,398,865		
Bourbon	2,593,277	4,427,284	7,020,561	2,268,886	4,348,041	6,616,927	- -	512,350
Senegal	760,135	3,038,185	3,798,320	687,657	1,514,808	2,202,465		
French Guiana (Cayenne)	522,357	1,750,254	2,272,611	465,681	1,730,864	2,196,545		
St. Pierre, Miquelon, and French fisheries	2,094,551	2,709,432	4,803,983	2,092,537	2,707,949	4,800,286		
Totals F.	263,829,652	502,486,660	766,316,312	154,653,027	404,772,027	559,425,054	1,256,570	99,945,131

Note. — *General commerce*, as applied to imports, means all articles imported by sea or land, without inquiring whether they are intended to be consumed, re-exported, or warehoused. *Special commerce*, as applied to imports, means such imported articles as have been admitted for home consumption, under payment of the customs duties.

The same distinction obtains in relation to exports. *General commerce*, in this case, means all exported articles, without regard to their origin; while *special commerce* means such only as are produced by the soil or manufactures of France.

IV. — Account of the Quantities of the different Sorts of Cotton, Sugar, and Coffee, imported into Havre, in each of the Four Years ending with 1832, and of the Stocks on Hand on the 31st of December each Year.

Countries whence they came.	1829.		1830.		1831.		1832.	
	Imports.	Stocks, Dec. 31.	Imports.	Stocks, Dec. 31.	Imports.	Stocks, Dec. 31.	Imports.	Stocks, Dec. 31.
Cotton.								
U.S. of America	147,186 bales	16,664 bales	152,995 bales	39,050 bales	121,116 bales	15,697 bales	165,885 bales	16,270 bales
Brazil - -	23,626 —	828 —	34,729 —	5,800 —	14,006 —	2,216 —	15,926 —	549 —
Other sorts -	5,118 —	8 —	3,462 —	150 —	2,379 —	86 —	2,417 —	181 —
	175,930 —	17,500 —	191,186 —	45,000 —	137,501 —	18,000 —	184,228 —	17,000 —
Sugar.								
Martinique and Guadaloupe -	60,560 hhds.	7,000 hhd.	49,820 hhds.	12,000 hhd.	58,450 hhds.	14,000 hhd.	46,000 hhds.	4,000 hhd.
Bourbon - -	27,769 bags	3,000 bags	47,634 bags	3,000 bags	26,270 bags	1,500 bags	29,696 bags	1,800 bags
Havannah and St. Jago -	1,560 boxes	200 bxs.	774 boxes	150 bxs.	868 boxes	191 bxs.	77 boxes	
Brazil - -	1,125 —	130 —	372 —	75 —	90 —	17 —	90 —	
Do. - -	25 bags	- -	- -	- -	42 bags			
Other sorts -	8,580 —	- -	388 casks	- -	3,543 —	100 bags	4,996 bags	
Do. - -	894 casks	-	8,066 bags	1,300 bags	- -	- -	827 casks	
Coffee.								
Martinique and Guadaloupe -	45 hhds.	5 hhd.	167 hhds.	18 hhd.	54 hhds.	16 hhd.	130 hhds.	86 hhd.
Do. do. -	2,791 tcs.	164 tcs.	2,290 tcs.	95 tcs.	1,032 tcs.	58 tcs.	2,148 tcs.	250 tcs.
Do. do. -	5,752 ¼ cks.	138 ¼ ck.	4,410 ¼ cks.	191 ¼ ck.	3,028 ¼ cks.	180 ¼ ck.	4,390 ¼ cks.	1,391 ¼ ck.
Do. do. -	143 bags	- -	160 bags	- -	26 bags	- -	94 bags	
Bourbon - -	3,674 bales	98 bales	1,557 bales	126 bales	824 bales	- -	2,261 bales	
Hayti, direct -	53,080 bags	14,658 bags	62,089 bags	23,414 bags	29,734 bags	8,500 bags	42,926 bags	11,076 bags
Do. - -	642 casks	- -	429 ¼ cks.	183 ¼ ck.	192 ¼ cks.	- -	45 ¼ cks.	
Various other sorts - -	30,192 bags	6,901 —	33,510 bags	1,615 bags	29,565 bags	5,500 —	73,161 bags	22,661 bags
Do. - -	1,055 hhds.	180 hhd.	432 hhds.	- -	136 hhds.	90 hhd.	492 hhds.	130 hhd.
Do. - -	- -	50 tcs.	- -	- -	- -	- -	- -	80 tcs.
Do. - -	1,587 ¼ cks.	400 ¼ ck.	154 ¼ cks.	- -	483 ¼ cks.	34 ¼ ck.	647 ¼ cks.	509 ¼ ck.

Prices of Commodities Duty paid and in Bond, Tares, Commercial Allowances, &c. — These important particulars may be learned by the inspection of the subjoined Price Current for the last week of December, 1833. The duties on the articles mentioned are also given; but it is most probable that some of these will be speedily varied. But the other particulars embodied in it will always render it an important document.

Havre Price Current, 31st of December, 1833.

	Duty paid. Fr. ct.	Fr. ct.	In Bond. Fr. ct.	Fr. ct.
Ashes, per 50 kil.				
Pot, American, 1833 -	39 0 to	39 50	0 0 to	0 0
do. 1832 - -	0 0 -	0 0	0 0 -	0 0
Russia - -	40 0 -	0 0	nominal	
Tuscany - -	0 0 -	0 0	0 0 -	0 0
Pearl, American, 1833	41 50 -	0 0	0 0 -	0 0
do. 1832 - -	0 0 -	0 0	none	

Duty on nett weight: by French vessels from European ports, 9 fr. 90 ct.; from elsewhere, 8 fr. 25 ct. By foreign vessels, 11 fr. 55 ct. — (See exceptions at Note A.)

Commercial and Custom-house tare, 12 per cent.

Bark (Jesuits'), per ½ kil.				
Lochsa - -	0 0 to	0 0	1 50 to	3 25
Callyssaya, curled -	0 0 -	0 0	3 30 -	0 0
do. flat -	0 0 -	0 0	2 85 -	2 90

Duty on nett weight: by French vessels from any port whatever, 27½ ct. By foreign vessels, 55 ct. From countries west of Cape Horn, 13¾ ct.

Custom-house tare: on chests, 12 per cent.; on serons, 2 per cent.

Commercial tare: on cases, real; on serons of 70 kil. and upwards, 8 kil.; of 40 kil. and upwards, 6 kil.; and of 20 kil. and upwards, 4 kil.

Bees' wax, per ½ kil.				
North American yellow -	1 45 to	1 65	0 0 to	0 0
New Orleans, do. - -	1 40 -	1 45	none	
Russia - -	1 60 -	1 65	0 0 -	0 0
Havannah - -	1 20 -	1 30	0 0 -	0 0
Senegal - -	1 32 -	1 35	0 0 -	0 0

Duty on gross weight: by French vessels from European ports, 5½ ct.; from elsewhere, 4 2/5 ct. By foreign vessels from any port whatever, 8¼ ct. — (See exceptions at Note A.)

Commercial tare: real.

Cassia lignea, per ½ kil.				
in mats - -	0 0 to	0 0	0 85 to	0 0
in chests - -	0 0 -	0 0	1 0 -	0 0

Duty on nett weight: by French vessels from the East Indies, 36 2/3 ct.; from elsewhere, 1 fr. 10 ct. By foreign vessels from any port whatever, 1 fr. 55 5/6 ct. — (See exceptions at Note A.)

Custom-house tare: on chests, 12 per cent.; on mats, 2 per cent.

Commercial tare: real.

Cochineal, per ½ kil.				
silvery, from ord. to fine	none		11 50 to	12 0
foxy, do. do. - -	none		10 0 -	10 75
black, do. do. - -	none		10 50 -	11 75

Duty on nett weight: by French vessels from any port whatever, 82½ ct. By foreign vessels, do. 88 ct. — (See exceptions at Note A.)

Custom-house tare: on casks, 12 per cent.; on serons, 2 per cent.

Commercial tare: real.

	Duty paid. Fr. ct.	Fr. ct.	In Bond. Fr. ct.	Fr. ct.
Cocoa, Caraccas, per ½ kil.	- nominal		1 5 to	1 15
Guayaquil -	- none		0 0 -	0 0
Brazil - -	by a French vessel		0 36 -	0 38
Trinidad -	- nominal		0 50 -	0 55

Duty on nett weight: by French vessels from the French colonies, 22 ct.; from countries west of Cape Horn, 30½ ct.; from European ports, 52¼ ct.; from elsewhere, 36 17/20 ct. By foreign vessels from any port whatever, 58 17/20 ct. — (See exceptions at Note A.)

Custom-house tare: on casks, 12 per cent.; on bags, 3 per cent.

Commercial tare: on casks, real; on bags, 2 per cent.

Coffee, per ½ kil.				
St. Domingo, from ordinary to fine - -	0 0 to	0 0	0 68 to	0 72
Cuba and Porto Rico -	0 0 -	0 0	0 67 -	0 82
Saguira and Porto Cabello	0 0 -	0 0	0 70 -	0 72
Brazil - -	nominal		0 67 -	0 70
Java - - -	none		0 0 -	0 0
Mocha - -	1 42 -	1 45	0 0 -	0 0

Duty on nett weight: by French vessels from the East Indies, 42 9/10 ct.; from European ports, 55 ct.; from elsewhere, 52¼ ct. By foreign vessels from any port whatever 57¾ ct. — (See exceptions at Note A).

Custom-house tare: on casks, 12 per cent.; on bags, 3 per cent.

Commercial tare: on casks, real; on bags, 2 per cent.; on Mocha coffee the tare runs from 4½ to 12½ kil. upon bales of 75 to 200 kil.

Copper, Peruvian, per ½ kil. -	0 90 to	0 95	none	
Russian - -	1 18 -	1 19	0 0 to	0 0

Duty on gross weight: by French vessels from European ports, 1 1/10 ct.; from elsewhere, 11/20 ct. By foreign vessels from any port whatever, 2 1/5 ct. — (See exceptions at Note A.)

Commercial tare: real.

Cotton, per ½ kil.				
Upland - -	0 95 to	1 16	0 84 to	1 5
Mobile, Alabama, and Tenessee - -	0 92 -	1 20	0 81 -	1 9
New Orleans - -	0 95 -	1 35	0 84 -	1 24
Sea Island - -	1 90 -	3 20	1 79 -	3 9
Pernambuco - -	1 20 -	1 35	1 9 -	1 24
Bahia - -	1 10 -	1 30	0 99 -	1 19
Maranham - -	0 0 -	0 0	none	
St. Domingo - -	1 5 -	1 10	0 94 -	0 99
Caraccas - -	0 0 -	0 0	none	
Martinique and Guadaloupe - -	1 10 -	1 30	0 0 -	0 0
Cayenne - -	0 0 -	0 0	none	

Duty on nett weight: on long or short staple, by French vessels from French colonies 2¾ ct.; from European ports (Turkey excepted), 16½ ct.; from the East Indies, 5½ ct.; from other

	Duty paid.		In Bond.	
	Fr. ct.	Fr. ct.	Fr. ct.	Fr. ct.

countries, 11 ct. By foreign vessels (except from Turkey), 13½ ct. By French vessels from Turkey 8¼ ct.; by foreign vessels from Turkey, 13¼ ct. — (See exceptions at Note A.)

Custom-house tare: 6 per cent. on bales of 50 kil. and above; and 8 per cent. on bales under 50 kil.

Commercial tare: on United States cottons, 6 per cent., cords off; on Brazil cottons, 4 per cent.; on St. Domingo, in bales, 6 per cent.; on Cumana and Caraccas, 7 kil. per seron above 40 kil.; and 6 kil. per seron of 40 kil. and under.

Draft: 2 kil. on Sea Island and Bengal; 3 kil. on all other descriptions in bales exceeding 50 kil.; and 1½ kil. upon bales under 50 kil.

Elephants' teeth, per ½ kil.	2 60 to 6 0		0 0 to 0 0	

Duty on nett weight: by French vessels from the East Indies, 44 ct.; from European ports, 77 ct.; from Senegal, 27½ ct.; from elsewhere, 55 ct. By foreign vessels from any port whatever, 93½ ct. — (See exceptions at Note A.)

Commercial and Custom-house tare: real.

Gum, Senegal, per ½ kil.	0 83 to 0 87		0 78 to 0 82	

Duty on gross weight: by French vessels from Senegal, 5½ ct.; from European ports, 13¾ ct.; from elsewhere, 11 ct. By foreign vessels from any port whatever, 16½ ct. — (See exceptions at Note A.)

Commercial tare: on casks, real; on bags, 2 per cent.

Hops, American, first sort	220 0 to 0 0		0 0 to 0 0	
Kent, do.	0 0	0 0	0 0	0 0

Duty on gross weight: by French vessels from any port whatever, 33 fr. per 50 kil. By foreign vessels, 36 fr. 2½ ct. — (See exceptions at Note A.)

Commercial tare: on bales, 2 per cent.

Hides, per ½ kil.				
Buenos Ayres'	0 90 to 1 5		0 0 to 0 0	
Pernambuco and Bahia, salted	0 67	0 76	0 0	0 0
Rio Janeiro	0 90	1 0	0 0	0 0
Carthagena and Caraccas	0 72	0 75	0 0	0 0
South American horse hides, per 50	60 0	65 0	0 0	0 0

Duty on gross weight: by French vessels from European ports, 5½ ct.; from elsewhere, 2¾ ct. By foreign vessels from any port whatever, 8¼ ct. — (See exceptions at Note A.)

Five bull hides are admitted among 100 hides without allowance, and 1 kil. is allowed for every bull hide above that number to the extent of 12; when more than 12, the allowance is conditional.

Horns, ox and cow, per 104	25 0 to 95 0		0 0 to 0 0	

Duty on gross weight per 50 kil.: by French vessels from any port whatever, 5½ ct. By foreign vessels, 5½ ct. — (See exceptions at Note A.)

Horse hair, per ½ kil.				
Buenos Ayres, short	0 70 to 0 75		0 0 to 0 0	
from mixed to long	0 85	1 30	0 0	0 0

Duty on gross weight: by French vessels from any port whatever, 2¾ ct. By foreign vessels, 5 ct. — (See exceptions at Note A.)

Commercial tare: real.

Indigo, per ½ kil.				
extra fine blue	0 0 to 0 0		0 0 to 0 0	
Bengal, extra fine violet and blue	13 0	0 0	0 0	0 0
fine violet and purple	12 0	12 50	0 0	0 0
do. mod. violet and do.	11 0	11 50	0 0	0 0
good and middl. violet	9 0	10 50	0 0	0 0
do. red do.	10 0	10 50	0 0	0 0
fine coppery do.	10 50	11 0	0 0	0 0
good coppery do.	4 50	10 0	0 0	0 0
do. to fine copper	8 0	9 0	0 0	0 0
ordinary and low	6 0	8 0	0 0	0 0
Oude, ordinary to fine	0 0	0 0	none	
Madras, do. do.	0 0	0 0	none	
Manilla, do. do.	0 0	0 0	none	
Guatemala, flores	9 25	9 75	0 0	0 0
sobre saliente	8 50	9 0	0 0	0 0
cortes	7 0	8 0	0 0	0 0
Caraccas	4 75	9 50	0 0	0 0

Duty on nett weight: by French vessels from the East Indies, 41¼ ct.; from European ports, 1 fr. 65 ct.; from elsewhere, 55 ct. By foreign vessels from any port whatever, 2 fr. 20 ct. — (See exceptions at Note A.)

Custom-house tare: on chests, casks, and serons, real, or at the option of the importer, 12 per cent. on chests or casks, and 9 per cent. on serons.

Commercial tare: on casks or chests, real; on serons of 100 to 110 kil., 11 kil.; on do. of 85 to 99 kil., 10 kil.; on do. of 70 to 84 kil., 9 kil.; on do. of 50 to 69 kil., 7 kil.

Allowance: 1 kil. per chest.

Jalap, per ½ kil.	0 0 to 0 0		1 90 to 2 0	

Duty on nett weight: by French vessels from any port whatever, 55 ct. By foreign vessels, 59 3/25 ct. — (See exceptions at Note A.)

Custom-house tare: 2 per cent.

Commercial tare: on serons of 60 kil. and above, 7 kil.; on do. of 40 kil. and above, 5 kil.; on do. of 30 kil. and above, 4 kil.

Lac dye, per ½ kil.	1 50 to 5 0		0 0 to 0 0	

Duty on nett weight: by French vessels from the East Indies, 55 ct.; from elsewhere, 1 fr. 10 ct. By foreign vessels from any port whatever, 1 fr. 37½ ct. — (See exceptions at Note A.)

Commercial and Custom-house tare: real.

Lead, per 50 kil.				
German	20 0 to 0 0		none	
Spanish	20 0	20 12	0 0	0 0

Duty on gross weight: by French vessels from any port whatever, 2 fr. 75 ct. By foreign vessels, 3 fr. 85 ct. — (See exceptions at Note A.)

Pepper, light, per ½ kil.	0 75 to 0 80		0 35 to 0 37	

Duty on nett weight: by French vessels from the East Indies, 33 ct.; from elsewhere, 66 ct. By foreign vessels from any port whatever, 82½ ct. — (See exceptions at Note A.)

Custom-house tare: on bags, 5 per cent.

Commercial tare: on single bags, 2 per cent.

	Duty paid.		In Bond.	
	Fr. ct.	Fr. ct.	Fr. ct.	Fr. ct.
Pimento, per ½ kil.				
Jamaica	0 0 to 0 0		0 62 to 0 65	
Tobago	none		0 35	0 40

Duty and tares: the same as for pepper.

Quercitron, per 50 kil.				
Philadelphia	16 50 to 16 75		0 0 to 0 0	
New York	13 50	0 0	0 0	0 0

Duty on gross weight: by French vessels from European ports, 4 fr. 95 ct.; from other countries, 3 fr. 30 ct. By foreign vessels from any port whatever, 6 fr. 60 ct. — (See exceptions at Note A.)

Commercial tare: 12 per cent.

Quicksilver, per ½ kil.	2 85 to 3 0		0 0 to 0 0	

Duty on gross weight: by French vessels from any port whatever, 11 ct. By foreign vessels, 12 1/10 ct. — (See exceptions at Note A.)

Commercial tare: real.

Rice, Carolina, per 50 kil.	22 0 to 24 25		0 0 to 0 0	

Permanent duty on gross weight: by French vessels from places of growth out of Europe, 1 fr. 37½ ct.; by do. from places of growth in Europe, 2 fr. 20 ct.; from European ports, or from Piedmont by land, 3 fr. 30 ct. By foreign vessels from any port whatever, or by land from any country whatever, Piedmont excepted, 4 fr. 95 ct. — (See exceptions at Note A.)

Commercial tare: 12 per cent.

Saltpetre, crude, per 50 kil.	64 0 nominal		36 0 to 37 0	

Duty on nett weight: by French vessels from countries out of Europe, 28 fr. 87½ ct.; from elsewhere, 35 fr. 75 ct. By foreign vessels from any port whatever, 44 fr.; west of Cape Horn per French vessels, 19 fr. 25 ct.; per foreign vessels, 29 fr. 35 1/3 ct.

Custom-house tare: 2 per cent.

Commercial tare: 6 kil. per double bale of the customary form.

Sarsaparilla, per ½ kil.				
Honduras	none		1 50 to 0 0	
Mexico	0 0 to 0 0		1 25	0 0
Para	none		2 0	0 0

Duty on nett weight: by French vessels from European ports, 68¾ ct.; from elsewhere, 55 ct. By foreign vessels from any port whatever, 82½ ct. — (See exceptions at Note A.)

Custom-house tare: on bales, 2 per cent.

Commercial tare: on bales, according to broker's estimation; on naked bundles, the cords are deducted.

Skins, deer, each	2 50 to 4 0		0 0 to 0 0	

Duty per 50 kil. on gross weight: by French vessels from any port whatever, 55 ct. By foreign vessels, 60½ ct. — (See exceptions at Note A.)

Spelter, per 50 kil.	16 75 to 17 0		nominal	

Duty on gross weight: 5½ ct. per 50 kil., without distinction of flag or derivation.

Sugar, per 50 kil.				
Havannah, white	none		37 0 to 42 0	
yellow	none		30 0	32 0
St. Jago, white	none		27 0	34 0
brown to yellow	none		24 0	30 0
Brazil, white	none		30 0	32 0
brown to yellow	0 0 to 0 0		23 0	26 0
Benares	none		27 0	30 0
Manilla	none		27 0	30 0

Duty on nett weight: raw sugars, not white, by French vessels from the East Indies, 44 fr.; from European ports, 52 fr. 25 ct.; from elsewhere, 46 fr. 75 ct. By foreign vessels, 55 fr. — (See exceptions at Note A.) Raw sugars, white or clayed, without distinction of quality or mode of fabrication, by French vessels from the East Indies, 49 fr. 50 ct.; from European ports, 57 fr. 75 ct.; from elsewhere, 52 fr. 25 ct. By foreign vessels, 66 fr. — (See exceptions at Note A.)

Custom-house tare: on chests, 12 per cent.; on single bags, 2 per cent.; on double do., 4 per cent.

Commercial tare: Havannah and St. Jago, chests, 13 per cent.; Brazil, 17 per cent.; on bags under 75 kil., 5 kil. per bag; of 75 kil. and upwards, 6 kil.

Tallow, Russia, per 50 kil.	65 0 to 0		0 0 to 0 0	

Duty on gross weight: by French vessels from any port whatever, 8 fr. 25 ct. By foreign vessels, 9 fr. 90 ct. — (See exceptions at Note A.)

Commercial tares: 12 per cent.

Teas, per ½ kil.				
Imperial	6 25 to 6 40		4 25 to 4 40	
Gunpowder	6 25	6 50	4 40	4 50
Hyson	5 15	5 80	3 50	3 70
Young hyson	4 0	5 0	2 0	2 10
Hyson skin	4 35	4 40	1 80	1 90
Pekoe	4 0	7 50	3 75	4 75
Souchong	3 30	4 50	1 50	1 60
Pouchong	4 0	4 25	2 30	2 50

Duty on nett weight: by French vessels from the East Indies, 82½ ct.; from elsewhere, 2 fr. 75 ct. By foreign vessels from any port whatever, 3 fr. 30 ct. — (See exceptions at Note A.)

Custom-house tare: 12 per cent.

Commercial tare: on imperial, gunpowder, young hyson, and pekoe, 10 kil. per chest; on hyson and hyson skin, 9 kil.; on souchong, 13 kil.; on ½ chests and boxes, conventional.

Tin, Banca, per ½ kil.	0 88 to 0 89		0 0 to 0 0	
British	0 85	0 87	none	
Peruvian	0 75	0 80	none	

Duty on gross weight: by French vessels from the East Indies, 11/40 ct.; from elsewhere, 1 1/10 ct. By foreign vessels from any port whatever, 2 1/5 ct. per 50 kil. — (See exceptions at Note A.)

Commercial tare: on casks, real.

Tortoise-shell, per ½ kil.	55 0 to 58 0		0 0 to 0 0	

Duty on nett weight: by French vessels from the East Indies, 55 ct.; from European ports, 1 fr. 10 ct.; from elsewhere, 82½ ct. By foreign vessels, 1 fr. 65 ct. — (See exceptions at Note A.)

Custom-house tare: on casks or cases, 12 per cent.

Commercial tare: on casks or cases, real.

Whalebone, per ½ kil.				
northern	2 40 to 2 50		none	
southern	1 42	1 45	0 0	0 0

	Duty paid.		In Bond.	
	Fr. ct.	*Fr. ct.*	*Fr. ct.*	*Fr. ct.*
Duty on gross weight: by French vessels from any port whatever, 16½ ct. By foreign vessels, 19¼ ct.				
Commercial tare: real.				
Allowance: 2 per cent. on southern bone.				
Woods, per 50 kil.				
Logwood, Campeachy -	11 50 to	12 0	0 0 to	0 0
Honduras - -	8 50 -	9 0	none	
St. Domingo -	8 25 -	8 75	0 0 -	0 0
Fustic, Cuba - -	11 50 -	0 0	0 0 -	0 0
Carthagena -	9 50 -	10 0	none	
Santa Martha -	26 0 -	27 0	0 0 -	0 0
Brazil - -	60 0 -	90 0	0 0 -	0 0
Duty on gross weight: by French vessels from European ports, 2 fr. 20 ct.; from elsewhere, 1 fr. 10 ct. By foreign vessels, 3 fr. 85 ct. — (See exceptions at Note A.)				
Allowance: 1 to 2 per cent.				

Explanatory Remarks.

The above duties include the surtax of 10 per cent.: the Custom-house admits the real tare whenever the importer desires it.

Note A. — The treaties of reciprocity entered into with the countries hereafter mentioned, introduce the following deviations from the above rates of duty.

United States. — The produce of the United States, except that of the fisheries, direct from the United States in United States vessels, pays the same duty as if imported by French vessels from the United States.

Brazils and Mexico. — The produce of the Brazils and Mexico, imported direct in national vessels, enjoys also the above privilege.

England. — The produce of Africa, Asia, or America, imported from any country whatever in British vessels, or from any port of the British dominions in Europe, either by French or foreign vessels, can only be admitted in bond for re-exportation.

The same regulation is applicable to all European produce (except that of Great Britain and its possessions in Europe), when imported by British vessels from other ports than those of Great Britain or its possessions in Europe.

The weight of 50 kil. is equal to 110¼ lbs. English, or 100 lbs. English are equal to 45 35/100 kil.; and the cwt. equal to 50 70/100 kil.

Credit. — 4½ months, except on coffee, cocoa, pimento, pepper, quicksilver, and clayed sugars, which are sold at 3½ months, and wheat at 2½ months.

Navigation of France, 1833.

I. Account showing the Ships, with their Tonnage and Crews, that entered the different Ports of France in 1833, specifying those that entered each and distinguishing between French and Foreign Ships. — (*Administration des Douanes for* 1833, p. 396.)

Ports.	Navigation carried on jointly with the Foreigner.							Navigation reserved to French Ships.								
	French Ships.			Foreign Ships. Carrying the Flag of the Countries whence they came.		Other Flags.		Colonial Trade.			Cod and Whale Fishery.			Coasting Trade.		
	Ships.	*Tonn.*	*Crew.*	*Ships.*	*Tonn.*	*Sh.*	*Tonn.*	*Sh.*	*Tonn.*	*Crew.*	*Sh.*	*Tonn.*	*Crew.*	*Ships.*	*Tonnage.*	*Crew.*
Bayonne -	13	635	72	113	3,596	17	1,460	-	-	-	4	487	94	295	15,688	1,580
Bordeaux -	159	30,113	1,974	205	34,450	94	14,329	67	17,086	1,005	35	4,545	459	2,472	134,189	13,949
Other ports	1	71	7	2	280	-	-	-	-	-	-	-	-	2,562	54,691	8,361
Rochelle -	1	123	10	102	21,059	7	672	-	-	-	34	3,885	453	12,140	376,726	44,556
Nantes -	96	12,990	858	90	14,778	31	5,618	62	15,835	945	9	1,039	174	2,668	105,465	9,542
Other ports	5	282	29	4	316	-	-	-	-	-	1	79	7	7,136	138,303	20,664
L'Orient -	3	231	18	27	3,693	3	390	-	-	-	-	-	-	8,010	186,738	30,144
Brest - -	15	877	78	53	8,554	-	-	-	-	-	-	-	-	11,061	147,594	36,487
Saint Malo	125	4,983	686	115	9,167	5	601	3	580	36	53	7,469	2,478	3,668	114,425	15,781
Cherbourg -	245	7,316	1,138	172	19,210	2	154	-	-	-	41	5,983	1,503	3,019	102,985	13,057
Rouen -	112	10,235	783	97	6,984	12	966	-	-	-	-	-	-	2,525	146,696	13,261
Havre -	250	44,934	2,535	470	121,369	25	3,660	130	32,721	1,645	14	4,940	424	2,521	159,093	9,328
Other ports	12	1,237	82	126	21,049	2	260	-	-	-	14	1,716	195	2,147	62,611	7,409
Abbeville -	16	990	88	181	24,394	3	295	1	176	10	5	384	49	1,638	67,828	6,406
Boulogne -	405	17,243	2,798	1,044	68,016	4	500	-	-	-	6	516	90	236	10,801	1,113
Dunkirk -	145	10,350	1,079	144	12,165	76	6,709	24	4,959	258	90	5,081	1,060	980	57,543	5,191
Digne - -	40	1,113	163	11	198	-	-	-	-	-	-	-	-	651	19,715	2,937
Toulon -	82	5,947	530	31	3,083	13	999	-	-	-	-	-	-	1,914	84,551	9,563
Marseilles -	1,006	93,975	7,264	1,135	135,309	399	64,225	99	24,691	1,325	65	11,055	888	4,127	237,906	19,229
Other ports	16	721	83	3	109	4	130	-	-	-	-	-	-	3,296	145,740	13,333
Montpellier	171	11,277	1,083	167	9,205	14	1,876	-	-	-	10	1,516	161	1,332	78,225	7,395
Perpignan -	91	2,730	427	26	922	-	-	-	-	-	-	-	-	1,177	39,486	5,673
Bastia -	166	3,736	1,071	76	1,914	7	71	-	-	-	-	-	-	2,548	36,633	13,519
Totals	3,175	262,109	22,856	4,394	519,820	721	102,915	386	96,048	5,224	381	48,695	8,035	78,123	2,523,632	308,478

Totals.

Ports.	*Ships.*	*Tonnage.*	*Ports.*	*Ships.*	*Tonnage.*	*Ports.*	*Ships.*	*Tonnage.*
Bayonne -	442	21,866	Cherbourg -	3,179	135,648	Toulon -	2,040	94,580
Bordeaux -	3,052	234,712	Rouen - -	2,746	164,881	Marseilles -	6,831	567,161
Other ports -	2,565	55,042	Havre - -	3,410	366,717	Other ports -	3,319	146,700
Rochelle -	12,284	402,465	Other ports -	2,301	86,873	Montpellier -	1,694	102,099
Nantes -	2,955	155,725	Abbeville -	1,844	94,067	Perpignan -	1,294	43,138
Other ports -	7,146	138,980	Boulogne -	1,695	97,076	Bastia - -	2,797	42,354
L'Orient -	8,043	191,052	Dunkirk -	1,459	96,807			
Brest - -	11,129	157,025	Digne - -	702	21,026	General total	87,180	3,553,219
Saint Malo -	3,969	137,225						

(For Table II, see next page.)

Trade between France and England. — Nothing can more strikingly illustrate the miserable effects of commercial restrictions, than the present state of the trade between Great Britain and France. Here we have two countries of vast wealth and population, near neighbours, and each possessing many important articles that the other wants, and yet the intercourse between them is inconsiderable. At a distant period this was not the case. Previously to the accession of William III., the import of wine only from France amounted to about 13,500 tuns a year, our imports of brandy and other articles being proportionally large. But Louis XIV. having espoused the cause of the exiled family of Stuart, the British government, not recollecting that the blow they aimed at the French would also smite their own subjects, imposed, in 1693, a *discriminating* duty of 8*l.* a tun on French wine, and in 1697 raised it to no less than 33*l.* a tun! It is probable that this excess of duty would have been repealed as soon as the peculiar circumstances in which it originated had disappeared, had not the stipulations in the famous commercial treaty with Portugal, negotiated by Mr. Methuen, in 1703, given it permanence. But, according to this treaty, we bound ourselves for the future to charge *one third* higher duties on the wines of France imported into England, than on those of Portugal; the Portuguese, by way of compensation, binding themselves to admit our

II. Account showing the total Number of Ships, with their Tonnage and Crews, entered inwards in the different Ports of France in 1833, specifying the Countries whence they came, and distinguishing between French and Foreign Ships.—(*Administration des Douanes for* 1833, p. 398.)

Countries.	Ships entered.								
	French.			Foreign.					
				Carrying the Flags of the Country whence they came.			Other Flags.		
	Ships.	*Tonnage.*	*Crew.*	*Ships.*	*Tonnage.*	*Crew.*	*Ships.*	*Tonnage.*	*Crew.*
Russia	[illegible]	11,[illegible]	649	42	11,058	541	137	23,611	1,228
Sweden	5	[illegible]	44	158	30,912	1,577	1	280	14
Norway	9	938	62	592	104,967	5,234	20	2,980	161
Denmark	1	69	6	31	2,665	193	20	1,403	96
Prussia	3	327	21	153	32,054	1,398	46	5,564	312
Hanseatic Towns	37	3,180	246	56	5,470	343	21	2,490	148
Holland	16	1,003	93	74	7,419	485	60	5,798	355
Belgium	50	4,423	320	11	1,160	68	11	1,217	71
England (Gibraltar, Malta, &c.)	921	35,064	5,541	1,632	119,260	13,293	12	2,189	116
Portugal (Madeira, Cape Verde Islands, Azores)	65	7,200	488	1	70	8	7	768	65
Spain (the Canaries)	348	35,077	3,093	536	17,771	4,112	57	9,084	590
Austria	7	907	60	91	23,906	1,112	17	3,510	215
Sardinia	699	37,535	3,996	415	19,526	2,929	22	1,637	205
Two Sicilies	72	10,719	1,001	171	35,378	2,208	15	1,881	141
Tuscany, Roman States, Lucca	130	3,534	878	96	5,280	654	127	12,682	1,189
Greece, and its islands in the Archipelago	3	389	31	20	5,009	402	2	364	28
Turkey, and its islands in the Archipelago	12	9,042	527	2	205	26	26	5,758	340
Egypt	30	6,057	302	-	-	-	1	250	12
Algiers	71	9,008	625	-	-	-	22	4,870	272
Other States of Barbary	114	11,033	859	-	-	-	64	9,148	627
Other territories in Africa	3	306	35						
India, English possessions	24	8,012	460	-	-	-	3	824	41
Dutch do.	4	1,058	61						
French do.	3	970	62						
China	2	767	37						
Cochin China, Philippines, &c.	3	715	55						
United States	59	13,015	759	298	95,248	4,102	2	594	24
Hayti	41	8,048	496						
English possessions in America	-	-	-	4	1,641	67			
Spanish do.	48	11,013	644	3	321	32	10	2,006	113
Danish do.	6	1,018	71	1	250	12	1	256	11
Brazil	43	9,572	581	1	250	15	11	2,385	122
Mexico	17	3,709	234	-	-	-	4	865	37
Colombia	15	3,062	179	-	-	-	1	204	10
Peru (Lower Peru)	2	409	31						
Chili	6	1,542	98						
Rio de la Plata, Monte Video, Buenos Ayres	21	4,389	261	-	-	-	1	197	11
Martinique	114	28,343	1,505						
Guadaloupe	159	39,165	2,017						
Cayenne	23	4,485	289						
Senegal	20	2,139	180						
Bourbon	70	21,736	1,235						
Total of French ships	3,561	358,157	28,080						
Fishery, cod	[illegible]	43,958	7,679						
whale	12	4,757	406						
Coasting trade, in the same sea	26,[illegible]	1,957,512	239,863						
from one sea to the other	1,363	189,767	11,514						
interior navigation	20,152	396,353	57,301						
Totals	82,065	2,930,484	344,593	4,394	519,820	38,811	721	102,915	6,554

woollens into their markets in preference to those of other countries, at a fixed and invariable rate of duty.

Though very generally regarded, at the time, as the highest effort of diplomatic skill and address, the Methuen treaty was, undoubtedly, founded on the narrowest and most contracted views of national interest; and has, in consequence, proved, in no common degree, injurious to both parties, but especially to England. By binding ourselves to receive Portuguese wines for *two thirds* of the duty payable on those of France, we, in effect, gave the Portuguese growers a monopoly of the British market; at the same time that we excluded one of the principal equivalents the French had to offer for our commodities, and provoked them to retaliate. This, indeed, was no difficult task.—Unhappily, they were but too ready to embark in that course of vindictive policy of which we set them the example; so that prohibitions on the one side being immediately followed by counter-prohibitions on the other, the trade between the two countries was nearly annihilated! But the indirect were still more injurious than the direct consequences of this wretched policy. It inspired both parties with feelings of jealousy and dislike, and kept them in the frowning attitude of mutual defiance. Each envied the other's prosperity; and being disposed to take fire at even fancied encroachments, the most frivolous pretexts were sufficient to engage them in contests that have filled the whole world with bloodshed and confusion. But had things been left to their natural course,—had an unfettered commercial intercourse been allowed to grow up between the two countries,—the one would have formed so near, so vast, and so profitable a market for the produce of the other, that they could not have remained long at war without occasioning the most extensively ruinous distress,—distress which no government would be willing to inflict on its subjects, and to which, though the government were willing, it is most probable no people would be disposed to submit. A free trade between England and France would give these two great nations *one common interest*. It would occasion not only a vast increase of the industry, and of the comforts and enjoyments, of the

people of both countries, but would be the best attainable security against future hostilities. "We know," said Mr. Villiers, in his very able and instructive speech (15th of June, 1830), "that British enterprise will fetch the extremest points on earth in the business of exchange; but here are the shores of France nearer to England than those of Ireland itself — nay, Bordeaux is commercially nearer to London than it is to Paris; and, but for the lamentable perversion of the gifts and dispositions of nature, and of the ingenuity of man — the highways of commerce between these countries — the seas which surround Great Britain and Ireland, and wash the shores of France, should literally swarm with vessels, engaged, not only in the interchange of material products, but in diffusing knowledge and stimulating improvement; in creating every where new neighbourhoods; in consolidating international dependence; in short, in drawing daily more close the bonds of international peace and confidence, and thus advancing, while they also served to confirm and secure, the peace, the civilisation, and the happiness of Europe." *

The commercial treaty which Mr. Pitt negotiated with France in 1786, was the first attempt to introduce a better system into the trade between the two countries; and it is one of the few treaties of this description that have been bottomed on fair and liberal principles. But the Revolution in France, and the lengthened and bloody wars by which it was followed, totally suppressed that mutually beneficial intercourse which had begun to grow up under Mr. Pitt's treaty; and when peace was again restored, in 1815, the French government unwisely resolved to continue the system of Napoleon, and to exclude most sorts of foreign products for which a substitute could be found at home! But the wide-spread distress that has resulted from this absurd policy, and the more general diffusion of sounder notions as to the real sources of public wealth, will, it may be confidently predicted, at no distant period, induce the government of France to adopt a less illiberal and irrational system. — (See Bordeaux.) The equalisation of the wine duties in this country will accelerate this desirable result. It shows the French that we are no longer influenced by the prejudices in which the discriminating system originated; and that we are ready to deal with them on the same fair and equal terms as with any one else. In this respect the measure is entitled to the highest praise; and we have no doubt that it will be the harbinger of others of the same kind — of a reduction of the exorbitant duties on brandy, for example — both here and in France. The statesman who shall succeed in abolishing the restraints on the commerce of the two countries, will render the most essential service to them both; and not to them only, but to all the world, the furthest parts of which have been harassed by their wars. It admits of demonstration, that, under a free system, the trade with France would be incomparably more important and valuable than that with Russia, the United States, or any other country. And we trust, should another edition of this work be called for, that we shall have to congratulate the public on the opening of this "broad and deep" channel of employment.

The following Tables, prepared expressly for this work, give a pretty complete view of the trade with France. Brandy, madder, silk manufactures, flax, wine, gloves, &c. are the principal articles of import; for the raw and thrown silk comes, as already mentioned, almost wholly from Italy. Brass and copper manufactures are by far the most important of all the articles we send to France, at least through the regular channels. It will, probably, surprise some of our readers to learn that, in 1832, the real or declared value of the silk goods manufactured in this country and exported to France amounted to no less than 75,187*l.*! This is an instructive commentary on the sinister auguries of those who predicted the ruin of our manufacture by French competition, in consequence of the subversion of the old monopoly system in 1825. The most important of the other articles of export are cottons, woollens, sheep's wool, hardware and cutlery, horses, tin, &c.

A glance at the first of the following Tables will sufficiently explain the real causes of the depressed state of the French trade. The duty of 22*s.* 6*d.* a gallon on brandy is, probably, about the *ne plus ultra* of fiscal rapacity. The duties on wine, verdigris, gloves, &c. are all very much beyond the mark. Till they be adequately reduced, the trade with France can never be any thing but inconsiderable, compared, at least, with what it ought to be.

* We regret to have to add, that this was one of the last public appearances made by Mr. Villiers. He died in December, 1832, at the early age of 31. His death was a national loss that will not easily be repaired. Few have ever entered upon public life with better dispositions, more enlarged and comprehensive views, or a more sincere desire to promote the happiness of their species.

I. Account of the Imports into the United Kingdom from France, specifying the Quantity and Value of each Article, and the Amount of Customs Duty paid thereon, during the Year 1832; with the Customs Duty received on each Article.

Species of Imports.	Denominations.	Quantities imported.	Official Value of the Imports.	Amount of Customs Duties received on each Article imported.
			L.	*L.*
Annotto	lbs.	9,441	944	12
Books	cwt.	1,581	11,073	5,042
Boots, shoes, and galoshes	pairs	45,591	9,459	3,634
China and earthenware	declared value	*L.* 8,823	8,823	2,376
Clocks	—	*L.* 20,593	20,593	5,028
Cotton manufactures of Europe	—	*L.* 6,365	6,365	775
Eggs	number	55,651,243	17,391	19,341
Flax	cwt.	31,512	55,558	131
Flowers, artificial	declared value	*L.* 2,160	2,160	524
Glass bottles, common	quarts	567,749	12,137	7,649
Hats, straw	number	9,904	516	1,361
Leather gloves	pairs	1,513,106	37,827	27,195
Linen, cambrics	pieces	44,532	21,719	12,193
Madder	cwt.	39,690	84,685	8,006
Madder root	—	33,394	246,059	2,321
Needlework and embroidery	declared value	*L.* 15,649	15,649	4,676
Oysters	bushels	77,950	28,256	5,846
Prunes	cwt.	3,823	3,004	6,121
Silk, raw	lbs.	749,417	424,669	3,064
thrown	—	145,285	175,322	48,589
waste	—	257,016	25,701	115
Silk manufactures, viz.:				
Silk or satin	—	74,723	118,458	40,909
Gauze	—	48,171	184,254	65,737
Crape	—	15,510	33,346	12,201
Velvet	—	7,790	20,824	8,655
Lace, millinery, &c. &c.	declared value	*L.* 53,702	53,702	16,322
Skins, goat, undressed	number	20,298	1,691	240
kid, dressed	—	664,019	11,961	3,519
lamb, tanned or dressed	—	5,069	51	25
Spirits, brandy	proof gallons	2,647,372	360,428	1,799,947
Toys	declared value	*L.* 1,230	1,230	215
Verdigris	lbs.	44,089	2,798	2,454
Wine, French	gallons	297,157	33,252	65,287
Wool, sheep's	lbs.	1,973	49	33
Woollen manufactures	declared value	*L.* 61,749	61,749	9,544
All other articles	value		331,211	84,574
	Total - *L.*		2,452,894	2,271,249

II. Account of the Exports of British and Irish Produce and Manufactures from the United Kingdom to France, specifying the Quantity and Value of each Article, during the Year 1832.

Species of Exports.	Denominations.	Quantities exported.	Official Value of British and Irish Produce and Manufactures exported.	Declared Value of British and Irish Produce and Manufactures exported.
			L.	*L.*
Apothecary wares	cwt.	1,023	2,046	8,225
Apparel	value	- -	4,441	4,441
Beer and ale	tuns	55½	277	975
Books, printed	cwt.	215	973	5,518
Brass and copper manufactures	—	36,267	191,822	147,193
Cabinet and upholstery wares	value	- -	2,217	2,217
Cheese	cwt.	160	192	558
Coals	tons	41,006	40,867	11,119
Cotton manufactures	yards	4,567,067	186,398	61,321
Ditto	value	- -	3,542	3,670
Earthenware of all sorts	pieces	96,376	241	1,738
Glass of all sorts	value	- -	74	238
Hardware and cutlery	cwt.	3,673	10,101	28,260
Horses	number	529	5,290	25,995
Iron, pig	tons	2,759	2,759	9,548
bar and bolt	—	1,656	16,567	8,119
cast and wrought	—	1,063	32,916	11,831
Lead and shot	—	65½	686	804
Leather and saddlery	value	- -	1,156	1,946
Linens	yards	291,961	14,626	14,780
Litharge of lead	cwt.	19	9	19
Machinery and mill-work	value	- -	4,528	4,528
Musical instruments	—	- -	1,742	1,742
Painters' colours and materials	—	- -	2,295	2,295
Plate of silver	ounces	4,026	1,812	1,528
Silk goods manufactured in the United Kingdom	value	- -	87,803	75,187
Spermaceti	cwt.	1,008	7,562	5,177
Stationery	value	- -	3,046	3,046
Steel, unwrought	cwt.	1,851	2,638	3,263
Tin, unwrought	—	8,508	31,055	29,472
Tin and pewter wares, and tin plates	value	- -	7,399	7,399
Whalebone	cwt.	701	3,505	5,048
Wool, sheep's	lbs.	736,482	26,303	38,541
Woollen manufactures	value	- -	45,320	43,187
All other articles	—	- -	106,062	105,860
	Total - *L.*		848,270	674,791

It would seem, from the subjoined account, as if the imports into Great Britain from France very much exceeded the exports, the official value of which amount to only 848,270*l.* a year. But though the fact were so, it would not, as some appear to suppose, afford the shadow of a foundation for the statements of those who contend that the trade with France is a losing one. A man carries nothing but money to the baker's shop, or the butcher's; and yet it is not said that he is injured by dealing with them, or that he should become baker or butcher for himself. We buy certain articles from France, because we find we can procure them from her on more reasonable terms than

from any other country; for, were it otherwise, does any one suppose we should send a single ship to her ports? Whether we carry on our intercourse with the French by sending them returns in bullion or ordinary products, is of no consequence whatever. We may be assured that bullion is not sent to another country, unless it be more valuable there than here; that is, unless its exportation be for *our* advantage. — (See BALANCE OF TRADE.) In point of fact, however, we very rarely send any bullion to France; and the proof of this is, that, since the peace, the exchange with Paris has been oftener in our favour than against us. When the bills drawn by the French on us exceed those we draw on them, the balance is usually paid by bills on Holland and Hamburgh, where there is, at all times, an excess of British produce. It is idle, therefore, to attempt to revive the ridiculous cry as to the disadvantageousness of the French trade, because the imports from France exceed the exports! The imports into all commercial countries uniformly exceed the exports; and the fact brought forward as a ground of complaint against the French trade, is the strongest recommendation in its favour. Perhaps, however, it may be consolatory to those who are so alarmed at the excess of imports from France, to be told that it is to a great extent apparent only. As already observed, large quantities of silk and other produce from Italy come to us through France, and are reckoned among the imports from that country, when they are in reality imports from Italy. Taking this circumstance into account, it will be found that the discrepancy between the exports to and imports from France is immaterial.

Account of the Amount in Official and Real Value of all British Exports to France, in each Year since 1814; distinguishing those of British from Colonial Produce; also, an Abstract of the Amount in Official Value of all Imports from France in each Year, as far as the same can be made up during that Time.

Years.	Official Value of Imports into the United Kingdom.	Official Value of Exports from the United Kingdom.			Declared Value of British and Irish Produce and Manufactures exported from the United Kingdom.
		British and Irish Produce and Manufactures.	Foreign and Colonial Merchandise.	Total Exports.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1814	740,226 10 0	377,799 9 7	1,867,913 19 4	2,245,713 8 11	582,702 15 0
1815	754,372 8 11	214,823 15 9	1,228,856 5 3	1,443,680 1 0	298,291 10 1
1816	417,782 17 2	321,070 4 11	1,313,151 17 8	1,634,222 2 7	407,699 11 4
1817	527,865 13 6	596,753 7 0	1,054,261 9 9	1,651,014 16 9	1,003,486 12 7
1818	1,162,423 15 7	318,850 19 1	877,912 13 0	1,196,763 12 1	369,503 14 9
1819	642,011 14 2	248,078 0 9	734,779 9 10	982,857 10 7	299,493 6 8
1820	775,132 5 6	334,086 13 2	829,814 9 6	1,163,901 2 8	390,744 10 3
1821	865,616 12 9	382,404 2 4	1,037,100 15 5	1,419,504 17 9	438,265 18 5
1822	878,272 15 0	346,810 15 1	839,150 11 4	1,185,961 6 5	437,009 2 5
1823	1,115,800 7 0	241,837 12 11	743,574 16 4	985,412 9 3	349,636 4 1
1824	1,556,733 17 5	260,498 9 9	864,500 16 4	1,124,999 6 1	338,635 8 11
1825	1,835,984 12 0	279,212 3 7	892,402 18 1	1,171,615 1 8	360,709 10 1
1826	1,247,426 0 6	426,819 13 9	656,124 10 9	1,082,944 4 6	488,438 6 7
1827	2,625,747 11 10	416,726 0 8	133,503 12 6	550,229 13 2	446,951 0 9
1828	3,178,825 3 9	448,945 2 7	195,497 9 2	644,442 11 9	498,937 12 0
1829	2,086,993 10 10	509,921 1 3	337,896 11 6	847,817 12 9	491,388 3 11
1830	2,328,483 14 11	486,284 0 1	181,065 1 5	667,349 1 6	475,884 3 2
1831	3,056,154 12 4	635,927 13 5	256,081 19 7	892,009 13 0	602,688 0 0
1832	2,452,894 0 0	848,270 0 0	- -	- -	674,791 0 0

HAWKERS AND PEDLARS. It is not very easy to distinguish between hawkers and pedlars. Both are a sort of itinerant retail dealers, who carry about their wares from place to place; but the former are supposed to carry on business on a larger scale than the latter. They are subject to the same regulations.

Regulations as to Hawkers and Pedlars. — The legislature has always looked with suspicion upon itinerant dealers; and has attempted, by obliging them to take out licences, and placing them under a sort of *surveillance*, to lessen their numbers, and to hinder them from engaging in dishonest practices. But the resident dealer has so many advantages on his side, that these precautions seem to be in a great measure superfluous. It should also be recollected, that before shops were generally established in villages and remote districts, hawkers and pedlars rendered material services to country people; and even now the competition which they excite is certainly advantageous.

By the 50 Geo. 3. c. 41., hawkers and pedlars are to pay an annual licence duty of 4*l.*; and if they travel with a horse, ass, or other beast, bearing or drawing burden, they are subject to an additional duty of 4*l.* for each beast so employed. The granting of licences, and management of the duties, are, by a late act, placed under the control of the commissioners of stamps.

Hawkers and pedlars, unless householders or residents in the place, are not allowed to sell by auction to the highest bidder: penalty 50*l.* — half to the informer, the other half to the king. But nothing in the act extends to hinder any person from selling, or exposing to sale, any sort of goods, in any public market or fair; or to hinder a hawker or pedlar from selling in a hired room, where he is not a resident, provided such sale is not by auction.

Every hawker, before he is licensed, must produce a certificate of good character and reputation, signed by the clergyman and two reputable inhabitants of the place where he usually resides.

Every hawker must have inscribed, in Roman capitals, on the most conspicuous part of every pack, box, trunk, case, cart, or other vehicle, in which he shall carry his wares, and on every room and shop in which he shall trade, and likewise on every hand-bill which he shall distribute, the words "LICENSED HAWKER." Penalty, in default, 10*l.* Unlicensed persons wrongfully using this designation forfeit 10*l.*

Hawkers dealing in smuggled goods, or in goods fraudulently or dishonestly procured, are punishable by forfeiture of licence, and incapacity to obtain one in future, besides being liable to all the other penalties, forfeitures, &c. applicable to such illegal dealing.

By stat. 6 Geo. 4. c. 80. it is enacted, that any person or persons hawking, selling, or exposing to sale, any spirits on the streets, highways, &c., or in any boat or other vessel on the water, or in any place other than those allowed in this act, shall forfeit such spirits and 100*l.* for every such offence. Any person may detain a hawker of spirits, and give notice to a peace officer to carry the offender before a justice.

Hawkers trading without licence are liable to a penalty of 10*l.* So also, if they refuse to show their licence on the demand of any person to whom they offer goods for sale, or on the demand of any justice, mayor, constable, or other peace officer, or any officer of the customs or excise. By 5 Geo. 4. c. 83., hawkers trading without a licence are punishable as vagrants.

To forge or counterfeit a hawker's licence incurs a penalty of 300*l.* To lend or hire a hawker's licence subjects lender and borrower to 40*l.* each, and the licence becomes forfeited. But the servant of a licensed hawker may travel with the licence of his master.

Hawkers trading without a licence are liable to be seized and detained by any person who may give notice to a constable, in order to their being carried before a justice of peace. Constables refusing to assist in the execution of the act are liable to a penalty of 10*l.*

Nothing in the act extends to prohibit persons from selling fish, fruit, or victuals; nor to hinder the maker of any home manufacture from exposing his goods to sale in any market or fair, in every city, borough, town corporate, and market town: nor any tinker, cooper, glazier, plumber, harness-mender, or other person, from going about and carrying the materials necessary to their business.

A *single* act of selling, as a parcel of handkerchiefs to a particular person, is not sufficient to constitute a hawker within the meaning of the statutes. — (*Rex* v. *Little*, B. 613.)

By the 52 Geo. 3. c. 108., no person, being a trader in any goods, wares, or manufactures of Great Britain, and selling the same by *wholesale*, shall be deemed a hawker; and all such persons, or their agents, selling by *wholesale* only, shall go from house to house, to any of their customers who sell again by wholesale or retail, without being subject to any of the penalties contained in any act touching hawkers, pedlars, and petty chapmen.

No person committed under these acts for non-payment of penalties can be detained in custody for a longer period than 3 months.

Hawkers exposing their goods to sale in a market town, must do it in the market-place.

Persons hawking tea without a licence are liable to a penalty, under 50 Geo. 3. c. 41.; and even though they had a licence, they would be liable to a penalty for selling tea in an unentered place. — (*Chitty's* edit. of *Burn's Justice*, vol. ii. p. 1113.)

Any person duly licensed to trade as a hawker and pedlar may set up any lawful trade in any place where he is resident, though he have not served any apprenticeship to the same, and, if prosecuted, he may plead the general issue, and have double costs. — (See *Chitty's* edit. of *Burn's Justice*, vol. ii. pp. 1102—1124.)

The hawkers' and pedlars' duty produced in 1832, 28,542*l.* gross revenue; the charges of collection are very heavy, amounting to between 5,000*l.* and 6,000*l.* Whatever, therefore, may be the other advantages of this tax, it cannot, certainly, be said to be very productive.

HAY (Ger. *Heu*; Du. *Hovi*; Fr. *Foin*; It. *Fieno*; Sp. *Heno*; Lat. *Fœnum*), any kind of grass, cut and dried for the food of cattle. The business of hay-making is said to be better understood in Middlesex than in any other part of the kingdom. The great object is to preserve the green colour of the grass as much as possible, and to have it juicy, fresh, and free from all sort of mustiness.

The sale of hay within the bills of mortality, and 30 miles of the cities of London and Westminster, is regulated by the act 35 Geo. 3. c. 88. It enacts, that all hay shall be sold by the load of 36 trusses, each truss weighing 56 lbs., except new hay, which is to weigh 60 lbs. till the 4th of September, and afterwards 56 lbs. only; so that till the 4th of September a load of hay weighs exactly a ton, but thereafter only 18 cwt. The clerk of the market is bound to keep a regular book for the inspection of the public, specifying the names of the seller, the buyer, the salesman, and the price of each load. Salesmen and factors are prohibited from dealing on their own account.

There are three public markets in the metropolis for the sale of hay and straw; Whitechapel, Smithfield, and the Haymarket. An act (11 Geo. 4. c. 14.) has been obtained, for the removal of the market from the Haymarket to the vicinity of the Regent's Park: but the removal has not yet taken place.

Straw is sold by the load of 36 trusses, of 36 lbs. each, making in all 11 cwt. 64 lbs.

It is affirmed, we know not with what foundation, that considerable frauds are perpetrated in the sale of hay and straw.

HEMP (Ger. *Hanf*; Du. *Hennip*, *Kennip*; Da. *Hamp*; Sw. *Hampa*; Fr. *Chanvre*; It. *Canape*; Sp. *Canamo*; Rus. *Konapli*, *Konopel*; Pol. *Konope*) a valuable plant (the *Cannabis sativa* of Linnæus), supposed to be a native of India, but long since naturalised and extensively cultivated in Italy, and many countries of Europe, particularly Russia and Poland, where it forms an article of primary commercial importance. It is also cultivated in different parts of America, though not in such quantities as to supersede its importation. It is stronger and coarser in the fibre than flax; but its uses, culture, and management, are pretty much the same. When grown for seed, it is a very exhausting crop; but when pulled green, it is considered as a cleaner of the ground. In this country its cultivation is not deemed profitable; so that, notwithstanding the encouragement it has received from government, and the excellent quality of English hemp, it is but little grown, except in some few districts of Suffolk and Lincolnshire. The quantity raised in Ireland is also inconsiderable. — (*Loudon's Encyc. of Agricult.*)

Exceedingly good *huckaback* is made from hemp, for towels and common tablecloths. Low-priced hempen cloths are a general wear for husbandmen, servants, and labouring manufacturers; the better sorts for working farmers and tradesmen in the country; and the finer ones, $\frac{7}{8}$ wide, are preferred by some gentlemen for strength and warmth. They possess this advantage over Irish and other linens, — that their colour improves in wearing, while that of linen deteriorates. But the great consumption of hemp is in the manufacture of sailcloth and cordage, for which purposes it is peculiarly fitted by the strength of its fibre. English hemp, when properly prepared, is said to be stronger than that of every other country, Russia not excepted; and would, therefore, make the best cordage. It is, however, but little used in that way, or in the making of sailcloth; being principally made into cloth for the uses already stated.

Hemp has been cultivated in Bengal from the remotest antiquity, but not, as in Europe, for the purpose of being manufactured into cloth and cordage. In the Hindoo economy it serves as a substitute for malt;

a favourite intoxicating liquor, called *banga*, being produced from it! This, also, is the use to which it is applied in Egypt. — (*Milburn's Orient. Commerce, &c.*)

The price of hemp fluctuated very much during the war. In consequence of difficulties in the way of its importation, it stood at a very high level from 1808 to 1814. This was the principal circumstance that originally brought iron cables into use; and the extent to which they are now introduced, has contributed materially to diminish the consumption and importation of hemp. — (*Tooke on High and Low Prices*, 2d ed. p. 345.)

Of 530,820 cwt. of undressed hemp imported in 1831, 506,803 were brought from Russia, 9,472 from the East Indies, 7,405 from Italy, 2,262 from the Philippine Islands, 2,248 from the United States, and some small quantities from a few other places. The duty on hemp was reduced, in 1832, from 4*s.* 8*d.* to 1*d.* per cwt.; a reduction which, considering the importance of cordage, and other articles made of hemp, cannot fail to be of very great advantage.

We borrow the following particulars with respect to the hemp trade of Petersburgh, from the work of Mr. Borrisow on the commerce of that city: —

Hemp forms a very important article of export from Petersburgh, and deserves particular notice. It is assorted, according to its quality, into *clean hemp*, or firsts; *out-shot hemp*, or seconds; *half-clean hemp*, or thirds; and *hemp codilla*.

Of the first 3 sorts, there are annually exported about 2,000,000 poods, the greatest part in English and American bottoms. It is brought to Petersburgh, from the interior beyond Moscow, by water; and its quality depends very much on the country in which it is produced. That brought from Karatshev is the best; next to this, that produced in Belev; hemp from Gshatsk is considered inferior to the latter.

As soon as the hemp is brought down in the spring, or in the course of the summer, it is selected and made up in bundles; both operations being performed by sworn selectors (*brackers*) and binders appointed by government for this purpose; and it is a well known fact, that this is done with great impartiality and exactness.

A bundle of clean hemp weighs from 55 to 65 poods; ditto out-shot, 48 to 55 ditto; ditto half-clean, 40 to 45 ditto.—(1 pood = 36 lbs. avoirdupois.)

Binding of hemp is paid for at the rate of 2 roubles 50 copecks for *clean*, 2 roubles for *out-shot*, and 1 rouble 60 copecks for *half-clean*, per bundle; one half is paid by the seller, and the other half by the purchaser, and is charged accordingly by their agents.

The expense of selecting hemp is 50 copecks per bercovitz (or 10 poods), and is the same for every sort. To every bundle of assorted hemp is attached a ticket with the names of the selector, binder, and owner, and the date and year. Every bundle has also affixed to it a piece of lead, stamped on one side with the name of the selector, and on the other with the sort of hemp and the time when it was selected. The external marks of good hemp are, its being of an equal green colour and free from spills; but its good quality is proved by the strength of the fibre, which should be fine, thin, and long. The first sort should be quite clean and free from spills; the *out-shot* is less so; and the *half-clean* contains a still greater portion of spills, and is moreover of mixed qualities and colours.

As a perfect knowledge of the qualities of hemp and flax can only be acquired by experience and attention, agents usually employ men constantly occupied in this business; by which means they are sure of getting goods of the best quality, and have the best chance of giving satisfaction to their principals; because, although the hemp is selected by sworn selectors, yet, owing to the quantity of business and the speed with which it must be executed, &c., there are often great differences in the same sorts. The charges are in this way somewhat increased; but this is trifling in comparison of the advantage gained. The part separated, or picked out in cleaning hemp, is called *hemp codilla*; it is generally made up in small bundles of 1 pood, which are again, when shipped, bound together in large bundles, each consisting of about 30 small ones.

Particular care must be taken to ship hemp and flax in fine dry weather; if it get wet, it heats and is totally spoiled. For this reason every vessel taking in hemp or flax is furnished with mats to prevent its getting damp. Hemp, being light and bulky, is, when stowed, forced into the hold by means of winches, which renders the operation of loading rather slow.

It may be taken as a general rule, that the prices of hemp are highest in the months of May, June, July, and the early part of August, the demand for this article being then greatest, and the exportation to North America being principally effected at this season. Again, the prices of hemp are lowest in the month of September; the reason of which is, that the less opulent hemp-merchants return at the end of this month to their own country, in order to make new purchases for the ensuing year; and rather than be detained, sell the remainder of their stock some roubles below the market price. This causes a general decline; although an unusual demand for the article happening at the same time, or political events or rumours, occasionally produce a contrary effect. Two large warehouses, called *ambares*, are built in Petersburgh for the special purpose of housing hemp, where the greatest order is observed.

Account of the Total Export of Hemp from Petersburgh during the last Eight Years, specifying the Quantities exported in British, American, and other Foreign Ships.

Years.	In British Ships.				American.	Other Foreign Ships.				Grand Total.
	Clean.	Out-shot.	Half-clean.	Total in British Ships.	Total.	Clean.	Out-shot.	Half-clean.	Total in Foreign Ships.	
	Poods.	*Poods.*	*Poods.*	*Poods.*	*Poods.*	*Poods.*	*Poods.*	*Poods.*	*Poods.*	*Poods.*
1825	1,098,952	101,633	154,637	1,355,232	336,152	104,144	146,941	99,045	350,130	2,041,514
1826	941,934	73,750	111,975	1,127,659	216,963	185,643	186,105	125,130	496,878	1,841,500
1827	1,011,931	36,959	166,304	1,215,194	288,700	166,963	114,155	128,699	409,817	1,913,711
1828	859,753	106,098	103,744	1,069,601	292,652	192,302	150,130	128,822	471,254	1,833,501
1829	324,719	213,452	95,563	633,734	139,567	38,947	94,937	108,311	242,185	1,015,496
1830	481,000	282,664	187,355	952,943	74,221	43,481	157,629	104,950	306,150	1,323,424
1831	682,976	202,611	210,919	1,096,506	277,881	21,481	81,498	57,109	160,088	1,534,475
1832	617,237	167,155	273,638	1,058,030	334,482	92,380	120,703	229,961	443 044	1,835,556

Sixty poods of hemp and 40 poods of codilla make a last at Petersburgh; 63 poods make an English ton. — (pp. 47—52.)

Riga hemp fetches a higher price that than of Petersburgh. It is divided into 3 sorts: viz. rein, rhine, or clean, out-shot, and pass hemp. The following are the prices of hemp, duty paid, as quoted in the London markets, December, 1833: —

	£	*s.*	*d.*		£	*s.*	*d.*	
Hemp, East India, *d. p.*	0	0	0	to	0	0	0	per ton.
Petersburgh, clean	25	10	0	—	26	0	0	—
out-shot	24	0	0	—	24	10	0	—
half-clean	21	0	0	—	21	10	0	—
Riga rhine	29	0	0	—	0	0	0	—

We subjoin a statement of the various charges on the exportation of hemp from Petersburgh, and on its importation into this country.

Clean Hemp.—1 bundle = 63 poods = 1 ton.

	Rou.	cop.
Duty, 3 rou. 60 cop. per bercovitz	22	68
Additional duty, 10 per cent.	2	27
Quarantine duty, 1 per cent.	0	22
R.	25	17
Custom-house charges, 4 per cent.	1	1
Receiving, weighing, and shipping, 5½ rou. per bundle	3	75
Bracking, 50 cop. per berecovitz	3	15
Binding, 40 cop. per ditto	2	52
Lighterage and attendance to Cronstadt, 8 rou. per bundle	8	0
Rebinding, 2½ rou. per bundle, ½ charged	1	12
Brokerage, 60 cop. per ton	0	60
R.	45	32

Brokerage, ½ per cent.
Commission and extra charges, 3 per cent.
Stamps on drafts, ½ per cent. } 1 per cent.
Brokerage, ½ per cent. }

Charges of importation per ton, taking the price at 40*l.* per ton.

	L.	*s.*	*d.*
Insurance, say 1*l.*, and policy	0	10	6
Freight, 52*s.* 6*d.* per ton	2	12	6
Customs and Russia dues	4	13	8
Landing charges	0	10	0
Sound dues	0	5	0
Discount, 3½ per cent.	1	10	0
Brokerage	0	4	0
Per ton, *L.*	10	5	8

In the above calculation, no allowance is made for damage; which, if care be taken to select a good vessel and an early season, does not amount to much. The estimates are nearly the lowest rates of charge. The insurance, indeed, is sometimes as low as 12*s.* 6*d.* per cent., and policy. That, however, is only in the very earliest part of the season; it rises to 5*l.* per cent. in the autumn.

Out-shot Hemp.—1 bundle = 63 poods = 1 ton.

	Rou.	cop.
Fixed charges	46	11

Other charges same.

Half-clean Hemp.—1½ bundle = 63 poods = 1 ton.

	Rou.	cop.
Fixed charges	48	71

Other charges same.

Hemp the produce or manufacture of Europe may not be imported into the United Kingdom for home consumption, except in British ships, or in ships of the country of which it is the produce, or from which it is imported, under penalty of forfeiting the same and 100*l.* by the master of the ship.—(3 & 4 *Will.* 4. c. 54. §§ 2 and 22.)

Hemp (Manilla), commonly called Manilla white rope. Mr. Crawfurd gives the following account of this article:—"Of the wild banana, one kind (*Musa textilis*) grows in vast abundance in some of the most northerly of the spice islands. In the great island of Mindanao, in the Philippines, it fills extensive forests. From the fibrous bark or epidermis is manufactured a kind of cloth, in frequent use among the natives. It also affords the material of the most valuable cordage which the indigenous products of the Archipelago yield. This is known to our traders and navigators under the name of Manilla rope, and is equally applicable to cables, and to standing or running rigging."—(*Hist. of Archipelago*, vol. i. p. 412.)

Hemp (Indian), or Sunn. This consists of the fibre of the *crotolaria juncea*, a totally different plant from the *cannabis sativa*, which, as already stated, is never used by the Hindoos for cloth or cordage. Sunn is grown in various places of Hindostan. The strongest, whitest, and most durable species is produced at Comercolly. During those periods of the late war when the intercourse with the Baltic was interrupted, and hemp bore an enormous price, large quantities of sunn were imported; but the fibre being comparatively weak, the article was not found to answer, and the importation has since been discontinued.—(*Milburn's Orient. Commerce*; *private information.*)

HEMP-SEED (Fr. *Chenevis, Chenevi*; Ger. *Hanfsaat*; It. *Cannapuccia*; Lat. *Semen cannabinum*; Rus. *Konopljanoe Semja*), the seed of hemp. The best hemp-seed is that which is brightest, and will not break when rubbed. It is used either as seed, or for crushing for oil, or as food for fowls. Being loaded with a duty of 2*l.* per quarter, it is but little imported into this country.

HERRINGS, AND HERRING FISHERY. The herring (*Clupea harengus* of Linnæus) is a fish too well known to require any description. It is every where in high esteem, both when fresh and when salted.

"Herrings are found from the highest northern latitudes yet known, as low as the northern coasts of France. They are met with in vast shoals on the coast of America as low as Carolina. In Chesapeake Bay is an annual inundation of those fish, which cover the shore in such quantities as to become a nuisance. We find them again in the seas of Kamtschatka; and probably they reach Japan. The great winter rendezvous of the herring is within the Arctic circle: there they continue for many months, in order to recruit themselves after the fatigue of spawning; the seas within that space swarming with insect food in a far greater degree than those of our warmer latitudes. This mighty army begins to put itself in motion in spring. They begin to appear off the Shetland Isles in April and May. These are only the forerunners of the grand shoal, which comes in June; and their appearance is marked by certain signs, such as the numbers of birds, like gannets and others, which follow to prey on them: but when the main body approaches, its breadth and depth is such as to alter the appearance of the very ocean. It is divided into distinct columns of 5 or 6 miles in length, and 3 or 4 in breadth; and they drive the water before them, with a kind of rippling. Sometimes they sink for the space of 10 or 15 minutes, and then rise again to the surface; and in fine weather reflect a variety of splendid colours, like a field of the most precious gems.

"The first check this army meets in its march southward, is from the Shetland Isles, which divide it into two parts: one wing takes to the east, the other to the western shores of Great Britain, and fill every bay and creek with their numbers: the former proceed towards Yarmouth, the great and ancient mart of herrings; they then pass through the British Channel, and after that in a manner disappear. Those which take towards the west, after offering themselves to the Hebrides, where the great stationary fishery is, proceed to the north of Ireland, where they meet with a second interruption, and are obliged to make a second division: the one takes to the western side, and is scarcely perceived, being soon lost in the immensity of the Atlantic; but the other, that passes into the Irish Sea, rejoices and feeds the inhabitants of most of the coasts that border on it. These brigades, as we may call them, which are thus separated from the greater

columns, are often capricious in their motions, and do not show an invariable attachment to their haunts.

"This instinct of migration was given to the herrings, that they might deposit their spawn in warmer seas, that would mature and vivify it more assuredly than those of the frozen zone. It is not from defect of food that they set themselves in motion; for they come to us full of fat, and on their return are almost universally observed to be lean and miserable. What their food is near the pole, we are not yet informed; but in our seas they feed much on the *oniscus marinus*, a crustaceous insect, and sometimes on their own fry.

"They are full of roe in the end of June, and continue in perfection till the beginning of winter, when they deposit their spawn. The young herrings begin to approach the shores in July and August, and are then from $\frac{1}{2}$ an inch to 2 inches long. Though we have no particular authority for it, yet, as very few young herrings are found in our seas during winter, it seems most certain that they must return to their parental haunts beneath the ice. Some of the old herrings continue on our coast the whole year."—(*Pennant's British Zoology.*)

The herring was unknown to the ancients, being rarely, if ever, found within the Mediterranean. The Dutch are said to have engaged in the fishery in 1164. The invention of pickling or salting herrings is ascribed to one Beukels, or Beukelson, of Biervliet, near Sluys, who died in 1397. The emperor Charles V. visited his grave, and ordered a magnificent tomb to be erected to his memory. Since this early period, the Dutch have uniformly maintained their ascendancy in the herring fishery; but, owing to the Reformation, and the relaxed observance of Lent in Catholic countries, the demand for herrings upon the Continent is now far less than in the fourteenth and fifteenth centuries.

Importance of the Herring Fishery. Progress of it in Great Britain.—There is, perhaps, no branch of industry, the importance of which has been so much over-rated as that of the herring fishery. For more than 2 centuries, company after company has been formed for its prosecution, fishing villages have been built, piers constructed, Boards and regulations established, and vast sums expended in bounties, and yet the fishery remains in a very feeble and unhealthy state. The false estimates that have been long current with respect to the extent and value of the Dutch herring fishery, contributed more, perhaps, than any thing else, to the formation of exaggerated notions of the importance of this business. That the Hollanders prosecuted it to a greater extent, and with far greater success, than any other people, is, indeed, most true. There is not, however, the shadow of a ground for believing that they ever employed, as has often been stated, about 450,000 individuals in the fishery and the employments immediately subservient to it. We question whether they ever employed so many as 50,000. At the time when the Dutch carried on the fishery to the greatest extent, the entire population of the Seven United Provinces did not certainly exceed 2,400,000; and deducting a half for women, and from a half to two thirds of the remaining 1,200,000 for boys and old men, it would follow, according to the statement in question, that every able-bodied man in Holland must have been engaged in the herring fishery! It is astonishing how such ridiculously exaggerated accounts ever obtained any circulation; and still more so, that they should have been referred to and quoted, without, apparently, any doubt being ever entertained of their authenticity, down to our own times! * Had they been sifted ever so little, their falsehood would have been obvious; and we should have saved many hundreds of thousands of pounds that have been thrown away in attempting to rival that which never existed.

It would be impossible, within the limits to which this article must be confined, to give any detailed account of the various attempts that have been made at different periods to encourage and bolster up the herring fishery. In 1749, in pursuance of a recommendation in his Majesty's speech at the opening of parliament, and of a report of a committee of the House of Commons, 500,000*l.* was subscribed for carrying on the fisheries, under a corporation called "The Society of the Free British Fishery." The Prince of Wales was chosen governor of the Society, which was patronised by men of the first rank and fortune in the state. But this Society did not trust entirely to its own efforts for success. The duties were remitted upon the salt used in the fisheries; and besides this reasonable encouragement, a high tonnage bounty was granted upon every buss fitted out for the deep sea fishery. In consequence, many vessels were sent out, as Dr. Smith has truly stated, not to catch herrings, but to *catch the bounty*; and to such an extent was this abuse carried, that in 1759, when the tonnage bounty was 50*s.*, the almost incredible sum of 159*l.* 7*s.* 6*d.* was paid as bounty *upon every barrel of merchantable herrings that was produced!*—(*Wealth of Nations*, vol. iii. p. 386. *M'Culloch's* ed.) But, notwithstanding this encouragement, such was the waste and mismanagement of the Company's affairs, that it was speedily destroyed. Dr. Smith says, that in 1794 hardly a vestige remained of its having ever been in existence.

But, notwithstanding this ill success, a new company was formed, for nearly the same objects, in 1786, of which George III. was patron. It has had nearly the same fate. "For a season or two, busses were fitted out by the society; but if every herring caught had carried a ducat in its mouth, the expense of its capture would scarcely have been repaid. The bubble ended by the society for fishing in the deep sea becoming a kind of building society, for purchasing ground in situations where curers and fishermen find it convenient to settle, and selling or letting it in small lots to them, at such advance of price as yields something better than fishing profits."—(See an excellent article on the *Herring Fishery* in the 11th Number of the *Quarterly Journal of Agriculture.*)

In 1808, a fresh attempt was made for the improvement and extension of the fishery. The act 48 Geo. 3. established a distinct set of commissioners for the superintendence of all matters connected with the fishery, and authorised them to appoint a sufficient number of fishery officers, to be stationed at the different ports, whose duty is to see that the various regulations with respect to the gutting, packing, &c. of the herrings, and the branding of the barrels, are duly carried into effect. In 1809, a bounty of 3*l.* per ton was granted on all vessels employed in the deep sea herring fishery, of above 60 tons burden, but payable only on 100 tons; and in 1820, a bounty of 20*s.* per ton, which, under certain specified circumstances, might be increased to 50*s.*, was granted on all vessels of from 15 to 60 tons, fitted out for the shore herring fishery; and, exclusively of these bounties on the tonnage, a bounty of 2*s.* a barrel was allowed on all herrings cured gutted during the 6 years ending the 5th of April, 1815, and a bounty of 2*s.* 8*d.* a barrel

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* They seem to have been first set forth in a treatise ascribed to Sir Walter Raleigh; and, what is very singular, they were admitted by De Witt into his excellent work, the *True Interest of Holland.* They have been implicitly adopted by Mr. Barrow, in the article *Fisheries* in the *Supplement* to the *Encyclopædia Britannica.*

on their exportation, whether cured gutted or ungutted. During the 11 years ending the 5th of April, 1826, the bounty on herrings cured gutted was 4*s.* a barrel.

It is stated in the article already referred to, that the cost of a barrel of cured herrings is about 16*s.* the half going to the fisherman for the green fish, the other half to the curer for barrel, salt, and labour The bounty of 4*s.* a barrel was, therefore, equal to *half* the value of the herrings as sold by the fisherman, and to *one fourth* of their value as sold by the curer! In consequence of this forced system, the fishery was rapidly increased. The following statement, extracted from the *Report of the Commissioners of the Fishery Board*, dated 1st of October, 1830, shows the progress it has made since 1809: —

Abstract of the Total Quantity of White Herrings cured, branded for Bounty, and exported, in so far as the same have been brought under the Cognisance of the Officers of the Fishery, from the 1st of June, 1809, when the System hitherto in force for the Encouragement of the British Herring Fishery took place, to the 5th of April, 1830; distinguishing each Year, and the Herrings cured Gutted, from those cured Ungutted. — (*Parl. Paper*, No. 51. Sess. 1830; and *Papers published by the Board of Trade*, Part I.)

Periods.	Total Quantity of Herrings cured.			Total Quantity of Herrings branded for Bounty.	Total Quantity of Herrings exported.		
	Gutted.	Ungutted.	Total.		Gutted.	Ungutted.	Total.
	Barrels.	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*	*Barrels.*
Period extending from 1st of June, 1809, to 5th of April, 1810 - - -	42,548	47,637½	90,185½	34,701	11,063⅓	24,784⅔	35,848
Year ended 5th of April, 1811 -	65,450	26,377½	91,827½	55,662½	18,880	19,253	38,133
—— 1812 -	72,515½	39,004	111,519½	58,430	27,564	35,256	62,820
—— 1813 -	89,900⅔	63,587⅓	153,488	70,027½	40,100½	69,625	109,725½
—— 1814 -	52,931½	57,611	110,542½	38,184⅔	34,929	83,474½	118,403½
—— 1815 -	105,574½	54,767	160,139½	83,376	68,938	72,367½	141,305½
—— 1816 -	135,981	26,670⅔	162,651⅔	116,436	81,544½	26,143½	107,688
—— 1817 -	155,776	36,567½	192,343½	140,018½	115,480½	23,148	138,628½
—— 1818 -	204,270½	23,430⅔	227,701	183,089½	148,147½	14,192	162,339½
—— 1819 -	303,777⅓	37,116⅔	340,894	270,022½	212,301½	14,860½	227,162
—— 1820 -	347,191⅓	35,301	382,491⅓	309,700½	244,096	9,420	253,516
—— 1821 -	415,308	28,887⅓	442,195⅓	363,872	289,445½	5,360	294,805½
—— 1822 -	291,938½	24,897⅓	316,542⅓	263,205½	212,890½	2,065½	214,956
—— 1823 -	225,037	23,832	248,869	205,110	169,459½	985½	170,445
—— 1824 -	333,490	56,740⅔	390,190⅔	290,631	238,505½	1,125	239,630½
—— 1825 -	303,397	44,268⅓	347,665⅓	270,844½	201,882⅓	134	202,016½
—— 1826 -	340,118	39,115⅔	379,233⅔	294,422½	217,053¼	20	217,073¼
—— 1827 -	259,171½	29,234	288,405½	223,606	165,741	695	166,406
—— 1828 -	339,360	60,418	399,778	279,317½	210,766	893	211,659
—— 1829 -	300,242½	55,737	355,979½	234,827	202,813⅛	3,062	205,875⅛
—— 1830 -	280,555¼	48,623⅛	329,557	218,418½	177,776	3,878½	181,654½
—— 1831 -	371,096	68,274	439,370	237,085	260,976	3,927	264,903

On looking at this Table, it is seen that the fishery made no progress under the new system till 1815, when the bounty was raised to 4*s.* This is a sufficient proof of the factitious and unnatural state of the business. Its extension, under the circumstances in question, instead of affording any proof of its being in a really flourishing condition, was distinctly the reverse. Individuals without capital, but who obtained loans sufficient to enable them to acquire boats, barrels, salt, &c. on the credit of the bounty, entered in vast numbers into the trade. The market was most commonly glutted with fish; and yet the temptation held out by the bounty caused it to be still further overloaded. Great injury was consequently done to those fish curers who possessed capital; and even the *fishermen* were injured by the system. "Most of the boats employed in the fishery never touch the water but during 6 weeks, from the middle or end of July to the middle of September. They are owned and sailed, not by regular fishermen following that vocation only, but by tradesmen, small farmers, farm-servants, and other landsmen, who may have sufficient skill to manage a boat at that season, but who do not follow the sea except for the 6 weeks of the herring fishery, when they go upon a kind of gambling speculation, of earning a twelvemonth's income by 6 weeks' work."—(*Quarterly Journal*, No. 11. p. 653.)

It has been often said, in vindication of the bounty system, that by extending the fishery it extended an important nursery for seamen; but the preceding statement shows that such has not been its effect. On the contrary, it has tended to depress the condition of the genuine fisherman, by bringing a host of interlopers into the field; and it has also been prejudicial to the little farmers and tradesmen, by withdrawing their attention from their peculiar business, that they may embark in what has hitherto been little less than a sort of lottery adventure.

These consequences, and the increasing amount of the sum paid for bounties, at length induced the government to adopt a different system; and by an act passed in 1825, the bounty of 2*s.* 8*d.* on exported herrings was made to cease in 1826, and 1*s.* was annually deducted from the bounty of 4*s.* a barrel paid on gutted herrings, till it ceased in 1830. Time has not yet been afforded to learn the full effect of this measure. We, however, have not the slightest doubt that it will be most advantageous. The foregoing Table shows, that though the quantity of herrings taken and exported in 1829 and 1830 fell off, there was a material increase in 1831. This is the more encouraging, as there can be little doubt that the supply will henceforth be proportioned to the real demand; while the genuine fishermen, and those curers who have capital of their own, will no longer be injured by the competition of landsmen, and of persons trading on capital furnished by government.

The repeal of the salt laws, and of the duty on salt, which preceded the repeal of the bounty, must be of signal service to the fishery. It is true that salt used in the fisheries was exempted from the duty; but, in order to prevent the revenue from being defrauded, so many regulations were enacted, and the difficulties and penalties to which the fishermen were in consequence subjected were so very great, that some of them chose rather to pay the duty upon the salt they made use of, than to undertake compliance with the regulations.

It is much to be regretted, that when government repealed the bounty, it did not also abolish the "Fishery Board," and the officers and regulations it had appointed and enacted. So long as the bounty existed, it was quite proper that those who claimed it should be subjected to such regulations as government chose to enforce; but now that it has been repealed, we see no reason whatever why the fishery should not be made perfectly free, and every one allowed to prepare his herrings as he thinks best. It is said, indeed, that were there no inspection of the fish, frauds of all sorts would be practised: that the barrels would be ill made, and of a deficient size; that the fish would not be properly packed; that the bottom and middle of the barrels would be filled with bad ones, and a few good ones only placed at the top; that there would not be a sufficiency of pickle, &c. But it is obvious that the reasons alleged in vindication of the official inspection kept up in the herring fishery, might be alleged in vindication of a similar inspection in almost every other branch of industry. It is, in point of fact, utterly useless. It is an attempt, on the part of government, to do that for their subjects, which they can do far better for them-

selves. Supposing the official inspection were put an end to, the merchants and others who buy herrings of the curers would themselves inspect the barrels: and while any attempt at fraud by the curers would thus be effectually obviated, they would be left at liberty to prepare their herrings in any way that they pleased, without being compelled, as at present, to follow only one system, or to prepare fish in the same way for the tables of the poor as for those of the rich. So far, indeed, is it from being true that the inspection system tends to put down trickery, that there is much reason to think that its effect is directly the reverse. The *surveillance* exercised by the officers is any thing but strict; and the official *brand* is often affixed to barrels which, were it not for the undeserved confidence that is too frequently placed in it by the unwary, would lie on the curer's hands. It is rather a security against the detection of fraud, than against its existence.

The grand object of the herring fishery "Board" has been to enforce such a system of curing as would bring British herrings to a level with those of the Dutch. In this, however, they have completely failed; Dutch herrings generally fetching double, and sometimes even three times the price of British herrings in every market of Europe. Neither is this to be wondered at. The consumers of Dutch herrings are the inhabitants of the Netherlands and of the German towns, who use them rather as a luxury than as an article of food, and who do not grudge the price that is necessary to have them in the finest order. The consumers of British herrings, on the other hand, are the negroes of the West Indies, and the poor of Ireland and Scotland. Cheapness is the prime requisite in the estimation of such persons; and nothing can be more entirely absurd, than that a public Board should endeavour to force the fish curers to adopt such a system in the preparation of herrings as must infallibly raise their price beyond the means of those by whom they are bought. Why should not the taste of the consumers be consulted as much in this as in any thing else? It would not be more ridiculous to attempt to have all cheese made of the same richness and flavour as Stilton, than it is to attempt to bring up all herrings to the standard of the Dutch.

We do, therefore, hope that a speedy end may be put to this system; and that our legislators and patriots will cease to torment themselves with schemes for the improvement of the fisheries. The very best thing they can do for them is to let them alone. It is not a business that requires any sort of adventitious encouragement. Every obstacle to the easy introduction of fish into London and other places ought certainly to be removed; but all direct interferences with the fishery are sure to be in the last degree pernicious.

Of the 181,654 barrels of herrings exported from Great Britain in the year ending the 5th of April, 1830, 89,680 went to Ireland, 67,672 to places out of Europe (chiefly the West Indies), and 24,302 to places in Europe other than Ireland.

HIDES (Ger. *Häute;* Du. *Huiden;* Fr. *Peaux;* It. *Cuoja;* Sp. *Pellejos, Pieles;* Rus. *Koshi*), signify, generally, the skins of beasts; but the term is more particularly applied to those of large cattle, such as bullocks, cows, horses, &c. Hides are raw or green; that is, in the state in which they are taken off the carcase, or dressed with salt, alum, and saltpetre, to prevent them from putrefying; or they are cured or tanned. The hides of South America are in the highest repute, and vast quantities of them are annually imported into Great Britain. Large quantities are also imported from various parts of the Continent; and from Morocco, the Cape of Good Hope, &c.

An Account of the Weight of the Hides imported into the United Kingdom in each of the Seven Years ending with 1832, and the Revenue annually derived from the same; specifying the Countries whence the Hides were imported, with the Quantities brought from each.

Countries from which imported.	1826.	1827.	1828.	1829.	1830.	1831.	1832.
Untanned Hides.	*Cwt. qrs.lbs.*	*Cwt. qrs.lbs.*	*Cwt. qrs.lbs.*	*Cwt. qrs.lbs.*	*Cwt. qrs.lbs.*	*Cwt. qrs.lbs.*	*Cwt. qrs.lbs.*
Russia	5,426 1 7	14,792 3 2	14,484 2 21	17,189 0 6	22,545 1 6	10,262 2 22	8,771 0 16
Sweden and Norway	- -	7 0 15	3 0 5	1 0 0	101 0 20	38 1 26	78 0 26
Denmark	9,232 3 3	12,919 0 14	12,338 3 6	4,994 0 11	2,476 1 6	9,142 1 0	7,256 0 20
Prussia	950 0 9	2,074 3 27	6,775 3 15	2,945 2 20	3,098 2 16	635 1 18	197 0 24
Germany	14,260 2 23	33,386 2 22	38,335 1 23	23,355 3 23	31,944 1 10	23,534 2 9	18,804 0 27
United Netherlands	12,747 3 24	21,518 0 27	27,289 3 2	19,102 2 26	23,966 1 4	19,468 3 15	11,845 3 11
France	422 0 8	182 0 16					
Portugal, Madeira, and the Azores	283 1 7	- -	13 1 19	- -	- -	- -	119 0 15
Spain and the Canaries	1 2 22	- -	- -	- -	- -	30 2 9	0 0 6
Gibraltar	2,903 2 0	1,259 2 22	1,232 1 7	1,808 1 4	1,352 0 27	1,781 0 17	1,051 0 16
Italy	5 1 9						
Turkey	1,058 2 13	- -	- -	342 0 0	2,250 0 12	4,784 1 0	4 2 22
Africa, viz. Morocco	10,805 1 6	668 0 17	3 2 4	64 0 13	- -	60 0 0	
Sierra Leone and coast to Cape of Good Hope	1,228 2 9	3,111 1 27	2,875 2 17	3,696 2 25	3,334 2 18	3,502 1 6	3,575 2 27
Cape of Good Hope and Eastern coast	7,520 3 27	12,207 1 3	12,963 1 20	15,814 0 22	19,957 1 21	16,900 1 4	13,193 3 14
East Indies (including the Mauritius)	2,375 0 8	1,111 1 25	3,522 3 12	3,605 1 19	5,104 0 19	3,376 0 5	10,739 0 26
New South Wales and Van Diemen's Land	518 2 16	1,167 1 7	1,112 3 1	3,161 1 10	3,945 0 13	5,662 0 11	6,719 2 1
South Sea Islands and Southern Fishery	3 3 18	4 0 0	15 3 12	5 2 15	- -	- -	28 2 12
British North American colonies	2,492 0 1	1,092 2 20	1,548 1 22	973 3 24	1,052 2 6	515 2 25	399 3 11
British West Indies	3,775 2 27	4,238 1 13	4,537 0 24	2,922 2 25	2,622 3 2	2,198 3 6	1,807 2 16
Foreign do.	173 1 11	62 1 15	201 3 23	13 2 15	86 2 8	50 3 9	
U. S. of America	12,162 3 26	11,549 0 7	19,627 3 11	20,162 3 7	16,030 0 26	4,206 1 13	12,516 0 15
Mexico	- -	2,474 0 24	73 0 26	67 2 2	3,946 2 17	153 1 2	1,428 1 2
Guatemala	- -	1,326 2 4	446 0 8	49 0 8	- -	259 0 3	
Colombia	651 3 12	1,054 1 20	1,454 2 21	1,197 2 24	1,242 0 18	259 0 3	289 1 20
Brazil	16,124 1 22	12,942 2 11	25,547 3 17	3,207 0 1	11,258 2 19	13,204 1 9	17,767 1 3
States of the Rio de la Plata	79,027 0 11	5,598 3 18	40,605 3 9	156,049 3 18	174,422 0 10	146,008 2 11	65,643 0 4
Chili	7,949 1 19	6,366 2 15	11,266 1 3	3,434 3 15	5,417 3 26	4,096 1 17	1,253 2 2
Peru	2,011 3 13	914 3 7	1,726 1 17	2,332 3 22	3,817 2 8	553 4 8	2,938 1 27
Guernsey, Jersey, Alderney, and Man, foreign	130 1 9	284 1 15	134 2 7	10 1 22	- -	504 1 6	452 1 2
Do. do. produce of	36 No.	118 2 14 and 98 No.	37 3 27 and 182 No.	- -	- - 121 No.	8 1 0 and 163 No.	302 0 0
Total	194,243 3 24 and 36 No.	152,434 0 15 and 98 No.	225,975 3 15 and 182 No.	286,416 3 13	339,773 0 24 and 121 No.	271,477 3 2 and 163 No.	186,982 3 3

An Account of the Weight of the Hides imported—*continued.*

Countries from which imported.	1826.		1827.		1828.		1829.		1830.		1831.		1832.	
Tanned Hides.	*No. of Rus. Hides.*	*Lbs. of other Hides.*	*No. of Rus. Hides.*	*Lbs. of other Hides.*	*No. of Rus. Hides.*	*Lbs. of other Hides.*	*No. of Rus. Hides.*	*Lbs. of other Hides.*	*No. of Rus. Hides.*	*Lbs. of other Hides.*	*No. of Rus. Hides.*	*Lbs. of other Hides.*	*No. of Rus. Hides.*	*Lbs. of other Hides.*
Russia	1,342	-	1,305	-	7,[illegible]	-	8,095	-	1,096	-	3,219	-	1,686	
Denmark	-	-	-	-	-	-	-	825	-	50	-	20		
Prussia	-	-	-	-	-	970	-	3,761	-	-	-	-	-	216
Germany	408													
Netherlands	-	305	-	-	-	266	104							
France	-	-	-	-	-	5,558	-	218						
East Indies (including the Mauritius)	-	-	-	3,408	1	2,030	-	1,740	-	36,222	-	15,033	-	13,142
British North American colonies	-	-	-	-	-	-	-	-	-	27,914	-	35,519	-	33,752
British West Indies	-	-	-	7,559										
U. S. of America	-	-	-	-	-	-	-	-	-	1,119	-	-	-	24
Brazil	-	-	-	172	-	31	-	-	-	-	-	12,067	-	3,719
Chili	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Guernsey, Jersey, Alderney, and Man, foreign	-	-	-	-	-	53								
Do. do. produce of	-	62,[illegible]	-	93,[illegible]	-	86,[illegible]	-	84,971	-	50,440	-	77,848	-	69,173
Total	1,[illegible]	62,513	1,[illegible]	105,[illegible]	7,[illegible]	105,876	8,199	91,515	1,096	115,745	3,219	140,487	1,686	120,038

The *rates of duty* on the hides imported during the above years were the same as those now charged; for which, see TARIFF.

Amount of Duty received on Foreign and Colonial Hides.

	1826.			1827.			1828.			1829.			1830.			1831.			1832.		
	L.	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
Untanned hides	24,491	14	6	26,319	19	3	34,841	15	0	37,379	11	5	42,538	18	6	32,814	9	8	24,242	2	9
Tanned do.	1,747	12	4	2,219	8	0	2,512	1	4	2,388	2	8	1,337	12	6	1,037	2	3	1,170	13	2
Total	26,239	6	10	28,539	7	3	37,353	16	4	39,767	14	1	43,876	11	0	33,851	11	11	25,412	15	11

His Majesty is authorised to prohibit, by proclamation or order in council published in the *London Gazette*, the importation of any hides or skins, horns or hoofs, or any other part of any cattle or beast, in order to prevent any contagious distemper from being brought into the kingdom.—(3 & 4 *Will.* 4. c. 52 § 58.)

Hides and skins paying duty by weight, may be delivered from the bonded warehouses, on the parties entering an average weight, due care being taken that the lockers actually retally and reweigh the hides and skins on delivery; and in the case of delivery for exportation, to express in cart notes the exact number delivered from the warehouse, in order to enable the export officer on the quay to check the quantity; and the merchant is to indorse on the cocket and bill the total number and weight shipped, before the vessel is suffered to clear.—(*Customs Order*, 4th Dec. 1824.)

HOGSHEAD, a measure of capacity, containing 52½ Imperial gallons. A hogshead is equal to ½ a pipe.—(See WEIGHTS AND MEASURES.)

HOLIDAYS, are understood to be those days, exclusive of Sundays, on which no regular public business is transacted at particular public offices. They are either fixed or variable. They are not the same for all public offices. Those kept at the Bank of England have recently been reduced a full half.

The *variable holidays* are, Ash Wednesday, Good Friday, Easter Monday and Tuesday, Holy Thursday, Whit Monday and Tuesday.

It is enacted by stat. 6 Geo. 4. c. 106. § 13., that no holidays shall be kept by the customs except Christmas-day and Good Friday, the King's birthday, and such days as may be appointed by proclamation for the purpose of a general fast.

The 7 & 8 Geo. 4. c. 53. § 16. enacts that no holidays shall be kept at the Excise, except Christmas-day and Good Friday, the birthdays of his Majesty and the Prince of Wales, the anniversaries of the Restoration of Charles II., and of his Majesty's coronation, and such days as may be appointed by proclamation for the celebration of a general fast, or such days as may be appointed as holidays by any warrant issued for that purpose by the Lords of the Treasury.

HONEY (Du. *Honig, Honing;* Fr. *Miel;* Ger. *Honig;* It. *Mele;* Lat. *Mel;* Rus. *Med;* Sp. *Miel*), a vegetable juice collected by bees. "Its flavour varies according to the nature of the flowers from which it is collected. Thus, the honeys of Minorca, Narbonne, and England, are known by their flavours; and the honey prepared in different parts even of the same country differs. It is separated from the comb by dripping, and by expression: the first method affords the purest sort; the second separates a less pure honey; and a still inferior kind is obtained by heating the comb before it is pressed. When obtained from young hives, which have not swarmed, it is denominated *virgin honey*. It is sometimes adulterated with flour, which is detected by mixing it with tepid water: the honey dissolves, while the flour remains nearly unaltered."—(*Thomson's Dispensatory.*)

By stat. 23 Eliz. c. 8. § 4., all vessels of honey are to be marked with the initial letters of the name of the owner, on pain of forfeiting 6*s.* 8*d.*; and contain, the barrel 32 gallons, the kilderkin 16 gallons, and the firkin 8 gallons, or forfeit 5*s.* for every gallon wanting; and if any honey sold, be corrupted with any deceitful mixture, the seller shall forfeit the honey, &c.

HOPS (Ger. *Hopfen;* Du. *Hoppe;* Fr. *Houblon;* It. *Luppoli, Bruscandoli;* Sp. *Oblon;* Rus. *Chmel;* Lat. *Humulus Lupulus*). The hop is a perennial rooted plant, of which there are several varieties. It has an annual twining stem, which when supported on poles, or trees, will reach the height of from 12 to 20 feet or more. It is a native of Britain, and most parts of Europe. When the hop was first used for preserving and improving beer, or cultivated for that purpose, is not known — (see ALE); but its culture was introduced into this country from Flanders in the reign of Henry VIII. Hops are first mentioned in the Statute Book in 1552, in an act 5 & 6 Edward 6. c. 5.; and it would appear from an act passed in 1603 (1 Jac. 1. c. 18.), that hops were at that time extensively cultivated in England. Walter Blithe, in his *Improver Improved*, published in 1649 (3d ed. 1653, p. 240.), has a chapter upon improvement by plantations of hops, in which there is this striking passage. He observes that "hops were then grown to be a national commodity: but that it was not many years since the famous city of London petitioned the parliament of England against two nuisances; and these were, Newcastle coals, in regard to their stench, &c., and hops, in regard they would *spoyl the taste of drink*, and endanger the people: and had the parliament been no wiser than they, we had been in a measure pined, and in a great measure starved; which is just answerable to the principles of those men who cry down all devices, or ingenious discoveries, as projects, and thereby stifle and choak improvement."

After the hops have been picked and dried, the brightest and finest are put into pockets or fine bagging, and the brown into coarse or heavy bagging. The former are chiefly used in the brewing of fine ales, and the latter by the porter brewers. A *pocket* of hops, if they be good in quality, well cured, and tight trodden, will weigh about 1½ cwt.; and a *bag* of hops will, under the same conditions, weigh about 2½ cwt. If the weight of either exceeds or falls much short of this medium, there is reason to suspect that the hops are of an inferior quality, or have been badly manufactured. The brighter the colour of hops, the greater is the estimation in which they are held. Farnham hops are reckoned best. The expense of forming hop plantations is very great, amounting in some instances to from 70*l.* to 100*l.* an acre; and the produce is very uncertain, the crop being frequently insufficient to defray the expenses of cultivation.

The hop growers are placed under the *surveillance* of the excise, a duty of 2*d.* per lb. being laid on all hops produced in this country. A hop planter is obliged to give notice to the excise, on or before the 1st of August each year, of the number of acres he has in cultivation; the situation and number of his oasts or kilns for drying; the place or places of bagging, which, with the storerooms or warerooms in which the packages are intended to be lodged, are entered by the officer. No hops can be removed from the rooms thus entered, before they have been weighed and marked by a revenue officer; who marks, or ought to mark, its weight, and the name and residence of the grower, upon each bag, pocket, or package. Counterfeiting the officer's mark is prohibited under a penalty of 100*l.*, and defacing it under a penalty of 20*l.* A planter or grower knowingly putting hops of different qualities or values into the same bag or package, forfeits 20*l.* And any person mixing with hops any drug, or other thing, to change or alter the colour or scent, shall forfeit 5*l.* a cwt. on all the hops so changed or altered. The malicious cutting or destroying of hop plantations may be punished by transportation beyond seas for life, or any term not less than 7 years, or by imprisonment and hard labour in a common gaol, for any term not exceeding 7 years. — (*Loudon's Ency. of Agriculture; Stevenson's Surrey; Burn's Justice, &c.*)

The duty on hops of the growth of Great Britain produced, in 1832, 241,771*l.*; of which sum the Rochester district paid 75,861*l.* 10*s.* 10*d.*, the Sussex 86,406*l.* 13*s.* 8*d.*, and the Canterbury 48,689*l.* 18*s.* 2*d.* The number of acres occupied by hop plantations in that year were 47,101; of which there were in the Rochester district 12,330, in Sussex 8,514, in Hereford 11,939, and in Canterbury 7,802. During the same year there were 703,153 lbs. of British hops exported. Of foreign hops 11,167 lbs. were imported, and 50,113 lbs. exported. — (*Parl. Paper*, Nos. 96. 196. and 217. Sess. 1833.)

Hops exported from Great Britain are, on being again imported, to be treated as foreign, whether originally so or not.

HORN (Du. *Hoorn;* Fr. *Corne;* Ger. *Horn;* Lat. *Cornu*), a substance too well known to require any description. Horns are of very considerable importance in the arts, being applied to a great variety of useful purposes. They are very extensively used in the manufacture of handles for knives, and in that of spoons, combs, lanterns, snuff-horns, &c. When divided into thin plates, horns are tolerably transparent, and were formerly used instead of glass in windows. Glue is sometimes made out of the refuse of horn. We annually import considerable quantities. At an average of 1831 and 1832, the entries of foreign horn for home consumption amounted to 15,766 cwt.

HORSE (Ger. *Pferd;* Du. *Paard;* Da. *Hest;* Sw. *Häst;* Fr. *Cheval;* It. *Cavallo;* Sp. *Caballo;* Rus. *Loschad;* Pol. *Kon;* Lat. *Equus;* Gr. Ἵππος), a domestic quadruped of the highest utility, being by far the most valuable acquisition made by man among the lower animals.

There is a great variety of horses in Britain. The frequent introduction of foreign breeds, and their judicious mixture, having greatly improved the native stocks. Our race horses are the fleetest in the world; our carriage and cavalry horses are amongst the handsomest and most active of those employed for these purposes; and our heavy draught horses are the most powerful, beautiful, and docile of any of the large breeds.

Number and Value of Horses in Great Britain. — The number of horses used in Great Britain for different purposes is very great, although less so, perhaps, than has been generally supposed. Mr. Middleton (*Survey of Middlesex*, 2d ed. p. 639.) estimated the total number of horses in England and Wales, employed in husbandry, at 1,200,000, and those employed for other purposes at 600,000. Dr. Colquhoun, contrary to his usual practice, reduces this estimate to 1,500,000 for Great Britain; and in this instance we are inclined to think his guess is pretty near the mark. The subjoined official statements give the numbers of the various descriptions of horses in England and Wales, which

paid duty in 1814, when those used in husbandry were taxed; and the numbers, when summed up, amount to 1,204,307. But this account does not include stage coach, mail coach, and hackney coach horses, nor does it include those used in posting. Poor persons keeping only one horse were also exempted from the duty; as were all horses employed in the regular regiments of cavalry and artillery, and in the volunteer cavalry. In Mr. Middleton's estimate, already referred to, he calculated the number of post chaise, mail, stage, and hackney coach horses, at 100,000; and from the inquiries we have made, we are satisfied that if we estimate the number of such horses in Great Britain, at this moment, at 125,000, we shall be decidedly beyond the mark.

On the whole, therefore, it may be fairly estimated that there are in Great Britain from 1,400,000 to 1,500,000 horses employed for various purposes of pleasure and utility. They may, probably, be worth at an average from 12*l.* to 15*l.*, making their total value from 18,000,000*l.* to 22,500,000*l.* sterling, exclusive of the young horses.

The duties begin to be charged as soon as horses are used for drawing or riding, and not previously.

An Account of the Number of Horses charged with Duty in the Years ending the 5th of April, 1815, 1826, and 1833, the Rates of Duty, and the Produce of the Duties.

	1814.			1825.			1832.		
Horses used for riding or drawing carriages, and charged at progressive rates:	No. of Horses.	Rates of Duty for each Horse.	Amount of Duty.	No. of Horses.	Rates of Duty for each Horse.	Amount of Duty.	No. of Horses.	Rates of Duty for each Horse.	Amount of Duty.
		L. s. d.	*L. s. d.*		*L. s. d.*	*L. s. d.*			*L. s. d.*
Persons keeping 1 -	161,123	2 17 6	453,218 12 6	116,529	1 8 9	167,510 8 9	123,668	Same as 1825.	177,772 15 0
— 2 -	31,847	4 14 6	150,453 9 0	27,418	2 7 3	64,775 0 6	31,073	do.	73,409 19 3
— 3 -	11,734	5 4 6	66,744 3 0	10,281	2 12 3	26,859 2 3	10,740	do.	28,053 5 0
— 4 -	7,819	5 10 0	41,866 0 0	5,748	2 15 0	15,807 0 0	5,845	do.	16,073 15 0
— 5 -	5,810	5 11 6	20,460 5 0	3,161	2 15 9	8,892 2 6	3,210	do.	8,947 17 6
— 6 -	3,[illegible]	5 16 0	17,748 0 0	2,172	2 18 0	6,298 16 0	2,138	do.	6,200 4 0
— 7 & 8 -	3,372	5 19 6	20,147 14 0	2,[illegible]	2 19 9	6,808 10 3	2,204	do.	6,584 9 0
— 9 -	720	6 1 6	4,374 0 0	585	3 0 9	1,776 18 9	532	do.	1,615 19 0
— 10 to 12	2,079	6 7 0	13,[illegible] 13 0	1,486	3 3 6	4,718 1 0	1,354	do.	4,298 19 0
— 13 - 16	746	6 7 6	4,735 14 0	520	3 3 9	1,657 10 0	719	do.	2,291 16 3
— 17 -	51	6 8 0	326 8 0	34	3 4 0	108 16 0	51	do.	163 4 0
— 18 -	144	6 9 0	928 18 0	54	3 4 6	174 3 0	126	do.	406 7 0
— 19 -	38	6 10 0	247 0 0	133	3 5 0	432 5 0	76	do.	247 0 0
— 20 & upwards	1,[illegible]	6 12 0	8,[illegible] 14 0	1,018	3 6 0	3,359 8 0	1,142	do.	3,768 12 0
Total -	[illegible]	- -	[illegible] 11 6	171,447	- -	309,178 2 0	182,878	- - -	329,839 2 0
Horses let to hire - -	1,[illegible]	6 17 6	4,180 5 0	1,[illegible]	1 8 9	2,446 12 6	2,073	do.	2,979 18 9
Race horses - - -	560	2 17 6	1,410 0 0	711	1 8 9	1,022 1 3	997	do.	1,433 3 9
Other horses and mules:									
Not wholly used in husbandry - - -	177,025	1 1 0	185,876 5 0						
Horses used *bond fide* in husbandry, 15 hands high and above - -	722,863	0 17 6	632,900 2 6						
Do. for husbandry or other purposes of labour, under 15 hands - -									
Horses belonging to small farmers, under 20*l.* rent, keeping not more than 2 horses - -	35,816	0 3 0	5,372 8 0						
	38,010	0 3 0	5,701 10 0						
Horses used for riding or drawing carriages, and not exceeding 15 hands	- - - -	- - -	- - -	13,121	1 1 0	20,077 1 0	24,639	do.	25,870 19 0
Horses rode by farming bailiffs - - -	- - - -	- - -	- - -	1,251	1 5 0	1,563 15 0	1,438	do.	1,797 10 0
Do. by butchers, where 1 only is kept - -	- - - -	- - -	- - -	2,089	1 8 9	4,296 13 9	3,364	do.	4,835 15 0
Do. where 2 are kept solely for trade - -	- - - -	- - -	- - -	1,083	0 10 6 for the 2d horse	569 12 6	1,213	do.	636 16 6
Horses not chargeable to any of the foregoing duties, and not exempted - - -	- - - -	- - -	- - -	112,389	0 10 6	59,319 4 6	123,728	do.	64,957 4 0
Mules - - - - -	- - - -	- - -	- - -	410	0 10 6	215 5 0	348	do.	182 14 0
Totals -	1,204,307			310,803			310,678		

Exemptions. — Besides the above account of the horses charged with duty, we have been favoured, by the Stamp Office, with an account of the numbers exempted from duty in 1832. This account is not, however, to be relied on; inasmuch as very many of those whose horses are not liable to the duties never think of making any returns. By not attending to this circumstance, we inadvertently, in the former edition of this work, under-rated the number of horses engaged in certain departments of industry.

Influence of Railroads on Horses. — The statements now made, show the dependence that ought to be placed on the estimates occasionally put forth by some of the promoters of railroads and steam carriages. These gentlemen are pleased to tell us, that, by superseding the employment of horses in public conveyances, and in the regular carriage of goods, the adoption of their projects will enable 1,000,000 horses to be dispensed with; and that, as each horse consumes as much food as 8 men, it will at once provide subsistence for 8,000,000 human beings! To dwell upon the absurdity of such a statement would be worse than useless; nor should we have thought of noticing it, but that it has found its way into a report of a committee of the House of Commons. It is sufficient to observe, that though *all* the stage and mail coaches, and *all* the public wagons, vans, &c. employed in the empire, were superseded by steam carriages, 100,000 horses would not certainly be rendered superfluous. The notion that 1 horse consumes as much as 8 men, at least if we suppose the men to be reasonably well fed, is too ridiculous to deserve notice.

The rates of duty payable at present (1834) on horses, are the same as those specified in the above Table for 1825 and 1832. A horse *bond fide* kept and usually employed for the purpose of husbandry, on a farm of less value than 200*l.* a year, though occasionally used as a riding horse, is exempt from the duty. And husbandry horses, whatever may be the value of the farms on which they are kept, may be rode, free of duty, to and from any place to which a burden shall have been carried or brought back; to procure

medical assistance, and to or from markets, places of public worship, elections of members of parliament, courts of justice, or meetings of commissioners of taxes.

Brood mares, while kept for the sole purpose of breeding, are exempted from all duty.

Horses may be let or lent for agricultural purposes, without any increase of duty.

Mules employed in carrying ore and coal are exempted from any duty. — (See the Statutes in *Chitty's* edition of *Burn's Justice*, vol. v. tit. *Assessed Taxes*.)

The facility with which horses may be stolen has led to the enactment of several regulations with respect to their sale, &c. The property of a horse cannot be conveyed away without the express consent of the owner. Hence, a *bonâ fide* purchaser gains no property in a horse that has been stolen, unless it be bought in a *fair*, or an *open* market. It is directed that the keeper of every fair or market shall appoint a certain open place for the sale of horses, and one or more persons to take toll there, and keep the place from 10 in the forenoon till sunset. The owner's property in the horse stolen is not altered by sale in a legal fair, unless it be openly ridden, led, walked, or kept standing for *one hour at least, and has been registered*, for which the buyer is to pay 1*d*. Sellers of horses in fairs or markets must be known to the toll-takers, or to some other creditable person known to them, who declares his knowledge of them, and enters the same in a book kept by the toll-taker for the purpose. Without these formalities, the sale is void. The owner of a horse stolen may, notwithstanding its legal sale, redeem it on payment or tender of the price any time within 6 months of the time of the theft. — (*Burn's Justice of the Peace*, *Chitty's* ed. vol. iii. p. 264.)

In order to obviate the facility afforded by means of slaughtering houses for the disposal of stolen horses, it was enacted in 1786 (26 Geo. 3. c. 71.), that all persons keeping places for slaughtering horses, geldings, sheep, hogs, or other cattle not killed for butcher's meat, shall obtain a licence from the quarter sessions, first producing from the minister and churchwardens, or from the minister and 2 substantial householders, a certificate of their fitness to be intrusted with the management and carrying on of such business. Persons slaughtering horses or cattle without licence are guilty of felony, and may be whipped and imprisoned, or transported. Persons licensed, are bound to affix over the door or gate of the place where their business is carried on, in legible characters, the words "*Licensed for slaughtering Horses, pursuant to an Act passed in the 26th Year of his Majesty King Geo. III.*" The parishioners entitled to meet in vestry are authorised to choose annually, or oftener, inspectors, whose duty it is to take an account and description, &c. of every living horse, &c. that may be brought to such slaughtering houses to be killed, and of every dead horse that may be brought to be flayed. Persons bringing cattle are to be asked an account of themselves, and if it be not deemed satisfactory, they may be carried before a justice. This act does not extend to curriers, fellmongers, tanners, or persons killing aged or distempered cattle, for the purpose of using or curing their hides in their respective businesses; but these, or any other persons, who shall knowingly or wilfully kill any sound or useful horse, &c., shall for every such offence forfeit not more than 20*l*., and not less than 10*l*.

The stealing of horses and other cattle is a capital crime, punishable by death. The maliciously wounding, maiming, killing, &c. of horses and other cattle, is to be punished, at the discretion of the court, by transportation beyond seas for life, for any term not less than 7 years, or by imprisonment for any term not exceeding 4 years; and if a male, he may be once, twice, or thrice publicly or privately whipped, should the court so direct. — (7 & 8 *Geo.* 4. c. 29. § 25.; 7 & 8 *Geo.* 4. c. 30. § 16.)

French Trade in Horses. — The horses of France are not, speaking generally, nearly so handsome, fleet, or powerful, as those of England. Latterly, however, the French have been making great efforts to improve the breed of horses, and have, in this view, been making large importations from England and other countries. At an average of the 5 years ending with 1827, the excess of horses imported into France, above those exported, amounted to about 13,000 a year. — (*Bulletin des Sciences Géographiques*, tom. xix. p. 5.) The imports from England have, in some late years, amounted to nearly 2,000 horses.

HORSE DEALERS, persons whose business it is to buy and sell horses.

Every person carrying on the business of a horse dealer is required to keep a book, in which he shall enter an account of the number of the horses kept by him for sale and for use, specifying the duties to which the same are respectively liable; this book is to be open, at all reasonable times, to the inspection of the officers; and a true copy of the same is to be delivered quarterly to the assessor or assessors of the parish in which the party resides. Penalty for non-compliance, 50*l*. — (43 *Geo.* 3. c. 161.) Horse dealers are assessed, if they carry on their business in the metropolis, 25*l*.; and if elsewhere, 12*l*. 10*s*.

Account specifying the Number of Horse Dealers in Great Britain, in 1831; distinguishing between those in the Metropolis and the Country; with the Rates of Duty on each Class, and the Produce of the Duties. — (*Papers published by the Board of Trade*, vol. ii. p. 45.)

Within the Cities of London and Westminster, St. Marylebone, St. Pancras, and Weekly Bills of Mortality.			In any other Part of Great Britain.			Total Number of Horse Dealers.	
Number assessed.	Rate of Charge.	Amount of Duty.	Number assessed.	Rate of Charge.	Amount of Duty.	Number assessed.	Amount of Duty.
	L. s. d.	*L. s. d.*		*L. s. d.*	*L. s. d.*		*L. s. d.*
74	25 0 0	1,850 0 0	963	12 10 0	12,037 10 0	1,037	13,887 10 0

HUNDRED WEIGHT, a weight of 112 lbs. avoirdupois, generally written cwt.

I. AND J.

JALAP, OR JALOP (Ger. *Jalapp;* Fr. *Jalap;* It. *Sciarappa;* Sp. *Jalapa*), the root of a sort of convolvulus, so named from Xalapa, in Mexico, whence we chiefly import it. The root, when brought to this country, is in thin transverse slices, solid, hard, weighty, of a blackish colour on the outside, and internally of a dark grey, with black circular striæ. The hardest and darkest coloured is the best; that which is light, spongy, and pale coloured, should be rejected. The odour of jalap, especially when in powder, is very characteristic. Its taste is exceedingly nauseous, accompanied by a sweetish bitterness. — (*Lewis's Mat. Med.; Brande's Pharmacy.*) The entries of jalap for home consumption amounted, at an average of 1831 and 1832, to 47,816 lbs. a year.

JAMAICA PEPPER. See PIMENTO.

JAPANNED WARES (Ger. *Japanische ware*; Du. *Japansch lakwerk*; Fr. *Marchandises de Japan*), articles of every description, such as tea-trays, clock-dials, candlesticks, snuff-boxes, &c. covered with coats of japan, whether plain, or embellished with painting or gilding. Birmingham is the grand staple of this manufacture, which is there carried on to a great extent. Pontypool, in Monmouthshire, was formerly famous for japanning; but it is at present continued there on a very small scale only. It is prosecuted with spirit and success at Bilston and Wolverhampton.

JASPER (Ger. *Jaspiss*; Du. *Jaspis*; Fr. *Jaspe*; It. *Diaspro*; Sp. *Jaspe*; Rus. *Jaschma*). This stone is an ingredient in the composition of many mountains. It occurs usually in large amorphous masses, sometimes in round or angular pieces; its fracture is conchoidal; specific gravity from 2 to 2·7. Its colours are various: when heated it does not decrepitate: it is usually divided into 4 species, denominated Egyptian jasper, striped jasper, porcelain jasper, and common jasper. It is sometimes employed by jewellers in the formation of seals.

JERSEY. See GUERNSEY.

JET, OR PITCH COAL (Du. *Git, Zwarte barnsteen*; Fr. *Jais, Jayet*; Ger. *Gagat*; It. *Gagata, Lustrino*; Lat. *Gagus, Gagates*), of a black velvet colour, occurs massive, in plates; sometimes in the shape of branches of trees, but without a regular woody texture. Internal lustre shining, resinous, soft; rather brittle; easily frangible; specific gravity 1·3. It is used for fuel, and for making vessels and snuff-boxes. In Prussia it is called black amber, and is cut into rosaries and necklaces. It is distinguished by its brilliancy, and conchoidal fracture.—(*Thomson's Chemistry.*)

JETSAM. See FLOTSAM.

IMPORTATION AND EXPORTATION, the bringing of commodities from and sending them to other countries. A very large portion of the revenue of Great Britain being derived from customs duties, or from duties on commodities imported from abroad; and drawbacks being given on many, and bounties on a few articles exported; the business of importation and exportation is subjected to various regulations, which must be carefully observed by those who would avoid incurring penalties, and subjecting their property to confiscation. The regulations referred to, have been embodied in the act 3 & 4 Will. 4. c. 52., which is subjoined.

GENERAL REGULATIONS.

No Goods to be landed nor Bulk broken before Report and Entry.—No goods shall be unladen from any ship arriving from parts beyond the seas at any port or place in the United Kingdom or in the Isle of Man, nor shall bulk be broken after the arrival of such ship within 4 leagues of the coasts thereof, before due report of such ship and due entry of such goods shall have been made, and warrant granted, in manner herein-after directed; and no goods shall be so unladen except at such times and places, and in such manner, and by such persons, and under the care of such officers, as is and are herein-after directed; and all goods not duly reported, or which shall be unladen contrary hereto, shall be forfeited; and if bulk be broken contrary hereto, the master of such ship shall forfeit the sum of 100*l.*; and if, after the arrival of any ship within 4 leagues of the coast of the United Kingdom or of the Isle of Man, any alteration be made in the stowage of the cargo of such ship, so as to facilitate the unlading of any part of such cargo, or if any part be staved, destroyed, or thrown overboard, or any package be opened, such ship shall be deemed to have broken bulk: provided always, that the several articles herein-after enumerated may be landed in the United Kingdom without report, entry, or warrant; (that is to say,) diamonds and bullion, fresh fish of British taking, and imported in British ships, turbots and lobsters fresh, however taken or imported.—§ 2.

MANIFEST.

All British Ships, and all Ships with Tobacco, to have Manifests.—No goods shall be imported into the United Kingdom, or into the Isle of Man, from parts beyond the seas, in any British ship, nor any tobacco in any ship, unless the master shall have on board a manifest of such goods or of such tobacco, made out, dated, and signed by him at the place or respective places where the same or the different parts of the same was or were taken on board, and authenticated in the manner herein-after provided; and every such manifest shall set forth the name and the tonnage of the ship, the name of the master and of the place to which the ship belongs, and of the place or places where the goods were taken on board respectively, and of the place or places for which they are destined respectively, and shall contain a particular account and description of all the packages on board, with the marks and numbers thereon, and the sorts of goods and different kinds of each sort contained therein, to the best of the master's knowledge, and of the particulars of such goods as are stowed loose, and the names of the respective shippers and consignees, as far as the same can be known to the master; and to such particular account shall be subjoined a general account or recapitulation of the total number of the packages of each sort, describing the same by their usual names, or by such descriptions as the same can best be known by, and the different goods therein, and also the total quantities of the different goods stowed loose: provided always, that every manifest for tobacco shall be a separate manifest distinct from any manifest for any other goods, and shall, without fail, contain the particular weight of tobacco in each hogshead, cask, chest, or case, with the tare of the same; and if such tobacco be the produce of the dominions of the Grand Seignior, then the number of the parcels or bundles within any such hogshead, cask, chest, or case shall be stated in such manifest.—§ 3.

To be produced to Officers in Colonies, &c.—Before any ship shall be cleared out or depart from any place in any of the British possessions abroad, or from any place in China, with any goods for the United Kingdom or for the Isle of Man, the master of such ship shall produce the manifest to the collector or comptroller of the customs, or other proper officer, who shall certify upon the same the date of the production thereof to him: provided always, that in all places within the territorial possessions of the East India Company the servant of the said Company by whom the last dispatches of such ship shall be delivered shall be the proper officer to authenticate the manifest as aforesaid; and in all places in China the chief supercargo of the said Company shall be the proper officer for such purpose.—§ 4.

To be produced to Consuls.—Before the departure of any ship from any place beyond the seas not under the British dominions, where any tobacco has been taken on board such ship for the United Kingdom or for the Isle of Man, the master of such ship shall produce the manifest of such tobacco to the British

consul or other chief British officer, if there be any such resident at or near such place; and such consul or other officer shall certify upon the same the date of the production thereof to him. — § 5.

If wanting, Master to forfeit 100*l.* — If any goods be imported into the United Kingdom or into the Isle of Man, in any British ship, or any tobacco in any ship, without such manifest, or if any goods contained in such manifest be not on board, the master of such ship shall forfeit the sum of 100*l.* — § 6.

Manifest to be produced within 4 *Leagues.* — The master of every ship required to have a manifest on board shall produce such manifest to any officer of the customs who shall come on board his ship after her arrival within 4 leagues of the coast of the United Kingdom or of the coast of the Isle of Man, and who shall demand the same, for his inspection; and such master shall also deliver to any such officer who shall be the first to demand it, a true copy of such manifest signed by the master; and shall also deliver another copy to any other officer of the customs who shall be the first to demand the same within the limits of the port to which such ship is bound; and thereupon such officers respectively shall notify on such manifest and on such copies the date of the production of such manifest and of the receipt of such copies, and shall transmit such copies to the collector and comptroller of the port to which such vessel is first bound, and shall return such manifest to the master; and if such master shall not in any case produce such manifest, or deliver such copy, he shall forfeit the sum of 100*l.* — § 7.

Report.

Master, within 24 *Hours, and before breaking Bulk, shall report.* — The master of every ship arriving from parts beyond the seas at any port in the United Kingdom or in the Isle of Man, whether laden or in ballast, shall, within 24 hours after such arrival, and before bulk be broken, make due report of such ship, and shall make and subscribe a declaration to the truth of the same, before the collector or comptroller of such port; and such report shall contain an account of the particular marks, numbers, and contents of all the different packages or parcels of the goods on board such ship, and the particulars of such goods as are stowed loose, to the best of his knowledge, and of the place or places where such goods were respectively taken on board, and of the burden of such ship, and of the country where such ship was built, or, if British, of the port of registry, and of the country of the people to whom such ship belongs, and of the name and country of the person who was master during the voyage, and of the number of the people by whom such ship was navigated, stating how many are subjects of the country to which such ship belongs, and how many are of some other country; and in such report it shall be further declared, whether and in what cases such ship has broken bulk in the course of her voyage, and what part of the cargo, if any, is intended for importation at such port, and what part, if any, is intended for importation at another port in the United Kingdom, or at another port in the Isle of Man respectively, and what part, if any, is prohibited to be imported, except to be warehoused for exportation only, and what part, if any, is intended for exportation in such ship to parts beyond the seas, and what surplus stores or stock remain on board such ship, and, if a British ship; what foreign-made sails or cordage, not being standing or running rigging, are in use on board such ship; and the master of any ship, who shall fail to make such report, or who shall make a false report, shall forfeit the sum of 100*l.* — § 8.

Masters of Vessels coming from Africa to report how many Natives they have on board. — The master of every vessel coming from the coast of Africa, and having taken on board at any place in Africa any person or persons being or appearing to be natives of Africa, shall, in addition to all other matters, state, in the report of his vessel, how many such persons have been taken on board by him in Africa; and any such master failing herein shall forfeit the sum of 100*l.*: provided also, that the master or owner or owners of such vessel, or some or one of them, at the time of making such report, be required to enter into bond to his Majesty in the sum of 100*l.*, conditioned to keep harmless any parish, or any extra-parochial or other place maintaining its own poor, against any expense which such parish or other place may be put to in supporting any such person during their stay in the United Kingdom; and any such master, owner or owners refusing or neglecting to enter into such bond shall forfeit the sum of 200*l.* — § 9.

Packages reported "Contents unknown," may be opened and examined. — If the contents of any package so intended as aforesaid for exportation in the same ship to parts beyond the seas shall be reported by the master as being unknown to him, it shall be lawful for the officers of the customs to open and examine such package on board, or to bring the same to the king's warehouse for that purpose; and if there be found in such package any goods which may not be entered for home use, such goods shall be forfeited; or if the goods be such as may be entered for home use, the same shall be chargeable with the duties of importation; unless in either case the commissioners of his Majesty's customs, in consideration of the sort or quality of such goods, or the small rate of duty payable thereon, shall see fit to deliver the same for exportation. — § 10.

Master to deliver Manifest, &c. — The master of every ship shall, at the time of making such report, deliver to the collector or comptroller the manifest of the cargo of such ship, where a manifest is required, and, if required by the collector or comptroller, shall produce to him any bill or bills of lading, or a true copy thereof, for any and every part of the cargo laden on board; and shall answer all such questions relating to the ship and cargo, and crew and voyage, as shall be put to him by such collector or comptroller; and in case of failure or refusal to produce such manifest, or to answer such questions, or to answer them truly, or to produce such bill of lading or copy, or if such manifest, or bill of lading, or copy, shall be false, or if any bill of lading be uttered by any master, and the goods expressed therein shall not have been *bonâ fide* shipped on board such ship, or if any bill of lading uttered or produced by any master shall not have been signed by him, or any such copy shall not have been received or made by him previously to his leaving the place where the goods expressed in such bill of lading or copy were shipped, then and in every such case such master shall forfeit the sum of 100*l.* — § 11.

Part of Cargo reported for another Port. — If any part of the cargo of any ship for which a manifest is required be reported for importation at some other port in the United Kingdom, or at some other port in the Isle of Man, the collector and comptroller of the port at which some part of the cargo has been delivered shall notify such delivery on the manifest, and return the same to the master of such ship. — § 12.

Ship to come quickly to Place of unlading, &c. — Every ship shall come as quickly up to the proper place of mooring or unlading as the nature of the port will admit, and without touching at any other place; and in proceeding to such place shall bring to at stations appointed by the commissioners of customs for the boarding of ships by the officers of the customs; and after arrival at such place of mooring or unlading such ship shall not remove from such place except directly to some other proper place, and with the knowledge of the proper officer of the customs, on penalty of 100*l.*, to be paid by the master of such ship: provided always, that it shall be lawful for the commissioners of customs to appoint places to be the proper places for the mooring or unlading of ships importing tobacco, and where such ships only shall be moored or unladen; and in case the place so appointed for the unlading of such ships shall not be within some dock surrounded with walls, if any such ship after having been discharged shall remain at such place, or if any ship not importing tobacco shall be moored at such place, the master shall in either case forfeit and pay the sum of 20*l.* — § 13.

Officers to board Ships. — It shall be lawful for the proper officers of the customs to board any ship arriving at any port in the United Kingdom or in the Isle of Man, and freely to stay on board until all the goods laden therein shall have been duly delivered from the same; and such officers shall have free access to every part of the ship, with power to fasten down hatchways, and to mark any goods before landing, and to lock up, seal, mark, or otherwise secure any goods on board such ship; and if any place, or any box or chest, be locked, and the keys be withheld, such officers, if they be of a degree superior to

tidesmen or watermen, may open any such place, box, or chest in the best manner in their power; and if they be tidesmen or watermen, or only of that degree, they shall send for their superior officer, who may open or cause to be opened any such place, box, or chest in the best manner in his power; and if any goods be found concealed on board any such ship, they shall be forfeited; and if the officers shall place any lock, mark, or seal upon any goods on board, and such lock, mark, or seal be wilfully opened, altered, or broken before due delivery of such goods, or if any of such goods be secretly conveyed away, or if the hatchways, after having been fastened down by the officer, be opened, the master of such ship shall forfeit the sum of 100*l.* — § 14.

National Ships, British or Foreign, having Goods on board, Person in charge to deliver an Account, or forfeit 100*l.* — If any ship (having commission from his Majesty, or from any foreign prince or state) arriving as aforesaid at any port in the United Kingdom or in the Isle of Man shall have on board any goods laden in parts beyond the seas, the captain, master, purser, or other person having the charge of such ship or of such goods for that voyage shall, before any part of such goods be taken out of such ship, or when called upon so to do by any officer of the customs, deliver an account in writing under his hand, to the best of his knowledge, of the quality and quantity of every package or parcel of such goods, and of the marks and numbers thereon, and of the names of the respective shippers and consignees of the same, and shall make and subscribe a declaration at the foot of such account, declaring to the truth thereof, and shall also truly answer to the collector or comptroller such questions concerning such goods as shall be required of him; and on failure thereof such captain, master, purser, or other person shall forfeit the sum of 100*l.*; and all such ships shall be liable to such searches as merchant ships are liable to; and the officers of the customs may freely enter and go on board all such ships, and bring from thence on shore into the king's warehouse any goods found on board any such ship as aforesaid; subject nevertheless to such regulations in respect of ships of war belonging to his Majesty as shall from time to time be directed in that respect by the commissioners of his Majesty's treasury of the United Kingdom of Great Britain and Ireland. — § 15.

Master to deliver List of Crew of Ships from West Indies. — The master of every British ship arriving at any port in the United Kingdom, on her return from any British possessions in the West Indies, shall, within 10 days of such arrival, deliver to the collector or comptroller a list, containing the names and descriptions of the crew which was on board at the time of clearing from the United Kingdom, and of the crew on board at the time of arrival in any of the said possessions, and of every seaman who has deserted or died during the voyage, and also the amount of wages due at the time of his death to each seaman so dying, and shall make and subscribe a declaration at the foot of such list, declaring to the truth thereof; and every master omitting so to do shall forfeit the sum of 50*l.*; and such list shall be kept by the collector for the inspection of all persons interested therein. — § 16.

Entry.

After 14 *Days, Officer may land Goods not entered, &c.* — Every importer of any goods shall, within 14 days after the arrival of the ship importing the same, make perfect entry inwards of such goods, or entry by bill of sight, in manner herein-after provided, and shall within such time land the same; and in default of such entry and landing it shall be lawful for the officers of the customs to convey such goods to the king's warehouse; and whenever the cargo of any ship shall have been discharged, with the exception only of a small quantity of goods, it shall be lawful for the officers of the customs to convey such remaining goods, and at any time to convey any small packages or parcels of goods, to the king's warehouse, although such 14 days shall not have expired, there to be kept waiting the due entry thereof during the remainder of such 14 days; and if the duties due upon any goods so conveyed to the king's warehouse shall not be paid within 3 months after such 14 days shall have expired, together with all charges of removal and warehouse rent, the same shall be sold, and the produce thereof shall be applied, first to the payment of freight and charges, next of duties, and the overplus, if any, shall be paid to the proprietor of the goods. — § 17.

Bill of Entry to be delivered. — The person entering any goods inwards (whether for payment of duty, or to be warehoused upon the first perfect entry thereof, or for payment of duty upon the taking out of the warehouse, or whether such goods be free of duty,) shall deliver to the collector or comptroller a bill of the entry of such goods, fairly written in words at length, expressing the name of the ship, and of the master of the ship in which the goods were imported, and of the place from whence they were brought, and the description and situation of the warehouse, if they are to be warehoused, and the name of the person in whose name the goods are to be entered, and the quantity and description of the goods, and the number and denomination or description of the respective packages containing the goods, and in the margin of such bill shall delineate the respective marks and numbers of such packages, and shall pay down any duties which may be payable upon the goods mentioned in such entry; and such person shall also deliver at the same time 2 or more duplicates, as the case may require, of such bill, in which all sums and numbers may be expressed in figures, and the particulars to be contained in such bill shall be written and arranged in such form and manner, and the number of such duplicates shall be such as the collector and comptroller shall require; and such bill being duly signed by the collector and comptroller, and transmitted to the landing waiter, shall be the warrant to him for the landing or delivering of such goods. — § 18.

Unauthorised Persons not permitted to make Entries. — Every person who shall make or cause to be made any such entry inwards of any goods, not being duly authorised thereto by the proprietor or consignee of such goods, shall for every such offence forfeit the sum of 100*l.*: provided always, that no such penalty shall extend or be deemed to extend to any person acting under the directions of the several dock companies or other corporate bodies authorised by law to pass entries. — § 19.

Not valid unless agreeing with Manifest, Report, and other Documents. — No entry nor any warrant for the landing of any goods, or for the taking of any goods out of any warehouse, shall be deemed valid, unless the particulars of the goods and packages in such entry shall correspond with the particulars of the goods and packages, purporting to be the same, in the report of the ship, and in the manifest, where a manifest is required, and in the certificate or other document, where any is required, by which the importation or entry of such goods is authorised, nor unless the goods shall have been properly described in such entry by the denominations and with the characters and circumstances according to which such goods are charged with duty or may be imported, either to be used in the United Kingdom, or to be warehoused for exportation only; and any goods taken or delivered out of any ship, or out of any warehouse, or for the delivery of which, or for any order for the delivery of which, from any warehouse, demand shall have been made, not having been duly entered, shall be forfeited. — § 20.

Goods by Number, Measure, or Weight, &c. — If the goods in such entry be charged to pay duty according to the number, measure, or weight thereof, such number, measure, or weight shall be stated in the entry; and if the goods in such entry be charged to pay duty according to the value thereof, such value shall be stated in the entry, and shall be affirmed by the declaration of the importer or his known agent, written upon the entry, and attested by his signature; and if the goods in such entry be chargeable at the option of the officers of customs, either according to the number, measure, or weight thereof, or according to the value thereof, then as well such number, measure, or weight, as also such value, shall be in like manner stated in the entry, and attested; and if any person make such declaration, not being the importer or proprietor of such goods, nor his agent duly authorised by him, such person shall forfeit the sum of 100*l.*; and such declaration shall be made in manner and form following, and shall be binding upon the person by or in behalf of whom the same shall be made; (that is to say,)

"I *A. B.* of [*place of abode*] do hereby declare, that I am [the importer, or authorised by the importer] of the goods contained in this entry, and that I enter the same [*stating which, if part only*] at the sum of ——————. Witness my hand the —————— day of ——————.

"*A. B.*" — § 21.

Goods undervalued, Officers may detain. — If upon examination it shall appear to the officers of the customs that such goods are not valued according to the true value thereof, it shall be lawful for such officers to detain and secure such goods, and (within 5 days from the landing thereof if it be in the ports of London, Leith, or Dublin, or within 7 days if in any other port in the United Kingdom, or if in any port in the Isle of Man,) to take such goods for the use of the Crown; and if a different rate of duty shall be charged upon any goods according as the value of the same shall be described in the entry to be above or to be below any particular price or sum, and such goods shall be valued in the entry so as to be liable to the lower rate of duty, and it shall appear to the officers of the customs that such goods, by reason of their real value, are properly liable to the higher rate of duty, it shall be lawful for such officers in like manner to take such goods for the use of the Crown; and the commissioners of his Majesty's customs shall thereupon in any of such cases cause the amount of such valuation, together with an addition of 10*l.* per cent. thereon, and also the duties paid upon such entry, to be paid to the importer or proprietor of such goods in full satisfaction for the same, and shall dispose of such goods for the benefit of the Crown; and if the produce of such sale shall exceed the sums so paid and all charges incurred by the Crown, one moiety of the overplus shall be given to the officer or officers who had detained and taken the goods; and the money retained for the benefit of the Crown shall be paid into the hands of the collector of the customs, with the knowledge of the comptroller, and carried to account as duties of customs. — § 22.

East India Company to sell Goods. — The value of goods imported by the East India Company shall be ascertained by the gross price at which the same shall have been sold by auction at the public sales of the said Company; and that the said Company shall fairly and openly expose to sale and cause to be sold all such goods so charged to pay duty according to the value thereof by way of public auction in the city of London, within 3 years from the importation thereof, and shall give due notice at the Custom-house in London to the officers appointed to attend such sales of the time and place thereof. — § 23.

Bill of Sight if Goods be not known. — If the importer of any goods, or his agent after full conference with him, shall declare before the collector or comptroller that he cannot for want of full information make a full or perfect entry of such goods, and shall make and subscribe a declaration to the truth thereof, it shall be lawful for the collector and comptroller to receive an entry by bill of sight for the packages or parcels of such goods by the best description which can be given, and to grant a warrant thereupon, in order that the same may be provisionally landed, and may be seen and examined by such importer, in presence of the proper officers; and within 3 days after any goods shall have been so landed, the importer shall make a full or perfect entry thereof, and shall either pay down all duties which shall be due and payable upon such goods, or shall duly warehouse the same, according to the purport of the full or perfect entry or entries so made for such goods, or for the several parts or sorts thereof: provided always, that if, when full or perfect entry be at any time made for any goods provisionally landed as aforesaid by bill of sight, such entry shall not be made in manner herein-before required for the due landing of goods, such goods shall be deemed to be goods landed without due entry thereof, and shall be subject to the like forfeiture accordingly: provided also, that if any sum of money shall have been deposited upon any entry by bill of sight, on account of the duties which may be found to be payable on the goods intended therein, it shall be lawful for the officers of the customs to deliver, in virtue of the warrant for landing the same, any quantity of goods the duty on which shall not exceed the sum so deposited. — § 24.

Goods to be taken to King's Warehouse. — In default of perfect entry within such 3 days, such goods shall be taken to the king's warehouse by the officers of the customs; and if the importer shall not, within 1 month after such landing, make perfect entry or entries of such goods, and pay the duties thereon, or on such parts as can be entered for home use, together with charges of removal and of warehouse rent, such goods shall be sold for payment of such duties (or for exportation, if they be such as cannot be entered for home use, or shall not be worth the duties and charges,) and for the payment of such charges; and the overplus, if any, shall be paid to the importer or proprietor thereof. — § 25.

East India Company may enter by Bill of Sight. — It shall be lawful for the East India Company, without making the proof herein-before required, to enter by bill of sight, to be landed and secured in such manner as the commissioners of his Majesty's customs shall require, any goods imported by them, and also any goods imported by any other person from places within the limits of the charter of the said Company, with the consent of such person, upon condition to cause perfect entry to be made of such goods within 3 months from the date of the importation thereof, either to warehouse the same or to pay the duties thereon within the times and in the manner herein-after mentioned; (that is to say,) if such goods be charged to pay duty according to the value, then to pay such duty within 4 months from the sale of the goods; and if such goods be charged to pay duty according to the number, measure, or weight thereof, then to pay one moiety of such duties within 6 calendar months from the time of the importation of such goods, and the other moiety within 12 calendar months from such time; and such goods shall be secured in such places and in such manner as the commissioners of his Majesty's customs shall require, until the same shall have been duly entered, and the duties thereon shall have been duly paid, or until the same shall have been duly exported: provided also, that it shall be lawful for any other person who shall have imported any goods from places within the said limits into the port of London in like manner to enter such goods by bill of sight in his own name, upon giving sufficient security by bond, to the satisfaction of the commissioners of his Majesty's customs, with the like conditions as are required of the said Company for making perfect entries, and for the securing and the paying of duties, provided such goods be entered by such bill of sight to be warehoused in some warehouse under the superintendence of the said Company, and in which goods imported by the said Company may be secured in manner before mentioned. — § 26.

In default of Payment of Duties, Goods to be sold. — In default of perfect entry within 3 months as aforesaid, or of due entry and payment of duty within the times and in the manner herein-before respectively required, it shall be lawful for the commissioners of his Majesty's customs to cause any such goods in respect of which such default shall have been made to be sold for the payment of such duties, (or for exportation, if they be such as cannot be entered for home use,) and for the payment of all charges incurred by the Crown in respect of such goods; and the overplus, if any, shall be paid to the proprietor thereof. — § 27.

Goods landed by Bill of Sight fraudulently concealed, forfeited. — Where any package or parcel shall have been landed by bill of sight, and any goods or other things shall be found in such package or parcel concealed in any way, or packed with intent to deceive the officers of his Majesty's customs, as well all such goods and other things as the package or parcel in which they are found, and all other things contained in such package or parcel, shall be forfeited. — § 28.

East India Company to pay Duties to Receiver-general. — The East India Company shall pay into the hands of the receiver-general of the customs every sum of money due from the said Company on account of the duties of customs at the respective times when the same shall become due; and the said receiver-general shall give to the said Company a receipt for the monies so paid, on the account of the collector of the customs, which receipt, when delivered to such collector, shall be received by him as cash. — § 29.

Goods damaged on Voyage. — Any goods which are rated to pay duty according to the number, measure, or weight thereof (except certain goods herein-after mentioned) shall receive damage during the voyage, an abatement of such duties shall be allowed in proportion to the damage so received; provided

proof be made to the satisfaction of the commissioners of his Majesty's customs, or of any officers of customs acting therein under their directions, that such damage was received after the goods were shipped abroad in the ship importing the same, and before they were landed in the United Kingdom; and provided claim to such abatement of duties be made at the time of the first examination of such goods. — § 30.

Officers to examine Damage, and state Proportion, or choose two Merchants. — The officers of the customs shall thereupon examine such goods with reference to such damage, and may state the proportion of damage which, in their opinion, such goods have so received, and may make a proportionate abatement of duties; but if the officers of customs be incompetent to estimate such damage, or if the importer be not satisfied with the abatement made by them, the collector and comptroller shall choose two indifferent merchants experienced in the nature and value of such goods, who shall examine the same, and shall make and subscribe a declaration, stating in what proportion, according to their judgment, such goods are lessened in their value by reason of such damage, and thereupon the officers of customs may make an abatement of the duties according to the proportion of damage so declared by such merchants. — § 31.

No Abatement for certain Goods. — No abatement of duties shall be made on account of any damage received by any of the sorts of goods herein-after enumerated; (that is to say,) cocoa, coffee, oranges, pepper, currants, raisins, figs, tobacco, lemons, and wine. — § 32.

Returned Goods. — It shall be lawful to re-import into the United Kingdom from any place, in a ship of any country, any goods (except as herein-after excepted) which shall have been legally exported from the United Kingdom, and to enter the same by bill of store, referring to the entry outwards, and exportation thereof, provided the property in such goods continue in the person by whom or on whose account the same have been exported, and that such re-importation take place within 6 years from the date of the exportation; and if the goods so returned be foreign goods, which had before been legally imported into the United Kingdom, the same duties shall be payable thereon as would, at the time of such re-importation, be payable on the like goods under the same circumstances of importation as those under which such goods had been originally imported, or such goods may be warehoused as the like goods might be warehoused upon a first importation thereof: provided always, that the several sorts of goods enumerated or described in the Table following shall not be re-imported into the United Kingdom for home use upon the ground that the same had been legally exported from thence, but that the same shall be deemed to be foreign goods, whether originally such or not, and shall also be deemed to be imported for the first time into the United Kingdom; (that is to say,)

A Table of Goods exported which may not be re-imported for Home Use.

Corn, grain, meal, flour, and malt, hops, tobacco, tea. Goods for which any bounty or any drawback of excise had been received on exportation, unless by special permission of the commissioners of his Majesty's customs, and on repayment of such bounty or such drawback.	All goods for which bill of store cannot be issued in manner herein-after directed, except small remnants of British goods by special permission of the commissioners of his Majesty's customs, upon proof to their satisfaction that the same are British, and had not been sold. — Sect. 33.

Bill of Store, by whom may be taken out. — The person in whose name any goods so re-imported were entered for exportation shall deliver to the searcher at the port of exportation an exact account, signed by him, of the particulars of such goods, referring to the entry and clearance outwards and to the return inwards of the same, with the marks and numbers of the packages, both inwards and outwards; and thereupon the searcher, finding that such goods had been legally exported, shall grant a bill of store for the same; and if the person in whose name such goods were entered for exportation was not the proprietor thereof, but his agent, he shall declare upon oath on such bill of store the name of the person by whom he was employed as such agent; and if the person to whom such returned goods are consigned shall not be such proprietor and exporter, he shall make and subscribe a declaration on such bill of store of the name of the person for whose use such goods have been consigned to him; and the real proprietor, ascertained to be such, shall make and subscribe a declaration upon such bill of store, to the identity of the goods so exported and so returned, and that he was at the time of exportation and of re-importation the proprietor of such goods, and that the same had not during such time been sold or disposed of to any other person; and such declaration shall be made before the collectors or comptrollers at the ports of exportation and of importation respectively; and thereupon the collector and comptroller shall admit such goods to entry by bill of store, and grant their warrant accordingly. — § 34.

Surplus Stores subject as Goods. — The surplus stores of every ship arriving from parts beyond the seas, in the United Kingdom or in the Isle of Man, shall be subject to the same duties, and the same prohibitions, restrictions, and regulations, as the like sorts of goods shall be subject to when imported by way of merchandise; but if it shall appear to the collector and comptroller that the quantity or description of such stores is not excessive or unsuitable, under all the circumstances of the voyage, it shall be lawful for them to permit such surplus stores to be entered for the private use of the master, purser, or owner of such ship, or of any passenger of such ship to whom any such surplus stores may belong, on payment of the proper duties, or to be warehoused for the future use of such ship, although the same could not be legally imported by way of merchandise. — § 35.

Goods from Plantations, &c. — No goods shall be entered as being of or from any British possession in America (if any benefit attach to such distinction) unless the master of the ship importing the same shall have delivered to the collector or comptroller a certificate, under the hand of the proper officer of the place where such goods were taken on board, of the due clearance of such ship from thence, containing an account of such goods. — § 36.

Certificate of Growth of Sugar, Coffee, Cocoa, Spirits, from Plantations. — Before any sugar, coffee, cocoa, or spirits shall be entered as being of the produce of some British possession in America, or the Island of Mauritius, the master of the ship importing the same shall deliver to the collector or comptroller a certificate, under the hand of the proper officer of the place where such goods were taken on board, testifying that proof had been made in manner required by law that such goods are of the produce of some British possession in America, or of the Island of Mauritius, stating the name of the place where such goods were produced, and the quantity and quality of the goods, and the number and denomination of the packages containing the same, and the name of the ship in which they are laden, and of the master thereof; and such master shall also make and subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place where such goods were taken on board, and that the goods so imported are the same as are mentioned therein. — § 37.

Certificate of Sugar from Limits of Charter. — Before any sugar shall be entered as being the produce of any British possession within the limits of the East India Company's charter, the master of the ship importing the same shall deliver to the collector or comptroller a certificate under the hand and seal of the proper officer at the place where such sugar was taken on board, testifying that oath had been made before him, by the shipper of such sugar, that the same was really and *bonâ fide* the produce of such British possession; and such master shall also make and subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place where such sugar was taken on board, and that the sugar so imported is the same as is mentioned therein. — § 38.

Certificate of Wine, Produce of Cape of Good Hope. — Before any wine shall be entered as being the produce of the Cape of Good Hope, the master of the ship importing the same shall deliver to the collector or comptroller a certificate under the hand of the proper officer of the Cape of Good Hope testifying that proof had been made, in manner required by law, that such wine is of the produce of the Cape of Good Hope or the dependencies thereof, stating the quantity and sort of such wine, and the number and denomination of the packages containing the same; and such master shall also make and subscribe a declar-

ation before the collector or comptroller, that such certificate was received by him at the Cape of Good Hope, and that the wine so imported is the same as is mentioned therein. — § 39.

Goods of Guernsey, Jersey, &c. — It shall be lawful to import into the United Kingdom any goods of the produce or manufacture of the islands of Guernsey, Jersey, Alderney, Sark, or Man, from the said islands respectively, without payment of any duty (except in the cases herein-after mentioned); and such goods shall not be deemed to be included in any charge of duties imposed by any act hereafter to be made on the importation of goods generally from parts beyond the seas: provided always, that such goods may nevertheless be charged with any proportion of such duties as shall fairly countervail any duties of excise, or any coast duty, payable on the like goods the produce of the part of the United Kingdom into which they shall be imported: provided also, that such exemption from duty shall not extend to any manufactures of the said islands made from materials the produce of any foreign country, except manufactures of linen and cotton made in and imported from the Isle of Man. — § 40.

Master to deliver Certificate of Produce, and declare to Certificate. — Before any goods shall be entered as being the produce of the said islands (if any benefit attach to such distinction), the master of the ship or vessel importing the same shall deliver to the collector or comptroller a certificate from the governor, lieutenant-governor, or commander-in-chief of the island from whence such goods were imported, that proof had been made, in manner required by law, that such goods were of the produce of such island, stating the quantity and quality of the goods, and the number and denomination of the packages containing the same; and such master shall also make and subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place where such goods were taken on board, and that the goods so imported are the same as are mentioned therein. — § 41.

Treasury may permit Produce of colonial Fisheries to be imported from Guernsey, &c. — It shall be lawful for the Lords Commissioners of his Majesty's Treasury, when and so long as they shall see fit, to permit any goods the produce of the British possessions or fisheries in North America, which shall have been legally imported into the islands of Guernsey or Jersey direct from such possessions, to be imported into the United Kingdom for home use direct from those islands, under such regulations as the said commissioners shall direct, any thing in the law of navigation to the contrary notwithstanding. — § 42.

Vessels with Stone from Guernsey, &c. not to be piloted. — No vessel arriving on the coast of England from Guernsey, Jersey, Alderney, Sark, or Man, wholly laden with stone the production thereof, shall be liable to be conducted or piloted by pilots appointed and licensed by the corporation of the Trinity House of Deptford Strond, any law, custom, or usage to the contrary notwithstanding. — § 43.

Fish, British taking and curing, and Lobsters and Turbots, free of Duty on Importation. — Fresh fish of every kind of British taking, and imported in British ships, and fresh lobsters and turbots, however taken or in whatever ship imported, and cured fish of every kind, of British taking and curing, imported in British ships, shall be imported free of all duties, and shall not be deemed to be included in any charge of duty imposed by any act hereafter to be made on the importation of goods generally: provided always, that before any cured fish shall be entered free of duty, as being of such taking and curing, the master of the ship importing the same shall make and subscribe a declaration before the collector or comptroller, that such fish was actually caught and taken in British ships, and cured by the crews of such ships, or by his Majesty's subjects. — § 44.

Certificate of Blubber, Train Oil, &c. British colonial taking. — Before any blubber, train oil, spermaceti oil, head matter, or whale fins, shall be entered as being the produce of fish or creatures living in the sea taken and caught wholly by his Majesty's subjects usually residing in some part of his Majesty's dominions, and imported from some British possession, the master of the ship importing the same shall deliver to the collector or comptroller a certificate under the hand of the proper officer of such British possession where such goods were taken on board, (or if no such officer be residing there, then a certificate under the hands of two principal inhabitants at the place of shipment,) notifying that oath had been made before him or them, by the shipper of such goods, that the same were the produce of fish or creatures living in the sea taken wholly by British vessels owned and navigated according to law; and such master shall also make and subscribe a declaration before the collector or comptroller, that such certificate was received by him at the place where such goods were taken on board, and that the goods so imported are the same as mentioned therein; and the importer of such goods shall also make and subscribe a declaration before the collector or comptroller, at the time of entry, that to the best of his knowledge and belief the same were the produce of fish or creatures living in the sea taken wholly by British vessels in manner aforesaid. — § 45.

Before entry of Blubber, &c. of British fishing, Master and Importer to make Declaration of the same. — Before any blubber, train oil, spermaceti oil, head matter, or whale fins, imported direct from the fishery, shall be entered as being the produce of fish or creatures living in the sea taken and caught wholly by the crews of ships cleared out from the United Kingdom, or from one of the islands of Guernsey, Jersey, Alderney, Sark, or Man, the master of the ship importing such goods shall make and subscribe a declaration, and the importer of such goods (to the best of his knowledge and belief) shall make and subscribe a declaration, that the same are the produce of fish or creatures living in the sea taken and caught wholly by the crew of such ship, or by the crew of some other ship (naming the ship) cleared out from the United Kingdom, or from one of the islands of Guernsey, Jersey, Alderney, Sark, or Man (stating which). — § 46.

Blubber from Greenland may be boiled, and entered as Oil imported, and be exported as such. — It shall be lawful upon the return of any ship from the Greenland seas or Davis's Straits to the United Kingdom with any blubber, being the produce of whales or other creatures living in the sea, for the importers thereof to cause the same to be boiled into oil at the port of importation, under the care and inspection of the proper officers of the customs; and the oil so produced shall be admitted to entry, and the duties be paid thereon, as if imported in that state, and such oil shall not afterwards, if the same come to be exported, be subject to duty of exportation as a manufacture of the United Kingdom. — § 47.

Importation direct. — No goods shall be deemed to be imported from any particular place unless they be imported direct from such place, and shall have been there laden on board the importing ship, either as the first shipment of such goods, or after the same shall have been actually landed at such place. — § 48.

Salvor may sell Goods sufficient to defray Salvage. — It shall be lawful for the owner or salvor of any property liable to the payment of duty saved from sea, and in respect of which any sum shall have been awarded under any law at the time in force, or in respect of which any sum shall have been paid or agreed to be paid by the owner thereof or his agent, to the salvors, to defray the salvage of the same, to sell so much of the property so saved as will be sufficient to defray the salvage so awarded, or such other sum so paid or agreed to be paid; and upon the production of an award made in execution of any such law to the commissioners of customs, or upon proof to the satisfaction of the said commissioners that such sum of money has been paid, or has been agreed to be paid, the said commissioners are hereby empowered and required to allow the sale of such property aforesaid, free from the payment of all duties, to the amount of such sum so awarded, paid, or agreed to be paid, or to the amount of such other sum as to the said commissioners shall seem just and reasonable: provided always, that if such owner or salvor shall be dissatisfied with any determination of the said commissioners as to the amount of such property to be sold duty free, it shall be lawful for such owner or salvor to refer any such determination of the said commissioners to the judgment and revision of the High Court of Admiralty; and in that case such sale shall be suspended until the decision of such court shall have been had thereon. — § 49.

Foreign Goods derelict, &c. to be subject to same Duties as on Importation. — All foreign goods, derelict, jetsam, flotsam, and wreck, brought or coming into the United Kingdom or into the Isle of Man, shall at all times be subject to the same duties as goods of the like kind imported into the United Kingdom respectively are subject to: provided always, that if, for ascertaining the proper amount of duty so payable, any question shall arise as to the origin of any such goods, the same shall be deemed to be of the growth,

produce, or manufacture of such country or place as the commissioners of customs shall upon investigation by them determine: provided also, that if any such goods be of such sorts as are entitled to allowance for damage, such allowance shall be made under such regulations and conditions as the said commissioners shall from time to time direct: provided also, that all such goods as cannot be sold for the amount of duty due thereon shall be delivered over to the lord of the manor or other person entitled to receive the same, and shall be deemed to be unenumerated goods, and shall be liable to and be charged with duty accordingly. — § 50.

Persons having such Goods in Possession, without Notice, liable to a Penalty of 100*l.* — If any person shall have possession of any such goods, either on land or within any port in the United Kingdom, and shall not give notice thereof to the proper officer of the customs within 24 hours after such possession, or shall not on demand pay the duties due thereon, or deliver the same into the custody of the proper officer of the customs, such person shall forfeit the sum of 100*l.*; and if any person shall remove or alter in quantity or quality any such goods, or shall open or alter any package containing any such goods, or shall cause any such act to be done, or assist therein, before such goods shall be deposited in a warehouse in the custody of the officers of the customs, every such person shall forfeit the sum of 100*l.*; and in default of the payment of the duties on such goods within 15 months from the time when the same were so deposited, the same may be sold in like manner and for the like purposes as goods imported may in such default be sold: provided always, that any lord of the manor having by law just claim to such goods, or if there be no such lord of the manor, then the person having possession of the same, shall be at liberty to retain the same in his own custody, giving bond, with 2 sufficient sureties, to be approved by the proper officer of the customs, in treble the value of such goods, for the payment of the duties thereon at the end of 1 year and 1 day, or to deliver such goods to the proper officer of the customs in the same state and condition as the same were in at the time of taking possession thereof. — § 51.

Goods under Excise Permit Regulations. — No goods which are subject to any regulations of excise shall be taken or delivered out of the charge of the officers of customs, (although the same may have been duly entered with them, and the full duties due thereon may have been paid,) until such goods shall also have been duly entered with the officers of excise, and permit granted by them for delivery of the same, nor unless such permit shall correspond in all particulars with the warrant of the officers of the customs: provided always, that such entry shall not be received by the officers of the excise, nor such permit granted by them, until a certificate shall have been produced to them of the particulars of the goods, and of the warrant for the same, under the hand of the officers of the customs who shall have the charge of the goods: provided also, that if upon any occasion it shall appear necessary, it shall be lawful for the proper officers of excise to attend the delivery of such goods by the officers of the customs, and to require that such goods shall be delivered only in their presence; and it shall be lawful for such officers of excise to count, measure, gauge, or weigh any such goods, and fully to examine the same, and to proceed in all respects relating to such goods in such manner as they shall be authorised or required by any act for the time being in force relating to the excise. — § 52.

Commissioners of Customs may direct certain Goods to be stamped. — The commissioners of customs are hereby authorised, after any goods have been entered at the Custom-house, and before the same shall be discharged by the officers, and delivered into the custody of the importer or his agent, to mark or stamp such goods in such manner and form as they may deem fit and proper for the security of the revenue, and by such officer as they shall direct and appoint for that purpose. — § 53.

Orders for stamping Goods to be published. — Every order made by the said commissioners of his Majesty's customs in respect of marking or stamping any goods shall be published in the *London Gazette* and *Dublin Gazette*. — § 54.

Penalty 200*l.* *on forging such Stamps.* — If any person or persons shall at any time forge or counterfeit any mark or stamp to resemble any mark or stamp which shall be provided and used for the purposes of this act, or shall forge or counterfeit the impression of any such mark or stamp, or shall sell or expose to sale, or have in his, her, or their custody or possession, any goods with a counterfeit mark or stamp, knowing the same to be counterfeit, or shall use or affix any such mark or stamp to any other goods required to be stamped as aforesaid other than that to which the same was originally affixed, all and every such offender or offenders, and his, her, or their aiders, abettors, and assistants, shall for every such offence forfeit and pay the sum of 200*l.* — § 55.

Times and Places for landing Goods. — No goods whatever (except diamonds, bullion, fresh fish of British taking and imported in British ships, and turbots and lobsters,) shall be unshipped from any ship arriving from parts beyond the seas, or landed or put on shore, but only on days not being Sundays or holidays, and in the day-time, (that is to say,) from the first day of September until the last day of March between sun-rising and sun-setting, and from the last day of March to the first day of September between the hours of 7 o'clock in the morning and 4 o'clock in the afternoon; nor shall any goods, except as aforesaid, be so unshipped or landed unless in the presence or with the authority of the proper officer of the customs; and such goods, except as aforesaid, shall be landed at one of the legal quays appointed by his Majesty for the landing of goods, or at some wharf, quay, or place appointed by the commissioners of the customs for the landing of goods by sufferance; and no goods, except as aforesaid, after having been unshipped shall be transhipped, or after having been put into any boat or craft to be landed shall be removed into any other boat or craft previously to their being duly landed, without the permission or authority of the proper officer of the customs. — § 56.

Goods to be unshipped, &c. at the Expense of Importer. — The unshipping, carrying, and landing of all goods, and the bringing of the same to the proper place after landing, for examination or for weighing, and the putting of the same into the scales, and the taking of the same out of and from the scales after weighing, shall be performed by or at the expense of the importer. — § 57.

Prohibitions and Restrictions absolute or modified. — The several sorts of goods enumerated or described in the Table following, denominated "A Table of Prohibitions and Restrictions inwards," shall either be absolutely prohibited to be imported into the United Kingdom, or shall be imported only under the restrictions mentioned in such Table, according as the several sorts of such goods are respectively set forth therein; (that is to say,)

A Table of Prohibitions and Restrictions Inwards.

A List of Goods absolutely prohibited to be imported.

Arms, ammunition, and utensils of war, by way of merchandise, except by licence from his Majesty, for furnishing his Majesty's public stores only.

Beef, fresh or corned or slightly salted.

Books; viz. first composed or written or printed in the United Kingdom, and printed or reprinted in any other country, imported for sale, except books not reprinted in the United Kingdom within 20 years; or being parts of collections, the greater parts of which had been composed or written abroad.

Cattle, great.

Clocks and watches of any metal, impressed with any mark or stamp appearing to be or to represent any legal British assay mark or stamp, or purporting by any mark or appearance to be of the manufacture of the United Kingdom, or not having the name and place of abode of some foreign maker abroad visible on the frame and also on the face, or not being in a complete state, with all the parts properly fixed in the case.

Coin; viz. false money, or counterfeit sterling.
silver, of the realm, or any money purporting to be such, not being of the established standard in weight or fineness.

Fish of foreign taking or curing, or in foreign vessels; except turbots and lobsters, stock-fish, live eels, anchovies, sturgeon, botargo, and caviare.

Gunpowder; except by licence from his Majesty, such licence to be granted for the furnishing his Majesty's stores only.

Lamb, malt, mutton, pork (fresh or corned or slightly salted), sheep.

Snuff-work.

Spirits from the Isle of Man.

Swine.

Tobacco stalks stripped from the leaf, whether manufactured or not.

Tobacco stalk flour.

List of Goods subject to certain Restrictions on Importation.

China, goods from, unless by the East India Company, and into the port of London, during the continuance of their exclusive privileges of trade.

East India; goods of places within the limits of the East India Company's charter, unless into such ports as shall be approved of by the Lords of the Treasury, and declared by order in council to be fit and proper for such importation.

Gloves of leather, unless in ships of 70 tons or upwards, and in packages containing 100 dozen pairs of such gloves.

Hides, skins, horns, or hoofs, or any other part of cattle or beast, his Majesty may by order in council prohibit, in order to prevent any contagious distemper.

Parts of articles; viz. any distinct or separate part of any article not accompanied by the other part or all the other parts of such article, so as to be complete and perfect, if such article be subject to duty according to the value thereof.

Silk; manufactures of silk, being the manufactures of Europe, unless into the port of London, or into the port of Dublin direct from Bordeaux, or into the port of Dover direct from Calais, and unless in a ship or vessel of 70 tons or upwards, or into the port of Dover in a vessel of the burden of 60 tons at least, with licence of the commissioners of the customs.

Spirits, not being perfumed or medicinal spirits; viz. all spirits, unless in ships of 70 tons or upwards.

rum of and from the British plantations, if in casks, unless in casks containing not less than 20 gallons.

all other spirits, if in casks, unless in casks containing not less than 40 gallons.

Tea; unless from the place of its growth, and by the East India Company, and into the port of London, during the continuance of their exclusive privileges of trade.

Tobacco and snuff; viz. unless in a ship of the burden of 120 tons or upwards.

tobacco of and imported from the state of Colombia, and made up in rolls, unless in packages containing at least 320 lbs. weight of such rolls.

Tobacco and snuff — *continued.*

Segars, unless in packages containing 100 lbs. weight of segars.

all other tobacco and snuff, unless in hogsheads, casks, chests, or cases, each of which shall contain of nett tobacco or snuff at least 100 lbs. weight if from the East Indies, or 450 lbs. weight if from any other place, and not packed in bags or packages within any such hogshead, cask, chest, or case, nor separated nor divided in any manner whatever, except tobacco of the dominions of the Turkish empire, which may be packed in inward bags or packages, or separated or divided in any manner within the outward package, provided such outward package be a hogshead, cask, chest, or case, and contain 450 lbs. nett at least.

and unless the particular weight of tobacco or snuff in each hogshead, cask, chest, or case, with the tare of the same, be marked thereon.

and unless into the ports of London, Liverpool, Bristol, Lancaster, Cowes, Falmouth, Whitehaven, Hull, Port Glasgow, Greenock, Leith, Newcastle-upon-Tyne, Plymouth, Belfast, Cork, Drogheda, Dublin, Galway, Limerick, Londonderry, Newry, Sligo, Waterford, and Wexford.

or into some other port or ports which may hereafter be appointed for such purpose by the Lords Commissioners of his Majesty's Treasury; such appointments in Great Britain being published in the *London Gazette*, and such appointments in Ireland being published in the *Dublin Gazette*.

but any ship wholly laden with tobacco may come into the ports of Cowes or Falmouth to wait for orders, and there remain 14 days, provided due report of such ship be made by the master with the collector or comptroller of such port.

And all goods from the Isle of Man, except such as be of the growth, produce, or manufacture thereof.

Forfeiture. — And if any goods shall be imported into the United Kingdom contrary to any of the prohibitions or restrictions mentioned in such Table in respect of such goods, the same shall be forfeited. — § 58.

But Goods may be warehoused for Exportation only, although prohibited. — Any goods, of whatsoever sort, may be imported into the United Kingdom to be warehoused under the regulations of any act in force for the time being for the warehousing of goods, without payment of duty at the time of the first entry thereof, or notwithstanding that such goods may be prohibited to be imported into the United Kingdom to be used therein, except the several sorts of goods enumerated or described in manner following; (that is to say,) goods prohibited on account of the package in which they are contained, or the tonnage of the ship in which they are laden; tea and goods from China in other than British ships, or by other persons than the East India Company during the continuance of their exclusive privileges of trade; gunpowder, arms, ammunition, or utensils of war; dried or salted fish, not being stock-fish; infected hides, skins, horns, hoofs, or any other part of any cattle or beast; counterfeit coin or tokens; books first composed or written or printed and published in the United Kingdom, and reprinted in any other country or place; copies of prints first engraved, etched, drawn, or designed in the United Kingdom; copies of casts of sculptures or models first made in the United Kingdom; clocks or watches, being such as are prohibited to be imported for home use. — § 59.

Goods to be entered to be warehoused for Exportation only. — If by reason of the sort of any goods, or of the place from whence, or the country, or navigation of the ship in which any goods have been imported, they be such or be so imported as that they may not be used in the United Kingdom, they shall not be entered except to be warehoused, and it shall be declared upon the entry of such goods that they are entered to be warehoused for exportation only. — § 60.

Entry Outwards.

Goods not to be shipped till Entry of Ship and Entry of Goods, and Cocket granted; nor till cleared. — No goods shall be shipped, or waterborne to be shipped, on board any ship in any port or place in the United Kingdom or in the Isle of Man, to be carried to parts beyond the seas, before due entry outwards of such ship and due entry of such goods shall have been made, and cocket granted, nor before such goods shall have been duly cleared for shipment in manner herein-after directed; and no stores shall be shipped for the use of any such ship bound to parts beyond the seas, nor shall any goods be deemed or admitted to be such stores, except such as shall be borne upon the victualling bill duly granted for such ship; and no goods shall be so shipped, or waterborne to be so shipped, except at such times and places, and in such manner, and by such persons, and under the care of such officers, as is and are herein-after directed; and all goods and stores which shall be shipped, or be waterborne to be shipped contrary hereto shall be forfeited. — § 61.

Ships to be cleared, or Master to forfeit 100*l.* — No ship on board of which any goods or stores shall have been shipped in any port in the United Kingdom or in the Isle of Man, for parts beyond the seas, shall depart from such port until such ship shall have been duly cleared outwards for her intended voyage, in manner herein-after directed, under forfeiture of the sum of 100*l.* by the master of such ship. — § 62.

Victualling Bill for Stores. — The master of every ship which is to depart from any port in the United Kingdom or in the Isle of Man, for parts beyond the seas, shall, upon due application made by him, receive from the searcher a victualling bill for the shipment of such stores as he shall require, and as shall be allowed by the collector and comptroller, for the use of such ship, according to the voyage upon which she is about to depart; and no articles taken on board any ship shall be deemed to be stores except such as shall be borne upon the victualling bill for the same. — § 63.

Master to deliver Certificate of Clearance of last Voyage, and to make Entry Outwards. — The master of every ship in which any goods are to be exported from the United Kingdom or from the Isle of Man to parts beyond the seas shall, before any goods be taken on board, deliver to the collector or comptroller a certificate from the proper officer of the clearance inwards or coastwise of such ship of her last voyage, specifying what goods, if any, have been reported inwards for exportation, and shall also deliver to the collector or comptroller an account, signed by the master or his agent, of the entry outwards of such ship for her intended voyage, setting forth the name and tonnage of the ship, the name of the place to which she belongs if a British ship, or of the country if a foreign ship, the name of the master, and the name or names of the place or places for which she is bound, if any goods are to be shipped for the same, and the name of the place in such port at which she is to take in her lading for such voyage; and if such ship shall have commenced her lading at some other port, the master shall state the name of any port at which any goods have been laden, and shall produce a certificate from the searcher that the cockets for such goods have been delivered to him; and the particulars of such account shall be written and arranged in such form and manner as the collector and comptroller shall require; and such account shall be the entry outwards of such ship, and shall be entered in a book to be kept by the collector [illegible] nation of

all parties interested; and if any goods be taken on board any ship before she shall have been entered outwards, the master shall forfeit the sum of 100*l.*: provided always, that where it shall become necessary to lade any heavy goods on board any ship before the whole of the inward cargo is discharged, it shall be lawful for the collector and comptroller to issue a stiffening order for that purpose, previous to the entry outwards of the ship.— § 64.

Bill of the Entry to be delivered. — The person entering outwards any goods to be exported to parts beyond the seas, from any port in the United Kingdom or in the Isle of Man, shall deliver to the collector or comptroller a bill of the entry thereof, fairly written in words at length, expressing the name of the ship and of the master, and of the place to which the goods are to be exported, and of the person in whose name the goods are to be entered, and the quantities and proper denominations or descriptions of the several sorts of goods, and shall pay down any duties which may be due upon the exportation of any such goods; and such person shall also deliver at the same time 1 or more duplicates of such bill, in which all sums and numbers may be expressed in figures; and the particulars to be contained in such bill shall be written and arranged in the form and manner, and the number of duplicates shall be such as the collector and comptroller shall require; and thereupon the collector and comptroller shall cause a cocket to be written for such goods, making it known that such goods have been so entered; and every cocket shall be signed by such collector and comptroller, and be delivered to the person who shall have made such entry, and such person shall keep and be responsible for the proper use of the same. — § 65.

Goods for Drawback or Bounty. — If any drawback or bounty be allowable upon the exportation of any such goods, or any duty be payable thereon, or any exemption from duty claimed, or if any such goods be exportable only according to some particular rule or regulation, or under some restriction or condition, or for some particular purpose or destination, such goods shall be entered and cleared for shipment by such denominations or descriptions as are used, mentioned, or referred to in the granting of such drawback or bounty, or in the levying of such duty, or granting such exemption, or in the directing of such rules, regulations, restrictions, conditions, purpose, or destination; and if the goods in such entry are charged to pay duty according to the value thereof, such value shall be stated in the entry, and shall be affirmed by the declaration of the exporter or his known agent, to be made upon the entry, and attested by his signature; and if any person shall make such declaration, not being the exporter of such goods, nor his agent duly authorised by him, such person shall forfeit the sum of 100*l.*; and such declaration shall be made in manner and form following, and shall be binding upon the person making the same; (that is to say),

"I, *A. B.* of [*place of abode*] do hereby declare, that I am the exporter of the goods mentioned in this entry, [*or*, that I am duly authorised by him,] and I do enter the same at the value of ————. Witness my hand the ———— day of ————. *A. B.*"— § 66.

Goods undervalued detained. — If upon examination it shall appear to the officers of the customs that such goods are not valued according to the true value thereof, the same may be detained, and (within 2 days) taken and disposed of for the benefit of the Crown, in like manner as is herein-before provided in respect of goods imported, except that no sum in addition to the amount of the valuation and the duties paid shall be paid to the exporter or proprietor of the goods. — § 67.

For Drawback, or from Warehouse, or Duties to be first paid. — The person intending to enter outwards any foreign goods for drawback, at any other port than that at which the duties inwards on such goods had been paid, shall first deliver to the collector or comptroller of the port where the duties on such goods were paid, 2 or more bills, as the case may require, of the particulars of the importation of such goods, and of the entry outwards intended to be made; and thereupon such collector and comptroller, finding such bills to agree with the entry inwards, shall write off such goods from the same, and shall issue a certificate of such entry, with such particulars thereof as shall be necessary for the computation of the drawback allowable on such goods, and setting forth in such certificate the destination of the goods, and the person in whose name they are to be entered for exportation, and also the name of such other port; and such certificate, together with 2 or more bills of the same, as the case may require, in which all sums and numbers may be expressed in figures, being delivered to the collector or comptroller of the port from which the goods are to be exported, shall be the entry outwards of such goods; and such collector and comptroller shall thereupon cause a cocket to be written and delivered for such goods, in manner herein-before directed. — § 68.

Coals Export Bond to Isle of Man and British Possessions. — No cocket shall be granted for the exportation of any coals to the Isle of Man, or to any British possession, until the exporter thereof shall have given security by bond in a penal sum of 40*s.* the chaldron, with condition that the same shall be landed at the place for which they shall be exported, or otherwise accounted for to the satisfaction of the commissioners of the customs; and also with condition to produce (within such time as the said commissioners shall require, to be expressed in such bond,) a certificate of the landing of such coals at such place, under the hand of the collector or comptroller or other proper officer at such place: provided always, that the bond so to be given in respect of coals shall not be liable to any duty of stamps. — § 69.

Clearance of Goods.

Packages to be indorsed on Cocket. — Before any part of the goods for which any cocket shall have been granted shall be shipped or waterborne to be shipped, the same shall be duly cleared for shipment with the searcher; and before any goods be cleared for shipment, the particulars of the goods for each clearance shall be indorsed on such cocket, together with the number and denomination or description of the respective packages containing the same; and in the margin of each such indorsement shall be delineated the respective marks and numbers of such packages; and to each such indorsement shall be subjoined, in words at length, an account of the total quantities of each sort of goods intended in such indorsement, and the total number of each sort of package in which such goods are contained, distinguishing such goods, if any, as are to be cleared for any bounty or drawback of excise or customs, and also such goods, if any, as are subject to any duty on exportation, or entitled to any exemption from such duty, and also such goods, if any, as can only be exported by virtue of some particular order or authority, or under some particular restriction or condition, or for some particular purpose or destination; and all goods shipped or waterborne to be shipped, not being duly cleared as aforesaid, shall be forfeited. — § 70.

Cocket indorsed, &c. — The person clearing such goods for shipment shall upon each occasion produce the cocket so indorsed to the searcher, and shall also deliver a shipping bill or copy of such indorsement, referring by names and date to the cocket upon which such indorsement is made, and shall obtain the order of the searcher for the shipment of such goods; and the particulars to be contained in such indorsement and in such shipping bill shall be written and arranged in such form and manner as the collector and comptroller shall require. — § 71.

Coals brought coastwise may be exported without landing. — If any coals shall have been brought coastwise from one port of the United Kingdom to another, and the master shall be minded to proceed with such coals, or any part of them, to parts beyond the seas, it shall be lawful for such master to enter such ship and such coals outwards for the intended voyage, without first landing the coals intended for exportation, provided the officers of the customs shall be satisfied that the quantity of coals left on board does not exceed the quantity so entered outwards. — § 72.

Account of Value to be delivered to the Searcher. — Upon the clearance for shipment of any goods, the produce or manufacture of the United Kingdom, not liable to any export duty, an account, containing an accurate specification of the quantity, quality, and value of such goods, together with a declaration to the truth of the same, signed by the exporter or his known agent, shall be delivered to the searcher by the

person clearing such goods; and if such declaration be false, the person signing the same shall forfeit the sum of 20*l.*; and it shall be lawful for the searcher to call for the invoice, bills of parcels, and such other documents relating to the goods, as he may think necessary for ascertaining the true value of the same: provided always, that if such exporter or agent shall make and subscribe a declaration before the collector or comptroller, that the value of the goods cannot be ascertained in time for the shipment of the same, and such declaration shall be delivered to the searcher, at the time of clearance, a further time of 3 months shall be allowed for the delivery of such separate shipping bill, on failure whereof such exporter or agent shall forfeit the sum of 20*l.* — § 73.

Goods for Excise Drawback. — No drawback of excise shall be allowed upon any goods so cleared, unless the person intending to claim such drawback shall have given due notice to the officer of excise, in form and manner required by any law in force relating to the excise, and shall have obtained, and have produced to the searcher, at the time of clearing such goods, a proper document, under the hand of the officer of excise, containing the necessary description of the goods for which such drawback is to be claimed; and if the goods to be cleared and shipped under the care of the searchers shall, upon examination, be found to correspond in all respects with the particulars of the goods contained in such document, and such goods shall be duly shipped and exported, the searcher shall, if required, certify such shipment upon such document, and shall transmit the same to the officer of excise. — § 74.

Officer of Excise may attend Examination. — It shall be lawful for the officer of excise, if he see fit, to attend and assist at such examination, and to mark or seal the packages, and to keep joint charge of the same, together with the searcher, until the same shall have been finally delivered by him into the sole charge of the searcher, to be shipped and exported under his care. — § 75.

Goods for Duty, Bounty, or Drawback, &c. brought for Shipment. — If any goods which are subject to any duty or restriction, in respect of exportation, or if any goods, which are to be shipped for any drawback or bounty, shall be brought to any quay, wharf, or other place, to be shipped for exportation, and such goods shall not agree with the indorsement on the cocket, or with the shipping bill, the same shall be forfeited; and if any goods prohibited to be exported be found in any package brought as aforesaid, such package and every thing contained therein shall be forfeited. — § 76.

Searcher may open any Package; but if correct, must repack. — It shall be lawful for the searcher to open all packages, and fully to examine all goods shipped or brought for shipment at any place in the United Kingdom or in the Isle of Man; and if the goods so examined shall be found to correspond in all respects with the cocket and clearance purporting to be for the same, such goods shall be repacked at the charge of such searcher, who may be allowed such charge by the commissioners of the customs, if they shall see fit so to do. — § 77.

Clearance of Ship.

Content to be delivered to Searcher, &c. — Before any ship shall be cleared outwards at any port in the United Kingdom or in the Isle of Man, for parts beyond the seas, with any goods shipped on board the same in such port, the master shall deliver a content of such ship to the searcher, setting forth the name and tonnage of such ship, and the place or places of her destination, and the name of the master, and also an account of the goods shipped on board, and of the packages containing such goods, and of the marks and numbers upon such packages, and a like account of the goods on board, if any, which had been reported inwards for exportation in such ship, so far as any of such particulars can be known by him; and also, before the clearance of such ship, the cockets, with the indorsements and clearances thereon for the goods shipped, shall be finally delivered by the respective shippers of such goods to the searcher, who shall file the same together, and shall attach with a seal a label to the file, showing the number of cockets contained in the file, and shall compare the particulars of the goods in the cockets with the particulars of the goods in such content, and shall attest the correctness thereof by his signature on the label, and on the content; and the master of the ship shall make and sign a declaration before the collector or comptroller to the truth of such content, and shall also answer to the collector or comptroller such questions concerning the ship, the cargo, and the intended voyage, as shall be demanded of him; and thereupon the collector or comptroller shall clear such ship for her intended voyage, and shall notify such clearance, and the date thereof, upon the content, and upon the label to the file of cockets, and upon the victualling bill, and also in the book of ships' entries outwards, for the information of all parties interested, and shall transmit the content, and the cockets, and the victualling bill to the searcher; and the particulars to be contained in such content shall be written and arranged in such form and manner as the collector and comptroller shall require. — § 78.

File of Cockets, &c. delivered to Master. — The file of cockets and the victualling bill shall thereupon be delivered by the searcher to the master of such ship, at such station within the port and in such manner as shall be appointed by the commissioners of his Majesty's customs for that purpose; and such file of cockets and victualling bill, so delivered, shall be kept by the master of such ship as the authority for departing from the port with the several parcels and packages of goods and of stores on board, so far as they shall agree with the particulars in the indorsements on such cockets or with such victualling bill. — § 79.

In Ballast. — If any ship is to depart in ballast from the United Kingdom or from the Isle of Man for parts beyond the seas, having no goods on board except the stores of such ship borne upon the victualling bill, or any goods reported inwards for exportation in such ship, the master of such ship shall, before her departure, answer to the collector or comptroller such questions touching her departure and destination as shall be demanded of him; and thereupon the collector or comptroller shall clear such ship in ballast, and shall notify such clearance and the date thereof on the victualling bill, and also in the book of ships' entries outwards, for the information of all parties interested; and such victualling bill shall be kept by the master of such ship as the clearance of the same. — § 80.

Part of former Cargo reported for Exportation. — If there be on board any ship any goods of the inward cargo which were reported for exportation in the same, the master shall, before clearance outwards of such ship from any port in the United Kingdom or in the Isle of Man, deliver to the searcher a copy of the report inwards of such goods, certified by the collector and comptroller; and such copy, being found to correspond with the goods so remaining on board, shall be the authority to the searcher to pass such ship with such goods on board; and being signed by the searcher, and filed with the cockets, shall be the clearance of the ship for those goods. — § 81.

If any Passengers, Master may enter Baggage in his Name. — If any passengers are to depart in any ship from the United Kingdom or from the Isle of Man for parts beyond the seas, it shall be lawful for the master of such ship to pass an entry and to receive a cocket in his name for the necessary personal baggage of all such passengers, and duly to clear such baggage for shipment in their behalf, stating in such clearances the particulars of the packages and the names of the respective passengers; and if such ship is to take no other goods than the necessary personal baggage of passengers actually going the voyage, it shall be lawful for such master to enter such ship outwards in ballast for passengers only; and if no other goods than such baggage duly entered and cleared be taken on board such ship, the same shall be deemed to be a ship in ballast, notwithstanding such baggage, and shall be described in the clearance, on the content, and on the label to the cocket or cockets, and on the victualling bill, and in the book of ships' entries, as a ship cleared in ballast, except as to the necessary personal baggage of passengers going the voyage. — § 82.

Master may enter Goods for private Use of Self and Crew. — If the master and crew of any foreign ship which is to depart in ballast from the United Kingdom for parts beyond the seas, shall be desirous to take on board chalk rubbish by way of ballast, or to take with them for their private use any small quantities of goods of British manufacture, it shall be lawful for such master, without entering such goods, to pass

an entry in his name, and receive a cocket free of any export duty for all such goods, under the general denomination of British manufactures not prohibited to be exported, being for the use and privilege of the master and crew, and not being of greater value than in the proportion of 20*l.* for the master, and 10*l.* for the mate, and 5*l.* for each of the crew, and stating that the ship is in ballast; and the master shall duly clear such goods for shipment in behalf of himself and crew, stating in such clearances the particulars of the goods and packages, and the names of the crew who shall jointly or severally take any of such goods under this privilege; and such ship shall be deemed to be a ship in ballast, and be cleared as such, and without a content, notwithstanding such goods or such cocket or cockets; and such clearance shall be notified by the collector or comptroller on the label to the cocket or cockets, and on the victualling bill, and in the book of ships' entries, as a clearance in ballast, except as to the privilege of the master and crew. — § 83.

Officers may board any Ship after Clearance. — It shall be lawful for the officers of the customs to go on board any ship after clearance outwards, within the limits of any port in the United Kingdom or in the Isle of Man, or within 4 leagues of the coast thereof, and to demand the file of cockets and the victualling bill, and if there be any goods or stores on board not contained in the indorsements on the cockets, nor in the victualling bill, such goods or stores shall be forfeited; and if any goods contained in such indorsements be not on board, the master shall forfeit the sum of 20*l.* for every package or parcel of goods contained in such indorsements and not on board; and if any cocket be at any time falsified, the person who shall have falsified the same, or who shall have wilfully used the same, shall forfeit the sum of 100*l.* — § 84.

Ships to bring to at Stations. — Every ship departing from any port in the United Kingdom or in the Isle of Man shall bring to at such stations within the port as shall be appointed by the commissioners of his Majesty's customs for the landing of officers from such ships, or for further examination previous to such departure. — § 85.

Debenture Goods.

Entry in Name of real Owner. — No drawback or bounty shall be allowed upon the exportation from the United Kingdom of any goods, unless such goods shall have been entered in the name of the person who was the real owner thereof at the time of entry and shipping, or of the person who had actually purchased and shipped the same, in his own name and at his own liability and risk, on commission, according to the practice of merchants, and who was and shall have continued to be entitled in his own right to such drawback or bounty, except in the cases herein-after provided for. — § 86.

Declaration to Exportation, and to Property, and to Right to Drawback or Bounty. — Such owner or commission merchant shall make and subscribe a declaration upon the debenture that the goods mentioned therein have been actually exported, and have not been relanded, and are not intended to be relanded in any part of the United Kingdom, nor in the Isle of Man (unless entered for the Isle of Man), nor in the islands of Faro or Ferro, and that he was the real owner thereof at the time of entry and shipping, or that he had purchased and shipped the said goods in his own name and at his own liability and risk, on commission, as the case may be, and that he was and continued to be entitled to the drawback or bounty thereon in his own right: provided always, that if such owner or merchant shall not have purchased the right to such drawback or bounty, he shall declare under his hand upon the entry and upon the debenture the person who is entitled thereto, and the name of such person shall be stated in the cocket and in the debenture; and the receipt of such person on the debenture shall be the discharge for such drawback or bounty. — § 87.

Agent may pass Entry, and receive Drawback, and make the Declaration, &c. — If such owner or merchant shall be resident in some part of the United Kingdom, being more than 20 miles from the custom-house of the port of shipment, he may appoint any person to be his agent to make and pass his entry, and to clear and ship his goods, and to receive for him the drawback or bounty payable on his debenture, if payable to him, provided the name of such agent and the residence of such owner or merchant be subjoined to the name of such owner or merchant in the entry and in the cocket for such goods; and such agent, being duly informed, shall make declaration upon the entry, if any be necessary, and also upon the debenture, in behalf of such owner or merchant, to the effect before required of such owner or merchant, and shall answer such questions touching his knowledge of the exportation of such goods and the property therein, and of the right to the drawback or bounty, as shall be demanded of him by the collector or comptroller; and if any such goods be exported by any corporation or company trading by a joint stock, it shall be lawful for them to appoint any person to be their agent for the like purposes and with the like powers to act in their behalf. — § 88.

Property of Persons abroad. — If any goods which are to be exported for drawback be the property of any person residing abroad, having been consigned by the owner thereof to some person as his agent residing in the United Kingdom, to be exported through the same to parts beyond the seas, by such agent, upon account of such owner, it shall be lawful for such person (being the consignee by whom and in whose name the duties inwards on such goods had been paid, or his legal representative), in like manner, as agent for such owner, to enter, clear, and ship such goods for him, and upon like conditions to receive for him the drawback payable thereon. — § 89.

Shipment within 3 Years, and Payment within 2 Years. — No drawback shall be allowed upon the exportation of any goods unless such goods be shipped within 3 years after the payment of the duties inwards thereon, and no debenture for any drawback or bounty allowed upon the exportation of any goods shall be paid after the expiration of 2 years from the date of the shipment of such goods, and no drawback shall be allowed upon any goods which by reason of damage or decay shall have become of less value for home use than the amount of such drawback; and all goods so damaged which shall be cleared for any drawback shall be forfeited, and the person who caused such goods to be so cleared shall forfeit the sum of 200*l.*, or treble the amount of the drawback in such case, at the election of the commissioners of the customs. — § 90.

Issuing and passing Debenture. — For the purpose of computing and paying any drawback or bounty payable upon any goods duly entered, shipped, and exported, a debenture shall, in due time after such entry, be prepared by the collector and comptroller, certifying in the first instance the entry outwards of such goods; and so soon as the same shall have been duly exported, and a notice containing the particulars of the goods shall have been delivered by the exporter to the searcher, the shipment and exportation thereof shall be certified to the collector and comptroller, upon such debenture, by the searcher, and the debenture shall thereupon be computed and passed with all convenient despatch, and be delivered to the person entitled to receive the same. — § 91.

Certificate of landing in Isle of Man. — No drawback or bounty shall be allowed for any goods exported from the United Kingdom to the Isle of Man, until a certificate shall be produced from the collector and comptroller of the customs of the Isle of Man of the due landing of such goods. — § 92.

Press-packing, and Declaration of Packer. — No drawback or bounty shall be allowed for any goods exported from the United Kingdom in bales cleared as being press packed, unless the quantities and qualities of the goods in each of such bales shall be verified by the master packer thereof, or, in case of unavoidable absence, by the foreman of such packer, having knowledge of the contents of the bales, by declaration made and subscribed upon the cocket before the collector or comptroller; or if such packer reside more than 10 miles from the port, then by declaration made and subscribed upon an account of such goods, before a magistrate or justice of the peace for the county or place where such packer shall reside; and if such bales be not cleared as being press-packed, then the searcher, having opened any such bale, shall not be required to repack the same at his charge. — § 93.

Licensed Lightermen, &c. — No goods cleared for drawback or bounty, or from the warehouse, shall be carried waterborne, to be put on board any ship for exportation from the United Kingdom, by any person, unless such persons shall be authorised for that purpose by licence under the hands of the commissioners of the customs; and before granting such licence, it shall be lawful for the said commissioners to require such security by bond for the faithful and incorrupt conduct of such person as they shall deem necessary; and after granting such licence it shall be lawful for the said commissioners to revoke the same, if the person to whom the same shall have been granted shall be convicted of any offence against the laws relating to the customs or excise: provided always, that all such licences which shall be in force at the time of the commencement of this act shall continue in force as if the same had been afterwards granted under the authority of this act. — § 94.

Warehouse or Debenture Goods not exported. — If any goods which have been taken from the warehouse to be exported from the same, or any goods which have been cleared to be exported for any drawback or bounty, shall not be duly exported to parts beyond the seas, or shall be relanded in any part of the United Kingdom (such goods not having been duly relanded or discharged as short-shipped under the care of the proper officers), or shall be landed in the islands of Faro or Ferro, or shall be carried to any of the islands of Guernsey, Jersey, Alderney, Sark, or Man (not having been duly entered, cleared, and shipped to be exported directly to such island), the same shall be forfeited, together with the ship from or by which the same had been so relanded, landed, or carried, and any other ship, vessel, boat, or craft which may have been used in so relanding, landing, or carrying such goods; and any person by whom or by whose orders or means such goods shall have been so taken or cleared, or so relanded, landed, or carried, shall forfeit a sum equal to treble the value of such goods. — § 95.

Drawback of Duties on Wine allowed for Officers in the Navy. — Drawback of the whole of the duties of customs shall be allowed for wine intended for the consumption of officers of his Majesty's navy, on board such of his Majesty's ships in actual service as they shall serve in, not exceeding the quantities of wine, in any 1 year, for the use of such officers, herein-after respectively mentioned; (that is to say,)

	Gallons.		*Gallons.*
For every admiral - - -	1,260	For every captain of the third, fourth, and fifth rate	420
— vice-admiral - -	1,050	— captain of an inferior rate - -	210
— rear-admiral - - -	840	— lieutenant, and other commanding officer, and for every marine officer - -	105
— captain of the first and second rate -	630		

provided always, that such wine be shipped only at one of the ports herein-after mentioned; (that is to say,) London, Rochester, Deal, Dover, Portsmouth, Plymouth, Yarmouth, Falmouth, Belfast, Dublin, Cork, Leith, or Glasgow. — § 96.

Persons entering Wine for Drawback to declare the Name and Rank of Officer claiming same. — The person entering such wine, and claiming the drawback for the same, shall state in the entry and declare on the debenture the name of the officer for whose use such wine is intended, and of the ship in which he serves; and such wine shall be delivered into the charge of the officers of the customs at the port of shipment, to be secured in the king's warehouse until the same shall be shipped under their care; and such officers having certified upon the debenture the receipt of the wine into their charge, the debenture shall be computed and passed, and be delivered to the person entitled to receive the same. — § 97.

Officers leaving the Service, &c. such Wine permitted to be transferred to others. — If any such officer shall leave the service or be removed to another ship, it shall be lawful for the officers of the customs of any of the ports before mentioned to permit the transfer of any such wine from one officer to another, as part of his proportion, whether on board the same ship or another, or the transhipment from one ship to another for the same officer, or the relanding and warehousing for future reshipment; and it shall also be lawful for the officers of customs at any port to receive back the duties for any of such wine, and deliver the same for home use: provided always, that if any of such wine be not laden on board the ship for which the same was intended, or be unladen from such ship without permission of the proper officer of the customs, the same shall be forfeited. — § 98.

Pursers of his Majesty's Ships of War may ship Tobacco for Use of Crew free of Duty, on giving Bond. — It shall be lawful for the purser of any of his Majesty's ships of war in actual service to enter and ship at the ports of Rochester, Portsmouth, or Plymouth, in the proportions herein-after mentioned, any tobacco there warehoused in his name or transferred into his name, for the use of the ship in which he shall serve; provided such purser shall deliver to the collector or comptroller of such port a certificate from the captain of such ship, stating the name of the purser and the number of men belonging to the ship, and shall also give bond, with one sufficient surety, in treble the duties payable on the tobacco, that no part thereof shall be relanded in the United Kingdom without leave of the officers of the customs, or be landed in either of the islands of Guernsey, Jersey, Alderney, Sark, or Man. — § 99.

Purser removed from one Ship to another may tranship Tobacco with Permission of Collector. — If any purser shall be removed from one ship to another, it shall be lawful for the collector and comptroller of the port where such ship shall be to permit the transhipment of the remains of any such tobacco for the use of such other ship, upon due entry of such tobacco by such purser, setting forth the time when and the port at which such tobacco was first shipped; and if any such ship shall be paid off, it shall be lawful for the collector and comptroller of any port where such ship shall be paid off to permit the remains of any such tobacco to be landed, and to be entered by the purser of such ship, either for payment of duties, or to be warehoused for the term of 6 months, for the supply of some other such ship, in like manner as any tobacco may be warehoused and supplied at either of the ports before mentioned, or for payment of all duties within such 6 months: provided always, that all tobacco warehoused for the purpose of so supplying his Majesty's ships of war shall be subject to the provisions of this act made for the warehousing of tobacco generally, as far as the same are applicable, and are not expressly altered by any of the provisions herein particularly made. — § 100.

Quantity of Tobacco not to exceed, &c. — No greater quantity of such tobacco shall be allowed to any ship of war than 2 lbs. by the lunar month for each of the crew of such ship, nor shall any greater quantity be shipped at any one time than sufficient to serve the crew of such ship for 6 months, after such rate of allowance; and the collector and comptroller of the port at or from which any such tobacco shall be supplied to any such ship, or landed from any such ship, or transferred from one such ship to another, shall transmit a particular account thereof to the commissioners of his Majesty's customs, in order that a general account may be kept of all the quantities supplied to and consumed on board each of such ships under the allowances before granted. — § 101.

Times and Places for shipping Goods. — No goods shall be put off from any wharf, quay, or other place, or shall be waterborne in order to be exported, but only on days not being Sundays or holidays, and in the day-time; (that is to say,) from the first day of September until the last day of March, betwixt sunrising and sun-setting, and from the last day of March until the first day of September, between the hours of 7 of the clock in the morning and 4 of the clock in the afternoon; nor shall any such goods be then put off or waterborne for exportation unless in the presence or with the authority of the proper officer of the customs, nor except from a legal quay appointed by his Majesty, or at some wharf, quay, or place appointed by the commissioners of his Majesty's customs for the shipping of such goods by sufferance. — § 102.

Penalty for exporting prohibited Goods. — If any goods liable to forfeiture for being shipped for exportation shall be shipped and exported without discovery by the officers of the customs, the person or persons who shall have caused such goods to be exported shall forfeit double the value of such goods. — § 103.

Prohibitions Outwards.

Prohibitions and Restrictions absolute or modified. — The several sorts of goods enumerated or described in the Table following (denominated "A Table of Prohibitions and Restrictions Outwards") shall be either absolutely prohibited to be exported from the United Kingdom, or shall be exported only under the restrictions mentioned in such Table, according as the several sorts of such goods are respectively set forth therein; (that is to say,)

A Table of Prohibitions and Restrictions Outwards.

Clocks and watches; viz. any outward or inward box, case, or dial plate, of any metal, without the movement in or with every such box, case, or dial plate, made up fit for use, with the clock or watchmaker's name engraven thereon.

Lace; viz. any metal inferior to silver which shall be spun, mixed, wrought, or set upon silk, or which shall be gilt, or drawn into wire, or flatted into plate, and spun or woven, or wrought into or upon, or mixed with lace, fringe, cord, embroidery, tambour work, or buttons, made in the gold or silver lace manufactory, or set upon silk, or made into button spangles, or pearl or any other materials made in the gold or silver lace manufactory, or which shall imitate or be meant to imitate such lace, fringe, cord, embroidery, tambour work, or buttons; nor shall any person export any copper, brass, or other metal which shall be silvered or drawn into wire, or flatted into plate, or made into button spangles, or pearl or any other materials used in the gold or silver lace manufactory, or in imitation of such lace, fringe, cord, embroidery, tambour work, or buttons, or of any of the materials used in making the same, and which shall hold more or bear a greater proportion than 3 pennyweights of fine silver to the pound avoirdupois of such copper, brass, or other metals.

any metal inferior to silver, whether gilt, silvered, stained, or coloured, or otherwise, which shall be worked up or mixed with gold or silver in any manufacture of lace, fringe, cord, embroidery, tambour work, or buttons.

Tools and utensils; viz. any machine, engine, tool, press, paper, utensil, or instrument used in or proper for the preparing, working, pressing, or finishing of the woollen, cotton, linen, or silk manufactures of this kingdom, or any other goods wherein wool, cotton, linen, or silk is used, or any part of such machines, engines, tools, presses, paper, utensils, or instruments, or any model or plan thereof, or any part thereof; except wool cards or stock cards not worth above 4s. per pair, and spinners' cards not worth above 1s. 6d. per pair, used in the woollen manufactures.

blocks, plates, engines, tools, or utensils commonly used in or proper for the preparing, working up, or finishing of the calico, cotton, muslin, or linen printing manufactures, or any part of such blocks, plates, engines, tools, or utensils.

rollers, either plain, grooved, or of any other form or denomination, of cast iron, wrought iron, or steel, for the rolling of iron or any sort of metals, and frames, beds, pillars, screws, pinions, and each and every implement, tool or utensil thereunto belonging; rollers, slitters, frames, beds, pillars, and screws for slitting mills; presses of all sorts, in iron and steel, or other metals, which are used with a screw exceeding 1½ inch in diameter, or any parts of these several articles, or any model of the before-mentioned utensils, or any part thereof; all sorts of utensils, engines, or machines used in the casting or boring of cannon or any sort of artillery, or any parts thereof; or any models of tools, utensils, engines, or machines used in such casting or boring, or any parts thereof; hand stamps, dog-head stamps, pulley stamps, hammers, and anvils for stamps; presses of all sorts called cutting-out presses; beds or punches to be used therewith, either in parts or pieces, or fitted together; scouring or shading engines; presses for horn buttons; dies for horn buttons; rolled metal, with silver thereon; parts of buttons not fitted up into buttons, or in an unfinished state; engines for chasing, stocks for casting buckles, buttons, and rings; die-sinking tools of all sorts; engines for making button-shanks; laps of all sorts; tools for pinching of glass; engines for covering of whips; bars of metal covered with gold or silver, and burnishing stones, commonly called blood-stones, either in the rough state or finished for use; wire moulds for making paper; wheels of metal, stone, or wood, for cutting, roughing, smoothing, polishing, or engraving glass; purcellas, pincers, sheers, and pipes used in blowing glass; potters' wheels and lathes, for plain, round, and engine turning; tools used by saddlers, harness-makers, and bridle-makers, viz. candle strainers, side strainers, point strainers, creasing irons, screw creasers, wheel irons, seat irons, pricking irons, bolstering irons, clams, and head knives.

frames for making wearing apparel.

A List of Goods which may be prohibited to be exported by Proclamation or Order in Council.

Arms, ammunition, and gunpowder.

Ashes, pot and pearl.

Military stores and naval stores, and any articles (except copper) which his Majesty shall judge capable of being converted into or made useful in increasing the quantity of military or naval stores.

Provisions, or any sort of victual which may be used as food by man.

And if any goods shall be exported, or be waterborne to be exported, from the United Kingdom, contrary to any of the prohibitions or restrictions mentioned in such table in respect of such goods, the same shall be forfeited. — § 104.

The sections from 105. to 118., both inclusive, relate to the Coasting Trade, and are given under that head.

Construction in General.

Terms used in Acts. — Whenever the several terms or expressions following shall occur in this act, or in any other act relating to the customs, or to trade and navigation, the same shall be construed respectively in the manner herein-after directed; (that is to say,) the term "ship" shall be construed to mean ship or vessel generally, unless such term shall be used to distinguish a ship from sloops, brigantines, and other classes of vessels; and the term "master" of any ship shall be construed to mean the person having or taking the charge or command of such ship; the term "owners" and the term "owner" of any ship shall be construed alike to mean 1 owner, if there be only 1, and any or all the owners if there be more than 1; the term "mate" of any ship shall be construed to mean the person next in command of such ship to the master thereof; the term "seaman" shall be construed to mean alike seaman, mariner, sailor, or landsman, being one of the crew of any ship; the term "British possession" shall be construed to mean colony, plantation, island, territory, or settlement belonging to his Majesty; the term "his Majesty" shall be construed to mean his Majesty, his heirs, and successors; the term "East India Company" shall be construed to mean the United Company of Merchants of England trading to the East Indies; the term "limits of the East India Company's charter" shall be construed to mean all places and seas eastward of the Cape of Good Hope to the Straits of Magellan; the term "collector and comptroller" shall be construed to mean the collector and comptroller of the customs of the port intended in the sentence; whenever mention is made of any public officer, the officer mentioned shall be deemed to be such officer for the time being; the term "warehouse" shall be construed to mean any place, whether house, shed, yard, timber pond, or other place in which goods entered to be warehoused upon importation may be lodged, kept, and secured without payment of duty, or although prohibited to be used in the United Kingdom; the term "king's warehouse" shall be construed to mean any place provided by the Crown for lodging goods therein for security of the customs. — § 119.

Malta in Europe. — The island of Malta and its dependencies shall be deemed to be in Europe. — § 120.

General Regulations.

Weights, Measures, Currency, and Management. — All duties, bounties, and drawbacks of customs shall be paid and received in every part of the United Kingdom and of the Isle of Man in British currency, and according to Imperial weights and measures; and in all cases where such duties, bounties, and drawbacks are imposed and allowed according to any specific quantity, or any specific value, the same shall be deemed to apply in the same proportion to any greater or less quantity or value; and all such duties, bounties, and drawbacks shall be under the management of the commissioners of the customs. — § 121.

Collector to take Bonds in respect of Goods relating to the Customs. — All bonds relating to the customs required to be given in respect of goods or ships shall be taken by the collector and comptroller for the use of his Majesty; and after the expiration of 3 years from the date thereof, or from the time, if any, limited therein for the performance of the condition thereof, every such bond upon which no prosecution or suit shall have been commenced shall be void, and may be cancelled and destroyed. — § 122.

Mode of ascertaining Strength of Foreign Spirits. — The mode of ascertaining the strengths and quantities of foreign spirits imported into the United Kingdom should at all times be exactly similar to the mode in practice for ascertaining the strengths and quantities of spirits made within the United Kingdom; be it therefore enacted, that the same instruments, and the same Tables and scales of graduation, and the

same rules and methods, as the officers of the excise shall by any law in force for the time being be directed to use, adopt, and employ in trying and ascertaining the strengths and quantities of spirits made within the United Kingdom, for the purpose of computing and collecting the duties of excise payable thereon, shall be used, adopted, and employed by the officers of the customs in trying and ascertaining the strengths and quantities of spirits imported into the United Kingdom, for the purpose of computing and collecting the duties of customs payable thereon. — § 123.

Officers of Customs to take Sample of Goods. — It shall be lawful for the officers of the customs to take such samples of any goods as shall be necessary for ascertaining the amount of any duties payable on the same; and all such samples shall be disposed of and accounted for in such manner as the commissioners of his Majesty's customs shall direct. — § 124.

Time of an Importation and of an Exportation defined. — If, upon the first levying or repealing of any duty, or upon the first granting or repealing of any drawback or bounty, or upon the first permitting or prohibiting of any importation or exportation, whether inwards, outwards, or coastwise, in the United Kingdom or in the Isle of Man, it shall become necessary to determine the precise time at which an importation or exportation of any goods made and completed shall be deemed to have had effect, such time, in respect of importation, shall be deemed to be the time at which the ship importing such goods had actually come within the limits of the port at which such ship shall in due course be reported, and such goods be discharged; and such time, in respect of exportation, shall be deemed to be the time at which the goods had been shipped on board the ship in which they had been exported; and if such question shall arise upon the arrival or departure of any ship, in respect of any charge or allowance upon such ship, exclusive of any cargo, the time of such arrival shall be deemed to be the time at which the report of such ship shall have been or ought to have been made; and the time of such departure shall be deemed to be the time of the last clearance of such ship with the collector and comptroller for the voyage upon which she had departed. — § 125.

Return of Duty overpaid. — Although any duty of customs shall have been overpaid, or although, after any duty of customs shall have been charged and paid, it shall appear or be judicially established that the same had been charged under an erroneous construction of the law, it shall not be lawful to return any such overcharge after the expiration of 3 years from the date of such payment. — § 126.

Tonnage or Burden of Ships declared. — The tonnage or burden of every British ship within the meaning of this act shall be the tonnage set forth in the certificate of registry of such ship, and the tonnage or burden of every other ship shall, for the purposes of this act, be ascertained in the same manner as the tonnage of British ships is ascertained. — § 127.

Officers may refuse Master of British Ship, unless indorsed on Register. — It shall be lawful for the officers of customs at any port under British dominion where there shall be a collector and comptroller of the customs to refuse to admit any person to do any act at such port as master of any British ship, unless his name shall be inserted in or have been indorsed upon the certificate of registry of such ship as being the master thereof, or until his name shall have been so indorsed by such collector and comptroller. — § 128.

Falsifying Documents. — If any person shall counterfeit or falsify, or wilfully use when counterfeited or falsified, any entry, warrant, cocket, or transire, or other document for the unlading, lading, entering, reporting, or clearing of any ship or vessel, or for the landing or shipping of any goods, stores, baggage, or article whatever, or shall by any false statement procure any writing or document to be made for any of such purposes, every person so offending shall for every such offence forfeit the sum of 200*l.*; provided always, that this penalty shall not attach to any particular offence for which any other penalty shall be expressly imposed by any law in force for the time being. — § 129.

Authority of an Agent may be required. — Whenever any person shall make any application to any officer of the customs to transact any business on behalf of any other person, it shall be lawful for such officer to require of the person so applying to produce a written authority from the person on whose behalf such application shall be made, and in default of the production of such authority, to refuse to transact such business. — § 130.

Persons falsifying Declaration liable to Penalty. — If any declaration required to be made by this act or by any other act relating to the customs (except declarations to the value of goods) be untrue in any particular, or if any person required by this act or by any other act relating to the customs to answer questions put to him by the officers of the customs, touching certain matters, shall not truly answer such questions, the person making such declaration or answering such questions shall, over and above any other penalty to which he may become subject, forfeit the sum of 100*l.* — § 131.

Seizures. — All goods, and all ships, vessels, and boats, which by this act or any act at any time in force relating to the customs shall be declared to be forfeited, shall and may be seized by any officer of the customs; and such forfeiture of any ship, vessel, or boat shall be deemed to include the guns, tackle, apparel, and furniture of the same; and such forfeiture of any goods shall be deemed to include the proper package in which the same are contained. — § 132.

Restoration of seized Goods, Ships, &c. — In case any goods, ships, vessels, or boats shall be seized as forfeited, or detained as under-valued, by virtue of any act of parliament relating to the customs, it shall be lawful for the commissioners of his Majesty's customs to order the same to be restored in such manner and on such terms and conditions as they shall think fit to direct; and if the proprietor of the same shall accept the terms and conditions prescribed by the said commissioners, he shall not have or maintain any action for recompence or damage on account of such seizure or detention; and the person making such seizure shall not proceed in any manner for condemnation. — § 133.

Remission of Forfeitures, &c. — If any ship shall have become liable to forfeiture on account of any goods laden therein, or unladen therefrom, or if the master of any ship shall have become liable to any penalty on account of any goods laden in such ship or unladen therefrom, and such goods shall be small in quantity or of trifling value, and it shall be made appear to the satisfaction of the commissioners of his Majesty's customs that such goods had been laden or unladen contrary to the intention of the owners of such ship, or without the privity of the master thereof, as the case may be, it shall be lawful for the said commissioners to remit such forfeiture, and also to remit or mitigate such penalty, as they shall see reason to acquit such master of all blame in respect of such offence, or more or less to attribute the commission of such offence to neglect of duty on his part as master of such ship; and every forfeiture and every penalty, or part thereof, so remitted, shall be null and void, and no suit or action shall be brought or maintained by any person whatever on account thereof. — § 134.

Ships not bringing to at Stations, Masters to forfeit. — If any ship coming up or departing out of any port in the United Kingdom or in the Isle of Man, shall not bring to at the proper stations in such port appointed by the commissioners of his Majesty's customs for the boarding or landing of officers of the customs, the master of such ship shall for every such offence forfeit the sum of 100*l.* — § 135.

Officers may be stationed in Ships in the Limits of any Port. — It shall be lawful for the commissioners of his Majesty's customs, and for the collector and comptroller of any port under their directions, to station officers on board any ship while within the limits of any port in the United Kingdom or in the Isle of Man; and the master of every ship on board of which any officer is so stationed shall provide every such officer sufficient room under the deck, in some part of the forecastle or steerage, for his bed or hammock, and in case of neglect or refusal so to do shall forfeit the sum of 100*l.* — § 136.

Power to charge Rent in King's Warehouse. — Whenever any goods shall be taken to and secured in any of the king's warehouses in the United Kingdom or in the Isle of Man, for security of the duties thereon, or to prevent the same from coming into home use, it shall and may be lawful for the commissioners of his Majesty's customs to charge and demand and receive warehouse rent for such goods for all such time as the same shall remain in such warehouse, at the same rate as [illegible] for the like

goods when warehoused in any warehouse in which such goods may be warehoused without payment of duty: provided always, that it shall be lawful for the Lords Commissioners of his Majesty's Treasury, or the commissioners of his Majesty's customs, by warrant or order under their hands respectively, from time to time to fix the amount of rent which shall be payable for any goods secured in any of the king's warehouses as aforesaid. — § 137.

Power to sell Goods not cleared from King's Warehouse. — In case such goods shall not be duly cleared from the king's warehouse within 3 calendar months, (or sooner, if they be of a perishable nature,) it shall be lawful for the commissioners of his Majesty's customs to cause such goods to be publicly sold by auction, for home use or for exportation, as the case may be; and the produce of such sale shall be applied towards the payment of the duties, if sold for home use, and of the warehouse rent and all other charges; and the overplus (if any) shall be paid to the person authorised to receive the same: provided always, that it shall be lawful for the said commissioners to cause any of such goods to be destroyed as cannot be sold for a sum sufficient to pay such duties and charges, if sold for home use, or sufficient to pay such charges, if sold for exportation: provided also, that if such goods shall have been landed by the officers of the customs, and the freight of the same shall not have been paid, the produce of such sale shall be first applied to the payment of such freight. — § 138.

Power for his Majesty to appoint Ports and legal Quays. — It shall be lawful for his Majesty, by his commission out of the Court of Exchequer, from time to time to appoint any port, haven, or creek in the United Kingdom, or in the Isle of Man, and to set out the limits thereof, and to appoint the proper places within the same to be legal quays for the lading and unlading of goods, and to declare that any place which had been set out as a legal quay by such authority shall be no longer a legal quay, and to appoint any new place within any port to be a legal quay for the lading and unlading of goods: provided always, that all ports, havens, and creeks, and the respective limits thereof, and all legal quays, appointed and set out and existing as such at the commencement of this act under any law till then in force, shall continue to be such ports, havens, creeks, limits, and legal quays respectively as if the same had been appointed and set out under the authority of this act. — § 139.

Averment of Offence. — In any information or other proceeding for any offence against any act made or to be made relating to the customs, the averment that such offence was committed within the limits of any port shall be sufficient, without proof of such limits, unless the contrary be proved. — § 140.

Commissioners may appoint Sufferance Wharfs. — It shall be lawful for the commissioners of his Majesty's customs from time to time, by any order under their hands, to appoint places to be sufferance wharfs, for the lading and unlading of goods by sufferance, to be duly issued by them, or by the proper officers under their directions, in such manner and in such cases as they shall see fit. — § 141.

No Ships engaged in the Carriage of Letters to import or export Goods. — No ship or boat appointed and employed ordinarily for the carriage of letters shall import or export any goods without permission of the commissioners of his Majesty's customs, under the penalty of the forfeiture of 100*l.*, to be paid by the master of such ship or boat. — § 142.

No Person deemed an Apprentice until Indenture enrolled with Collector. — No person shall be deemed to be an apprentice for the purposes of an act passed in the 4th year of the reign of his late Majesty, intituled "An Act (4 Geo. 4. c. 25) for regulating the Number of Apprentices to be taken on board British Merchant Vessels, and for preventing Desertion of Seamen," unless the indenture of such apprentice shall have been enrolled with the collector and comptroller of the port from which any such apprentice shall first go to sea after the date of such indenture, or in default of such enrolment, until the same shall have been enrolled at some port from which the ship in which such apprentice shall afterwards go to sea shall be cleared. — § 143.

Licensed Agents. — It shall not be lawful for any person to act as an agent for transacting any business at the Custom-house in the port of London which shall relate to the entry or clearance of any ship, or of any goods, or of any baggage, unless authorised so to do by licence of the commissioners of his Majesty's customs, who are hereby empowered to require bond to be given by every person to whom such licence shall be granted, with 1 sufficient surety, in the sum of 1,000*l.*, for the faithful and incorrupt conduct of such person and of his clerks acting for him: provided always, that such bond shall not be required of any person who shall be one of the sworn brokers of the city of London; and if any person shall act as such agent, not being so licensed, or if any person shall be in partnership in such agency with any person not so licensed, such person shall, in either case, for every such offence forfeit the sum of 100*l.* — § 144.

Treasury may revoke Licence. — It shall be lawful for the said commissioners of his Majesty's treasury, by any order under their hands, to revoke any such licence; and after a copy of such order shall have been delivered to such person or to his clerk, or left at his usual place of abode or business, such licence shall be void. — § 145.

Not to extend to Clerks or Servants of Individuals, nor to Clerks in Long Room. — Nothing herein contained shall extend to prevent the clerk or servant of any person, or of any persons in co-partnership, from transacting any business at the Custom-house on account of such person or persons, without such licence; provided such clerk or servant shall not transact any such business as clerk, servant, or agent to any other person. — § 146.

Agent may appoint Clerks to act for him only. — It shall be lawful for any such agent or agents in co-partnership to appoint any person without licence to be his or their clerk in transacting such agency: provided always, that no person shall be admitted to be such clerk to more than 1 agent or co-partnership of agents, nor until his name and residence, and the date of his appointment, shall have been indorsed on the licence of every such agent, and signed by him, and witnessed by the signature of the collector and comptroller of the customs, unless such person shall have been appointed with consent of the commissioners of his Majesty's customs before the commencement of this act. — § 147.

Treasury may extend Regulations to other Ports. — It shall be lawful for the said commissioners of his Majesty's treasury, by their warrant, to be published in the *London* or *Dublin Gazette*, to extend the regulations herein-before made relating to agents in the port of London to agents at any other port in Great Britain, or at any port in Ireland. — § 148.

IMPORTS AND EXPORTS, the articles imported into and exported from a country.

We have explained in another article (BALANCE OF TRADE), the mode in which the value of the imports and exports is officially determined by the Custom-house, and have shown the fallacy of the common notions as to the advantage of the exports exceeding the imports. The scale of prices according to which the official value of the imports and exports is determined having been fixed so far back as 1698, the account is of no use as showing their true value; but it is of material importance as showing the fluctuations in their quantity. We were anxious, had the means existed, to have given accounts of the various articles imported and exported at different periods during the last century, that the comparative increase or diminution of the trade in each might have been exhibited in one general view. Unluckily, however, no means exist for completing such an account. The Tables published by Sir Charles Whitworth, Mr. Macpherson, and others, specify only the aggregate value of the imports from and exports to particular countries, without specifying the articles or their value of which such imports and

exports consisted. And on applying at the Custom-house, we found that the fire in 1814 had destroyed the records; so that there were no means of compiling any complete account of the value of the articles imported or exported previously to that period. We, therefore, have been obliged to confine ourselves, except as respects the period since 1815, to an attempt to exhibit the amount of the trade with each country for such periods as seemed best calculated to show its real progress. Those selected for this purpose, in the first of the following Tables, are periods of peace; for, during war, the commerce with particular countries is liable to be extended or depressed so far beyond its natural limits, as to afford no means of judging of its ordinary amount. The averages given in the Table (with the exception of 1802), are sufficiently extensive to neutralise the influence of such extraordinary circumstances (whether arising from bad harvests, the repeal or imposition of duties, or any other cause,) as might materially affect an average for 2 or 3 years only; and as they extend from 1698 to 1822, they afford a very complete view of the progress of the foreign trade of Great Britain. This Table was compiled from official documents by the indefatigable Mr. Cesar Moreau, and may be safely relied on. The Tables which follow, and which show the amount and value of the trade of the empire at the present time, are all official, or compiled from official sources.

During the first half of last century, and previously, woollen goods formed the principal article of native produce exported from Great Britain; and next to it were hardware and cutlery, leather manufactures, linen, tin and lead, copper and brass manufactures, coal, earthenware, provisions, slops, &c. Corn formed a considerable article in the list of exports down to 1770; since which period the balance of the corn trade has been, with a few exceptions, very decidedly on the side of importation. Cotton did not begin to be of any importance as an article of export till after 1770; but since then the extension and improvement of the cotton manufacture has been so astonishingly great, that the exports of cotton stuffs and yarn amount, at this moment, to about *a half* of the entire exports of British produce and manufactures! — (See *antè*, p. 445.) The export of woollen goods has been comparatively stationary.

The principal articles of import during the last half century have consisted of sugar, tea, corn, timber and naval stores, cotton wool, sheep's wool, woods and drugs for dyeing, wine and spirits, tobacco, silk, tallow, hides and skins, coffee, spices, bullion, &c. Of the colonial and other foreign products imported into England, considerable quantities have always been re-exported.

Trade of Great Britain.

I. Account of the *Official* Value of the Import and Export Trade of Great Britain with all Parts of the World, at an Annual Medium of the undermentioned Periods; specifying the separate Amount of the Trade with each Country for such Periods.

Countries.	Imports into Great Britain from all Parts, of all Sorts of Products.					Exports from Great Britain to all Parts, of all Sorts of Products.				
	Annual Medium of Five Periods of Peace, viz.					Annual Medium of Five Periods of Peace, viz.				
	1698-1701.	1749-1755.	1784-1792.	In 1802.	1816-1822.	1698-1701.	1749-1755.	1784-1792.	In 1802.	1816-1822.
	£	£	£	£	£	£	£	£	£	£
Europe, British and foreign.										
Foreign, North	1,888,176	2,135,870	3,885,999	5,915,853	4,891,885	3,114,285	4,166,669	4,761,965	15,015,209	17,010,820
South	1,490,904	1,533,896	2,860,914	3,123,007	3,308,502	1,451,231	3,129,499	3,187,139	7,209,291	8,324,987
Ireland, Guernsey, Jersey, Alderney, Man, and the Whale Fishery	487,640	746,282	2,433,864	3,839,501	5,143,220	429,353	1,353,804	2,251,081	3,663,237	4,097,630
Gibraltar (from 1801, Malta and Ionian Islands)	- -	111,863	12,238	119,318	147,961	388,594	641,366	210,838	542,404	2,246,565
Europe, British and foreign	3,866,720	4,527,911	9,193,015	12,997,679	13,491,568	5,383,463	9,291,338	10,411,023	26,430,141	31,680,002
Asia	656,031	1,119,158	3,179,136	5,794,906	7,119,152	214,212	714,105	1,795,747	2,929,816	3,219,446
Africa	17,421	34,279	92,252	168,863	267,869	114,043	213,841	809,546	6,161,179	531,712
America	1,029,780	2,529,998	5,252,349	12,480,870	14,042,949	737,876	2,001,690	5,605,626	10,890,830	17,695,335
Grand total	5,569,952	8,211,346	17,716,752	31,442,318	34,921,538	6,449,594	12,220,974	18,621,942	41,411,966	53,126,195
Europe, North.										
Russia	110,446	488,053	1,619,146	2,182,430	2,258,975	60,899	100,354	395,696	1,281,555	2,329,725
Sweden	213,657	187,632	261,823	327,350	132,303	59,454	19,859	70,617	90,515	145,217
Denmark and Norway	77,308	84,507	140,138	155,672	196,517	39,874	87,206	294,108	427,016	422,810
Prussia	181,186	280,633	595,544	1,057,603	658,080	152,209	171,091	117,247	818,269	1,002,881
Germany	681,169	687,805	552,291	1,192,030	684,741	757,621	1,345,212	1,566,311	8,005,237	8,772,871
Netherlands	624,410	407,240	717,057	1,000,768	961,269	2,044,228	2,442,947	2,317,986	4,392,617	4,337,316
Europe, South.										
France	86,025	60,962	452,734	424,434	737,360	166,115	437,483	921,492	2,390,103	1,314,079
Portugal	202,909	288,549	645,486	961,711	492,193	343,443	1,121,529	675,348	1,284,344	1,933,154
Spain	566,527	437,869	724,287	830,937	877,436	580,422	1,198,337	709,179	1,421,294	615,923
Italy	358,537	578,445	853,862	723,501	891,835	143,249	238,476	759,243	1,950,416	3,699,715
Turkey	276,906	168,071	184,545	182,424	306,678	218,002	133,674	121,877	163,134	764,116
America, North.										
United States	296,402	891,169	986,409	1,923,504	3,267,488	387,546	1,238,161	2,839,484	5,329,490	6,393,956
British colonies	18,617	48,750	221,413	367,935	716,572	18,491	72,984	864,489	1,350,896	1,715,220
America, South.										
British West Indies	714,761	1,588,183	3,860,674	8,531,175	7,926,215	331,839	664,067	1,862,522	3,925,613	5,030,367
Foreign ditto (from 1808, Brazils and Span. colonies)	- -	1,896	183,855	1,658,256	2,132,[illegible]	- -	- -	- -	,831	4,555,792

II. *Official* and *Declared* Value of Exports of British and Irish Produce and Manufacture; and *Official* Value of Exports of Foreign and Colonial Merchandise from Great Britain; and *Official* Value of Imports into the same, for the following Years. — (*Parl. Paper*, No. 243. Sess. 1830, and *Finance Accounts.*)

Years ending the 5th of January.	Exports.			Imports.
	British and Irish Produce and Manufactures from Great Britain.		Foreign and Colonial Merchandise from Great Britain.	Into Great Britain.
	Official Value. £	*Declared Value.* £	*Official Value.* £	*Official Value.* £
1799	18,556,891	21,252,836	8,760,196	25,122,203
1800	22,284,941	35,903,850	7,271,696	24,066,700
1801	22,831,986	36,929,007	11,549,681	28,257,781
1802	24,501,608	39,730,659	10,336,966	30,435,268
1803	23,195,893	45,102,230	12,677,431	28,308,373
1804	20,042,506	36,127,787	8,032,643	25,104,541
1805	22,132,367	37,135,746	8,938,741	26,454,281
1806	22,907,371	37,834,326	7,643,120	27,334,020
1807	25,266,546	39,746,581	7,717,555	25,554,478
1808	22,963,772	36,394,443	7,624,312	25,326,845
1809	24,179,554	36,306,585	5,776,775	25,660,953
1810	32,916,838	46,049,777	12,750,358	30,170,292
1811	33,250,408	47,000,926	9,357,435	37,613,294
1812	21,723,532	30,850,618	6,117,720	25,240,904
1813	28,447,912	39,534,526	9,533,065	24,923,922
1814	*	*	*	*
1815	32,200,880	43,447,373	19,157,818	32,620,771
1816	41,712,002	49,653,245	15,708,435	31,822,053
1817	34,774,021	40,328,940	13,441,665	26,374,921
1818	39,233,467	40,349,235	10,269,271	29,910,502
1819	41,900,555	45,180,150	10,835,800	35,845,340
1820	32,985,689	34,252,251	9,879,236	29,681,640
1821	37,820,293	35,529,077	10,525,026	31,515,222
1822	40,194,681	35,823,127	10,602,090	29,769,122
1823	43,558,488	36,176,897	9,211,928	29,432,376
1824	43,166,039	34,589,410	8,588,996	34,591,264
1825	48,024,962	37,900,021	10,188,596	36,056,551
1826	46,453,022	38,077,330	9,155,305	42,660,954
1827	40,532,854	30,847,528	10,066,503	36,174,350
1828	51,279,102	36,394,817	9,806,343	43,489,346
1829	52,019,728	36,150,379	9,928,655	43,536,187
1830	55,405,723	35,212,873	10,606,441	42,311,649
1831	60,492,637	37,691,302	8,535,786	44,815,397
1832	60,090,123	36,632,694	10,729,943	48,161,661
1833	64,582,037	36,046,027	11,036,759	43,237,417

* Records destroyed by fire. — From the year ending the 5th of January, 1815, inclusive, British produce and manufactures have been included in the returns of Irish produce, &c. from Ireland, and consequently omitted in the column headed Exports, Foreign, Colonial, and British, under which they had been previously returned.

Trade of Great Britain and Ireland.

I. Value of Imports into Great Britain and Ireland from Foreign Parts, calculated at the *Official* Rates of Valuation; specifying those imported into each. — (*Finance Accounts for* 1832.)

(This and the three following Tables are taken from the *Finance Accounts* for 1832.)

Species of Imports.	Years ending the 5th of January.								
	1831.			1832.			1833.		
Great Britain.	£	s.	d.	£	s.	d.	£	s.	d.
Almonds of all sorts	20,909	6	5	34,616	1	1	30,549	14	7
Annotto	5,666	8	0	17,945	11	6	8,645	6	6
Ashes, pearl and pot	286,122	9	5	279,838	7	7	228,193	3	7
Barilla and alkali	107,472	6	3	70,377	7	6	27,984	16	10
Bark for tanning and dyeing	206,008	13	4	195,980	9	11	149,604	14	0
Borax	35,823	2	0	33,030	19	6	32,819	17	0
Brimstone	125,333	5	10	138,286	10	9	166,014	7	11
Bristles	37,906	2	6	38,741	17	4	28,138	4	3
Butter	149,646	13	10	171,644	7	0	181,974	18	6
Camphire	10,263	1	6	4,913	1	0	10,340	17	2
Cassia lignea	62,819	3	6	29,881	10	0	78,548	12	10
Cheese	157,708	1	9	192,641	10	7	193,712	6	5
Cinnamon	92,834	19	0	45,173	18	0	7,352	8	3
Cloves	39,501	12	6	32,197	2	6	62,905	11	3
Cochineal and granilla	255,380	19	0	180,747	7	0	311,343	13	2
Cocoa, cocoa nut husks, shells, and chocolate	46,583	8	1	76,860	7	2	65,852	2	0
Coffee	2,543,852	12	1	2,649,008	6	0	3,116,830	15	3
Copper, unwrought, in bricks and pigs	6,088	13	7	2,644	3	7	2,727	7	10
Cork	29,486	6	11	39,354	14	5	33,069	5	9
Corn, grain, meal, and flour	3,270,744	13	7	4,671,353	13	2	898,055	8	11
Cortex Peruvianus	69,161	5	0	28,209	15	0	44,624	15	0
Cotton manufactures of India	410,576	10	9	318,775	6	6	236,543	0	6
of Europe, &c.	24,447	14	7	31,549	13	11	18,464	18	7
Currants	119,585	19	10	223,538	13	7	173,875	0	10
Dye and hard woods, fustic	45,713	7	0	56,389	5	0	39,013	9	2
logwood	201,544	4	10	165,800	6	0	217,161	4	9
mahogany	147,720	10	11	113,973	12	10	149,819	5	7
rosewood	31,806	9	8	28,296	1	9	25,679	15	5
Elephants' teeth	32,829	11	10	31,603	12	2	17,956	10	6
Figs	12,439	3	10	17,595	4	6	15,139	6	10

Species of Imports.	Years ending the 5th of January. 1831. £	s.	d.	1832. £	s.	d.	1833. £	s.	d.
Fish, cod, &c. of Newfoundland and British America	55,877	5	8	28,538	9	1	34,124	4	6
Flax and tow, or codilla of hemp and flax	1,892,748	4	8	1,879,043	7	9	2,010,518	8	9
Furs	156,148	15	4	186,302	10	6	163,357	2	9
Gum, animi and copal	8,518	3	8	26,109	18	8	25,606	8	10
Arabic	17,722	14	5	17,316	7	0	19,628	13	7
lac of all sorts	44,830	5	3	75,653	14	3	72,495	2	9
Senegal	20,780	2	11	25,127	8	6	40,424	13	3
Hemp, undressed	378,325	10	0	434,398	11	2	484,579	16	6
Hides, raw and tanned	983,496	16	10	792,665	4	0	547,203	12	10
Jalap	10,084	17	6	6,559	7	6	2,866	5	0
Indigo	1,121,061	0	11	983,343	6	3	864,971	4	7
Iron, in bars	148,154	8	4	170,162	9	4	185,090	7	8
Isinglass	13,490	5	8	24,464	8	4	22,868	16	9
Lead, pig	9,912	9	10	18,399	11	3	16,544	6	5
Lemons and oranges	56,253	19	10	66,186	7	7	52,353	19	5
Linens, foreign	67,289	12	10	67,837	10	3	104,005	17	8
Liquorice juice	21,502	8	9	40,325	11	0	26,220	14	2
Mace	9,867	19	4	25,804	13	0	45,336	1	10
Madder and madder roots	375,153	2	10	542,200	7	11	610,626	0	8
Molasses	158,373	12	1	218,439	14	11	380,553	13	3
Nutmegs	49,582	7	0	41,558	5	0	44,885	9	0
Oil, castor	48,779	0	5	37,675	19	6	30,152	3	9
of olives	365,045	12	1	551,092	10	6	18,651	5	1
palm	213,458	13	3	164,760	2	8	222,335	15	9
train, spermaceti and blubber	368,404	12	5	480,164	6	11	578,410	14	4
Pepper	46,895	8	1	104,548	10	5	78,134	4	8
Pimento	91,338	2	6	45,471	4	0	43,520	0	6
Quicksilver	401,414	0	0	62,857	4	0	156,325	12	0
Rags for paper	41,158	7	5	30,135	15	0	30,014	6	11
Raisins	81,322	1	7	147,688	5	5	127,144	13	8
Rhubarb	100,796	19	1	87,746	17	6	77,216	5	0
Rice, and rice in the husk	132,661	18	4	165,449	9	3	184,453	10	0
Salt	9,991	1	0	17,886	7	5	16,952	2	2
Saltpetre	88,595	8	3	107,864	7	3	155,797	7	4
Seeds, clover	77,745	2	11	63,194	5	7	41,294	15	11
flax and linseed	205,999	14	2	315,798	9	10	223,155	19	0
rape	68,426	19	11	52,060	9	11	75,193	0	3
Shumac	39,362	9	2	42,021	7	1	43,711	4	3
Silk, raw and waste	1,647,194	13	4	1,557,018	3	4	1,617,184	14	8
thrown	496,977	15	2	757,712	14	0	221,050	11	6
manufactures of India	124,599	7	1	159,421	17	5	147,721	16	2
of Europe, &c.	409,724	11	0	446,402	2	1	464,250	2	2
Skins, not being furs	186,828	7	11	238,103	5	4	225,865	0	2
Smalts	10,862	1	2	8,363	8	7	8,891	0	0
Spelter	221,379	16	0	191,032	5	11	171,908	19	0
Spirits, brandy	224,827	0	1	198,581	17	6	358,700	2	10
geneva	14,192	13	0	15,189	6	9	19,085	3	4
rum	593,101	9	5	675,599	7	6	409,912	12	11
Sugar	6,382,129	9	0	6,935,985	13	6	6,366,583	13	9
Tallow	1,076,967	8	11	1,062,234	18	1	1,191,141	1	6
Tar	122,084	1	8	108,180	17	1	96,086	2	8
Tea	3,189,774	10	6	3,164,892	12	0	3,170,570	8	0
Timber, battens and batten ends	13,892	3	10	19,023	12	0	14,675	19	3
deals and deal ends	56,997	9	8	64,161	5	4	56,306	5	2
masts and spars	49,621	5	7	84,537	8	10	93,816	5	2
staves	46,277	11	7	47,511	12	9	40,376	5	11
timber, fir, 8 in. square	320,513	19	1	357,213	15	4	332,633	15	7
oak	26,242	14	1	33,219	18	0	42,540	10	11
other sorts	21,363	17	0	19,662	12	3	30,082	17	10
balks, handspikes, oak plank, &c. &c.	43,264	17	6	49,421	1	1	42,742	12	5
Tobacco and snuff	278,186	14	0	305,247	14	10	189,706	3	1
Turpentine, common	119,744	18	0	158,559	10	4	163,855	10	3
Valonia	29,429	2	1	26,449	6	3	33,284	15	7
Wax, bees'	35,036	6	7	34,254	2	8	20,648	12	0
Whalefins	33,909	8	2	56,147	12	2	130,579	8	10
Wines	719,421	8	6	752,283	10	4	624,140	18	8
Wool, cotton	8,720,270	15	9	9,516,087	9	5	9,469,857	18	9
sheep's	881,354	1	11	929,855	12	1	803,371	1	10
Woollen manuf. (includg. carpets)	68,589	0	4	89,172	9	0	82,605	2	0
Yarn, linen, raw	100,247	0	0	95,046	9	2	74,151	8	8
All other articles	1,975,545	8	5	1,937,286	2	4	2,098,274	16	9
Total official value of imports into Great Britain from foreign parts	44,815,397	11	11	48,161,661	5	7	43,237,416	17	3
IRELAND.*									
Value of imports into Ireland at the official rates of valuation	1,429,843	14	7	1,552,228	5	11	1,348,824	17	9
UNITED KINGDOM.									
Total official value of imports into the U. K. £	45,245,241	6	6	49,713,889	11	6	44,586,241	15	0

* It seems to be unnecessary to specify in detail the imports i[illegible] making about one third of the whole. [illegible]rgest,

II. Value of the Produce and Manufactures of the United Kingdom, exported from Great Britain and Ireland to Foreign Parts, calculated at the *Official* Rates of Valuation; specifying the exports from each.

Species of Exports.	Years ending the 5th of January.								
	1831.			1832.			1833.		
GREAT BRITAIN.	£	s.	d.	£	s.	d.	£	s.	d.
Alum	5,690	15	11	12,213	9	0	10,990	16	6
Apparel, slops and negro clothing	384,213	13	6	368,545	3	9	376,091	16	5
Arms and ammunition	245,497	16	2	459,579	7	6	329,298	9	6
Bacon and hams	34,312	4	8	21,482	10	2	17,904	4	0
Beef and pork salted	62,377	18	1	55,993	16	10	38,962	13	8
Beer and ale	54,447	5	4	47,212	5	1	60,381	19	5
Books, printed	15,690	15	11	17,395	4	11	17,627	14	0
Brass and copper manufactures	997,379	3	9	959,971	0	1	1,125,912	18	5
Bread and biscuit	6,980	1	6	6,640	15	3	10,151	14	3
Butter and cheese	50,107	8	4	46,634	16	1	72,073	5	10
Cabinet and upholstery wares	35,567	19	2	41,316	11	4	43,907	10	2
Coals and culm	435,590	14	3	435,008	14	7	536,939	10	0
Cordage	37,656	9	6	38,684	19	6	53,764	19	11
Corn, grain, meal and flour	12,855	0	8	12,786	14	5	10,024	5	0
Cotton manufactures	35,395,400	18	2	33,682,475	19	11	37,060,750	6	5
yarn	5,655,569	14	7	5,674,600	3	8	6,725,505	18	1
Cows and oxen	1,411	10	0	792	10	0	425	10	0
Earthenware of all sorts	93,188	9	2	97,409	4	9	111,629	17	3
Fish of all sorts	276,968	3	4	190,685	14	1	198,827	5	1
Glass of all sorts	125,179	18	11	116,726	2	6	117,254	4	0
Haberdashery and millinery	46,449	4	1	44,487	7	0	33,991	5	9
Hardwares and cutlery	892,921	19	7	967,793	16	2	877,228	6	7
Hats, beaver and felt	171,869	12	11	135,910	18	6	114,963	9	4
of all other sorts	13,879	15	2	14,645	16	0	14,376	17	4
Hops	8,944	17	10	17,596	12	1	55,117	15	0
Horses	12,910	12	3	6,932	10	0	14,315	0	0
Iron and steel, wrought and unwrought	1,887,062	7	1	1,979,415	15	5	2,406,461	16	4
Lard	4,114	2	6	2,653	19	0	4,428	3	10
Lead and shot	78,126	19	9	71,783	19	10	128,679	19	0
Leather, wrought and unwrought	96,570	18	1	94,619	14	6	108,178	2	1
saddlery and harness	75,071	18	10	60,950	8	9	54,229	6	11
Linen manufactures	3,101,031	1	10	3,662,945	18	6	2,649,343	12	8
Machinery and mill-work	208,736	17	2	105,505	15	3	92,714	11	1
Mathematical and optical instruments	21,446	12	11	17,103	7	8	16,430	18	5
Mules	6,000	0	0	2,260	0	0	970	0	0
Musical instruments	51,784	11	4	38,372	5	9	36,601	13	10
Oil, train, of Greenland fishery	34,841	2	0	15,290	14	6	30,895	14	5
Painters' colours	99,985	3	0	101,986	12	6	115,910	8	0
Plate, plated ware, jewellery and watches	194,401	5	2	188,245	0	1	177,172	19	3
Potatoes	7,190	17	0	8,724	4	8	12,922	0	2
Salt	345,414	18	8	328,048	11	0	348,490	9	10
Saltpetre, British refined	15,184	11	3	32,488	1	6	43,868	3	1
Seeds of all sorts	5,364	4	8	6,197	2	8	5,460	5	6
Silk manufactures	435,045	17	3	469,076	15	6	474,509	17	8
Soap and candles	257,522	19	0	229,618	4	6	331,067	14	10
Spirits	2,455	7	11	2,468	3	10	3,393	2	6
Stationery of all sorts	167,679	15	11	177,698	0	2	176,497	9	7
Sugar, refined	1,652,210	6	6	1,638,677	14	3	1,292,125	18	5
Tin, unwrought	111,052	8	6	79,457	10	6	116,243	11	6
and pewter wares, and tin plates	247,617	11	2	228,115	18	3	241,948	3	1
Tobacco (manufactured) and snuff	2,375	11	3	1,785	2	9	1,683	10	0
Tongues	797	5	0	817	5	0	964	11	0
Umbrellas and parasols	32,508	15	9	47,512	18	0	40,493	8	2
Whalebone	24,644	9	3	4,520	3	7	12,732	1	2
Wool, sheep's	105,346	0	2	124,788	13	11	149,991	12	4
of other sorts	20,642	12	0	28,941	10	0	10,502	6	6
Woollen manufactures	5,551,644	0	10	6,187,979	9	5	6,666,700	18	11
All other articles	683,614	12	11	678,552	7	4	802,007	7	7
Total official value of the produce and manufactures of the United Kingdom, exported from Great Britain to foreign parts	60,492,637	7	5	60,090,123	11	9	64,582,037	9	7
IRELAND.									
Total official value of the produce and manufactures of the United Kingdom, exported from Ireland to foreign parts	648,227	8	5	593,809	16	7	444,665	1	5
UNITED KINGDOM.									
Total official value of the produce and manufactures of the United Kingdom, exported from the same to foreign parts £	61,140,864	15	10	60,683,933	8	4	65,026,702	11	0

III. Value of the Produce and Manufactures of the United Kingdom, exported from Great Britain and Ireland to Foreign Parts, according to the *Real* or *Declared* Value thereof, specifying the Amount sent from each.

Species of Exports.	Years ending the 5th of January.								
	1831.			1832.			1833.		
GREAT BRITAIN.	£	s.	d.	£	s.	d.	£	s.	d.
Alum	3,008	7	6	5,855	5	11	4,771	15	9
Apparel, slops and negro clothing	384,213	13	6	368,545	3	9	376,091	16	5
Arms and ammunition	241,623	0	10	562,729	1	2	274,950	17	0
Bacon and hams	31,833	18	1	20,834	6	10	17,970	1	6
Beef and pork, salted	85,859	15	9	83,428	3	9	66,180	5	6
Beer and ale	206,876	16	1	157,350	0	4	198,715	7	0
Books, printed	93,851	3	7	100,770	9	3	92,809	3	8
Brass and copper manufactures	853,313	6	8	802,879	1	5	916,226	4	9
Bread and biscuit	9,654	0	2	10,072	10	0	12,877	2	4
Butter and cheese	123,792	8	9	130,603	5	2	185,346	17	9
Cabinet and upholstery wares	55,567	19	2	41,316	11	4	43,907	10	2
Coals and culm	182,862	10	9	198,242	14	11	226,772	15	3
Cordage	78,441	10	10	75,821	14	4	95,030	2	8
Corn, grain, meal and flour	35,842	4	11	37,026	16	9	27,407	9	2
Cotton manufactures	15,203,713	7	2	13,207,947	6	3	12,622,880	2	10
yarn	4,132,258	17	7	3,974,989	17	0	4,721,796	3	6
Cows and oxen	2,348	10	0	1,726	0	0	510	6	0
Earthenware of all sorts	439,566	19	2	458,965	11	11	489,980	17	7
Fish of all sorts	245,750	11	3	184,031	18	0	213,607	10	0
Glass of all sorts	396,662	6	1	423,828	19	4	396,407	5	0
Haberdashery and millinery	384,701	2	7	414,716	17	3	332,429	9	6
Hardwares and cutlery	1,410,956	4	5	1,620,236	11	6	1,433,297	17	5
Hats, beaver and felt	208,497	19	5	169,076	6	5	144,111	3	5
of all other sorts	15,672	5	9	15,148	7	8	15,189	14	0
Hops	6,614	4	8	11,284	5	9	71,067	19	0
Horses	49,243	10	0	29,212	0	0	57,886	0	0
Iron and steel, wrought and unwrought	1,076,186	11	3	1,119,967	3	1	1,189,250	10	2
Lard	4,526	15	0	3,390	15	0	5,529	3	0
Lead and shot	106,768	15	5	96,215	17	0	144,598	10	10
Leather, wrought and unwrought	243,142	16	6	234,491	6	10	235,505	1	0
saddlery and harness	78,071	18	10	60,950	8	9	54,229	6	11
Linen manufactures	1,926,256	15	1	2,301,803	7	3	1,655,478	16	8
Machinery and mill-work	208,736	17	2	105,505	15	3	92,714	11	1
Mathematical and optical instruments	21,446	12	11	17,103	7	8	16,430	18	5
Mules	7,248	0	0	2,715	10	0	1,056	0	0
Musical instruments	51,784	11	4	38,372	5	9	36,601	13	10
Oil, train, of Greenland fishery	45,063	3	8	21,170	11	3	33,594	4	1
Painters' colours	99,985	3	0	101,986	12	6	115,910	8	0
Plate, plated ware, jewellery, and watches	190,207	15	9	187,930	15	0	173,617	13	1
Potatoes	5,451	17	4	6,106	8	0	7,707	10	0
Salt	181,209	9	2	162,706	3	9	147,176	12	0
Saltpetre, British refined	8,682	9	0	20,683	10	6	24,482	0	10
Seeds of all sorts	4,510	13	0	5,257	18	4	4,996	0	5
Silk manufactures	519,919	9	4	578,260	10	0	529,808	3	10
Soap and candles	220,315	9	2	210,170	8	7	288,674	0	0
Spirits	5,841	13	6	5,218	18	0	7,193	11	6
Stationery of all sorts	167,679	15	11	177,698	0	2	176,497	9	7
Sugar, refined	1,287,887	14	10	1,237,774	6	6	1,038,519	16	0
Tin, unwrought	105,134	7	2	77,718	7	2	111,797	7	10
and pewter wares, and tin plates	249,619	12	2	230,004	10	10	243,191	5	10
Tobacco (manufactured) and snuff	21,734	10	2	16,258	12	9	15,133	9	6
Tongues	1,345	11	0	1,500	8	0	1,550	13	0
Umbrellas and parasols	32,508	15	9	47,512	18	0	40,490	8	2
Whalebone	41,893	5	0	8,287	10	0	16,975	15	0
Wool, sheep's	144,712	11	3	173,103	19	6	219,650	1	0
of other sorts	33,460	2	6	66,835	4	0	24,088	0	0
Woollen manufactures	4,847,398	9	6	5,385,811	5	4	5,475,298	12	2
All other articles	859,063	19	0	843,542	17	0	880,255	0	6
Total real or declared value of the produce and manufactures of the United Kingdom, exported from Great Britain to foreign parts	37,694,302	5	4	36,652,694	17	9	36,046,027	11	5
IRELAND.									
Total real or declared value of the produce and manufactures of the United Kingdom, exported from Ireland to foreign parts	560,200	4	11	510,952	16	1	398,497	7	2
UNITED KINGDOM.									
Total real or declared value of the produce and manufactures of the United Kingdom, exported from the same to foreign parts £	38,251,502	10	3	37,163,647	13	10	36,444,524	18	7

IV. Value of the Foreign and Colonial Merchandise exported from Great Britain and Ireland to Foreign Parts, calculated at the *Official* Rates of Valuation, and specifying those sent from each.

Species of Exports.	Years ending the 5th of January. 1831.			1832.			1833.		
GREAT BRITAIN.	£	s.	d.	£	s.	d.	£	s.	d.
Annotto	1,201	10	5	505	3	4	231	0	0
Ashes, pearl and pot	10,523	3	9	38,333	1	7	31,615	11	9
Barilla and alkali	2,823	0	7	3,256	14	0	4,716	6	8
Cassia lignea	79,764	4	0	71,877	4	0	76,406	0	0
Cinnamon	133,805	15	0	126,160	15	0	131,069	5	0
Cloves	14,841	0	0	30,717	0	0	31,407	0	0
Cochineal and granilla	113,743	4	0	189,561	7	6	155,553	15	0
Cocoa	49,544	8	10	54,687	17	6	64,257	13	5
Coffee	1,235,475	6	4	1,404,905	17	3	1,607,113	3	3
Copper, unwrought, in bricks and pigs	5,224	6	10	10,074	0	3	3,979	5	6
Corn, grain, meal and flour	135,774	3	4	176,643	2	2	666,594	12	3
Cortex Peruvianus	55,689	3	0	20,636	14	0	44,227	7	0
Cotton manufactures of India	590,377	1	9	549,299	10	6	656,599	8	8
of Europe	15,049	1	4	18,029	6	4	8,901	7	8
Currants	10,238	2	7	45,007	3	11	21,703	0	8
Dye-woods, fustic	9,066	9	8	3,366	8	7	9,563	11	2
logwood	83,125	14	9	83,306	5	4	61,870	3	1
Fish, cod, &c. of Newfoundland	39,344	0	4	33,363	16	6	16,138	7	6
Flax	7,720	4	9	22,286	15	5	32,678	12	5
Hemp	11,983	13	10	36,118	10	0	26,188	3	2
Hides, raw and tanned	142,815	17	3	168,519	11	11	132,234	11	10
Indigo	898,293	7	4	838,499	5	10	1,024,807	4	6
Iron in bars	38,590	7	5	56,182	18	4	45,511	19	3
Lead, pig	12,882	8	7	18,513	12	7	14,351	18	9
Linens, foreign	34,914	14	3	40,244	2	7	35,377	16	6
Mace	13,866	4	0	60,605	5	0	57,724	17	0
Nutmegs	52,989	12	6	28,714	8	0	47,703	10	0
Oil of olives	45,784	7	5	139,364	1	2	169,752	0	0
train	11,959	19	7	6,728	19	8	14,824	19	7
Pepper	80,612	17	10	370,674	12	8	198,035	1	9
Pimento	65,002	14	9	59,707	3	3	49,782	1	11
Raisins	24,793	1	7	15,321	1	8	26,442	1	3
Rice	50,809	0	11	88,612	0	0	81,889	13	9
Saltpetre, rough	33,224	1	1	65,546	2	10	54,149	8	9
Silk, raw, thrown, and waste	51,726	10	0	58,372	12	0	93,842	14	0
manufactures of India	151,750	8	11	203,295	5	8	173,198	4	8
of Europe	18,708	9	8	28,097	0	5	24,879	18	8
Skins and furs	62,558	16	3	64,218	11	10	68,288	0	5
Spelter	158,961	4	7	156,709	3	6	124,349	11	5
Spirits, brandy	130,110	10	11	144,296	14	0	194,395	2	0
geneva	56,402	14	11	55,345	16	5	54,711	5	1
rum	488,015	11	7	733,291	10	3	717,801	16	6
Sugar	778,641	18	5	1,050,156	10	9	907,296	7	10
Tallow	86,008	6	8	111,925	5	5	45,946	0	11
Tea	36,443	2	0	35,453	17	0	39,959	17	0
Tobacco	184,996	15	1	176,351	18	10	130,637	8	5
Wines	194,389	0	7	181,210	18	8	229,692	17	3
Wool, cotton	718,455	1	4	1,626,075	2	11	1,390,358	5	9
sheep's	45,329	9	10	70,805	4	6	38,157	4	3
Woollen manufactures (including carpets)	3,656	0	0	15,115	15	0	5,506	10	0
All other articles	1,216,019	17	7	1,143,851	7	11	1,194,336	15	10
Total official value of foreign and colonial merchandise exported from Great Britain to foreign parts	8,535,786	7	11	10,729,942	13	9	11,036,758	19	0
IRELAND.									
Total official value of foreign and colonial merchandise exported from Ireland to foreign parts	14,651	7	10	15,128	17	6	8,110	18	0
UNITED KINGDOM.									
Total official value of foreign, &c. merchandise exported from the U. K. to foreign parts £	8,550,437	15	9	10,845,071	11	3	11,044,869	17	0

TRADE OF IRELAND.

V. Imports into Ireland. — (From *Papers published by Board of Trade*, Part I.)

FROM ALL PARTS.	1801.	1805.	1809.	1813.	1817.	1821.	1825.
Ashes, pearl and pot, barilla cwt.	75,914	122,419	214,293	87,712	100,976	132,516	112,836
Flaxseed bushels	376,985	234,101	262,748	292,313	237,566	375,346	535,331
Timber, deal and deal ends gt. hund.	14,461	22,169	3,976	12,672	4,592	4,155	9,389
staves —	31,213	41,979	56,327	20,581	43,041	24,611	43,457
eight inches square and upwards loads	13,483	21,973	18,662	29,473	19,845	30,928	76,049
Iron, unwrought tons	7,454	15,140	14,149	23,231	12,457	16,016	17,902
wrought, hardware and cutlery value £	144,812	195,348	266,447	357,735	175,355	231,012	264,944
Haberdashery — £	57,626	83,255	130,939	155,119	77,497	93,550	837,218
Woollen manufactures, entered by the yard yards	2,095,258	2,489,516	3,426,859	4,498,431	2,315,558	2,670,770	3,384,918
of other descriptions value £	41,144	85,504	72,032	118,460	49,218	130,910	43,733

Imports into Ireland — *continued.*

From all Parts.	1801.	1805.	1809	1813.	1817.	1821.	1825.
Woollen and worsted yarn, lbs.	17,181	48,638	533,995	1,342,933	653,248	777,717	579,051
Cotton manufactures, entered by the yard - yard	44,314	59,904	205,110	214,783	541,900	968,369	4,996,885
of other descriptions value	£ 152,406	211,782	238,101	254,709	176,072	234,482	30,933
Cotton yarn - lbs.	375,597	1,459,905	1,114,879	1,684,828	813,875	2,336,206	2,702,523
wool - - —	1,200,192	1,874,236	5,576,088	3,378,144	2,472,554	3,967,363	4,065,930
Silk, raw and thrown - —	60,034	88,457	82,415	104,186	60,069	58,729	62,128
Coffee - - —	283,780	203,357	589,316	991,144	739,508	243,425	335,921
Spirits, brandy and geneva Imp. gals.	379,438	26,093	184,238	34,670	4,134	21,749	9,166
rum - —	1,152,828	138,783	1,196,044	487,347	124,458	33,005	53,295
Sugar, raw - - cwt.	296,258	253,462	369,049	318,153	245,012	307,945	280,634
refined - - —	4,209	23,231	18,510	20,106	28,204	42,139	66,392
Tea - - - lbs.	3,499,801	3,267,712	3,391,663	3,522,942	3,141,035	3,493,960	3,889,658
Tobacco - - - —	6,941,946	5,480,022	8,047,052	2,520,555	4,465,790	2,714,594	3,904,034
Wines of all sorts Imp. gals.	1,172,166	962,984	1,316,104	941,431	386,458	548,279	968,940
Tallow - - - cwt.	21,188	30,400	5,391	19,514	13,397	59,242	186,147
Coals - - - tons	315,345	412,515	402,040	517,047	712,988	651,909	738,453
Other articles - value	£ 1,099,767	1,182,866	1,709,099	1,903,441	1,690,072	1,571,925	2,021,973
Aggregate official value of imports into Ireland from *all* parts - - -	£ 4,621,344	5,294,967	6,896,821	7,797,286	5,646,563	6,407,427	8,596,785
Aggregate official value of imports into Ireland from *foreign* parts - -	£ 1,350,994	1,227,250	1,580,264	1,050,932	923,797	1,068,589	1,547,849
Aggregate official value of imports into Ireland from *Great Britain* - - -	£ 3,270,350	4,067,717	5,316,557	6,746,354	4,722,766	5,338,838	7,048,936

VI. Exports from Ireland.

Articles being the Produce or Manufactures of the United Kingdom.	1801.	1805.	1809.	1813.	1817.	1821.	1825.
TO ALL PARTS.							
Corn and meal, viz.—							
Barley - - - qrs.	- -	17,223	26,588	194,193	39,114	78,228	154,822
Oats - - - - —	129	223,234	828,458	808,329	646,036	1,159,824	1,503,204
Wheat - - —	- -	82,815	85,599	201,273	57,280	4,76,940	283,340
Other grain - - —	1	5,302	3,023	5,934	2,011	7,897	23,832
Wheat flour - - cwt.	203	22,774	18,087	267,894	34,517	295,035	394,507
Oatmeal, &c. - - —	2,524	34,297	90,948	108,547	34,863	66,063	204,617
Cattle and live stock—							
Cows and oxen - - No.	31,664	21,941	18,335	49,592	45,322	26,759	63,524
Sheep - - - - —	2,891	10,988	7,596	7,690	29,478	25,354	72,191
Swine - - - - —	1,968	6,383	4,712	14,521	24,418	104,556	65,919
Horses - - - —	818	4,186	3,451	4,001	879	2,503	3,140
Bacon and hams - cwt.	21,161	95,073	167,122	234,606	191,025	366,209	262,278
Beef and pork - - barrels	160,840	222,098	262,744	281,503	262,605	219,165	181,276
Butter - - - cwt.	304,666	294,415	385,953	461,514	397,965	472,944	474,161
Lard - - - - —	2,049	6,363	16,282	20,136	17,181	28,489	35,261
Soap and candles - —	15,557	17,713	30,810	46,615	25,381	18,454	14,791
Flax, undressed - —	1,639	278	6,507	69,191	44,239	68,791	54,898
Spirits, Irish - Imp. gals.	178,602	819,970	60,437	113,316	37,884	226,491	629,529
Cotton manufactures,—entered by the yard - yards	1,256	8,956	34,998	99,141	549,261	921,971	10,567,458
of other descriptions - value	£ 4,824	3,281	31,923	58,074	26,250	6,564	301
Linen manufactures - yards	37,911,602	43,683,533	37,166,399	39,028,087	56,230,575	49,531,139	55,114,515
yarn - - lbs.	2,631,132	792,400	1,534,512	2,141,776	1,571,444	1,150,464	391,489
Other articles of the produce or manufactures of the United Kingdom - - value	£ 192,259	211,184	302,843	280,999	434,125	334,323	466,390
Aggregate official value of the produce and manufactures of the United Kingdom, exported from Ireland to *all* parts	£ 3,778,145	4,670,647	4,992,840	6,297,264	6,447,424	7,705,070	9,101,956
Aggregate official value of the produce and manufactures of the United Kingdom, exported from Ireland to *foreign* parts - - -	£ 426,076	469,569	625,415	1,132,781	877,959	637,818	697,667
Aggregate official value of the produce and manufactures of the United Kingdom, exported from Ireland to *Great Britain* - - -	£ 3,352,069	4,201,078	4,367,425	5,164,483	5,569,465	7,067,252	8,404,289

The above Tables shew the inconsiderable amount of the trade of Ireland with all countries, except Great Britain. In 1825, the trade between the two divisions of the empire was placed on the footing of a coasting trade, and no account has since been kept of the quantity or value of the commodities passing between them, with the exception of corn. The amount of the official, and of the real or declared value of the trade between Ireland and foreign countries, during the 3 years ending with 1832, is given in the preceding Tables.

VII. Account of the Official Value of the Imports into the United Kingdom, and of the Exports of British and Irish Produce and Manufactures, and of Foreign and Colonial Merchandise, in the Year 1831, specifying the Imports from and Exports to each Country.—(*Parl. Paper*, No. 336. Sess. 1833.)

Countries.	United Kingdom.			
	Official Value of Imports.	Official Value of Exports.		
		British and Irish Produce and Manufactures.	Foreign and Colonial Merchandise.	Total Exports.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Europe — Russia	4,086,368 17 11	1,746,972 12 5	856,856 14 8	2,603,829 7 1
Sweden	212,629 13 1	94,587 5 1	67,788 12 8	162,375 17 9
Norway	91,678 10 1	92,599 1 1	58,225 5 6	150,824 6 7
Denmark	410,361 7 2	173,280 1 11	83,423 8 3	256,703 10 2
Prussia	1,300,702 7 5	264,618 2 1	564,684 12 10	829,302 14 11
Germany	1,584,165 8 3	7,667,147 0 3	1,806,480 8 9	9,473,627 9 0
Netherlands	1,276,181 12 3	3,179,298 13 6	3,270,927 0 11	6,450,225 14 5
France	5,056,154 12 4	635,927 13 5	256,081 19 7	892,009 13 0
Portugal, Azores and Madeira	560,616 18 8	2,251,584 3 0	68,197 17 1	2,319,782 0 1
Spain and the Canaries	1,296,924 0 4	1,036,623 17 8	318,038 7 8	1,354,662 5 4
Gibraltar	12,668 7 0	879,382 3 7	121,340 18 3	1,000,723 1 10
Italy	1,475,354 6 10	4,548,154 10 4	820,651 1 0	5,368,805 11 4
Malta	61,501 2 10	257,587 8 8	20,485 2 6	278,022 11 2
Ionian Islands	187,185 11 4	71,492 13 2	13,383 8 7	84,976 1 9
Turkey and Continental Greece	758,797 19 1	2,113,928 9 2	95,777 3 2	2,209,705 12 4
Morea and Greek islands	29,573 5 9	28,563 12 0	1,743 11 10	30,307 3 10
Isles Guernsey, Jersey, Alderney and Man	292,940 14 7	445,410 2 4	126,435 1 2	571,845 3 6
	17,180,443 15 11	25,467,207 9 8	8,550,520 14 5	34,017,728 4 1
Africa — Egypt, ports on the Mediterranean	275,547 19 7	236,189 15 3	2,068 9 9	238,258 5 0
Tripoli, Barbary and Morocco	45,966 5 9	759 10 0	4,950 16 11	5,710 6 11
Western coast of Africa	239,105 0 5	352,182 17 9	155,275 19 7	507,458 17 4
Cape of Good Hope	183,481 14 2	351,107 13 3	28,940 6 1	380,047 19 4
Eastern coast of Africa	2,328 17 0			
Cape Verde Islands	- - -	123 17 6	75 3 8	199 1 2
St. Helena	44,312 3 8	28,439 6 3	3,030 9 10	31,469 16 1
Mauritius	724,295 8 2	268,963 16 4	11,984 17 9	280,948 14 1
Asia — East Indies and China	7,940,182 5 9	6,521,732 10 7	426,068 0 7	6,947,600 11 2
New South Wales, Van Diemen's Land and Swan River	191,841 3 2	427,378 18 8	149,735 11 9	577,114 10 5
New Zealand and South Sea Islands	6,442 10 0	4,056 12 6	815 8 3	4,872 0 9
America — British Northern colonies	1,532,582 19 0	2,858,514 19 9	271,975 9 3	3,130,490 9 0
British West Indies	8,448,829 8 7	3,729,521 14 3	258,764 6 4	3,988,286 0 7
Foreign West Indies	615,204 7 2	2,186,482 5 7	48,762 14 11	2,235,245 0 6
United States	8,970,342 8 3	12,007,208 8 11	588,965 9 0	12,596,173 17 11
Mexico	191,731 12 3	1,112,916 12 11	138,852 4 10	1,251,768 17 9
Guatemala	8,963 4 6			
Columbia	25,243 14 1	476,768 0 0	22,964 17 4	499,732 17 4
States of Rio de la Plata	470,272 14 10	582,086 6 4	8,224 8 10	590,310 15 2
Chili	71,180 16 11	1,057,621 17 2	10,842 2 8	1,068,463 19 10
Peru	42,577 2 3	614,639 11 10	21,392 9 3	646,032 1 1
Brazil	2,278,659 18 4	2,392,602 8 4	39,002 8 7	2,431,664 16 11
The Whale Fisheries	273,800 19 9	- -	1,914 0 0	1,914 0 0
Total £	49,727,108 14 6	60,686,364 12 10	10,745,126 9 7	71,431,491 2 5

VIII. Account of the Quantities of the Principal Articles of Foreign and Colonial Merchandise imported and retained for Home Consumption, with the Quantity exported in 1831; Fractional Quantities omitted.—(*Parl. Paper*, No. 550. Sess. 1833.)

Articles.	Quantities Imported.	Retained for Home Consumption.	Quantities exported.
Ashes, pearl and pot, cwt.	228,756	122,941	23,469
Barilla — —	184,049	252,483	
Bark, oak, and cork tree, cwt.	931,075	926,056	
Brimstone, rough, —	289,421	295,072	
Bristles — lbs.	2,070,306	1,819,788	
Butter — cwt.	125,169	121,193	
Cassia lignea — lbs.	598,420	61,162	718,772
Cheese — cwt.	134,459	130,608	
Cinnamon — lbs.	225,869	23,178	504,643
Cloves — —	128,223	83,885	81,912
Cochineal — —	224,371	134,122	168,329
Cocoa nuts — —	3,483,118	502,806	1,531,131
Coffee — —	45,007,828	22,715,807	22,485,474
Copper, unwrought, cwt.	661	6	1,550
Cork, unmanufactured, cwt.	46,962	43,274	
Corn: — Wheat — qrs.	1,838,696	1,201,585	43,456
Barley — —	376,538	522,696	642
Oats — —	619,913	334,484	5,571
Rye — —	91,565	56,867	36,735
Peas and beans —	83,904	77,226	567
Wheat meal and flour, cwt.	1,636,059	1,015,142	68,664
Cortex Peruvianus, or Jesuits' bark — lbs.	225,678	112,773	137,578
Cotton piece goods of India, not printed pieces	1,064,416	value £.12,889	784,317
Cottons, printed, sq. yds.	149,806	19,636	133,068
Currants — cwt.	212,899	149,018	
Dye and hard woods: —			
Fustic — tons	6,334	5,776	
Logwood — —	14,852	10,405	6,911
Mahogany — —	11,541	12,174	
Elephants' teeth — cwt.	5,267	3,368	
Figs — —	28,722	20,578	
Flax and tow, or codilla of hemp and flax, cwt.	936,411	918,883	
Furs: — Bear — No.	17,602	1,614	6,969
Beaver — —	100,944	65,699	
Fitch — —	243,705	238,127	
Marten — —	214,107	145,859	7,269
Mink — —	103,561	56,066	
Musquash — —	772,693	271,214	602,662
Nutria — —	494,067	426,012	
Otter — —	25,198	3,481	6,668
Ginger — cwt.	5,315	4,827	6,092
Gum: — Arabic — cwt.	7,285	9,170	280
Lac-dye — lbs.	782,599	454,779	143,611
Shellac — —	1,183,058	552,389	687,281
Hats or bonnets, straw, No.	84,066	93,947	

Articles.	Quantities imported.	Retained for Home Consumption.	Quantities exported.
Hemp, undressed, cwt.	530,820	504,307	
Hides, untanned - —	271,469	236,099	
Indigo - - lbs.	7,299,605	2,490,134	4,374,241
Iron in bars - tons	17,872	13,656	4,255
Lead, pig - - —	1,232	14	1,234
Leather gloves - pairs	1,196,465	1,181,338	
Lemons and oranges: —			
Packages not exceeding 5,000 cubic inches -	71,120	59,517	
Ditto above 5,000, and not exceeding 7,300	177,308	168,073	
Ditto above 7,300, and not exceeding 14,000	74,526	71,649	
Linens, cambrics, &c. pieces	55,092	53,971	
Ditto, plain and diaper: —			
Entered by the ell ells	425,824	- -	454,431
Entered by the piece pieces	17,102	- -	18,956
Entered by the square yard - sq. yds.	28,190	140	78,760
Entered at value - *L.*	11,059	12,823	915
Liquorice juice - cwt.	8,873	6,002	
Mace - - lbs.	41,287	18,894	63,795
Madder - - cwt.	43,955	48,756	
Madder root - —	52,449	53,862	
Molasses - - —	332,875	348,626	
Nutmegs - - lbs.	210,363	152,369	88,352
Oil: — Castor - —	393,191	327,940	
Olive - - galls.	4,158,917	1,928,892	
Palm - - cwt.	164,760	175,452	
Blubber - - tuns	1,969	1,969	
Spermaceti - —	6,816	6,774	
Not blubber or spermaceti - tuns	15,884	14,283	
Opium - - lbs.	9,967	25,937	25,045
Pepper - - —	6,273,480	2,050,082	6,844,416
Pimento - - —	1,810,616	304,400	1,815,537
Prunes - - cwt.	9,370	8,044	
Quicksilver - lbs.	314,286	192,310	848,108
Raisins - - cwt.	216,282	162,204	
Rhubarb - - lbs.	140,595	40,124	104,849
Rice - - cwt.	168,744	140,100	88,886
Rice in the husks, bush.	225,556	189,388	
Safflower - - cwt.	2,772	2,300	
Sago - - —	2,549	3,423	
Saltpetre - - —	175,938	155,499	20,168
Sarsaparilla - lbs	176,854	107,410	
Seeds: — Clover - cwt.	110,255	114,663	
Flax and linseed, bush.	2,759,103	2,476,990	
Rape seed - —	407,275	396,502	
Tares - - —	88,939	81,480	
Senna - - lbs.	250,296	130,222	
Shumac - - cwt.	133,799	127,821	
Silk: — Raw and waste, lbs.	3,992,593	3,773,791	29,975
Thrown - - —	649,281	514,240	25,311
Manufactures of Europe - - lbs.	158,831	148,478	9,202
India, viz.: —			
Bandanas, romals, &c. pieces	185,117	101,023	100,337

Articles.	Quantities imported.	Retained for Home Consumption.	Quantities exported.
Crape - - lbs.	1,307	Value *L*10,485	818
Crape scarfs, shawls, &c. - - No.	27,233		27,819
Taffeties, damasks, &c. pieces	10,631	5,516	6,383
Skins: — Calf and kid, untanned - cwt.	42,637	40,194	
Deer, undressed - No.	125,357	31,079	112,948
Goat, — - —	354,584	212,422	97,469
Kid, — - —	595,573	486,527	
dressed - —	621,780	621,780	
Lamb, undressed - —	2,820,092	2,819,706	
Seal, — - —	541,692	528,206	
Smalts - - lbs.	391,523	348,115	
Spelter - - cwt.	76,412	20,526	62,684
Spirits: — Rum, prf. gals.	7,892,722	3,624,597	2,375,527
Brandy - —	1,461,897	1,235,101	504,172
Geneva - - —	215,926	25,898	207,072
Sugar, unrefined - cwt.	5,366,262	3,781,011	420,721
Tallow - - —	1,010,691	918,733	
Tar - - lasts	10,572	10,075	
Tea - - lbs.	31,648,926	29,997,055	236,359
Timber: — Battens & batten ends, gt. hunds.	14,596	11,637	
Deals & deal ends —	54,915	49,189	
Lathwood - - —	11,373	11,269	
Masts, yards, &c., under 12 inches diameter, No.	13,438	12,027	
Ditto, 12 inches diameter and above, loads	4,703	4,125	
Oak plank, 2 inches thick or upwards, loads	2,525	2,279	
Staves - gt. hunds.	76,431	70,307	
Teak - - loads	23,839	24,891	
Timber 8 inches square or upwards - loads	562,199	546,078	
Wainscot logs - —	2,571	2,701	
Tins - - cwt.	8,099	- -	12,226
Tobacco, unmanufactured - lbs.	33,107,679	19,418,940	9,358,356
Tobacco, manufactured, and snuff - lbs.	220,106	114,900	80,061
Turpentine, not worth more than 12*s.* per cwt. - - cwt.	317,895	301,199	
Valonia - - —	134,307	137,193	
Wax, bees' - - —	7,203	10,095	
Whale fins - - —	7,191	6,723	
Wool, cotton - lbs.	288,674,853	273,249,553	22,308,555
sheep's - —	31,652,029	29,669,998	1,025,962
Wine: — Cape - gals.	428,154	559,884	30,942
French - - —	351,102	254,366	76,152
Portugal - - —	2,763,211	2,707,734	235,129
Spanish - - —	2,605,328	2,089,532	377,138
Madeira - - —	356,514	209,127	128,828
Canary - - —	191,916	94,117	104,702
Rhenish - - —	71,352	57,888	8,152
Other sorts - —	349,293	259,916	54,262
Of all sorts - - —	7,116,870	6,212,264	1,014,925
Yarn, linen, raw, cwt.	17,352	17,352	
Zaffre - - lbs.	227,512	227,982	

IX. Quantities and Declared Value of British and Irish Produce and Manufactures exported in 1831. — (*Parl. Paper*, No. 550. Sess. 1833.)

Articles.	Quantities.	Decl. Value.
		L.
Apparel, slops, and haberdashery - -	- -	790,293
Arms and ammunition - -	- -	562,765
Bacon and hams - - cwt.	7,562	22,689
Beef and pork - - bar.	41,243	117,922
Beer and ale - - - tuns	8,844	161,768
Books, printed - - cwt.	4,112	101,110
Brass and copper manufactures —	181,951	803,124
Butter and cheese - - —	63,260	254,024
Coals, culm, and cinders - tons	510,831	199,760
Cordage - - - cwt.	36,276	81,986
Cotton manufactures: — entered by the yard - - - yards	421,385,303	12,163,515
Cotton hosiery, lace, and small wares	- -	1,118,672
Cotton twist and yarn - lbs.	63,821,440	3,975,019
Earthenware of all sorts - pieces	37,028,897	461,090
Fish - - - barrels	96,712	109,656
Glass, entered by weight - cwt.	177,915	420,044
entered at value - - -	- -	9,580
Hardwares and cutlery - cwt.	336,194	1,622,429
Hats, beaver and felt - - doz.	62,856	170,188
Iron and steel, wrought and unwrought - - tons	124,312	1,123,372
Lead and shot - - - —	6,777	96,333

Articles.	Quantities.	Decl. Value.
		L.
Leather, wrought and unwrought, lbs.	1,314,931	246,410
Saddlery and harness - -	- -	61,312
Linen manufactures - yards	69,233,892	2,400,043
Linen threads, tapes, &c. - -	- -	48,643
Machinery and mill work - -	- -	105,491
Painters' colours - - -	- -	102,065
Plate, plated ware, jewellery, and watches - - -	- -	188,144
Salt - - - bush.	9,932,214	165,437
Silk manufactures - - -	- -	578,874
Soap and candles - - lbs.	9,625,686	236,499
Stationery of all sorts - -	- -	179,216
Sugar, refined - - cwt.	581,836	1,238,919
Tin, unwrought - - —	27,763	77,718
Tin and pewter wares and tin plates	- -	230,143
Wool, sheep's and lambs' - lbs.	3,494,275	173,105
Woollen and worsted yarn - —	1,592,455	158,111
Woollen manufactures - pieces	1,997,348	4,580,902
Do. Do. - yards	5,797,546	500,546
Woollen, hosiery, and small wares -	- -	500,155
All other articles - - -	- -	1,362,874
	Total *L.*	37,164,372

Causes of the Magnitude of British Commerce. — The immediate cause of the rapid increase and vast magnitude of the commerce of Great Britain is, doubtless, to be found in the extraordinary improvements, and consequent extension, of our manufactures since 1770. The cotton manufacture may be said to have grown up during the intervening period. It must also be borne in mind, that the effect of an improvement in the production of any article in considerable demand is not confined to that particular article, but extends itself to others. Those who produce it according to the old plan, are undersold unless they adopt the same or similar improvements; and the improved article, by coming into competition with others for which it may be substituted, infuses new energy

into their producers, and impels every one to put forth all his powers, that he may either preserve his old, or acquire new advantages. The cotton manufacture may be said to be the result of the stupendous inventions and discoveries of Hargraves, Arkwright, Crompton, and a few others; but we should greatly under-rate the importance of their inventions, if we supposed that their influence was limited to this single department. They imparted a powerful stimulus to every branch of industry. Their success, and that of Watt and Wedgwood, gave that confidence to genius so essential in all great undertakings. After machines had been invented for spinning and weaving cottons, whose fineness emulates the web of the gossamer, and steam-engines had been made "to engrave seals, and to lift a ship like a bauble in the air," every thing seemed possible — *nil arduum visum est.* And the unceasing efforts of new aspirants to wealth and distinction, and the intimate connection of the various arts and sciences, have extended and perpetuated the impulse given by the invention of the spinning-frame and the steam-engine.

The immense accumulation of capital that has taken place since the close of the American war has been at once a cause and a consequence of our increased trade and manufactures. Those who reflect on the advantages which an increase of capital confers on its possessors can have no difficulty in perceiving how it operates to extend trade. It enables them to buy cheaper, because they buy larger quantities of goods, and pay ready money; and, on the other hand, it gives them a decided superiority in foreign markets where capital is scarce, and credit an object of primary importance with the native dealers. To the manufacturer, an increase of capital is of equal importance, by giving him the means of constructing his works in the best manner, and of carrying on the business on such a scale as to admit of the most proper distribution of whatever has to be done among different individuals. These effects have been strikingly evinced in the commercial history of Great Britain during the last half century; and thus it is, that capital, originally accumulated by means of trade, gives, in its turn, nourishment, vigour, and enlarged growth to it.

The improvement that has taken place in the mode of living during the last half century has been partly the effect, and partly the cause, of the improvement of manufactures, and the extension of commerce. Had we been contented with the same accommodations as our ancestors, exertion and ingenuity would long since have been at an end, and routine have usurped the place of invention. Happily, however, the desires of man vary with the circumstances under which he is placed, extending with every extension of the means of gratifying them, till, in highly civilised countries, they appear almost illimitable. This endless craving of the human mind, its inability to rest satisfied with previous acquisitions, combined with the constant increase of population, renders the demand for new inventions and discoveries as intense at one period as at another, and provides for the continued advancement of society. What is a luxury in one age, becomes a necessary in the next. The fact of Queen Elizabeth having worn a pair of silk stockings was reckoned deserving of notice by contemporary historians; while, at present, no individual, in the rank of a gentleman, can go to dinner without them. The lower classes are continually pressing upon the middle; and these, again, upon the higher; so that invention is racked, as well to vary the modes of enjoyment, as to increase the amount of wealth. That this competition should be, in all respects, advantageous, is not to be supposed. Emulation in show, though the most powerful incentive to industry, may be carried to excess; and has certainly been ruinous to many individuals, obliged sometimes, perhaps, by their situation, or seduced by example, to incur expenses beyond their means. But the abuse, even when most extended, as it probably is in England, is, after all, confined within comparatively narrow limits; while the beneficial influence resulting from the general diffusion of a taste for improved accommodations adds to the science, industry, wealth, and enjoyments of the whole community.

We are also inclined to think that the increase of taxation, during the late war, contributed to the improvement of manufactures, and the extension of trade. The gradually increasing pressure of the public burdens stimulated the industrious portion of the community to make corresponding efforts to preserve their place in society; and produced a spirit of invention and economy that we should have in vain attempted to excite by any less powerful means. Had taxation been very oppressive, it would not have had this effect; but it was not so high as to produce either dejection or despair, though it was, at the same time, sufficiently heavy to render a considerable increase of exertion and parsimony necessary, to prevent it from encroaching on the fortunes of individuals, or, at all events, from diminishing the rate at which they were previously accumulating To the excitement afforded by the desire of rising in the world, the fear of falling superadded an additional and powerful stimulus; and the two together produced results that could not have been produced by the unassisted operation of either. We do not think that any evidence has been, or can be, produced to show, that the capital of the country would have been materially greater than it is, had the tranquillity of Europe been maintained uninterrupted from 1793 to the present moment.

We do not state these circumstances in order to extenuate the evils of war, or of oppressive taxation; but merely to show the real influence of taxation on industry, when gradually augmented and kept within reasonable bounds. Under such circumstances, it has the same influence on a nation that an increase of his family, or of his unavoidable expenses, has on a private individual.

But after every fair allowance has been made for the influence of the causes above stated, and of others of a similar description, still it is abundantly certain that a liberal system of government, affording full scope for the expansion and cultivation of every mental and bodily power, and securing all the advantages of superior talent and address to their possessors, is the grand *sine quâ non* of commercial and manufacturing prosperity. Where oppression and tyranny prevail, the inhabitants, though surrounded by all the means of civilisation and wealth, are invariably poor and miserable. In respect of soil, climate, and situation, Spain has a decided advantage over Great Britain: and yet, what a miserable contrast does the former present, when compared with the latter! The despotism and intolerance of her rulers, and the want of good order and tranquillity, have extinguished every germ of improvement in the Peninsula, and sunk the inhabitants to the level of the Turks and Moors. Had a similar political system been established in England, we should have been equally depressed. Our superiority in science, arts, and arms, though promoted by subsidiary means, is, at bottom, the result of *freedom* and *security* — freedom to engage in every employment, and to pursue our own interest in our own way, coupled with an intimate conviction, derived from the nature of our institutions, and their opposition to every thing like arbitrary power, that acquisitions, when made, may be securely enjoyed or disposed of. These form the grand sources of our wealth and power. There have only been two countries, — Holland and the United States, — which have, in these respects, been placed under nearly the same circumstances as England; and, notwithstanding they inhabit a morass, defended only by artificial mounds from being deluged by the ocean, the Dutch have long been, and still continue to be, the most prosperous and opulent people of the Continent; while the Americans, whose situation is more favourable, are advancing in the career of improvement with a rapidity hitherto unknown. In Great Britain we have been exempted, for a lengthened period, from foreign aggression and intestine commotion; the pernicious influence of the feudal system has long been at an end; the same equal burdens have been laid on all classes; we have enjoyed the advantage of liberal institutions, without any material alloy of popular licentiousness or violence; our intercourse with foreign nations, though subjected to many vexatious restraints, has been comparatively free; full scope has been given to the competition of the home producers; the highest offices have been open to deserving individuals; and, on the whole, the natural order of things has been less disturbed amongst us by artificial restraints than in most other countries. But without security, no degree of freedom would have been of material importance. Happily, however, every man has felt satisfied, not only of the temporary, but of the permanent tranquillity of the country, and of the stability of its institutions. The plans and combinations of capitalists have not been affected by misgivings as to what might take place in future. Monied fortunes have not been amassed in preference to others, because they might be more easily sent abroad in periods of confusion and disorder; but all individuals have unhesitatingly engaged, whenever an opportunity offered, in undertakings of which a remote posterity was alone to reap the benefit. No one can look at the immense sums expended upon the permanent improvement of the land, on docks, warehouses, canals, &c., or reflect for a moment on the settlements of property in the funds, and on the extent of our system of life insurance, without being deeply impressed with the vast importance of that confidence which the public have placed in the security of property, and the good faith of government. Had this confidence been imperfect, industry and invention would have been paralysed; and much of that capital which feeds and clothes the industrious classes would never have existed. The preservation of this security entire, both *in fact and in opinion*, is essential to the public welfare. If it be anywise impaired, the colossal fabric of our prosperity will crumble into dust; and the commerce of London, Liverpool, and Glasgow, like that of Tyre, Carthage, and Palmyra, will, at no very remote period, be famous only in history. — (From the *Treatise on Commerce*, contributed by the author of this work to the Society for the Diffusion of Useful Knowledge.)

IMPRESSMENT, the forcible taking away of seamen from their ordinary employment, and compelling them to serve, against their will, in his Majesty's ships.

1. *Regulations as to Impressment.* — This practice is not expressly sanctioned by any act of parliament; but it is so indirectly by the numerous statutes that have been passed, granting exemptions from it. According to Lord Mansfield, it is "a power founded upon immemorial usage," and is understood to make a part of the common law. All *sea-faring* men are liable to impressment, unless specially protected by custom or statute. Seamen executing particular services for government, not unfrequently get protections from the Admiralty, Navy Board, &c. Some are exempted by *local* custom: and *ferrymen* are every where privileged from impressment. The statutory exemptions are numerous

1. *Every ship in the coal trade* has the following persons protected, viz. 2 able seamen (such as the master shall nominate) for every ship of 100 tons; and 1 for every 50 tons for every ship of 100 tons and upwards; and any officer who presumes to impress any of the above, shall forfeit, to the master or owner of such vessel, 10*l.* for every man so impressed; and such officer shall be incapable of holding any place, office, or employment, in any of his Majesty's ships of war.—(5 & 7 *Will.* 3. c. 18. sect. 19.) *

2. *No parish apprentice* shall be compelled or permitted to enter into his Majesty's sea service till he arrives at the age of 18 years.—(2 & 3 *Anne*, c. 6. sect. 4.)

3. Persons *voluntarily* binding themselves apprentices to sea service, shall not be impressed for 3 years from the date of their indentures. But no persons above 18 years of age shall have any exemption or protection from his Majesty's service, if they have been at sea before they became apprentices.—(2 & 3 *Anne*, c. 6. sect. 15.; 4 *Anne*, c. 19. sect. 17.; and 13 Geo. 2. c. 17. sect. 2.)

4. *Apprentices.*—The act 4 Geo. 4. c. 25. enacts some new regulations with respect to the number of apprentices that ships must have on board according to their tonnage; and grants protection to such apprentices till they have attained the age of 21 years.—(For the regulations of this act, see APPRENTICE.)

5. *Persons employed in the Fisheries.*—The act 59 Geo. 3. c. 108. grants the following exemptions from impressment, viz.:—

1st, *Masters of fishing vessels* or boats, who, either themselves or their owners, have, or within 6 months before applying for a protection shall have had, 1 apprentice or more under 16 years of age, bound for 3 years, and employed in the business of fishing.

2dly, All such *apprentices*, not exceeding *eight* in every master or owner of any fishing vessel of 50 tons or upwards; not exceeding *seven* to every vessel or boat of 35 tons and under 50; not exceeding *six* to every vessel of 30 tons and under 35 tons; and not exceeding *four* to every vessel or boat under 30 tons burden; during the time of their apprenticeship, and till the age of 20 years; they continuing, for the time, in the business of fishing only.

3dly, *One mariner*, besides the master and apprentices, to every fishing vessel of 10 tons or upwards, employed on the sea-coast, during his continuance in such service.

4thly, *Any landsman* above the age of 18, entering and employed on board such vessel, for 2 years from his first going to sea; and to the end of the voyage then engaged in, if he so long continue in such service.

An affidavit sworn before a justice of the peace, containing the tonnage of such fishing vessel or boat, the port or place to which she belongs, the name and description of the master, the age of every apprentice, the term for which he is bound, and the date of his indenture, and the name, age, and description of every such mariner and landsman respectively, and the time of such landsman's first going to sea, is to be transmitted to the Admiralty; who, upon finding the facts correctly stated, grant a separate protection to every individual. In case, however, "*of an actual invasion of these kingdoms, or imminent danger thereof,*" such protected persons may be impressed; but except upon such an emergency, any officer or officers impressing such protected persons shall respectively forfeit 20*l.* to the party impressed, if not an apprentice, or to his master if he be an apprentice.—Sects. 2, 3, 4.

6. *General Exemptions.*—All persons 55 years of age and upwards, and under 18 years. Every person being a foreigner, who shall serve in any merchant ship, or other trading vessel, or privateer, belonging to a subject of the Crown of Great Britain; and all persons, of what age soever, who shall use the sea; shall be protected for 2 years, to be computed from the time of their first using it.—(13 *Geo.* 2. c. 17.)

7. *Harpooners*, line managers, or boat steerers, engaged in the southern whale fishery, are also protected.—(26 *Geo.* 3. c. 50.)

8. *Mariners employed in the herring fishery* are exempted while actually employed.—(48 *Geo.* 3. c. 110.)

2. *Policy of Impressment.* This practice, so subversive of every principle of justice, is vindicated on the alleged ground of its being absolutely necessary to the manning of the fleet. But this position, notwithstanding the confidence with which it has been taken up, is not quite so tenable as has been supposed. The difficulties experienced in procuring sailors for the fleet at the breaking out of a war, are not natural but artificial, and might be got rid of by a very simple arrangement. During peace, not more than a fourth or a fifth part of the seamen are retained in his Majesty's service that are commonly required during war; and if peace continue for a few years, the total number of sailors in the king's and the merchant service is limited to that which is merely adequate to supply the reduced demand of the former, and the ordinary demand of the latter. When, therefore, war is declared, and 30,000 or 40,000 additional seamen are wanted for the fleet, they cannot be obtained, unless by withdrawing them from the merchant service, which has not more than its proper complement of hands. But to do this by offering the seamen higher wages would be next to impossible; and would, supposing it were practicable, impose such a sacrifice upon the public as could hardly be borne. And hence, it is said, the necessity of impressment; a practice which every one admits can be justified on no other ground than that of its being absolutely essential to the public safety.

It is plain, however, that a necessity of this sort may be easily obviated. All, in fact, that is necessary for this purpose, is merely to keep such a number of sailors in his Majesty's service during peace as may suffice, with the ordinary proportion of landmen and boys, to man the fleet at the breaking out of a war. Were this done, there would not be the shadow of a pretence for resorting to impressment; and the practice, with the cruelty and injustice inseparable from it, might be entirely abolished.

But it is said that, though desirable in many respects, the *expense* of such a plan will always prevent it from being adopted. It admits, however, of demonstration, that instead of being dearer, this plan would be actually cheaper than that which is now followed. Not more than 1,000,000*l.* or 1,200,000*l.* a year would be required to be added to the navy estimates, and that would not be a real, but merely a nominal advance. The violence and injustice to which the practice of impressment exposes sailors, operates at all times to raise their wages, by creating a disinclination on the part of many young men to enter the sea service; and this disinclination is vastly increased during war, when wages *usually rise to four or five times their previous amount*, imposing a burden on the commerce of the country, exclusive of other equally mischievous consequences, many times greater than the tax that would be required to keep up the peace establishment of the navy to its proper level. It is really, therefore, a vulgar error to suppose that impressment has the recommendation of cheapness in its favour; and, though it had, no reasonable man would contend that that is the only, or even the principal, circumstance to be attended to. In point of fact, however, it is as costly as it is oppressive and unjust.—(The reader is referred, for a fuller discussion of this interesting question, to the note on *Impressment* in the 4th volume of the *Wealth of Nations.*)

INDEMNITY, is where one person secures another from responsibility against any particular event; thus, a policy of insurance is a contract of indemnity against any particular loss. Where one person also becomes bail for another, a bond of indemnity is frequently executed; and where a bond or bill of exchange has been lost or mislaid, the acceptor or obligee would not act prudently in paying it, without being secured by a bond of indemnity.

INDIAN RUBBER. See CAOUTCHOUC.

INDIGO (Fr. *Indigo*; Ger. *Indigo*; Sans. *Nili*; Arab. *Neel*; Malay, *Taroom*), the drug which yields the beautiful blue dye known by that name. It is obtained by the maceration in water of certain tropical plants; but the indigo of commerce is almost entirely obtained from leguminous plants of the genus *Indigofera*: that cultivated in India being the *Indigofera tinctoria*; and that in America the *Indigofera anil.* The Indian plant has pinnate leaves and a slender ligneous stem; and when successfully cultivated, rises to the height of 3, 5, and even 6 feet.

It appears pretty certain that the culture of the indigo plant, and the preparation of

* In order that these men shall be thus protected, it is necessary for the master *to name them, before they are impressed*: this is to be done by going before the mayor or other chief magistrate of the place, who is to give the master a certificate, in which is contained the names of the particular men whom he thus nominates; and this certificate will be their protection.

the drug, have been practised in India from a very remote epoch. It has been questioned, indeed, whether the *indicum* mentioned by Pliny (*Hist. Nat.* lib. xxxv. c. 6.) was indigo, but, as it would seem, without any good reason. Pliny states that it was brought from India; that when diluted it produced an admirable mixture of blue and purple colours (*in diluendo misturam purpuræ cæruleique mirabilem reddit*); and he gives tests by which the genuine drug might be discriminated with sufficient precision. It is true that Pliny is egregiously mistaken as to the mode in which the drug was produced; but there are many examples in modern as well as ancient times, to prove that the possession of an article brought from a distance implies no accurate knowledge of its nature, or of the processes followed in its manufacture. Beckmann (*Hist. of Inventions*, vol. iv. art. *Indigo*) and Dr. Bancroft (*Permanent Colours*, vol. i. pp. 241—252.) have each investigated this subject with great learning and sagacity; and agree in the conclusion that the *indicum* of Pliny was real indigo, and not, as has been supposed, a drug prepared from the *isatis* or woad. At all events, there can be no question that indigo was imported into modern Europe, by way of Alexandria, previously to the discovery of the route to India by the Cape of Good Hope. When first introduced, it was customary to mix a little of it with woad to heighten and improve the colour of the latter; but, by degrees, the quantity of indigo was increased; and woad was, at last, entirely superseded. It is worth while, however, to remark, that indigo did not make its way into general use without encountering much opposition. The *growers of woad* prevailed on several governments to prohibit the use of indigo! In Germany, an Imperial edict was published in 1654, prohibiting the use of indigo, or "*devil's dye*," and directing great care to be taken to prevent its clandestine importation, "because," says the edict, "the trade in woad is lessened, dyed articles injured, and money carried out of the country!" The magistrates of Nuremburg went further, and compelled the dyers of that city to take an oath once a year not to use indigo; which practice was continued down to a late period. In 1598, upon an urgent representation of the states of Languedoc, at the solicitation of the woad growers, the use of indigo was prohibited in that province; and it was not till 1737, that the dyers of France were left at liberty to dye with such articles, and in such a way, as they pleased. — (*Beckmann*, vol. iv. p. 142.) Let not those who may happen to throw their eyes over this paragraph, smile at the ignorance of our ancestors — *Mutato nomine, de te fabula narratur.* How much opposition is made at this moment to the importation of many important articles, for no better reasons than were alleged, in the sixteenth century, against the importation of indigo!

Indigo is at present produced in Bengal, and the other provinces subject to the presidency of that name, from the 20th to the 30th degree of north latitude; in the province of Tinnevelly, under the Madras government; in Java; in Luconia, the principal of the Philippine Islands; and in Guatemala, and the Caraccas, in Central America. Bengal is, however, the great mart for indigo; and the quantity produced in the other places is comparatively inconsiderable.

Raynal was of opinion that the culture of indigo had been introduced into America by the Spaniards; but this is undoubtedly an error. Several species of *indigofera* belong to the New World; and the Spaniards used it as a substitute for ink very soon after the conquest. — (*Humboldt, Essai Politique sur la Nouvelle Espagne*, tom. iii. p. 54. 2d ed.)

For the first 20 years after the English became masters of Bengal, the culture and manufacture of indigo, now of such importance, was unknown as a branch of British industry; and the exports were but trifling. The European markets were, at this period, principally supplied from America. In 1783, however, the attention of the English began to be directed to this business; and though the processes pursued by them be nearly the same with those followed by the natives, their greater skill, intelligence, and capital, give them immense advantages. In their hands, the growth and preparation of indigo has become the most important employment, at least in a commercial point of view, carried on in the country. The indigo made by the natives supplies the internal demand; so that all that is raised by Europeans is exported.

In the Delta of the Ganges, where the best and largest quantity of indigo is produced, the plant lasts only for a single season, being destroyed by the periodical inundation; but in the dry central and western provinces, one or two *rattoon* crops are obtained: and owing to this circumstance, the latter are enabled to furnish a large supply of seed to the former.

The fixed capital required in the manufacture of indigo consists of a few vats of common masonry for steeping the plant, and precipitating the colouring matter; a boiling and drying house; and a dwelling house for the planter. These, for a factory of 10 pair of vats, capable of producing, at an average, 12,500 lbs. of indigo, worth on the spot about 2,500*l.*, will not cost above 1,500*l.* sterling. The buildings and machinery necessary to produce an equal value in sugar and rum, would probably cost about 4,000*l.* This fact, therefore, without any reference to municipal regulations, affords a ready answer to the question which has been frequently put, why the British planters in India have never engaged in the manufacture of sugar.

During the 9 years which preceded the opening of the trade with India, in 1814, the annual average produce of indigo in Bengal, for exportation, was nearly 5,600,000 lbs.; but the average produce of the 4 last years of this period scarcely equalled that of the preceding 5. But since the ports were opened, the indigo produced for exportation has increased fully a *third*; the exports during the 16 years ending with 1829-30, being above 7,400,000 lbs. a year. The following brief statement shows the rate of this increase, taking the average produce of each 4 years: —

	Lbs.		*Lbs.*		*Lbs.*		*Lbs*
1814, 1815, 1816, 1817	7,040,000	1818, 1819, 1820, 1821	6,000,000	1822, 1823, 1824, 1825	8,000,000	1826, 1827, 1828, 1829	9,000,000

and it has continued about the same since.

It deserves to be remarked, that since the opening of the trade, Indian capitalists have betaken themselves to the manufacture of indigo on the European method, and that at present about a fifth part of the whole annual produce is prepared by them.

The culture of indigo is very precarious, not only in so far as respects the growth of the plant from year

to year, but also as regards the quantity and quality of the drug which the same amount of plant will afford even in the same season. Thus, the produce of 1825-26 was 41,000 chests, while the produce of the following year was but 25,000 chests; the produce of 1827-28 was about 42,000 chests, and that of 1828-29 only 26,500 chests! The average of these years, that is, about 9,000,000 lbs., may be considered as the present annual produce of Bengal. The price of indigo in India increased, for a while, in a far greater ratio than the quantity. In 1813-14, the real value of that exported from Calcutta was 1,461,000*l.*; but in 1827-28, although the quantity had increased but 20 per cent., the value rose to 2,920,000*l.*, or was about doubled. There was no corresponding rise in the price in Europe, but, on the contrary, a decline; and the circumstance is to be accounted for by the restraints placed on the investment of capital in the production of colonial articles suited to the European market, the consequent difficulty of making remittances from India, and an unnatural flow of capital to the only great article of Indian produce and export that is supposed capable of bearing its application.

But the effects of the profuse advances made by the Calcutta capitalists to those engaged in the indigo culture, coupled with the increasing imports from Madras, and the stationary demand for the drug in this country, have at length manifested themselves in the most distressing manner. Prices have been so much reduced that a ruinous reaction has taken place; most of the Calcutta merchants engaged in the trade having been obliged to stop payment, involving in their fall several opulent houses in this country. It remains to be seen whether this will occasion any diminution in the supplies of indigo, or whether the supply may not be maintained even at the reduced prices by increased economy. The subjoined Table shows that prices advanced considerably in 1833; but it is doubtful whether this advance will be sustained.

The consumption of indigo has varied but little in this country during the last dozen years, having been, at an average of that period, about 2,500,000 lbs. a year. This stationary demand, notwithstanding the fall in the price of the drug and the increase of population, is principally to be ascribed to the decreasing use of blue cloth, in the dyeing of which it is principally made use of. Its consumption in France is about as great as in Britain. Besides the exports to Great Britain, France, and the United States, a good deal of Bengal indigo is exported to the ports on the Persian Gulf, whence it finds its way to southern Russia. It is singular that it is not used by the Chinese, with whom blue is a favourite colour.

The indigo of Bengal is divided into two classes, called, in commercial language, *Bengal* and *Oude;* the first being the produce of the southern provinces of Bengal and Bahar, and the last that of the northern provinces. The first is, in point of quality, much superior to the other. This arose at one time, in a considerable degree, from the practice which prevailed in the northern provinces, of the European planter purchasing the wet fecula from the native manufacturer, and completing the processes of curing and drying the drug. This is at present in a great measure discontinued; and the Oude indigo has, in consequence, considerably improved in quality. Its inferiority is probably more the result of soil and climate, than of any difference in the skill with which the manufacture is conducted.

In 1827-28, and we are possessed of no later data, the export of indigo from the port of Madras amounted to 880,880 lbs. weight; having more than quadrupled in the course of the preceding 5 years. Besides the export from Madras, there is also a considerable one from the French settlement of Pondicherry; of which, however, we have no detailed statement. In 1827, the export of indigo from Manilla amounted to about 230,000 lbs. avoirdupois; but it is understood to have materially increased since. The export from Batavia, in 1829, amounted to 152,000 lbs. weight, and the production is rapidly increasing. According to the statement now given, the annual exports of Asiatic indigo are as follow:—Bengal, 9,000,000 lbs.; Madras, 900,000 lbs.; Manilla, 300,000 lbs.; Batavia, 150,000 lbs. Hence the annual average produce for foreign markets, making allowance for a trifling augmentation in the exports from Madras, Java, and the Philippines, is certainly not less than 10,500,000 lbs.

According to M. Humboldt, the exportation of indigo from Guatemala, in 1825, amounted to 1,800,000 lbs. Indigo is also produced in some of the West India islands, but not in large quantities.

Good indigo is known by its lightness or small specific gravity, indicating the absence of earthy impurities; by the mass not readily parting with its colouring matter when tested by drawing a streak with it over a white surface; but, above all, by the purity of the colour itself. The first quality, estimated by this last test, is called, in commercial language, *fine blue;* then follow *ordinary blue*, *fine purple*, *purple and violet*, *ordinary purple and violet*, *dull blue*, *inferior purple and violet*, *strong copper*, and *ordinary copper*. These distinctions refer to the Bengal indigo only, the Oude being distinguished only into *fine* and *ordinary*. The qualities of Madras and Manilla indigo are nearly the same, and equal to ordinary Bengal indigo. The indigo of Java is superior to these.

We are indebted to Mr. Cook for the following Table, which gives a very comprehensive view of the state of the crops of indigo in Bengal, and the imports, consumption, and prices of Bengal indigo, since 1811-12:—

Crops in Bengal.			Years.	Total Import from India into Great Britain	Total Deliveries for Export and Home Con.	Stock in Great Britain 31st of Dec.	Average Prices in London.									
								Fine Bengal. per lb.				Ord. Bengal. per lb.				Low Oude. per lb.			
Years.	*Maunds.*	*Chests.*		*Chests.*	*Chests.*	*Chests.*	*Yrs.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
1811-1812	70,000	= 19,500	1812	17,200	14,600	29,500	1812	8	0 to 10	6		4	0 to	5	3	3	0 to	3	6
1812-1813	78,000	= 22,000	1813	14,500	19,200	24,500	1813	10	0 —	14	0	6	3 —	8	3	4	6 —	6	0
1813-1814	74,500	= 21,300	1814	24,200	23,800	24,900	1814	10	0 —	14	6	6	6 —	9	0	4	0 —	5	6
1814-1815	102,500	= 27,000	1815	28,900	23,400	30,400	1815	8	0 —	11	0	5	0 —	7	0	3	0 —	4	6
1815-1816	115,000	= 29,000	1816	15,500	20,200	25,700	1816	6	6 —	10	0	3	9 —	5	6	2	8 —	3	3
1816-1817	87,000	= 23,500	1817	13,500	15,700	23,500	1817	7	6 —	10	0	5	6 —	7	6	4	0 —	6	0
1817-1818	72,800	= 19,000	1818	16,600	16,100	24,000	1818	8	0 —	9	6	6	6 —	8	0	5	0 —	6	0
1818-1819	68,000	= 17,000	1819	11,500	15,800	19,700	1819	7	6 —	9	0	5	0 —	6	0	3	3 —	4	3
1819-1820	72,000	= 19,000	1820	16,500	21,600	14,500	1820	7	0 —	9	0	5	6 —	6	6	3	3 —	4	6
1820-1821	107,000	= 25,500	1821	13,000	17,300	9,800	1821	7	6 —	9	6	5	6 —	7	0	4	0 —	5	9
1821-1822	72,400	= 19,500	1822	13,500	15,100	8,200	1822	11	0 —	12	6	8	6 —	10	3	4	9 —	6	0
1822-1823	90,000	= 24,000	1823	21,700	16,800	13,100	1823	9	6 —	11	0	5	9 —	8	6	3	6 —	4	6
1823-1824	113,000	= 28,000	1824	16,300	17,200	12,200	1824	12	0 —	13	6	8	0 —	10	6	5	0 —	6	3
1824-1825	79,000	= 22,000	1825	25,300	21,100	16,400	1825	13	0 —	15	0	8	6 —	10	6	4	3 —	5	9
1825-1826	144,000	= 41,000	1826	27,800	21,200	22,300	1826	8	0 —	9	6	4	6 —	7	0	2	3 —	3	9
1826-1827	90,000	= 25,000	1827	19,000	18,500	22,800	1827	11	6 —	13	6	7	0 —	9	6	3	0 —	4	6
1827-1828	149,000	= 42,000	1828	35,820	27,500	31,100	1828	8	0 —	10	0	5	3 —	7	3	2	0 —	2	9
1828-1829	98,000	= 26,500	1829	23,200	23,100	31,200	1829	7	6 —	8	6	3	9 —	6	6	2	6 —	3	6
1829-1830	141,000	= 40,000	1830	32,120	25,700	37,600	1830	6	6 —	7	6	3	3 —	4	6	2	0 —	2	6
1830-1831	116,000	= 33,600	1831	23,330	24,980	35,970	1831	6	0 —	6	6	3	0 —	4	3	2	0 —	2	6
1831-1832	122,000	= 35,000	1832	25,470	28,920	32,520	1832	5	6 —	6	3	3	3 —	4	6	2	3 —	2	9
1832-1833	122,000	= 35,000	1833	25,000	23,000*	35,000*	1833	7	0 —	7	9	5	0 —	6	0	3	0 —	4	0

* These numbers are partly from estimate; but they cannot be far wrong.

Of 7,299,605 lbs. of indigo imported into Great Britain in 1831, 6,996,063 lbs. were from India, 149,349 lbs from the British West Indies, 81,991 lbs. from Guatemala, 16,014 lbs. from Colombia, &c. Of the total quantity imported, 2,490,000 lbs. were retained for consumption.

The imports of indigo, in 1832, were 6,353,065 lbs.; of which 2,395,653 lbs. were retained.

Indigo of British possessions, not deemed their produce unless imported from thence.—(7 *Geo.* 4. c. 48.)

For further information as to indigo, see *Colebrooke's Husbandry of Bengal*, p. 154.; *Milburn's Orient. Com.*; *Bell's Review of Commerce of Bengal*; *Wilson's Review of do.*; evidence of Gillian Maclaine, Esq., East India Committee, 1830-31, &c.

INK (Du. *Ink, Inkt;* Fr. *Encre;* Ger. *Dinte;* It. *Inchiostro;* Lat. *Atramentum;* Rus. *Tschernilo;* Sp. *Tinta;* Sw. *Blak.*)

"Every liquor or pigment used for writing or printing is distinguished by the name of ink. Common practice knows only black and red. Of black ink there are three principal kinds: 1. Indian ink; 2. Printer's ink; and, 3. Writing ink. The Indian ink is used in China for writing with a brush, and for painting upon the soft flexible paper of Chinese manufacture. It is ascertained, as well from experiment as from information, that the cakes of this ink are made of lampblack and size, or animal glue, with the addition of perfumes or other substances not essential to its quality as an ink. The fine soot from the flame of a lamp or candle received by holding a plate over it, mixed with clean size from shreds of parchment or glove-leather not dyed, will make an ink equal to that imported. Good printer's ink is a black paint, smooth, and uniform in its composition, of a firm black colour, and possesses a singular aptitude to adhere to paper thoroughly impregnated with moisture.

"Common ink for writing is made by adding an infusion or decoction of the nut-gall to sulphate of iron, dissolved in water. A very fine black precipitate is thrown down, the speedy subsidence of which is prevented by the addition of a proper quantity of gum Arabic. Lampblack is the common material to give the black colour, of which 2½ ounces are sufficient for 16 ounces of the varnish. Vermilion is a good red. They are ground together on a stone with a muller, in the same manner as oil paints. Among the amusing experiments of the art of chemistry, the exhibition of sympathetic inks holds a distinguished place. With these the writing is invisible, until some reagent gives it opacity. These inks have been proposed as the instruments of secret correspondence. But they are of little use in this respect, because the properties change by a few days' remaining on the paper; most of them have more or less of a tinge when thoroughly dry; and none of them resist the test of heating the paper till it begins to be scorched."—(*Ure's Dictionary.*)

INKLE, a sort of broad linen tape, principally manufactured at Manchester and some other towns in Lancashire.

INSOLVENCY AND BANRUPTCY. Insolvency is a term in mercantile law, applied to designate the condition of all persons unable to pay their debts according to the ordinary usage of trade. A bankrupt is an insolvent; but persons may be in a state of insolvency without having committed any of the specific acts which render them liable to a commission of bankruptcy.

We have, under the article BANKRUPTCY, explained the most important differences in the law as to insolvency and bankruptcy; and have also briefly stated in that article, and in the article CREDIT, some of the alterations which seem to be imperatively required to make these laws more in harmony, than they are at present, with the principles of justice, and more conducive to the interests of commerce and the public advantage. In the present article, therefore, we shall confine ourselves to a summary statement of the proceedings under the existing laws.

Under the bankrupt laws, the creditors have a compulsory authority to sequestrate the entire possessions of their debtor; under the insolvent laws, the debtor himself may make a voluntary surrender of his property for the benefit of all his creditors. From this diversity in the initiative process results the greatest diversity in the ultimate operation of the bankrupt and insolvent acts. The proceedings under a commission of bankruptcy being instituted by the creditors, they lose all future power over the property and person of the insolvent after he has obtained his certificate; but the proceedings under the insolvent act having been commenced by the debtor himself, he only, by the surrender of his effects, protects his *person* in future from arrest — not the property he may subsequently acquire, from liability to the payment of all his debts in full.

Proceedings under the existing Insolvent Act. — In 1813, a special tribunal, called the "Court for Relief of Insolvent Debtors," was appointed for the purpose of receiving the surrender of property and effects for the benefit of the creditors of insolvents. It consists of a chief and two other commissioners, appointed by the Crown, and is a court of record, with powers similar to those of the superior courts at Westminster; but it cannot award costs, unless in particular cases. The court sits twice a week in Portugal-street; and no fees are taken, except those established by the court. The commissioners also severally make circuits, and attend at the towns and places appointed for insolvents in the country to appear: their judicial powers in the provincial towns are the same as those exercised in the metropolis.

I. The first step in the insolvent's proceeding is the *Petition.* Any person in actual custody for any debt, damages, costs, or money due for contempt of any court, may, within 14 days from his first detention, petition the court for his discharge; stating in such petition the particulars of his arrest, and the amount of his debts, and praying to be discharged not only against the demands of the persons detaining him, but against all other creditors having claims at the time of presenting the petition. Persons not *actually* in custody within the walls of a prison, and during the proceedings thereon, are not entitled to the benefit of the act. In case of sickness, however, and after an order for hearing the petition has been obtained, this condition is not required.

Notice of the time appointed for hearing the petition must be given to all creditors whose debts amount to 5*l.*, and be advertised in the *London Gazette.*

At the time of subscribing the petition, the insolvent executes an assignment to the provisional assignee of the court, renouncing all title to his property, except wearing apparel, working tools, bedding, and such necessaries of himself and family as shall not exceed the value of 20*l.* During confinement, the court may order an allowance for the support of the petitioner.

The filing of a petition is an act of bankruptcy, and, if a commission be issued within 2 calendar months, vacates the assignment: but this does not stop the proceedings of the court; and any property remaining to the petitioner after obtaining his certificate continues liable as if no commission had been issued.

The voluntary preference of a creditor, by conveyance of money, goods, bills, or other property, after the filing of the petition, or within 3 months prior to the imprisonment of the petitioner, being then in insolvent circumstances, is fraudulent and void.

Within 14 days after the filing of his petition, the insolvent must prepare a schedule of his debts; also of his property and income from every source whence he derives benefit or emolument, together with an account of all debts owing to him, the names of the debtors, and their places of abode. Lastly, the schedule must describe the wearing apparel and other articles not exceeding 20*l.* which the petitioner is allowed to retain.

Insolvents guilty of omissions in the schedule, with intent to defraud creditors, or excepting in it necessaries to an amount exceeding 20*l.*, or persons assisting therein, are guilty of a misdemeanour, subjecting to an imprisonment for not more than 3 years.

II. *The Assignees.* — Any time after the filing of the petition, the court appoints assignees from among the creditors, to whom, on their acceptance of the appointment, an assignment is [illegible] case of any real estate, the same within the space of 6 months, must be sold

by public auction, in such manner and place as the major part in value of the creditors approve: but when any part of the property is so circumstanced that the immediate sale of it would be prejudicial to the interests of the prisoner, the court may direct the management of such property till it can be properly sold; and if the debts can be paid by mortgage in lieu of sale, the court may give directions for that purpose.

Goods in possession and disposal of the insolvent, whereof he is *reputed* owner, are deemed his property; but this does not affect the assignment of any ship or vessel, duly registered according to the 6 Geo. 4. c. 110.

An account upon oath before an officer of the court, or justice of peace, must be made up by the assignees within every 3 months at the furthest; and in case of a balance in hand, a dividend must be forthwith made, of which dividend 30 days' previous notice must be given; and every creditor is allowed to share in the dividend, unless objected to by the prisoner, assignees, or other creditors, in which case the court decides.

The assignees may execute powers which the insolvent might have executed, as the granting of leases, taking fines, transferring public stock or annuities; but they cannot nominate to a vacant ecclesiastical benefice.

The assignees, with the consent of one commissioner, and the major part of the creditors in value, may compound for any debt due to the prisoner; or may submit differences connected with the estate of the insolvent to arbitration.

Dividends payable to creditors, unclaimed for 12 months, are to be paid into court to the credit of the estate of the insolvent: in default of payment of the dividends by the assignees, their goods may be distrained; or, if no distress, they may be imprisoned.

The assignees, in case the insolvent is a beneficed clergyman or curate, are not entitled to the income of the benefice or curacy; but they may obtain a sequestration of the profits for the benefit of creditors. Neither are the assignees entitled to the pay, half-pay, pension, or other emolument, of any person who is or has been in the army, navy, or civil service of the government or East India Company; but the court may order, subject to the approval of the heads of public offices, a portion of such pay, half-pay, pension, or emoluments, to be set aside towards the liquidation of the debts of the insolvent.

The court may inquire into the conduct of the assignees, on the complaint of the insolvent or any of his creditors; and, in case of malversation, award costs against them.

Assignees who wilfully employ or retain any part of the proceeds of the insolvent's estate, may be charged with interest, at a rate not exceeding 20*l.* per cent. per annum.

III. *Discharge of the Insolvent.* — On the day appointed for hearing the petition, any creditor may oppose the discharge of the prisoner; and, for that purpose, put such questions and examine such witnesses, as the court shall admit, touching the matters contained in the petition and schedule; or a creditor may require, and the court direct, that an officer of the court shall investigate the accounts of the prisoner, and report thereon. In case the prisoner is not opposed, and the court is satisfied with his schedule, it may order his immediate discharge from custody; or it may direct him to be detained in custody for any term not exceeding 6 months, to be computed from the time of filing the petition.

But if the prisoner has destroyed his books, or falsified entries therein, or otherwise acted fraudulently towards his creditors, or wilfully omitted any thing in his schedule, he may be imprisoned for any term not exceeding *three years*: or where a prisoner has contracted debts fraudulently, by means of a breach of trust; or put creditors to unnecessary expense; or incurred debts by means of any false pretence, or without probable expectation, at the time when contracted, of ever paying them; or shall be indebted for damages for criminal conversation with the wife, or for seducing the daughter or servant of the plaintiff; or for breach of promise of marriage; or for damages in any action for malicious prosecution, libel, slander, or trespass; the court may imprison for 2 years.

The discharge extends to sums payable by annuity; the annuitants being admitted as creditors to the estate of the insolvent, at a fair valuation of their interest.

But the discharge does not extend to any debts due to the Crown, nor for any offence against the revenue laws; nor at suit of any sheriff or other public officer, upon any bail-bond entered into for any person prosecuted for such offence; unless the Treasury certify consent to the discharge.

Insolvents under writ of *capias* or extent, must apply to the Barons of the Exchequer to be discharged.

When the prisoner is not discharged, the court may, on application for that purpose, order the creditor at whose suit he is detained to pay any sum not exceeding 4*s.* weekly; and in default of payment, the prisoner to be liberated.

IV. *Future Liabilities of the Insolvent.* — Prior to adjudication on the petition, the insolvent is required to execute a warrant of attorney, empowering the court to enter up judgment against him, in the name of the assignees, for the amount of the debts unpaid; and when the insolvent is of sufficient ability to pay such debts, or is dead, leaving assets for the purpose, the court may permit execution to be taken out against the property of the insolvent acquired after his discharge; and this proceeding may be repeated till the *whole of the debt, with costs*, is paid and satisfied.

But no person, after judgment entered up, is liable to imprisonment for any debt to which the adjudication of the court extended.

When an insolvent is entitled to the benefit of the act, no execution, except under the judgment before mentioned, can issue against him for debts contracted prior to his confinement; but he may be proceeded against for a debt which could not be enforced at the period of his discharge.

An insolvent, after his discharge, may, on the application of an assignee to the court, be again examined touching the effects set forth in the schedule; and if he refuse to appear or answer questions, he may be recommitted.

No uncertificated bankrupt, nor any person having had the benefit of the insolvent act, can have it a second time within *five years*, unless 3-4ths in number and value of the creditors consent thereto, or unless it appear to the court that the insolvent, since his bankruptcy or discharge, has done his utmost to pay all just demands; and that the debts subsequently incurred have been unavoidable, from inability otherwise to acquire subsistence for himself and family.

Married women are entitled to the benefit of the insolvent act, and may petition the court on executing a special assignment.

The Insolvent Act, of which the above is a digest, was continued, by an act of the session of 1830, the 1 Will. 4. c. 38., for 2 years, and "from thence to the end of the next session of parliament." It is important to remark, that the act of Will 4. prohibits, while the insolvent acts are in force, any debtor from being discharged on his petition under the 32 Geo. 2. c. 28., commonly called the "Lords' Act."

Our next object will be to present a brief exposition of the BANKRUPT LAWS.

BANKRUPTCY. — Blackstone defines a bankrupt — "A trader who secretes himself, or does certain other acts tending to defraud his creditors." But an intention to defraud is not now held to be essential to constitute a bankrupt; who may be either simply an insolvent, or a person who is guilty of certain acts tending to defraud his creditors.

There are, as already observed, some important distinctions between the bankrupt and insolvent laws, not only in their application to different descriptions of individuals, but also in the powers they exercise over the estates of persons subsequently to their being brought under their adjudication. The benefits of the Insolvent Act extend without distinction to every class of persons actually in prison for debt; the benefits of the Bankrupt Act extend to traders only. But persons relieved under a commission of bankruptcy for the first time are for ever discharged from all debts proveable against them, and their property from any future liability; whereas, if relieved under the Insolvent Act, their persons only are protected from arrest, while any property they may subsequently acquire continues liable to their creditors till the whole amount of their debts is paid in full. It follows that the Insolvent Act affords merely a personal relief; while the Bankrupt Act discharges both person and property, and even returns the bankrupt a certain allowance out of the produce of his assets, proportioned to good behaviour, and the amount of his dividend.

Having already treated of insolvency, we shall now proceed to describe the proceedings under a commission of bankruptcy, as regulated by the act of Lord Brougham, the 1 & 2 Will. 4. c. 56., and the 6 Geo. 4. c. 16., which are the last general acts on the subject, and by which former statutes have been consolidated, and several important improvements introduced; leaving, however, untouched, many of the radical defects inherent in this branch of the law. The chief points to be considered, are — 1. The persons who may become bankrupt; 2. Acts constituting bankruptcy; 3. Proceedings of petitioning creditor; 4. New Court of Bankruptcy; 5. Debts proveable under the commission; 6. Official assignees; 7. Assignees chosen by creditors; 8. Property liable under bankruptcy; 9. Examination and liabilities of bankrupt; 10. Payment of a dividend; 11. Certificate and allowance to bankrupt.

1. *Who may become Bankrupt.*—Generally all persons in trade, capable of making binding contracts, whether natural-born subjects, aliens, or denizens, are within the jurisdiction of the bankrupt laws; but the statute expressly includes builders, bankers, brokers, packers, carpenters, scriveners, ship insurers, warehousemen, wharfingers, shipwrights, victuallers; keepers of inns, taverns, hotels, and coffee-houses; dyers, printers, bleachers, fullers, calenderers, cattle or sheep salesmen, factors, agents, and all persons who use the trade of merchandise by bargaining, bartering, commission, consignment, and otherwise, and also all persons who seek their living by buying and selling, letting for hire, or by the manufacturing of goods and commodities. Persons who cannot become bankrupt, are, graziers, farmers, workmen for hire, labourers, receivers general of taxes, and subscribers to any commercial or trading company established by charter or act of parliament.

A clergyman, unless a trader, cannot be made a bankrupt; nor an attorney, in the common course of his profession; nor an infant, nor a lunatic, nor a married woman, except in those cases where she may be sued and taken in execution for her debts.—(8 *T. R.* 545.)

A single act of buying or selling is not sufficient to make a trader; as a schoolmaster selling books to his scholars only, or a keeper of hounds buying dead horses and selling the skin and bones.—(6 *Moore*, 56.) But the quantity of dealing is immaterial, where an intention to deal generally may be inferred.—(1 *Rose*, 84.) A buyer or seller of land, or any interest in land, is not a trader within the act; and on this principle it has been decided, that a brick-maker selling bricks made in his own field, or the owner of a mine selling minerals from his own quarry, is not liable, because such business is carried on only as a mode of enjoying the profits of a real estate.—(2 *Wils.* 169.)

Traders having privilege of parliament, are subject to the bankrupt laws, and may be proceeded against as other traders; but such persons cannot be arrested or imprisoned, except in cases made felony by the statute.

2. *Acts constituting Bankruptcy.*—In general, any act which is intended to delay or defraud creditors, is an act of bankruptcy; such as a trader concealing himself from his creditors, leaving the country, causing himself to be arrested or his goods taken in execution, or making any fraudulent conveyance, gift, or delivery of his property. A trader keeping house commits an act of bankruptcy, if he give a general order to be denied. So is closing the door, and not admitting persons till ascertained who they are from window, though no actual denial.—(1 *Bar. & Cres.* 54.) But it is no act of bankruptcy if the denial be on Sunday, or at an unseasonable hour of the night, or to prevent interruption at dinner time.

Traders held in prison for any really subsisting debt for the period of 21 days, or who, being arrested, make their escape out of prison or custody, commit acts of bankruptcy. A penalty due to the Crown is a sufficient debt, and the time is computed from the first arrest, where the party lies in prison immediately, and the day of arrest is included, and the whole of the last day.

Filing a petition, in order to take the benefit of the Insolvent Act, is an act of bankruptcy, and a fiat may be issued any time before the petition is heard by the Insolvent Court, or within 2 calendar months.

A trader may make a declaration of his insolvency, signed and attested by an attorney or solicitor, and afterwards to be filed in the Bankrupt Office; and the secretary signing a memorandum thereof, is authority for advertising it in the *Gazette*. Upon this act of bankruptcy no commission can issue, if not within 2 calendar months after such advertisement, and unless such advertisement be within 8 days after filing declaration; and no docket can be struck till 4 days after advertisement, if the commission is to be executed in London, and 8 if in the country. Such declaration of insolvency being concerted between bankrupt and creditor, does not invalidate the commission.

The execution by a trader of any conveyance by deed, of all his estate and effects for the benefit of all his creditors, is not an act of bankruptcy, unless a commission be sued out within 6 months after, provided the deed be attested by an attorney or solicitor, and executed within 15 days after, and notice thereof within 2 months be given in the *Gazette*, and 2 daily newspapers; or, if the trader reside more than 50 miles from London, notice may be given in the *Gazette*, and nearest country newspaper.

3. *Proceedings of Petitioning Creditors.*—A person being a trader, and having committed an act of bankruptcy, the next step in the proceeding is to petition the Lord Chancellor to issue his fiat. No fiat is issued, unless the petitioning creditor's debt, if 1 person or 1 firm, amounts to 100*l.*; if 2 creditors, to 150*l.*; if 3 or more creditors, to 200*l.* or upwards. The petitioning creditor must make an affidavit before a Master in Chancery, of the truth of his debt, and give bond in 200*l.* to prove it, and the act of bankruptcy. If the debt prove insufficient to support a fiat, the Lord Chancellor, upon the application of another creditor who has proved a sufficient debt, contracted posterior to that of the petitioning creditor, may order the bankruptcy to be proceeded in.

The petitioning creditor proceeds at his own cost until the choice of assignees, when his expenses are paid out of the first money received under the bankruptcy.

Creditors entitled to sue out a fiat against all the partners in a firm, may elect to petition only against 1 or more of such partners; and the commission may be superseded as to 1 or more partners, without affecting its validity as to the other partners.

Creditors who have sued out a fiat compounding with the bankrupt, or receiving more in the pound than other creditors, forfeit the whole of their debt, and whatever gratuity they received, for the benefit of the other creditors, and the Lord Chancellor may either order the commission to be proceeded in or superseded.

4. *New Court of Bankruptcy.*—Formerly the bankrupt business of the metropolis was transacted by 70 commissioners, appointed by the Lord Chancellor. They received no regular commission, but derived their authority from a letter written to them by the Chancellor, informing them of their appointment. The whole proceedings under a town commission, from its issuing to the winding up of the bankrupt's affairs, were managed by these commissioners, who acted by rotation, in lists of 5 each. In place of these an entire new court has been substituted, consisting of a chief judge, with 3 puisne judges, and 6 commissioners. There are also 2 principal registrars, and 8 deputy registrars. The secretary of bankrupts is also continued as one of the officers under the new system.

The judges, or any 3 of them, sit as a Court of Review, to adjudicate in all matters of bankruptcy brought before them, subject to an appeal to the Lord Chancellor. The 6 commissioners sit occasionally in 2 subdivision courts of 3 commissioners each. The powers of the single commissioner are nearly the same as the old commissioners. The examination of any bankrupt or other person, or of a proof of debt, may be adjourned by a single commissioner to a subdivision court; and disputed debts, if all parties consent, may be tried by a jury. An appeal lies from a single commissioner, or a subdivision court, to the Court of Review; and a decree of this Court is final, unless appealed against within 1 month.

The London commissioners under the old law had a jurisdiction for 40 miles round London, which is continued to their successors. Commissions in the country beyond this distance were directed to barristers, or, if these could not be had, to solicitors, resident near the spot where the commission was to be executed. Under the new act, the judges of assize name to the Lord Chancellor such barristers and solicitors in the county as they think fit for the office; and if he approve, they are to appoint them permanent commissioners for the execution of all bankruptcy business in the county; and fiats, not directed to the Court of Bankruptcy in London, are directed to them.

Let us now proceed with the powers and duties of the commissioners.

Commissioners are empowered to summon persons, examine them on oath, and call for any deeds or documents necessary to establish the trading and act of bankruptcy; and upon full proof thereof, to adjudge the debtor a bankrupt. Notice of such adjudication must be given in the *Gazette*, and 3 public meetings appointed for the bankrupt to surrender; the last of which meetings to be the 42d day after. A bankrupt refusing to attend at the appointed time may be apprehended; and on refusing to answer any question touching his business or property, may be committed to prison.

By warrant of the commissioners, persons may break open any house, premises, door, chest, or trunk of any bankrupt, and seize on his body or property; and if the bankrupt be in prison or custody, they may seize any property (necessary wearing apparel excepted) in the possession of such bankrupt, or any other person. Authorised by a justice's warrant, premises may be searched not belonging to the bankrupt, on suspicion of property being concealed there; and persons suspected to have any of the bankrupt's property in their possession, refusing to obey the summons of commissioners, or refusing to answer interrogatories, or to surrender documents, without lawful excuse, may be imprisoned. The wife of the bankrupt may be examined, or, on refusal, committed.

Persons summoned are entitled to their expenses; and those attending, whether summoned or not, to assist the commissioners in their inquiries, are protected from arrest on any civil suit.

5. *Debts proveable under Commission.*—At the 3 meetings appointed by the commissioners, and at every other meeting appointed by them for proof of debts, every creditor may prove his debt by affidavit or by his own oath; incorporated bodies by an agent authorised for the purpose; and one partner may prove on behalf of the firm. Persons living at a distance may prove by affidavit before a Master in Chancery, or, if resident abroad, before a magistrate where residing, attested by a public notary, or British minister or consul.

Clerks and servants, to whom the bankrupt is indebted for wages, are entitled to be paid 6 months' wages *in full*, and for the residue they may prove under the commission.

Indentures of apprenticeship are discharged by bankruptcy; but in case a premium has been received, the commissioners may direct a portion of it to be repaid for the use of the apprentice, proportioned to the term of apprenticeship unexpired.

Debts upon bill, bond, note, or other negotiable security, or where credit has been given upon valuable consideration, though not due at the time the act of bankruptcy was committed, are proveable under the commission. Sureties, persons liable for the debts of, or bail for the bankrupt, may prove after having paid such debts, if they have contracted the liability without notice of any act of bankruptcy. Obligee in bottomry or respondentia bonds, and assured in policy of insurance, are admitted to claim; and after loss, to prove as if the loss or contingency had happened before commission had issued against the obligor or insurer. Annuity creditors may prove for the value of their annuities, regard being had to the original cost of such annuities. Plaintiffs in any action, having obtained judgment against the bankrupt, may prove for their costs.

When there are mutual debts between the bankrupt and a creditor, they may be set off against each other, and the balance, if in favour of the creditor, is proveable against the bankrupt's estate.

Interest may be proved on all bills of exchange and promissory notes over-due at the time of issuing commission, up to the date of the commission.

Proving a debt under the commission, is an election not to proceed against the bankrupt by action; and in case the bankrupt be in prison at the suit of a creditor, he cannot prove his debt without first discharging the bankrupt from confinement: but the creditor is not liable for the costs of the action so relinquished by him.

No debt barred by the statute of limitations is proveable under the commission.

6. *Official Assignees.*—An important alteration introduced by Lord Brougham's act, particularly to commercial men, is the appointment of official assignees. They are 30 in number, merchants and traders, resident in the metropolis or vicinity; and are selected by the Lord Chancellor. They are to act with the assignees chosen by the creditors. All the real and personal estates of the bankrupt, all the monies, stock in the public funds, securities and proceeds of sale, are transferred and vested in the official assignee, subject to the rules, orders, and direction of the Lord Chancellor, or a member of the Court of Bankruptcy. The official assignee gives security for the trust reposed in him; and is required to deposit all monies, securities, &c. in the Bank of England.

The official assignee is neither remunerated by a percentage nor a fixed salary, but a sum is paid to him for his trouble, at

the discretion of the commissioners, and proportioned to the estates of the bankrupt and the duties discharged.

7. *Appointment of Assignees by Creditors.* — The official assignee is empowered to act as the sole assignee of the bankrupt's estates and effects until others are chosen by creditors, which must be at the 2d meeting. Every creditor to the amount of 10*l.*, who has proved his debt, is eligible to vote; persons may be authorised by letters of attorney to vote, and the choice is made by the major part in value of the creditors: but the commissioners may reject any person they deem unfit; upon which a new choice must be made.

When only 1 or more partners of a firm are bankrupt, a creditor to the whole firm is entitled to vote, and to assent to or dissent from the certificate; but such creditor, unless a petitioning creditor, cannot receive any dividend out of the separate estate, until all the other creditors are paid in full.

Assignees may, with consent of creditors declared at any meeting duly summoned, compound or submit disputes to arbitration, and such reference be made a rule of the Court of Bankruptcy, or they may commence suits in equity; but if 1-3d in value of creditors do not attend such meeting, the same powers are granted to assignees with the consent, in writing, of commissioners.

Assignees to keep a book of account, where shall be entered a statement of all receipts and payments relating to bankrupt's estate, and which may be inspected by any creditor who has proved. Commissioners may summon assignees, with their books and papers, before them; and if they refuse to attend, may cause them to be committed till they obey the summons.

An assignee retaining or employing the money of the bankrupt, to the amount of 100*l.* or upwards, for his own advantage, may be charged 20*l.* per cent. interest.

Commissioners at the last examination of bankrupt to appoint a public meeting, not sooner than 4 calendar months after issuing commission, nor later than 6 calendar months from last examination, of which 21 days' notice must be given in the *Gazette*, to audit the accounts of the assignees; which accounts must be delivered on oath, and the commissioners may examine the assignee touching the truth thereof.

8. *Property liable under Bankruptcy.* — The official assignee is vested with all the real and personal estate of the bankrupt, and with all such property as may be devised to him, or come into his possession, till the time he obtain his certificate. The commissioners may sell any real property of which the bankrupt is seised, or any estate tail, in possession, reversion, or remainder; and the sale is good against the bankrupt, the issue of his body, and against all persons claiming under him after he became bankrupt, or whom by fine, common recovery, or other means, he can cut off from any future interest. All property which the bankrupt has in right of his wife passes to the assignee, except such as is settled for her own sole benefit. Any property pledged, or securities deposited, may be redeemed for the benefit of the creditors.

If a bankrupt, being at the time insolvent, convey his land or goods to his children or others (except upon their marriage, or for a valuable consideration), or deliver securities, or transfer debts into other names, such transactions are void.

A landlord after or out of bankruptcy cannot distrain for more than *one year's rent*; but he may prove under the commission for the residue.

The assignee may accept any lease to which the bankrupt is entitled, and his acceptance exonerates the bankrupt from any future liability for rent; or if the assignee decline the lease, and the bankrupt, within 14 days after, deliver the lease to the lessor, he is not liable for rent.

In general, all power which the bankrupt might lawfully execute in the sale and disposition of his property for the benefit of himself, may be executed by the assignee for the benefit of creditors.

All contracts, conveyances, and transactions by or with any bankrupt, and all executions and attachments levied, without notice of an act of bankruptcy, for more than 2 months before the issuing of the commission, are valid. All payments whatever, either *by* or *to* the bankrupt, without notice of an act of bankruptcy, are protected down to the date of the commission; and purchasers for valuable considerations, *with notice*, cannot be molested, unless a commission issue within 12 months after the act of bankruptcy.

The circumstance of a commission appearing in the *Gazette*, and a fair presumption that the person to be affected thereby may have seen the same, is deemed sufficient legal notice of an act of bankruptcy having been committed.

9. *Examination and Liabilities of Bankrupt.* — A bankrupt, not surrendering to the commissioners before 3 o'clock upon the 42d day after notice, or not making discovery of his estate and effects, not delivering up goods, books, papers, &c., or removing or embezzling to the value of 10*l.*, is guilty of *felony*, and liable to a discretionary punishment, from imprisonment to transportation for life. The period for surrendering may be enlarged by the Lord Chancellor; and the commissioners, or assignees with approval of commissioners, may grant an allowance for support of the bankrupt and his family till he has passed his last examination. During his attendance on commissioners, the bankrupt is protected from arrest.

The bankrupt is required to deliver up his books of account to the assignees upon oath, and to attend them on reasonable notice; he may inspect his accounts, assisted by other persons, in presence of assignees. After certificate is allowed, he is required to attend assignees, in settling accounts, at 5*s.* per day; and may be committed for non-attendance.

A penalty of 100*l.* is imposed on persons concealing bankrupts' effects, and double the value of the property so concealed; and an allowance of 5*l.* per cent. to persons discovering such concealment, with such further reward as the major part of the creditors may think fit to grant.

The bankrupt, or any other person, wilfully swearing falsely, is liable to the penalties of perjury.

If the bankrupt intend to dispute the commission, he must present a petition to the Court of Review within 2 calendar months; or, if out of the United Kingdom, within 12.

At any meeting of creditors, after the last examination, the bankrupt or his friends may *tender a composition*; which, it accepted by 9-10ths in number and value of the creditors, at 2 separate meetings, the Lord Chancellor may supersede the commission. In deciding on such offer, creditors under 20*l.* are not entitled to vote; but their debts are computed in value. Persons residing out of England may vote by letter of attorney, properly attested; and the bankrupt may be required to make oath that no unfair means have been employed to obtain the assent of any creditor to such arrangement.

10. *Payment of a Dividend.* — Not sooner than 4, nor later than 12 calendar months, the commissioners are to appoint a public meeting, of which 21 days' previous notice must be given in the *Gazette*, to make a dividend; and at which meeting, creditors who have not proved, may prove their debts; and at such meeting commissioners may order the nett produce of bankrupt's estate to be shared among the creditors that have proved, in proportion to their debts: but no dividend to be declared unless the accounts of the assignees have been first audited and delivered in as before described.

If the estate is not wholly divided upon a first dividend, a second meeting must be called, not later than 18 months from the date of commission; and the dividend declared at such second meeting to be final, unless some suit at law be pending, or some part of bankrupt's property afterwards accrue to the assignees; in which case it must be shared among the creditors within 2 months after it is converted into money.

Assignees having unclaimed dividends to the amount of 50*l.*, who do not, within 2 calendar months from the expiration of a year from the order of payment of such dividends, either pay them to the creditors entitled thereto, or cause a certificate thereof to be filed in the Bankrupts' Office, with the names, &c. of the parties to whom due, shall be charged with legal interest from the time the certificate ought to have been filed, and such further sum, not exceeding 20*l.* per cent. per annum, as the commissioners think fit. The Lord Chancellor may order the investment of unclaimed dividends in the funds; and after 3 years the same may be divided among the other creditors.

No action can be brought against assignees for any dividend; the remedy being by petition to the Lord Chancellor.

11. *Certificate and Allowance to Bankrupt.* — The bankrupt who has surrendered, and conformed in all things to the provisions of the bankrupt laws, is discharged by the certificate from all debts and demands proveable under the commission; but this does not discharge his partner, or one jointly bound, or in joint contract with him, nor does it bar a debt due to the Crown.

The certificate must be signed by 4-5ths in number and value of creditors who have proved debts to the amount of 20*l.* or upwards; or, after 6 calendar months from last examination, then either by 3-5ths in number and value, or by 9-10ths in number. The bankrupt must make oath the certificate was obtained without fraud; and any creditors may be heard before it is finally allowed by the Lord Chancellor. Any contract or security given to obtain signatures to the certificate, is void.

A bankrupt, after obtaining his certificate, cannot be arrested for any debt proveable under the commission; nor is he liable to satisfy any debt from which he is discharged, upon any promise, contract, or agreement, unless made in writing.

In case a person has been bankrupt before, or compounded with his creditors, or taken benefit of Insolvent Act, unless the estate produce 15*s.* in the pound, the certificate only protects the person of bankrupt from arrest; and any future property he acquires may be seized by assignees for benefit of creditors.

If the produce of bankrupt's estate does not amount to 10*s.* in the pound, he is only allowed out of the assets so much as assignees think fit, not exceeding 3 per cent., or 300*l.* in the whole; if it produce 10*s.*, 5 per cent., not exceeding 400*l.*; if 12*s.* 6*d.* is paid in the pound, 7½ per cent., not exceeding 500*l.*; if 15*s.* in the pound and upwards, 10 per cent., and not exceeding 600*l.* One partner may receive his allowance, if entitled, from the joint and his separate estate, though the others are not entitled.

A bankrupt is not entitled to certificate or allowance, if he has lost by gaming or wagering, in 1 day, 20*l.*, or within 1 year next preceding his bankruptcy, 200*l.*; or 200*l.* by stock-jobbing in the same period; or, in contemplation of bankruptcy, has destroyed or falsified his books, or concealed property to amount of 10*l.*; or, if any person having proved a false debt under the commission, such bankrupt, being privy thereto, or afterwards knowing the same, has not disclosed it to his assignees within 1 month after such knowledge.

Lastly, upon request by the bankrupt, the official assignee is required to declare to him how he has disposed of his property, and account to him for the surplus, if any: but before any surplus can be admitted, interest must be paid, first, on all debts proved that carry interest, at the rate payable thereon; and next, upon all other debts, at the rate of 4*l.* per cent., to be calculated from the date of the commission.

I. Account of the Number of Commissions of Bankruptcy issued from 1790 to 1821.

Years.	Commissions.	Years.	Commissions.	Years.	Commissions.	Years.	Commissions.	Years.	Commissions.	Years.	Commissions.
1790	747	1796	954	1802	1,090	1807	1,362	1812	2,228	1817	1,927
1791	769	1797	1,115	1803	1,214	1808	1,433	1813	1,953	1818	1,945
1792	934	1798	911	1804	1,117	1809	1,382	1814	1,612	1819	1,499
1793	1,955	1799	717	1805	1,129	1810	2,314	1815	2,284	1820	1,381
1794	1,041	1800	951	1806	1,268	1811	2,500	1816	2,731	1821	1,238
1795	879	1801	1,199								

II. Account of the Number of Commissions of Bankrupt and Fiats issued each Year, from 1822 to 1832 both included; distinguishing Town Commissioners and Fiats, and showing how many Country Commissions and Fiats were opened in each Year. — (*Parl. Paper*, No. 342. Sess. 1833.)

Years.	Commissions sealed.	Town Commissions opened.	Country Commissions opened.	Years.	Commissions sealed.	Town Commissions opened.	Country Commissions opened.
1822	1,419	468	534	1831	1,886	692	770
1823	1,250	592	396				
1824	1,240	574	396				
1825	1,475	683	448	1832:			
1826	3,307	1,229	1,220	Coms.	61	20	37
1827	1,688	671	742	Fiats	1,661	623	703
1828	1,519	601	620		1,772	643	740
1829	2,150	809	910				
1830	1,720	661	748		19,376	7,563	7,524

Total commissions and fiats sealed and signed in the above period	19,376
Total town commissions and fiats opened	7,563
Total country commissions and fiats opened	7,524

III. Total Number of Persons discharged from Prison under the Acts for the Relief of Insolvent Debtors since the Constitution of the present Court in 1820; and the Number who have been ordered to be detained in Custody for contravening the Provisions of the Acts for the Relief of Insolvent Debtors. — (*Parl. Paper*, No. 141. Sess. 1831, and *Papers published by Board of Trade.*)

N. B.—The Court makes no orders of detention; and the following Table shows all the judgments given to the 30th of June, 1831.

Years.	Ordered to be discharged forthwith.				Ordered to be discharged at some future Period.				Total.
	In London.	On Circuit.	Before Justices.	Total.	In London.	On Circuit.	Before Justices.	Total.	
1820	830	none.	1,495	2,325	61	none.	96	157	2,482
1821	2,347	none.	2,516	4,863	219	none.	208	427	5,290
1822	2,074	none.	2,499	4,573	161	none.	221	382	4,955
1823	1,811	none.	2,047	3,858	181	none.	202	383	4,241
1824	1,745	388	1,255	3,318	142	18	115	275	3,593
1825	1,955	1,342	73	3,370	126	161	8	295	3,665
1826	2,429	1,865	89	4,383	110	183	5	298	4,681
1827	1,929	1,988	89	4,006	90	128	10	228	4,234
1828	1,913	1,450	112	3,475	127	131	6	264	3,739
1829	2,067	1,580	100	3,747	158	152	10	320	4,067
1830	2,056	1,823	111	3,990	189	191	9	389	4,379
1831	1,553	2,031	135	3,719	159	178	8	345	4,064
Totals	22,709	12,397	10,521	45,627	1,723	1,142	898	3,763	49,390

INSURANCE, a contract of indemnity, by which one party engages, for a stipulated sum, to insure another against a risk to which he is exposed. The party who takes upon him the risk, is called the *Insurer*, *Assurer*, or *Underwriter*; and the party protected by the insurance is called the *Insured*, or *Assured*; the sum paid is called the *Premium*; and the instrument containing the contract is called the *Policy*.

I. Insurance (General Principles of).
II. Insurance (Marine).
III. Insurance (Fire).
IV. Insurance (Life).

I. Insurance (General Principles of).

It is the duty of government to assist, by every means in its power, the efforts of individuals to protect their property. Losses do not always arise from accidental circumstances, but are frequently occasioned by the crimes and misconduct of individuals; and there are no means so effectual for their prevention, when they arise from this source, as the establishment of a vigilant system of police, and of such an administration of the law as may be calculated to afford those who are injured a ready and cheap method of obtaining every practicable redress; and, as far as possible, of insuring the punishment of culprits. But in despite of all that may be done by government, and of the utmost vigilance on the part of individuals, property must always be exposed to a variety of casualties from fire, shipwreck, and other unforeseen disasters. And hence the importance of inquiring how such unavoidable losses, when they do occur, may be rendered least injurious.

The loss of a ship, or the conflagration of a cotton mill, is a calamity that would press heavily even on the richest individual. But were it distributed among several individuals, each would feel it proportionally less; and provided the number of those among whom it was distributed were very considerable, it would hardly occasion any sensible inconvenience to any one in particular. Hence the advantage of combining to lessen the injury arising from the accidental destruction of property: and it is the diffusion of the risk of loss over a wide surface, and its valuation, that forms the employment of those engaged in insurance.

Though it be impossible to trace the circumstances which occasion those events that are, on that account, termed accidental, they are, notwithstanding, found to obey certain laws. The number of births, marriages, and deaths; the proportions of male to female, and of legitimate to illegitimate births; the ships cast away; the houses burned; and a vast variety of other apparently accidental events; are yet, when our experience embraces a sufficiently wide field, found to be nearly equal in equal periods of time: and it is easy, from observations made upon them, to estimate the sum which an individual should pay, either to guarantee his property from risk, or to secure a certain sum for his heirs at his death.

It must, however, be carefully observed, that no confidence can be placed in such estimates, unless they are deduced from a very wide induction. Suppose, for example, it happens that during the present year one house is accidentally burned, in a town containing 1,000 houses; this would afford very little ground for presuming that the *average* probability of fire in that town was as 1 to 1,000. For it might be found that not a single house had been burned during the previous 10 years, or that 10 were burned during each of these years. But supposing it were ascertained, that, at an average of 10 years, 1 house had been annually burned, the presumption that 1 to 1,000 was the real ratio of the probability of fire would be very much strengthened; and if it were found to obtain for 20 or 30 years together, it might be held, for all practical purposes at least, as indicating the precise degree of probability.

Besides its being necessary, in order to obtain the true measure of the probability of any event, that the series of events, of which it is one, should be observed for a rather lengthened period, it is necessary also that the events should be numerous, or of pretty frequent occurrence. Suppose it were found, by observing the births and deaths of 1,000,000 individuals taken indiscriminately from among the whole population, that the mean duration of human life was 40 years; we should have but very slender grounds for concluding that this ratio would hold in the case of the next 10, 20, or 50 individuals that are born. Such a number is so small as hardly to admit of the operation of what is called the *law of average*. When a large number of lives is taken, those that exceed the medium term are balanced by those that fall short of it; but when the number is small, there is comparatively little room for the principle of compensation, and the result cannot, therefore, be depended upon.

It is found, by the experience of all countries in which censuses of the population have been taken with considerable accuracy, that the number of male children born is to that of female children in the proportion nearly of 22 to 21. But unless the observations be made on a very large scale, this result will not be obtained. If we look at particular families, they sometimes consist wholly of boys, and sometimes wholly of girls; and it is not possible that the boys can be to the girls of a single family in the ratio of 22 to 21. But when, instead of confining our observations to particular families, or even parishes, we extend them so as to embrace a population of 500,000, these discrepancies disappear, and we find that there is invariably a small excess in the number of males born over the females.

The false inferences that have been drawn from the doctrine of chances, have uniformly, almost, proceeded from generalising too rapidly, or from deducing a rate of probability from such a number of instances as do not give a fair average. But when the instances on which we found our conclusions are sufficiently numerous, it is seen that the most anomalous events, such as suicides, deaths by accidents, the number of letters put into the post-office without any address, &c., form pretty regular series, and consequently admit of being estimated *à priori*.

The business of insurance is founded upon the principles thus briefly stated. Suppose it has been remarked that of *forty* ships, of the ordinary degree of sea-worthiness, employed in a given trade, 1 is annually cast away, the probability of loss will plainly be equal to *one fortieth*. And if an individual wish to insure a ship, or the cargo on board a ship, engaged in this trade, he ought to pay a *premium* equal to the 1-40th part of the sum he insures, exclusive of such an additional sum as may be required to indemnify the insurer for his trouble, and to leave him a fair profit. If the premium exceed this sum, the insurer is overpaid; and if it fall below it, he is underpaid.

Insurances are effected sometimes by societies, and sometimes by individuals, the risk being in either case diffused amongst a number of persons. Companies formed for carrying on the business have generally a large subscribed capital, or such a number of proprietors as enables them to raise, without difficulty, whatever sums may at any time be required to make good losses. Societies of this sort do not limit their risks to small sums; that is, they do not often refuse to insure a large sum upon a ship, a house, a life, &c. The magnitude of their capitals affords them the means of easily defraying a heavy loss; and their premiums being proportioned to their risks, their profit is, at an average, independent of such contingencies.

Individuals, it is plain, could not act in this way, unless they were possessed of very

large capitals; and besides, the taking of large risks would render the business so hazardous, that few would be disposed to engage in it. Instead, therefore, of insuring a large sum, as 20,000*l.*, upon a single ship, a private underwriter or insurer may not, probably, in ordinary cases, take a greater risk than 200*l.* or 500*l.*; so that, though his engagements may, when added together, amount to 20,000*l.*, they will be diffused over from 40 to 100 ships; and supposing 1 or 2 ships to be lost, the loss would not impair his capital, and would only lessen his profits. Hence it is, that while one transaction only may be required in getting a ship insured by a company, 10 or 20 separate transactions may be required in getting the same thing done at Lloyd's, or by private individuals. When conducted in this cautious manner, the business of insurance is as safe a line of speculation as any in which individuals can engage.

To establish a policy of insurance on a fair foundation, or in such a way that the premiums paid by the insured shall exactly balance the risks incurred by the insurers, and the various necessary expenses to which they are put, including, of course, their profit, it is necessary, as previously remarked, that the experience of the risks should be pretty extensive. It is not, however, at all necessary, that either party should inquire into the circumstances that lead to those events that are most commonly made the subject of insurance. Such a research would, indeed, be entirely fruitless: we are, and must necessarily continue to be, wholly ignorant of the causes of their occurrence.

It appears, from the accounts given by Mr. Scoresby, in his valuable work on the Arctic Regions, that of 586 ships which sailed from the various ports of Great Britain for the northern whale fishery, during the 4 years ending with 1817, 8 were lost — (vol. ii. p. 131), — being at the rate of about 1 ship out of every 73 of those employed. Now, supposing this to be about the average loss, it follows that the premium required to insure against it should be 1*l.* 7*s.* 4*d.* per cent., exclusive, as already observed, of the expenses and profits of the insurer. Both the insurer and the insured would gain by entering into a transaction founded on this fair principle. When the operations of the insurer are extensive, and his risks spread over a considerable number of ships, his profit does not depend upon chance, but is as steady, and may be as fairly calculated upon, as that of a manufacturer or a merchant; while, on the other hand, the individuals who have insured their property have exempted it from any chance of loss, and placed it, as it were, in a state of absolute security.

It is easy, from the brief statement now made, to perceive the immense advantage resulting to navigation and commerce from the practice of marine insurance. Without the aid that it affords, comparatively few individuals would be found disposed to expose their property to the risk of long and hazardous voyages; but by its means insecurity is changed for security, and the capital of the merchant whose ships are dispersed over every sea, and exposed to all the perils of the ocean, is as secure as that of the agriculturist. He can combine his measures and arrange his plans as if they could no longer be affected by accident. The chances of shipwreck, or of loss by unforeseen occurrences, enter not into his calculations. He has purchased an exemption from the effects of such casualties; and applies himself to the prosecution of his business with that confidence and energy which nothing but a feeling of security can inspire. "Les chances de la navigation entravaient le commerce. Le système des assurances a paru; il a consulté les saisons; il a porté ses regards sur la mer; il a interrogé ce terrible élément; il en a jugé l'inconstance; il en a pressenti les orages: il a épié la politique: il a reconnu les ports et les côtes des deux mondes; il a tout soumis à des calculs savans, à des théories approximatives; et il a dit au commerçant habile, au navigateur intrépide: certes, il y a des désastres sur lesquels l'humanité ne peut que gémir; mais quant à votre fortune, allez, franchissez les mers, déployez votre activité et votre industrie; je me charge de vos risques. Alors, Messieurs, s'il est permis de le dire, les quatre parties du monde se sont rapprochées." — (*Code de Commerce, Exposé des Motifs*, liv. ii.)

Besides insuring against the perils of the sea, and losses arising from accidents caused by the operation of natural causes, it is common to insure against enemies, pirates, thieves, and even the fraud, or, as it is technically termed, *barratry*, of the master. The risk arising from these sources of casualty being extremely fluctuating and various, it is not easy to estimate it with any considerable degree of accuracy; and nothing more than a rough average can, in most cases, be looked for. In time of war, the fluctuations in the rates of insurance are particularly great: and the intelligence that an enemy's squadron, or even a single privateer, is cruising in the course which the ships bound to or returning from any given port usually follow, causes an instantaneous rise in the premium. The appointment of convoys for the protection of trade during war, necessarily tends, by lessening the chances of capture, to lessen the premium on insurance. Still, however, the risk in such periods is, in most cases, very considerable; and as it is liable to change very suddenly, great caution is required on the part of the underwriters.

Provision may also be made, by means of insurance, against loss by fire, and almost all the casualties to which property on land is subject.

But, notwithstanding what has now been stated, it must be admitted, that the advantages derived from the practice of insuring against losses by sea and land are not altogether unmixed with evil. The security which it affords tends to relax that vigilant attention to the protection of property which the fear of its loss is sure otherwise to excite. This, however, is not its worst effect. The records of our courts, and the experience of all who are largely engaged in the business of insurance, too clearly prove that ships have been repeatedly sunk, and houses burned, in order to defraud the insurers. In despite, however, of the temptation to inattention and fraud which is thus afforded, there can be no doubt that, on the whole, the practice is, in a public as well as private point of view, decidedly beneficial. The frauds that are occasionally committed raise, in some degree, the rate of insurance. Still it is exceedingly moderate; and it is most probable, that the precautions adopted by the insurance offices for the prevention of fire, especially in great towns, where it is most destructive, outweigh the chances of increased conflagration arising from the greater tendency to carelessness and crime.

The business of life insurance has been carried to a far greater extent in Great Britain than in any other country, and has been productive of the most beneficial effects. Life insurances are of various kinds. Individuals without any very near connections, and possessing only a limited fortune, are sometimes desirous, or are sometimes, from the necessity of their situation, obliged, annually to encroach on their capitals. But should the life of such persons be extended beyond the ordinary term of existence, they might be totally unprovided for in old age; and to secure themselves against this contingency, they pay to an insurance company the whole or a part of their capital, on condition of its guaranteeing them, as long as they live, a certain annuity, proportioned partly, of course, to the amount of the sum paid, and partly to their age when they buy the annuity.

But though sometimes serviceable to individuals, it may be questioned whether insurances of this sort are, in a public point of view, really advantageous. So far as their influence extends, its obvious tendency is to weaken the principle of accumulation; to stimulate individuals to consume their capitals during their own life, without thinking or caring about the interest of their successors. Were such a practice to become general, it would be productive of the most extensively ruinous consequences. The interest which most men take in the welfare of their families and friends affords, indeed, a pretty strong security against its becoming injuriously prevalent. There can, however, be little doubt that this selfish practice may be strengthened by adventitious means; such, for example, as the opening of government loans in the shape of life annuities, or in the still more objectionable form of tontines. But when no extrinsic stimulus of this sort is given to it, there do not seem to be any very good grounds for thinking that the sale of annuities by private individuals or associations can materially weaken the principle of accumulation.

Luckily, however, the species of insurance now referred to is but inconsiderable compared with that which has accumulation for its object. All professional persons, or those living on salaries or wages, such as lawyers, physicians, military and naval officers, clerks in public or private offices, &c., whose incomes must, of course, terminate with their lives, and a host of others, who are either not possessed of capital, or cannot dispose of their capital at pleasure, must naturally be desirous of providing, so far as they may be able, for the comfortable subsistence of their families in the event of their death. Take, for example, a physician or lawyer, without fortune, but making, perhaps, 1,000*l.* or 2,000*l.* a year by his business; and suppose that he marries and has a family: if this individual attain to the average duration of human life, he may accumulate such a fortune as will provide for the adequate support of his family at his death. But who can presume to say that such will be the case? — that he will not be one of the many exceptions to the general rule? — And suppose that he were hurried into an untimely grave, his family would necessarily be destitute. Now, it is against such calamitous contingencies that life insurance is intended chiefly to provide. An individual possessed of an income terminating at his death, agrees to pay a certain sum annually to an insurance office; and this office binds itself to pay to his family, at his death, a sum equivalent, under deduction of the expenses of management and the profits of the insurers, to what these annual contributions, accumulated at compound interest, would amount to, supposing the insured to reach the common and average term of human life. Though he were to die the day after the insurance has been effected, his family would be as amply provided for as it is likely they would be by his accumulations were his life of the ordinary duration. In all cases, indeed, in which those insured die before attaining to an average age, their gain is obvious. But even in those cases in which their lives are prolonged beyond the ordinary term, they are not losers — they then merely pay for a security which they must otherwise have been without. During the whole period, from the time when they effect their insurances, down to the time when they arrive at the mean duration of human life, they are protected against the risk of dying without leaving their families sufficiently provided for; and the sum which they pay after having

passed this mean term is nothing more than a fair compensation for the security they previously enjoyed. Of those who insure houses against fire, a very small proportion only have occasion to claim an indemnity for losses actually sustained; but the possession of a security against loss in the event of accident, is a sufficient motive to induce every prudent individual to insure his property. The case of life insurance is in no respect different. When established on a proper footing, the extra sums which those pay whose lives exceed the estimated duration is but the value of the previous security.

In order so to adjust the terms of an insurance, that the party insuring may neither pay too much nor too little, it is necessary that the probability of his life failing in each subsequent year should be determined with as much accuracy as possible.

To ascertain this probability, various observations have been made in different countries and periods, showing, out of a given number of persons born in a particular country or place, how many complete each subsequent year, and how many die in it, till the whole be extinct. The results of such observations, when collected and arranged in a tabular form, are called Tables of Mortality; being entitled, of course, to more or less confidence, according to the number and species of lives observed; the period when, and the care with which, the observations were made, &c. But, supposing these Tables to be formed with sufficient accuracy, the expectation of life at any age, or its mean duration after such age, may readily be learned from them; and hence, also, the value of an annuity, or an assurance on a life of any age. Thus, in the Table of Mortality for Carlisle, framed by Mr. Milne, of the Sun Life Office, and which is believed to represent the average law of mortality in England with very considerable accuracy, out of 10,000 persons born together, 4,000 complete their 56th year; and it further appears, that the number of such persons who die in their 66th year is 124; so that the probability that a life now 56 years of age will terminate in the 10th year hence is $\frac{124}{4,000}$. But, reckoning interest at 4 per cent., it appears (Table II. Interest and Annuities), that the present value of 100*l.* to be received 10 years hence is 67·556*l.*; consequently, if its receipt be made to depend upon the probability that a life now 56 years of age will fail in the 66th year, its present value will be reduced by that contingency to $\frac{124 \times 67\ 566l.}{4,000} = 2{\cdot}094l.$, or 2*l.* 1*s.* 10$\frac{1}{2}$*d.* The present value of 100*l.* receivable upon the life of a party now 56 years of age terminating in the 57th or any subsequent year of his life, up to its extreme limit (which, according to the Carlisle Table, is the 105th year), being calculated in this way, the sum of the whole will be the present value of 100*l.* receivable whenever the life may fail, that is, of 100*l.* insured upon it, supposing no additions were made to it for the profits and expenses of the insurers.

More compendious processes are resorted to for calculating Tables of insurances at all ages; but the above statement sufficiently illustrates the principle on which they all depend. In practice, a life insurance is seldom made by the payment of a single sum when it is effected, but almost always by the payment of an *annual premium* during its continuance, the first being paid down at the commencement of the insurance.* If the Table of Mortality adopted by the insurers fairly represent the law of mortality prevailing among the insured, it follows that when a party insured does not attain to the average age according to the Table, the insurers will either lose by him, or realise less than their ordinary profit; and when, on the other hand, the life of an insured party is prolonged beyond the tabular average, the profits of the insurers are proportionally increased. But if their business be so extensive as to enable the law of average fully to apply, what they lose by premature death will be balanced by the payments received from those whose lives are prolonged beyond the mean duration of life for the ages at which they were respectively insured; so that the profits of the society will be wholly independent of chance.

The relief from anxiety afforded by life insurance very frequently contributes to prolong the life of the insured, at the same time that it materially augments the comfort and well-being of those dependent on him. It has, also, an obvious tendency to strengthen habits of accumulation. An individual who has insured a sum on his life, would forfeit all the advantages of the insurance, were he not to continue regularly to make his annual payments. It is not, therefore, optional with him to save a sum from his ordinary expenditure adequate for this purpose. He is compelled, under a heavy penalty, to do so; and having thus been led to contract a habit of saving to a certain extent, it is most probable that the habit will acquire additional strength, and that he will either insure an additional sum, or privately accumulate.

The practice of marine insurance, no doubt from the extraordinary hazard to which property at sea is exposed, seems to have long preceded insurances against fire and upon lives. We are ignorant of the precise period when it began to be introduced; but it appears most probable that it dates from the end of the fourteenth or the beginning of the

* For the method of calculating these annual premiums, see *post*, Interest and Annuities.

fifteenth century. It has, however, been contended by Loccenius (*De Jure Maritimo*, lib. ii. c. 1.), Puffendorff (*Droit de la Nature et des Gens*, lib. v. c. 9.), and others, that the practice of marine insurances is of much higher antiquity, and that traces of it may be found in the history of the Punic wars. Livy mentions, that during the second of these contests, the contractors employed by the Romans to transport ammunition and provisions to Spain, stipulated that government should indemnify them against such losses as might be occasioned by the enemy, or by tempests, in the course of the voyage. — (*Impetratum fuit, ut quæ navibus imponerentur ad exercitum Hispaniensem deferenda, ab hostium tempestatisque vi, publico periculo essent.* — Hist. lib. xxiii. c. 49.) Malynes (*Lex Mercatoria*, 3d ed. p. 105.), founding on a passage in Suetonius, ascribes the first introduction of insurance to the emperor Claudius, who, in a period of scarcity at Rome, to encourage the importation of corn, took upon himself all the loss or damage it might sustain in the voyage thither by storms and tempests. — (*Negotiatoribus certa lucra proposuit, suscepto in se damno, si cui quid per tempestates accidisset, et naves mercaturæ causâ, fabricantibus, magna commoda constituit.* — c. 18.) It is curious to observe that this stipulation gave occasion to the commission of acts of fraud, similar to those so frequent in modern times. Shipwrecks were pretended to have happened, that never took place; old shattered vessels, freighted with articles of little value, were purposely sunk, and the crew saved in boats: large sums being then demanded as a recompence for the loss. Some years after, the fraud was discovered, and some of the contractors were prosecuted and punished. (Lib. xxv. c. 3.) But none of these passages, nor a similar one in Cicero's letters — (*Ad Fam.* lib. ii. c. 17.), warrant the inferences that Loccenius, Malynes, and others have attempted to draw from them. Insurance is a contract between two parties; one of whom, on receiving a certain premium (*pretium periculi*), agrees to take upon himself the risk of any loss that may happen to the property of the other. In ancient no less than in modern times, every one must have been desirous to be exonerated from the chance of loss arising from the exposure of property to the perils of the sea. But though, in the cases referred to, the carriers were exempted from this chance, they were not exempted by a contract *propter aversionem periculi*, or by an insurance; but by their employers taking the risk upon themselves. And it is abundantly obvious that the object of the latter in doing this was not to profit, like an insurer, by dealing in risks, but to induce individuals the more readily to undertake the performance of an urgent public duty.

But with the exception of the instances now mentioned, nothing bearing the remotest resemblance to an insurance is to be met with till a comparatively recent period. If we might rely on a passage in one of the Flemish chroniclers, quoted by the learned M. Pardessus, — (see his excellent work, *Collection des Loix Maritimes*, tome i. p. 356.), we should be warranted in concluding that insurances had been effected at Bruges so early as the end of the thirteenth century: for the chronicler states that, in 1311, the Earl of Flanders consented, on a requisition from the inhabitants, to establish a chamber of insurance at Bruges. M. Pardessus is not, however, inclined to think that this statement should be regarded as decisive. It is evident, from the manner in which the subject is mentioned, that the chronicler was not a contemporary; and no trace can be found, either in the archives of Bruges, or in any authentic publication, of any thing like the circumstance alluded to. The earliest extant Flemish law as to insurance is dated in 1537; and none of the early maritime codes of the North so much as alludes to this interesting subject.

Beckmann seems to have thought that the practice of insurance originated in Italy, in the latter part of the fifteenth or the early part of the sixteenth century. — (*Hist. of Invent.* vol. i. art. *Insurance.*) But the learned Spanish antiquary, Don Antonio de Capmany, has given, in his very valuable publication on the History and Commerce of Barcelona (*Memorias Historicas sobre la Marina, &c. de Barcelona*, tomo ii. p. 383.), an ordinance relative to insurance, issued by the magistrates of that city in 1435; whereas the earliest Italian law on the subject is nearly a century later, being dated in 1523. It is, however, exceedingly unlikely, had insurance been as early practised in Italy as in Catalonia, that the former should have been so much behind the latter in subjecting it to any fixed rules; and it is still more unlikely that the practice should have escaped, as is the case, all mention by any previous Italian writer. We, therefore, agree entirely in Capmany's opinion, that, until some authentic evidence to the contrary be produced, Barcelona should be regarded as the birthplace of this most useful and beautiful application of the doctrine of chances. — (Tomo i. p. 237.)

A knowledge of the principles and practice of insurance was early brought into England. According to Malynes — (*Lex Mercat.* p. 105.), it was first practised amongst us by the Lombards, who were established in London from a very remote epoch. It is probable it was introduced some time about the beginning of the sixteenth century; for it is mentioned in the statute 43 Eliz. c. 12. — a statute in which its utility is very clearly set forth — that it had been an *immemorial usage* among merchants, both English and

foreign, when they made any great adventure, to procure insurance to be made on the ships or goods adventured. From this it may reasonably be supposed that insurance had been in use in England for at least a century previous. It appears from the same statute, that it had originally been usual to refer all disputes that arose with respect to insurances to the decision of "grave and discreet" merchants appointed by the Lord Mayor. But abuses having grown out of this practice, the statute authorised the Lord Chancellor to appoint a commission for the trial of insurance cases; and in the reign of Charles II. the powers of the commissioners were enlarged. But this court soon after fell into disuse; and, what is singular, no trace can now be discovered of any of its proceedings.—(*Marshall on Insurance*, Prelim. Disc. p. 26.)

Few questions as to insurance seem to have come before the courts at Westminster till after the middle of last century. The decisions of Lord Mansfield may, indeed, be said to have fixed, and in a considerable degree formed, the law upon this subject. His judgments were not bottomed on narrow views, or on the municipal regulations of England; but on those great principles of public justice and convenience which had been sanctioned and approved by universal experience. His deep and extensive information was acquired by consulting the most intelligent merchants, and the works of distinguished foreign jurists; and by carefully studying the famous French ordinance of 1681, the most admirably digested body of maritime law of which any country has ever had to boast. Hence the comprehensiveness and excellence of his Lordship's decisions, and the respect they have justly commanded in all countries.* In his hands the law of insurance became, in a far greater degree than any other department of English law, a branch of that national or public law, of which Cicero has beautifully said, "*Non erit alia lex Romæ, alia Athenis, alia nunc, alia posthac, sed et omnes gentes et omni tempore una lex et sempiterna, et immortalis continebit, unusque erit communis quasi magister et imperator omnium Deus.*"—(*Fragm.* lib. iii. *de Republicâ.*)

Insurance against fire and upon lives is of much later origin than insurance against the perils of the sea. The former, however, has been known and carried on amongst us, to some extent at least, for nearly a century and a half. The Amicable Society, for insurance upon lives, was established by charter of Queen Anne, in 1706; the Royal Exchange and London Assurance Companies began to make insurances upon lives in the reign of George I.; and the Equitable Society was established in 1762. But the advantages of life insurance, and the principles on which the business should be conducted, were then very ill understood; and the practice can hardly be said to have obtained any firm footing amongst us, till the Equitable Society, by adopting the judicious suggestions of Dr. Price, began its career of prosperity about 1775. Notwithstanding the example of England, life insurance has made very little progress on the Continent. It was, indeed, expressly forbidden by the French ordinance of 1681 (liv. iii. tit. 6. art. 10.); by the regulations as to insurance issued at Amsterdam in 1612 (art. 24.); and it is doubtful whether the practice be not inconsistent with the 334th art. of the *Code de Commerce*. But we are inclined to think that the want of security, more than any positive regulations, has been the principal cause of the little progress of life insurance on the Continent. Of whatever disadvantages our large public debt may be productive, it is not to be doubted that the facilities it has afforded for making investments, and the punctuality with which the national engagements have been fulfilled, have been the principal causes of the extraordinary extent to which the business of life and even fire insurance has been carried in this country.

II. Insurance (Marine).

There are few persons who are not acquainted, in some degree, with fire and life insurances. The security which they afford to individuals and families is a luxury which nobody, in tolerably comfortable circumstances, is willing to be without. Hence the great increase, in our days, of companies professing to afford this security; and hence the knowledge, on the part of the public generally, of the nature and principles of the engagements into which these companies enter. But marine insurance is a subject which is of immediate interest only to merchants and ship owners; unless, indeed, we should refer to that small portion of the community, who have occasion to transport themselves beyond seas with capital and effects for purposes of colonisation, or to fill some official situation. Hence the comparative indifference, on the part of the public, as to this subject. The general principles, however, of all insurance are the same; and in treating of marine insurance, it will be necessary to notice little beyond such topics as are peculiar to that branch of the business.

Individual Insurers or Underwriters.—The first circumstance that cannot fail to strike the general inquirer into the practice of marine insurance in this country, is that, while all fire and life insurances are made at the risk of companies, which include within themselves the desirable requisites of security, wealth, and numbers, the great bulk of marine insurances are made at the risk of individuals. London and Liverpool are the only towns in England in which there are any public companies for this purpose.† In London there are only 4: the 2 old companies, the *London* and the *Royal Exchange*; and the two established in 1824, the *Alliance Marine* and the *Indemnity Mutual Marine*. In Liverpool there is only 1 company. The individuals engaged in this branch of the insurance business in London, about whom we shall say more presently, assemble in Lloyd's Coffee-house, over the Royal Exchange.

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* See Emerigon's famous *Traité des Assurances*, tome ii. p. 67.

† Within these few months a company has been formed at Sunderland, and it is said that some are projected in other sea-ports.

Prohibition of Companies. — Till 1824, all firms and companies, with the exception of the 2 chartered companies, the Royal Exchange and London, were prohibited by law from taking marine insurances. Towards the latter end of that year, the prohibition was removed, and the business of marine insurance was placed on the same footing as other descriptions of business. While the restriction lasted, the 2 chartered companies did so little business, that marine insurance might, in fact, be said to be wholly in the hands of individuals. These companies were so much higher in their premiums, and so much more exclusive in the risks they were willing to undertake, than their individual competitors, that even those merchants and ship owners, who would cheerfully have paid some trifling consideration to obtain the greater security of a company, were obliged to resort to individuals. And it was only when the repeal of this absurd restriction was proposed, that the companies showed, by defending it, that they set any value upon their privilege. The underwriters at Lloyd's joined them in this opposition; and pamphlets were written, and speeches made, to demonstrate how much merchants and ship owners would suffer, were the law to allow them the free use of their discretion in insuring their property; and how much more conducive to their interests it was, that they should be forced up to Lloyd's, to pay premiums to individuals rather than companies. But these pamphlets and speeches are forgotten; and we should be sorry to wound the feelings of their authors, or to trespass on the patience of our readers, by referring to them more particularly.

Formation of Companies. — During the autumn of 1824 and spring of 1825, 5 companies sprang into existence in London: the two already mentioned, and the *St. Patrick*, the *Patriotic*, and the *South Devon*. The last 3 have since been given up, having proved ruinous concerns to the proprietors. The 2 former are composed of some of the most eminent merchants and ship owners of the city of London, who united for the double purpose of providing a more perfect security for their property, and of ascertaining whether the insurance business might not be made to yield a fair return to the capital employed in it. The change thus introduced into the business has had the effect of rousing the 2 old companies into activity, and thus may be said to have afforded to the public the opportunity of transacting their business with 4 substantial companies, in addition to individual underwriters, whereas they could previously deal only with individuals.

It may be computed that these 4 companies draw to themselves 1-5th of the whole business of the country, leaving the other 4-5ths to individual underwriters, and the Liverpool, Scotch, and Irish companies. It has been inferred by some, that the comparatively limited business of the companies is a convincing proof that individuals are much better adapted to engage in this department than societies; while it is contended by others that the large share of business, thus speedily attracted to the companies, ought to satisfy every body, when due allowances are made for the difficulties to be combated in breaking through established modes and habits of doing business, that the tendency in the public is practically to confirm what antecedent investigation would suggest, — that companies, while they must necessarily hold out better security, and greater liberality and punctuality in the settlement of claims, are capable of transacting a given amount of business with a saving both of labour and expense.

Mode of conducting Business. — We shall now give an account of the existing arrangements for conducting the business of marine insurance, as well by individuals as the companies in London.

Lloyd's. — The individual underwriters meet in a subscription room at Lloyd's. The joint affairs of the subscribers to these rooms are managed by a committee chosen by the subscribers. Agents (who are commonly styled Lloyd's agents) are appointed in all the principal ports of the world, who forward, regularly, to Lloyd's, accounts of the departures from and arrivals at their ports, as well as of losses and other casualties; and, in general, all such information as may be supposed of importance towards guiding the judgments of the underwriters. These accounts are regularly filed, and are accessible to all the subscribers. The principal arrivals and losses are, besides, posted in 2 books, placed in 2 conspicuous parts of the room; and also in another book, which is placed in an adjoining room, for the use of the public at large. Many of the merchants of the city of London are subscribers to these rooms; and the 2 old companies contribute each 100*l.* per annum, in return for which they are furnished with copies of the daily intelligence. The 2 new companies made similar proposals, which were, and, we believe, continue to be, rejected; but this feeling of animosity is unworthy of the subscribers, and will, no doubt, speedily disappear.

The rooms are open from 10 o'clock in the morning till 5 o'clock in the afternoon, but the most considerable part of the business is transacted between 1 and 4. Those merchants and ship owners who manage their own insurance business, procure blank policies at the government office, or of their stationers, which they fill up so as to meet the particular object in view, and submit them to those underwriters with whom they are connected; by whom they are subscribed or rejected. Each policy is handed about in this way until the amount required is complete. The form of the policy and of a subscription is subjoined to this article.

The premium is not paid to the underwriter in ready money, but is passed to account. Nor does the underwriter debit the account of the person to whom he subscribes a policy, with the whole amount of the premium, but with the premium less 5 per cent. Whenever losses occur which more than absorb the premiums on any one account, the underwriter is called upon to pay the balance. But should the underwriter's account be what is called good, that is, should the premiums exceed the claims, he sends round, during the spring and summer, to collect from his various debtors either the balance of his last year's account, or money on account, according to his judgment; but, upon what he receives, he makes an allowance of 12 per cent. An underwriter, if prudent, therefore, before he consents to receive, will not only look to the goodness of his account, but to the probability of its continuing so.

Insurance Brokers. — Many merchants and ship owners do not transact their own insurance business. They give their orders for insurance to others, who undertake it for them, and are responsible for its proper management. These latter persons are called insurance brokers; and some of them manage the business of a number of principals. To them, likewise, are transmitted the orders for insurance from the outports and manufacturing towns. They charge the whole premium to their principals, and their profit consists in 5 per cent. upon the premium, 12 per cent. upon the money that they pay to the underwriters, and ½ per cent. that they deduct from all the claims which they recover from the underwriters. It is proper to remark, that this is the established or regular profit; but competition has occasioned numerous deviations from it by the brokers, many of whom consent to divide this profit with the principals who employ them. The insurance brokers are not unfrequently underwriters also; and as some insurances are considered far more lucrative than others to underwriters, and as the brokers have particular facilities, in some respects, of judging of the goodness of their own risks, so likewise have they an inducement to play into one another's hands, and they do so accordingly. — (See BROKERS.)

It will at once be seen, that the trouble of effecting insurances at Lloyd's is considerable; that a good deal of time must be consumed; and that merchants and ship owners, therefore, have great inducement to consign their insurance business to brokers. But where the business is transacted with a company, this inducement, if not destroyed altogether, is, at all events, very much diminished. Any party having property to insure, has merely to go to the manager of the company, and state the particulars of the risk to be insured; the premium being agreed upon, the manager writes out a memorandum for the policy, which the party signs, and he is thus effectually insured. The companies procure the stamp and write out the policy, which is ready for delivery in 4 or 5 days. The companies, like the underwriters, charge the premium less 5 per cent. In other respects they vary.

The Royal Exchange Assurance Company allow 12 per cent. upon the profitable balance of each year's premiums, with credit till March for the premiums of the preceding year, and 5 per cent. for prompt payment.

The Alliance Marine Assurance Company allow 12 per cent. upon the profitable balance of each year's premiums, with credit till March; or 10 per cent. for prompt payment.

The Indemnity Mutual Marine Assurance Company allow 12 per cent. upon the profitable balance of each year's premiums, with credit till June; or 10 per cent. for prompt payment.

The allowances of the London Assurance Company are the same as those of the Indemnity.

Payment of Losses. — Losses are paid at all the offices promptly, and without deduction. A month's credit is allowed to the underwriters; and another month, and sometimes 2 months, are given to the broker, to collect from the underwriters, and pay over to his principals.

Clubs. — Besides the individual underwriters and companies above noticed, there are clubs or associations formed by ship owners, who agree, each entering his ships for a certain amount, to divide among themselves one another's losses. These clubs are institutions of long standing; but, since the alteration of the law in 1824, appear to be on the decline. Their formation originated in a twofold reason: 1st, that the underwriters charged premiums more than commensurate with the risk; and, 2dly, that they did not afford adequate protection. To avoid the first of these two evils, instead of paying a fixed premium, they pay among themselves the actual losses of their several members as they occur; and to avoid the second, they lay down certain principles of settlement in accordance with their views of indemnity. Each member of one of these clubs gives his power of attorney to the selected manager; and this manager issues a policy for each ship, which policy is subscribed by him as attorney for all the members, the premium inserted in the policy being understood to be nominal. These clubs are open to the leading objections that apply to individual underwriters; for the members are not collectively, but only individually, liable to those of their number who happen to sustain a loss; and the delay of settlement is such, that more than 12 months have been known to elapse before the payment of a loss has been obtained from all the members.

Rate of Premium. — But little need be said upon the circumstances that influence the rate of premium demanded by the insurers. It must be self-evident that premiums will vary according to the seasons, the quality of the vessel, the known character of the captain, the nature of the commodity, and the state of our political relations. All these, of course, are matters upon which each individual must exercise his own discretion, partly from general experience, and partly from particular information; exaggeration of risk, and consequent exorbitancy of premium for any length of time, being out of the question, where so many individual underwriters, in addition to the companies, are in competition with one another, and where the merchants have the means at hand of effecting their insurances abroad. We have already taken notice of the intelligence of which Lloyd's is the focus. In addition to this, there are 2 subscription register books for shipping maintained by the principal merchants, ship owners, and underwriters. These books profess to give an account of the tonnage, build, age, repairs, and quality of almost all the vessels that frequent our ports; and, although exceedingly defective in many respects, are material assistants to the insurers, who have no means of ascertaining by their own observation the particulars of 1 in 100 of the ships they are called upon to insure. But active measures are now in progress for superseding these *two* register books by *one*, giving a much more accurate and faithful account of the state of the mercantile shipping. We doubt, however, whether its real state will ever be revealed, as it ought to be, for the general benefit, until public officers are appointed to perform this duty. This might be done at a trifling expense; and the advantage to the owners of good ships, to merchants, and to passengers, would be immense.

Contract of Insurance.

Having thus given a general outline of the mode of transacting business between the insurers and insured, and the means used to enable both parties to come, as near as possible, to a due estimate of the risk to be insured against, our next step will be to explain the nature of the contract, and the bearing of its more important clauses.

It is unnecessary to state that the object of those who are engaged in commerce, or in moving articles of merchandise from one part of the world to another, is to *buy* at such a price that, after paying all the expenses of transport, the *sale* price may leave them a surplus in the shape of profit. If there were no such contrivance as insurance, merchants would be obliged to calculate upon the probability of the occasional loss of their property, and to regulate their transactions accordingly; but it must be obvious that enterprise, under such circumstances, would be very much crippled. Now, insurance, in as far as it approaches perfection in guaranteeing the merchant against all loss, except that of the market, substitutes a fixed charge for uncertain and contingent loss, and enables him to confine his attention exclusively to price and quality, and to charges of transport; in which latter, of course, the premium of insurance is included. As, however, in practice, insurance is by no means a perfect protection, either to the merchant or ship owner, against all loss that may occur *in transitu*, there is, even after insurance, some contingencies remaining to be taken into consideration; and we do not know that we can do better, by way of explaining the contract of insurance, than state, as briefly and succinctly as possible, what are the losses against which the merchant and ship owner are not protected by an insurance effected in this country.

1. *Acts of our own Government.* — All losses arising from the acts of our own government. Thus, if an embargo were laid on vessels about to sail for a particular quarter, and the merchant obliged to unload his goods; or if his goods were condemned to be destroyed in quarantine; or purposely destroyed at sea by some of our cruisers; no part of his loss would be made good by the insurer. The insurer in this country, although liable for the acts of foreign powers, is not liable for such acts directed against the property of their own subjects. Thus, if French property, insured in this country, were confiscated by the French government, the owner would have no remedy against his insurer.

2. *Breaches of the Revenue Laws.* — All losses arising from a breach of the revenue laws. It may be observed, that if the owner of the ship, by his act, expose the goods of the merchant to loss, the merchant so injured, although he cannot recover from his insurers, may claim from him. It may also be observed, that if the captain of the vessel, by his act, to which neither the owner of the ship nor the merchant is a party, expose the ship and cargo to loss, the insurers, in such case, are bound to make good the loss; the insurers being liable for all damage arising from illegal acts of the captain and crew, supposing the owner of the ship not to be accessary. The illegal acts of the captain and crew, contrary to the instructions and without the consent of the owners, are termed "barratry" in the policy. — (See Barratry.)

3. *Breaches of the Law of Nations.* — All losses arising from a breach of the law of nations. Thus, if any port is declared by a foreign power to be in a state of blockade, and such blockade is acknowledged by our government; and if a ship, in defiance of that notification, attempt to break the blockade, and is taken in the attempt; the insurer is not liable to the loss. It will often happen, when a port is under blockade, that the profit is so great upon goods introduced in defiance of the blockade, as to tempt adventurers to break it, and to enable them to afford a very high premium to insure against the risk. But as policies for such an object are not acknowledged in our courts of law, when effected, they are understood to be *policies of honour*. The same kind of policy is adopted by the underwriters, to protect foreign merchants who prefer insuring in this country against British capture.

1. *Consequences of Deviation.* — All losses subsequent to any deviation from the terms of the policy. Thus, if a merchant, in a policy on produce from the West Indies to London, warrant the ship to sail on or before the 1st of August, and the ship sail after that day and be lost, the insurer is exonerated. Or, if a merchant insure from London to Lisbon, and the ship call at Havre and is afterwards lost, the insurer is not liable. It will be understood, of course, that the owner of the ship is liable to the merchant for any breach of contract on his part, as well as that the insurer is liable for the barratry of the master; a deviation on the part of the master, not intended for the benefit of the owner, and contrary to his instruc-

tions, being considered barratry. Should the owner of the goods neglect to describe accurately the voyage for which he wishes to be insured, the loss would be a consequence of his own negligence.

There is a doctrine connected with barratry which it will here be proper to notice. A captain, owner or part owner of the ship in which he sails, cannot commit an act of barratry. In other words, the insurers are not, in such a case, liable for an act of his which would otherwise be barratrous. The equity of this doctrine, as far as regards the interests of the captain himself, cannot be called in question; but it is difficult to understand why the merchant who ships goods on board such a captain's vessel should not be permitted to insure, among other risks, against the captain's illegal acts. We have heard, that a clause has occasionally been introduced into policies to protect merchants against captain-owners, and we do not suppose that our courts of law would refuse to enforce such a clause. Indeed, we cannot discover any reason why every party, saving the captain, should not have the power of insuring against the consequences of illegal acts of the captain. We believe, that among the life offices, which protect themselves from loss by suicide and the hands of justice, there are some which make a distinction in favour of those who merely hold policies on the lives of others as a collateral security. The propriety of such a distinction must strike every body.

5. *Unseaworthiness.* — All losses arising from unseaworthiness. Unseaworthiness may be caused in various ways, such as want of repair, want of stores, want of provisions, want of nautical instruments, insufficiency of hands to navigate the vessel, or incompetency of the master. It might be supposed, at first sight, that insurance affords a much less perfect security than it really does, seeing on how many pleas it is possible for the insurer to dispute his liability; but when it is considered that the proof of unseaworthiness is thrown upon the defendant, and that the leaning of the courts is almost always in favour of the insured, it will be easy to suppose that no respectable insurers would ever plead unseaworthiness, unless they could make out a case of more than ordinary strength and clearness. The degree of uneasiness felt by merchants and ship owners at their liability to be involved in loss by cases of unseaworthiness, may be guessed from the fact, that although the Indemnity Assurance Company at one time precluded themselves from pleading unseaworthiness by a special clause in their policy, not only did they obtain no additional premium in consequence thereof, but they did not even obtain a preference over other companies and individuals at the same premium. At least, this fact must either be admitted as a proof of the absence of uneasiness on this head, or of that inveteracy of habit which seems to lead the great bulk of mankind always, if possible, to continue undeviatingly in those courses to which they are accustomed, even where the benefits to be derived from a deviation are undeniable.

6. *Protraction of the Voyage.*—All loss arising from unusual protraction of the voyage. Thus, if a ship meet with an accident in the Baltic, and the repairs detain the vessel till the close of the season, when the passage home is rendered impracticable by the ice till the opening of the ensuing season, no payment is made to the merchant, in mitigation of his loss from interest of money, loss of market (if the market fall), or deterioration in the quality of his goods (unless arising from actual sea damage); nor to the ship owner, in mitigation of his loss from the extra wages and maintenance of his crew. In most foreign countries the ship owner is remunerated by the insurers for the wages and maintenance of his crew while his ship is detained in consequence of any loss for the making good of which they are liable.

7. *Liability for doing Damage to other Vessels.*—All loss to which the ship owner is liable when his vessel does damage to others. According to our laws, the owner of every ship not in charge of a pilot, that does damage, by negligence of the master and crew, to any description of craft or vessel, is liable to make good the same to the extent of value of his own ship and freight: for beyond this he is not liable. The common policy in use among the underwriters at Lloyd's and the companies does not protect the ship owner from this loss. But the clubs or associations before mentioned almost universally take this risk. Indeed, this is one of the purposes which gave rise to their formation. But even they limit their liability to the amount of the policy; so that if a ship insured with them were to run down another, and to sink herself in the concussion, the owner would only receive the value of his own vessel from the club, and still be liable to the owner of the other vessel. The Indemnity Company, by a clause in their policy, make themselves liable for 3-4ths of the loss which the owner of the vessel insured with them may sustain from damage done by his vessel to those of others. If such a case as the one just supposed should occur under their policy, the insured would receive the value of his own vessel and 3-4ths of the loss to be made good by him to the owner of the other vessel. The policies of this Company approach in this respect the nearest of any to perfect protection to the ship owner. But the loss from running down other vessels, although serious, nay sometimes ruinous, seldom occurs; and many ship owners trust so confidently that it will never fall upon them, that they are as well satisfied to be without as with this protection.

8. *Average Clause.* — The next description of loss of which we shall treat, against which the insured are not protected, is described in the following clause of the policy :—"Corn, fish, salt, seed, flour, and fruit, are warranted free from average, unless general, or the ship be stranded; sugar, tobacco, hemp, flax, hides, and skins, are warranted free from average under 5 per cent., unless general, or the ship be stranded; and all other goods, also the ship and freight, are warranted free from average under 3 per cent., unless general, or the ship be stranded."

The language employed in this clause, being technical, requires explanation, to render it intelligible to the general reader. Average is a name applied to certain descriptions of loss, to which the merchant and ship owner are liable. There are two kinds of average, general and particular.

General Average comprehends all loss arising out of a voluntary sacrifice of a part of either vessel or cargo, made by the captain for the benefit of the whole. Thus, if a captain throw part of his cargo overboard, cut from an anchor and cable, or cut away his masts, the loss so sustained, being voluntarily submitted to for the benefit of the whole, is distributed over the value of the whole ship and cargo, and is called "general average."

Particular Average comprehends all loss occasioned to ship, freight, and cargo, which is not of so serious a nature as to debar them from reaching their port of destination, and when the damage to the ship is not so extensive as to render her unworthy of repair. Losses where the goods are saved, but in such a state as to be unfit to forward to their port of destination, and where the ship is rendered unfit to repair, are called "partial or salvage loss." The leading distinction between particular average and salvage loss is, that, in the first, the property insured remains the propery of the assured—the damage sustained, or part thereof, as the case may be, and as will be hereafter explained, being made good by the insurer; and in the second, the property insured is abandoned to the insurer, and the value insured claimed from him, he retaining the property so abandoned, or its value.

Particular Average on Goods.—A few cases illustrative of the method of stating a claim for particular average will best explain the nature of this description of loss, and will at the same time show the reader what the practical distinction is between particular average and salvage loss.

The property insured we shall suppose to be *a ton of hemp*, the cost of which at Petersburgh is 30*l.*, for which sum it is insured from Petersburgh to London, and that the duty, freight, and charges to which the merchant is subject on landing at London are 10*l.* We shall likewise suppose that the hemp, on its arrival, is so damaged as not to be worth more than half what it would have fetched had it been sound. The insurer would then be called upon to make good to the insured 15*l.*, or 50 per cent. upon the sum insured. But it does not follow that this payment of 15*l.* would indemnify the merchant, or that it would not more than indemnify him, for the loss sustained.

	L.	s.	L.	s.
If the hemp upon arrival in this country would have fetched in a sound state -	50	0		
Less duty, freight, and charges -	10	0		
			40	0
But in its damaged state is only worth -	25	0		
Less duty, freight, and charges -	10	0		
			15	0
The merchant's loss by the damage is -			L.25	0

Whereas he only receives from the insurer 15*l.* Upon the principle of a salvage loss he would also receive 15*l.*

	L.	s.	L.	s.
If the hemp would have fetched in a sound state - - - - -	20	0		
Less duty, freight, and charges -	10	0		
			10	0
But in its damaged state is only worth -	10	0		
Less duty, freight, and charges -	10	0		
The merchant's loss by the damage is -			L.10	0

Whereas he receives from the insurer 15*l.* Upon the principle of a salvage loss he would receive 30*l.*

	L.	s.	L.	s.
If the hemp would have fetched in a sound state - - - - -	30	0		
Less duty, freight, and charges -	10	0		
			20	0
But in its damaged state is only worth -	15	0		
Less duty, freight, and charges -	10	0		
			5	0
The merchant's loss by the damage is -			L.15	0

And he receives from the insurer 15*l.* Upon the principle of a salvage loss he would receive 25*l.*

It will be observed that the merchant's loss by the damage of his goods varies with the state of the market. It may also be observed, that in general the merchant will not receive from the insurer the whole amount of the loss that he sustains. Whenever his market is a profitable one (and that it must usually be so will be obvious to every body), whenever, indeed, his market is not a decidedly losing one, his policy does not afford him a complete protection.

The argument in favour of this mode of settling claims for particular average—and it should be observed that the subject has been discussed, and the principle acknowledged in the courts of law—is, that the insurer's liability is to be guided by the amount upon which he has received a premium or consideration; that he is not to be affected by the rise or fall of markets; but that the *gross* market price of the *sound*, and the *gross* market price of the *damaged* goods, are to be the test by which the rate of damage upon the amount insured is to be adjusted; the insurer being liable, besides, for all the extra charges arising out of the damage.

In the first case stated, the merchant's loss by damage is 25*l.* upon 40*l.*, or 62½ per cent.; in the second, 10*l.* upon 10*l.* or 100 per cent.; in the third, 15*l.* upon 20*l.*, or 75 per cent. If the duty, freight, and charges were diminished in proportion to the diminished value of the goods, the loss in each case would be 50 per cent. upon the nett price, as it is 50 per cent. upon the gross price. As far as the duty is concerned, government, upon many articles, reduces it in proportion to the diminution in the value of the goods; and if the freight were reduced in a similar manner, the merchant would always be indemnified for his loss by the insurer. But the practice with regard to freight in this country admits of no such arrangement; freight being paid according to the quantity delivered.

To make the principle upon which claims for particular average are adjusted, and its bearing, still clearer, we shall illustrate it by a few more cases. Suppose two packages to be insured at cost price—a cask of rice and a cask of sugar—each weighing 10 cwt.; the cost of each at the port of shipment 10*l.*, the freight of each 10*s.* per cwt. at the port of delivery, both articles free from duty, and to arrive at a market where no more than the cost price is realised; assuming that both packages are damaged 50 per cent.—the rice by loss of quality, the sugar by loss of weight—the statement will be as follows:—

	L.	s.	L.	s.
10 cwt. of rice, had it arrived sound, would have produced - - - - -	15	0		
Less freight on 10 cwt. at 10*s.* per cwt.	5	0		
			10	0
But being damaged, did only produce -	7	10		
Less freight on 10 cwt. at 10*s.* per cwt.	5	0		
			2	10
Merchant's loss - - - - -			L.7	10

	L.	s.	L.	s.
10 cwt. of sugar, if sound, would have produced - - - - -	15	0		
Less freight on 10 cwt. at 10*s.* per cwt.	5	0		
			10	0
The barrel being damaged, did only weigh 5 cwt., and produce - - - - -	7	10		
Less freight on 5 cwt. at 10*s.* per cwt.	2	10		
			5	0
Merchant's loss - - -			L.5	0

In each case the merchant is entitled to recover from his insurer 5*l.*, or 50 per cent., upon 10*l.*, the sum insured, which, although an indemnity to him for his loss on the sugar, is far from being so for his loss upon the rice. If the merchant would contrive so to shape his contract with the ship owner for freight, as to reduce the freight in proportion to the depreciation in the value of the damaged commodity, he would be completely protected. The ship owner might on his side protect himself by insurance from loss by reduction of quality, as he now does from loss by reduction of quantity. But we have already more than once adverted to the difficulty of breaking in upon established practices. The merchants go on from year to year complaining of the losses to which they are subject from this awkward contrivance, while no steps are taken to improve it. To show that the principle is equitable as between the merchant and his insurer, we subjoin one more statement, where the damage is taken at 100 per cent.:—

	L.	s.	L.	s.
10 cwt. of rice, if sound, would have produced - - - - -	15	0		
Less freight on 10 cwt. at 10*s.* per cwt.	5	0		
			10	0
Being totally spoiled, did produce nothing -				
The merchant being still liable for the freight - - - -			5	0
Making his loss - - -			L.15	0

He receives 10*l.* only from the insurer.

	L.	s.	L.	s.
10 cwt. of sugar, if sound, would have produced - - - - -	15	0		
Less freight on 10 cwt. at 10*s.* per cwt.	5	0		
			10	0
The barrel being washed out produces nothing				
The merchant however, not being liable to pay freight - -				
His loss is only - -			L.10	0.

Which he recovers from the insurer.

It will be observed, that in each case the insurer pays 10*l.*, or the full sum upon which he receives the premium.

When whole cargoes, or parcels of goods of considerable value, are insured, the clause in the policy which protects the insurer from particular average under a certain percentage, is often partially set aside. Thus, if a cargo of 500 hogsheads of sugar, valued at 10,000*l.*, were damaged to the extent of 460*l.*, the merchant, supposing the protecting clause to remain in force, would recover nothing from the insurer, the loss not amounting to 5 per cent. The additional written clause, by which it is the practice to modify the printed clause, is as follows:—"Particular average, payable upon each 10 hhds. sugar, 10 casks and 50 bags coffee, and 10 bags cotton, following numbers, and upon each package of manufactured goods, chest of indigo, bag of wool or silk, the same as if separately insured." Such clauses may be, and are, introduced *ad libitum* by mutual consent of insurer and insured, the premium or consideration being arranged accordingly.

The protecting clause is considered, on the other hand, by the insurers, exceedingly unsatisfactory in some respects; and they, as occasion requires, insist upon additional protection. Thus, saltpetre, hides, cocoa, and tin plates, are generally warranted free from particular average, unless the ship be stranded; and upon tobacco, it is customary for the insurers to make themselves liable only to such part of the particular average as exceeds 5 per cent. throwing 5 per cent., upon the merchant

Particular Average on Freight.—The clause, as far as it affects "freight," calls for no particular comment. Particular average upon freight can only arise, according to prevailing practice, from loss of weight; and whenever the loss of weight amounts to 3 per cent. or upwards, the ship owner is entitled to recover from his insurer. The ship owner, upon the arrival of the ship at its port of destination, is entitled to hold the goods as security until the freight is paid. If the owner of the goods should prove insolvent, and the goods should be entirely spoiled by sea damage during the voyage, and the ship owner thus lose his freight, he has no claim upon the insurer; because, although his collateral security is destroyed by a peril of the sea, his right to receive freight remains unimpaired, and it is against the loss or impairing of this right that the insurer protects him.

Particular Average on Ships.—Particular average upon ships is a subject somewhat more beset with difficulties. There is scarcely a ship that makes a voyage of any length, that does not sustain some damage. The clause in the policy warranting the ship free from particular average under 3 per cent., unless stranded, protects the insurer from the constant recurrence of petty claims; but in addition to this, it is the practice to class the damage, that a ship sustains in the prosecution of her voyage, under two heads: ordinary damage, or wear and tear; and extraordinary damage, or particular average. The splitting of sails, the breaking of anchors and cables, the upsetting of windlasses, are losses that come under the first head. The carrying away of masts and bulwarks, damage to the copper sheathing, and hull, from striking on rocks, come under the second.

When a ship sustains damage, if she be on her first voyage, the whole expense of the repairs is made good by the insurers. But if she be not on her first voyage, it is the established custom that the insurer pays no more than 2-3ds of the repairs, the owner of the vessel having, as it is thought, an equivalent for the 1-3d which falls upon him, in the substitution of new work for old. Where the nature of the damage is such as to require that the copper should be stripped off the ship's bottom, the insurer pays the difference between the price of the old and the new copper on the weight of the old copper stripped off; the excess in weight of the new over the old copper is paid for by the ship owner; and the labour of stripping and replacing the copper is paid for on the principle already mentioned. In any general rule of this kind, it must be obvious that the ship owner will sometimes gain and sometimes lose by an accident. As soon as the ship owner, or his captain, learns that his vessel has met with an accident, or as soon after as possible, he summons regular surveyors to examine his vessel and report all defects, discriminating between those defects that have arisen from perils of the sea, and those from wear and tear. The first only are made good by the insurer, together with all charges, such as surveyors' fees, dock dues, &c., caused by the necessity of undergoing repair. It has been already observed, that when a ship is obliged, in the progress of her voyage, to put into port for the purpose of repair, although the owner of the ship be subjected to great expense for the wages and maintenance of his crew during the detention, he can recover no part of this expense from the insurer; the doctrine being, that the owner of the ship is bound to navigate his vessel, and that the insurer does not undertake to guarantee that the voyage shall be completed within any specific time. Such is the doctrine, at least, in this country, and the practice is founded upon it; but in all other countries the doctrine and practice are the reverse. For in them allowance is made to the ship owner for the wages and maintenance of the crew during the whole period that the ship is under repair. Where a vessel sustains damage and undergoes repair in the progress of her voyage, and is subsequently lost, the insurer is liable both for the particular average and a total loss. Or the owner of the ship may, if he please, insure the amount expended in repair; and then, in the event of subsequent loss, the insurer is liable for the total loss only, but in the event of subsequent safe arrival, the average is augmented by the charge of insurance.

The operation of the clause warranting the ship free from average under 3 per cent., unless general, or the ship be stranded, may now be clearly seen. If a ship be insured and valued at 10,000*l.*, and the repairs of the vessel do not, after all the deductions above referred to, amount to 3 per cent., there is no claim upon the insurer, unless the vessel shall have been stranded.—(See AVERAGE.)

Stranding.—The term stranded is not well chosen, admitting of more than one construction; and the clause of which it forms a part is imperfectly conceived. And in settlements of accounts, when differences arise, the parties who discuss them are more apt to strive for that interpretation of terms and clauses which is favourable to their interests, than for that which is best adapted for general purposes. It is commonly understood that merely striking the ground and coming off is not a stranding; it being necessary, in order to fall within that term, that the ship should remain on the ground or rock, as it may happen, and that efforts should be made to float her. Striking on an anchor and leaking dangerously is not a stranding. We shall only adduce two illustrations, for the purpose of showing how ill adapted this clause is as a means to an end. Corn and other such articles are warranted free from particular average, unless the ship be stranded, because the insurers, considering these articles to be peculiarly susceptible of damage, will not consent to take that risk, except on some extraordinary occasion. A ship, laden with corn, makes a very stormy passage from the Baltic to London, and damages the whole of her cargo. Upon arrival off our coast she is stranded, but got off without straining or sustaining any damage. The insurer is held to be liable for the damage to the corn, under the clause of the policy. On another occasion, after a very favourable passage to our coast, a ship strikes upon a shoal, but is not stranded, sustaining, however, so much damage that she arrives at London with 6 feet water in her hold, and her cargo almost wholly spoiled. The insurer is held not to be liable under the clause of the policy.

General Average.—The insurer is bound to make good all general average without exception, however trifling the amount. General average is treated as though altogether unconnected with particular average; and damage to the goods not amounting to 3 per cent. is not payable by the insurer, although there may be also a general average, and the general and particular average together may amount to more than 3 or 5 per cent. General average is a charge which must be paid by the merchant and ship owner, even if uninsured; although, when insured, he transfers, as it were, in virtue of his insurance, the charge from himself to his insurer. All the elements that can by possibility enter into general average may be classed under four heads:—1. Sacrifice of part of the ship and stores; 2. Sacrifice of part of the cargo and freight; 3. Remuneration of services required for general preservation; 4. Expense of raising money to replace what has been sacrificed, and to remunerate services.

1. When any part of the ship is sacrificed for the general benefit, the owner is entitled to receive (deducting, of course, his share of contribution) the amount of his outlay in the replacing of such sacrifice; allowance being made, on the principle stated above, where old works and materials are replaced with new. The deduction of 1-3d, however, does not invariably apply. For instance, 1-6th only is taken off the price of an iron cable that is slipped from for the general benefit, because iron cables are calculated to last for a great number of years; and no deduction is ever made from the price of anchors. The charge of replacing the loss may amount to considerably more than the value lost, computing the value at the place where the ship was originally fitted. Thus, the cost of replacing an anchor and cable slipped from in the Downs, is frequently double the value of the anchor and cable at London. But whatever the charge may be, such charge forms the basis of settlement.

2. Sacrifice of the cargo and freight takes place in jettison, or where part of the cargo is flung overboard to lighten the vessel. Upon arrival in port, after such jettison, the owner of the goods jettisoned is entitled to receive (deducting his share of contribution) what the goods would have produced nett to him, supposing them to have arrived sound; and the owner of the ship is entitled to receive (deducting his share of contribution) the freight to which he would have been entitled upon the safe delivery of the goods.

3. Remuneration of services and other charges. When a ship loses her anchors and cables, very large

sums are frequently awarded to boatmen who venture off to her with new ones at the imminent hazard of their lives. A ship disabled at sea is towed into port by another, and remuneration for such service is awarded according to the value saved, the detention occasioned, and the loss sustained. The ship rendering the service may be laden with fish or fruit, that may be totally spoiled by the detention, or may be in ballast. A ship captured by the enemy may be re-captured by a man of war or armed merchant vessel; here, again, salvage is awarded according to the circumstances of the case. All these charges are general average; that is to say, must be distributed over ship, freight, and cargo. When a ship, with her cargo, is driven on shore, the expense of attempting to get her off is general average. If she cannot be got off without discharging, the expense of discharging is general average; but the expense of getting the ship off after the cargo has been taken out falls exclusively upon the ship. The warehousing of the cargo and other expenses incurred for its preservation, are charges exclusively upon the cargo. The expense of reloading is borne by the freight. When a ship puts into port in distress, the pilotage inwards is general average; the pilotage outwards is a charge upon the freight. This distribution of charges has settled into a tolerably well established practice; and upon this principle claims are settled at the offices, and at Lloyd's.

4. The money required to meet the above charges is sometimes attainable without expense. If the accident happen near home, and the ship owner be respectable, he advances the money, and recovers from the various parties concerned so soon as the accounts can be made up: or if the accident happen in a foreign port, where the owner of the ship is well known, the captain's bill upon him will sometimes be received in payment of the charges incurred. But where such facilities do not exist, the captain is empowered to pledge his ship, freight, and cargo, as security to any one he may prevail upon to supply the necessary funds. This pledge is termed a bottomry bond. By it the captain admits the receipt of the money; consents to the payment of a premium (which varies with the distance of the port of destination, the risk of the voyage, the respectability of the owner, and the necessities of the captain); and assigns the ship, freight, and cargo, as security for the repayment of the money advanced and the stipulated premium. Should the captain consider the bottomry premium demanded of him exorbitant, or should he deem it preferable in other respects, he may sell a portion of the cargo for the purpose of raising such money as he may stand in need of towards the prosecution of his voyage. The expense of raising the requisite funds, whether by commission, by bottomry premium, or by loss on the sale of the cargo, is charged to those parties for whose interest the money is required. Thus, if a ship, having struck upon a rock, puts into port in distress, and is obliged to unload to repair; supposing the particular average upon the ship to amount to 500*l.*; the general average, consisting of assistance into port and expense of unloading, 200*l.*; particular charges on freight, consisting of expense of reloading and pilotage outwards, 100*l.*; and particular charges on cargo, consisting of warehouse rent and repair of packages, 200*l.*; and the expense of raising money should be 20 per cent.; — these sums would be severally increased by this addition, and would be raised to 600*l.*, 240*l.*, 120*l.*, and 240*l.* — (See Bottomry.)

It still remains to be inquired in what proportion the general average is to be paid by the different owners of the cargo, and the owner of ship and freight. Almost all general averages are adjusted at the ship's port of destination, and the values of the ship and cargo are taken at what they would produce in their actual state upon arrival, and the freight according to what is actually receivable, less the wages of the captain and crew; the general average being distributed in proportion to these values. Should the cargo be altogether worthless, it cannot be made to contribute; and should the wages of the crew exceed the freight, then the freight is not liable to contribute. In case of jettison, the party whose property has been sacrificed for the general benefit receives indemnity on the same principle; the value to which he is entitled being what his property would have produced *nett*, supposing it to have been sold on the arrival of the vessel — the same value serving for the basis of his proportion of contribution. Some few cases occur, where the general average is adjusted at the port of departure. Thus, if a ship, outward bound to the British colonies, cut from an anchor and cable in the Downs, or incur other general average on our own coast, the insurances being principally effected in this country, it is the custom to adjust it on the spot, by which means both delay and expense are avoided. On these occasions, the values at the port of shipment are taken as the basis of contribution. A total loss, subsequently to a general average, does not exonerate the insurer from his prior liability; and although it is customary with the ship owner, or his agent, specifically to insure the money expended in average, for the purpose of protecting the insurer against any greater liability than 100 per cent., he is not absolutely obliged to do so. When the average funds are raised by bottomry, the party advancing them takes the ship, freight, and cargo, as security, and charges a premium to cover the risk of the ship's non-arrival at her port of destination. And thus, on such an occasion, a subsequent total loss relieves the insurer from all liability to average.

The laws and customs by which averages are adjusted vary in different countries; but the insurer in this country is only liable for the averages adjusted according to our laws. The merchant, however, whose goods arrive at a foreign port, is obliged to submit to the laws of that port. He may thus be a considerable loser; paying general average according to one law, and receiving from his insurer according to another. And he never can be a gainer, because, before he is entitled to recover from his insurer, he must prove that he has paid to the owner of the ship. This is one of the many inconveniences to which mercantile men are exposed, which cannot be removed without, what it may be hoped will gradually take place, an assimilation of the commercial laws of different countries.

Proof of Loss. — The policy of insurance is the instrument under which the merchant and ship owner claim indemnification for all losses that are not specially excepted. The proof that the loss has been sustained must also be exhibited; such as the title to the vessel and cargo, and the evidence of the captain and crew to establish the circumstances out of which the claim arises. If A. were to insure his vessel for the space of 12 months, and at the expiration of 6 months were to sell his ship to B.; A.'s interest in the vessel having ceased, so also does his insurer's liability; and B., if he wish to be protected, must make a new insurance. Proof of ownership, therefore, is an essential preliminary to the recovery of a claim. In general practice, no difficulty arises from this, because the fact of ownership is sufficiently notorious. The bill of lading is, in most cases, satisfactory proof that the cargo was on board, as well as of the amount of freight.

Valued and open Policies. — If an insurance for 2,000*l.* be effected upon 100 hhds. of sugar, valued at 20*l.* per hhd., the bill of lading, showing that the vessel had 100 hhds. on board, establishes the interest at 2,000*l.*, and the policy is termed a valued policy. But if an insurance for 2,000*l.* be effected on 100 hhds. of sugar, and nothing be expressed as to value, the bill of lading only establishes that 100 hhds. are on board, without establishing the amount of interest. The production of the invoice, showing the cost of the goods, is necessary to that end, the policy being termed an open one.

Return of Premium for short Interest. — In a valued policy, when the whole of the property insured does not appear to have been shipped, the difference between the quantity insured and the quantity shipped is termed short interest. Thus, if 2,000*l.* be insured upon 100 hhds. of sugar, valued at 20*l.* per hhd., and 80 hhds. only be shipped; as the insurer's liability does not extend beyond 1,600*l.*, so he is obliged to return the premium upon 400*l.* to which no risk attaches. This return of premium is called a return for short interest.

For Over-Insurance. — In an open policy, where the value shipped is not equal to the value insured, the difference is termed over-insurance. If a merchant, A., make an insurance for 5,000*l.* upon goods, without specifying any value, from Calcutta to London, the premium being 60*s.* and the stamp duty 5*s.* per cent., the amount of interest that attaches to the policy is so fixed, that he is neither to gain nor lose by the transaction in the event of the vessel's loss, supposing his insurance to be sufficient. To entitle him to recover a profit, the profit to be insured must be stipulated in the policy. The expense of in-

surance upon 100*l.* being 2*l.* 5*s.*, it is clear that every 100*l.* insurance covers 96*l.* 15*s.* original cost; that is to say, protects the merchant from loss to that extent in case of the loss of the vessel. If, then, we assume the invoice of the goods shipped to be 40,000 rupees, or, at the exchange of 2*s.* per rupee, 4,000*l.*, the interest attaching to the policy is ascertained as follows: — If 96*l.* 15*s.* cost is insured by 100*l.* insurance, what will 4,000*l.* cost be insured by? Answer, 4,135*l.* Under such circumstances, although a policy exists for 5,000*l.*, the insured is not able to prove interest for more than 4,135*l.*; and consequently, the insurer being entitled to recover no more than that sum in case of loss, the insurer is called upon to make a return of premium for over-insurance upon 865*l.*

Although we have treated separately of returns for short interest and over-insurance, we should observe that these terms in practice are used indiscriminately; and, indeed, we cannot say that we perceive much advantage in making the distinction, or preserving the distinctive appellations.

It sometimes happens that the property expected in a vessel is not all insured at one time or in one policy. But this makes no difference in the principle of settlement according to our law; although, according to the laws of most other countries, the policies take precedence of one another according to their dates, the whole short interest falling upon the policy or policies last effected. The foreign law, in this instance, appears to us the more equitable and reasonable of the two; and that our reason for thinking so may be intelligible, and thus gain assent or meet with refutation, we shall state a case of short interest upon a number of policies, such as not unfrequently appears. A merchant, A., orders his correspondent at Calcutta to ship for his account a quantity of sugar, not exceeding 1,000 tons, at a price not exceeding 20*l.* per ton. In due time he receives a letter from his correspondent acknowledging the receipt of his order, and expressing confident hopes of being able to purchase the quantity, or the greater part of it, at the limits prescribed, and promising to advise as he proceeds. A., on receipt of this letter, say on the 1st of January, makes a provisional insurance for 5,000*l.* upon sugar valued at 20*l.* per ton. Continuing without further advices, and fearing lest his correspondent's letter should have miscarried, and that he might have property afloat uninsured, on the 1st of February, 1st of March, and 1st of April, he effects similar insurances, thus covering the whole 1,000 tons. He subsequently receives advice that his correspondent had not been able to purchase more than half the quantity ordered, at his limit, and he recovers from his insurers half the premium upon each policy. Now, it was not at all improbable that he might have received advice from his correspondent, as he expected, much sooner. And if he had received advice in the middle of February, of the shipment of 500 tons, and that the ship which contained them was totally lost in the river Hooghly, the insurers upon the two first policies would have been liable for a total loss. And it appears to us a defective arrangement, by which a party, who is at one time exposed to a total loss, should at another be compelled to return half his premium. It is true that the merchant may, if he please, insert in his policies a clause by which the policies shall be made to succeed one another; but we should say that the law, in insurance cases, as in the disposal of the property of deceased persons, ought to be the best general disposition, leaving to individuals the right of modification according to particular circumstances.

Return for Double Insurance. — Besides returns for short interest and over-insurance, there are returns for double insurance. They are, in fact, to all intents and purposes, the same thing. Double insurance exists where the party, through forgetfulness, makes an insurance upon his property twice over; or where the shippers and consignees of goods, when uncertain of one another's intentions, effect each an insurance upon them; or where the captain of a vessel in foreign parts, fearing lest his advices should not reach his owner, effects an insurance upon it, and the owner at the same time, acting with equal caution, effects one also. The observations already made upon returns for short interest, and upon the difference between our laws and those of other countries, apply with equal force here.

We have now gone over all the principal topics connected with marine assurance. Those who peruse this article with ordinary attention will, we hope, gain a tolerably clear insight into the principles and practice of the business. But a perfectly familiar acquaintance with it can only be acquired by those who are daily conversant with its details.

Duty on Policies of Marine Insurance. — Amount and Expediency of such Duty. — All policies of marine insurance must be on stamped paper, the duties on which are as follows: —

For every 100*l.* insured on a voyage in the coasting trade of the kingdom, where the premium does not exceed 20*s.* per cent., 1*s.* 3*d.*

Where the premium does exceed 20*s.* per cent., 2*s.* 6*d.*

For every 100*l.* insured to or from any colonial or foreign port, where the premium does not exceed 15*s.* per cent., 1*s.* 3*d.*

Where the premium does exceed 15*s.* per cent., but does not exceed 30*s.* per cent., 2*s.* 6*d.*

Where the premium exceeds 30*s.* per cent., 5*s.*

For every 100*l.* insured for a period of time not exceeding 3 months, 2*s.* 6*d.*; exceeding 3 months (no ship can be insured on one stamp for a longer period than 12 months), 5*s.*

This duty was reduced in the year 1833. It is now about two thirds of what it was before. The reduction, so far as it goes, must of course be beneficial. But the tax is altogether wrong in principle, and ought to be repealed altogether. Its obvious tendency is to discourage the coasting trade, by imposing a duty on goods carried by sea, from which those carried by land and canals are exempted; and we believe it will be found that this unjust preference costs more to the public in the greater carriage of goods sent, through its means, by the more expensive channel of inland conveyance, than all that portion of the duty which affects coasting vessels produces to the revenue. But the other portion of the tax, or that which affects vessels engaged in the foreign or colonial trade, is still more objectionable. It is immaterial to a merchant sending a ship to sea, whether he insure her in London, Amsterdam, or Hamburgh; and as policies executed in the last two cities are either wholly exempted from duties, or subject to such only as are merely nominal, the effect of the duty is to transfer to the Continent a considerable part of the business of marine insurance, that would otherwise be transacted in London. It is plain, therefore, that this duty operates to drive a valuable branch of business from amongst us; and even though it had no such effect, still it is sufficiently clear that a tax on providence, or on the endeavour to guarantee the safety of property at sea, is not one that ought to exist in any country, and least of all in so commercial a country as England. Where the latitude given is so great, doubts will arise whether one stamp be adequate to cover a long voyage. And when difficulties are made in the settlement of a loss on such grounds, they are very prejudicial to the interests of the assured, and by no means creditable to the character of the underwriter.

If the trifling revenue (amounting in 1832 to only 210,000*l.*) derived from these stamps cannot be spared, a very small addition to the import duties would more than cover its amount, save the expense of collection, and relieve the mercantile public from the annoyance and loss above alluded to.*

Form of a Policy of Insurance executed at Lloyd's.

S. G.

£800.

In the Name of God, Amen. Charles Brown and Co., as well in their own names as for and in the name and names of all and every other person or persons to whom the same doth, may, or shall appertain, in part or in all, doth make assurance, and cause themselves and them and every of them, to be insured, lost or not lost, at and from St. Petersburgh to any port or ports in the United Kingdom, upon any kind of goods and merchandises, and also

* This very valuable article (on Marine Insurance) has been, as the reader will easily perceive, furnished by a gentleman thoroughly conversant with the principles and details of the business.

upon the body, tackle, apparel, ordnance, munition, artillery, boat, and other furniture, of and in the good ship or vessel called the Swift, whereof is master, under GOD, for this present voyage, Bright, or whoever else shall go for master in the said ship, or by whatsoever other name or names the said ship, or the master thereof, is or shall be named or called; beginning the adventure upon the said goods and merchandises from the loading thereof on board the said ship
upon the said ship, &c.

Stamp £2.

and so shall continue and endure during her abode there, upon the said ship, &c. And further, until the said ship, with all her ordnance, tackle, apparel, &c. and goods and merchandises whatsoever, shall be arrived at her final port of discharge (as above), upon the said ship, &c., until she hath moored at anchor twenty-four hours in good safety; and upon the goods and merchandises, until the same be there discharged and safely landed. And it shall be lawful for the said ship, &c. in this voyage, to proceed and sail to, and touch and stay at any ports or places whatsoever, without prejudice to this insurance The said ship, &c. goods and merchandises, &c. for so much as concerns the assured, by agreement between the assured and assurers in this policy, are and shall be valued at eight hundred pounds, being on the captain's one fourth share of said ship, said one fourth share valued at that sum. Touching the adventures and perils which we the assurers are contented to bear, and do take upon us in this voyage: they are of the seas, men-of-war, fire, enemies, pirates, rovers, thieves, jettisons, letters of mart and countermart, surprisals, takings at sea, arrests, restraints, and detainments of all kings, princes and people, of what nation, condition, or quality soever, barratry of the master and mariners, and of all other perils, losses, and misfortunes, that have or shall come to the hurt, detriment, or damage of the said goods and merchandises and ship, &c. or any part thereof; offences against the revenue of the United Kingdom of Great Britain or Ireland excepted. And, in case of any loss or misfortune, it shall be lawful for the assured, their factors, servants, and assignees, to sue, labour, and travel for, in, and about the defence, safeguard, and recovery of the said goods and merchandises and ship, &c. or any part thereof, without prejudice to this insurance; to the charges whereof we the assurers will contribute, each one according to the rate and quantity of his sum herein assured. And it is agreed by us, the insurers, that this writing, or policy of assurance, shall be of as much force and effect, as the surest writing or policy of assurance, heretofore made in Lombard Street, or in the Royal Exchange, or elsewhere in London. And so we the assurers are contented, and do hereby promise and bind ourselves, each one for his own part, our heirs, executors, and goods, to the assured, their executors, administrators, and assigns, for the true performance of the premises, confessing ourselves paid the consideration due unto us for this assurance by the assured, at and after the rate of five guineas per cent., to return one pound per cent. if the voyage end on the east coast of England.

IN WITNESS whereof, we, the assurers, have subscribed our names and sums assured in London,

N.B. — Corn, fish, salt, fruit, flour, and seeds, are warranted free from average, unless general, or the ship be stranded. — Sugar, tobacco, hemp, flax, hides, and skins, are warranted free from average under five pounds per cent.; and all other goods, also the ship and freight, are warranted free from average under three pounds per cent., unless general, or the ship be stranded.

£500. Joseph White, Five hundred pounds. 1st of Sept. 1833.
£300. Thomas Black by George Green, Three hundred pounds. 1st of Sept. 1833.

Policy by the Indemnity Mutual Marine Assurance Company.

Established 1824.

£5,000.

WHEREAS William Grey hath represented to us whose hands and seals are hereunto subscribed and affixed, and who are two of the directors of the INDEMNITY MUTUAL MARINE ASSURANCE COMPANY, that he is interested in, or duly authorised as owner, agent, or otherwise, to make the assurance hereinafter mentioned and described, with the INDEMNITY MUTUAL MARINE ASSURANCE COMPANY, and hath covenanted or otherwise obliged himself to pay forthwith for the use of the said Company, at the office of the said Company, the sum of sixty-two pounds ten shillings as a premium or consideration, at and after the rate of twenty-five shillings per cent. for such assurance. NOW THIS POLICY OF ASSURANCE WITNESSETH, that in consideration of the premises and of the said sum of sixty-two pounds ten shillings, WE do, for ourselves and each of us, covenant and agree with the said William Grey, his executors, administrators, and assigns, that the capital stock and funds of the said Company shall, according to the provisions of the deed of settlement of the said Company, and the resolutions entered into at two extraordinary general courts of the said Company held on the twenty-ninth day of August, and the twentieth day of September, one thousand eight hundred and twenty-seven, be subject and liable to pay and make good, and shall be applied to pay and make good all such losses and damages hereinafter expressed as may happen to the subject matter of this policy, and may attach to this policy in respect of the sum of five thousand pounds hereby assured, which assurance is hereby declared to be upon

Stamp £6. 5*s*.

(C) 1/250. 250 hhds. of sugar valued at 20*l*. each, average payable upon each 10 hhds. following landing numbers, the same as if separately insured, laden or to be laden on board the ship or vessel called the Nelly, whereof Turner is at present master, or whoever shall go for master of the said ship or vessel, lost or not lost, at and from Grenada to London, including the risk of craft to and from the vessel, warranted to sail on or before the 1st of August, 1831. AND WE do covenant and agree, that the assurance aforesaid shall commence upon the said ship, at and from Grenada, and until she hath moored at anchor twenty-four hours in good safety; and upon the freight and goods or merchandise on board thereof, from the loading of the said goods or merchandise on board the said ship or vessel at London, and until the said goods or merchandise be discharged and safely landed at . AND that it shall be lawful for the said ship or vessel to proceed and sail to, and touch, and stay at any ports or places whatsoever, in the course of her said voyage, for all necessary purposes, without prejudice to this assurance. AND touching the adventures and perils which the capital stock and funds of the said Company are made liable unto, or are intended to be made liable unto, by this assurance, they are, of the seas, men-of-war, fire, enemies, pirates, rovers, thieves, jettisons, letters of mart and countermart, surprisals, takings at sea, arrests, restraints, and detainments of all kings, princes, and people, of what nation, condition, or quality soever; barratry of the master and mariners, and of all other p[illegible]

have or shall come to the hurt, detriment, or damage of the aforesaid subject matter of this assurance, or any part thereof. And in case of any loss or misfortune, it shall be lawful to the assured, their factors, servants, and assigns, to sue, labour, and travel for, in, and about the defence, safeguard, and recovery of the aforesaid subject matter of this assurance, or any part thereof, without prejudice to this assurance, the charges whereof the capital stock and funds of the said Company shall bear in proportion to the sum hereby assured. And it is declared and agreed, that corn, fish, salt, fruit, flour, and seed, shall be and are warranted free from average unless general, or the ship be stranded; and that sugar, tobacco, hemp, flax, hides, and skins, shall be and are warranted free from average under five pounds per centum; that all other goods, also the ship and freight, shall be and are warranted free from average under three pounds per centum, unless general, or the ship be stranded. Provided nevertheless, that the capital stock and funds of the said Company shall alone be liable, according to the provisions of the deed of settlement and the resolutions above-mentioned, to answer and make good all claims and demands whatsoever, under or by virtue of this policy; and that no proprietor of the said Company, his or her heirs, executors, or administrators, shall be in anywise subject or liable to any claims or demands, nor be in anywise charged by reason of this policy beyond the amount of his or her share or shares in the capital stock of the said Company, it being one of the original or fundamental principles of the said Company, that the responsibility of the individual proprietors shall, in all cases, be limited to their respective shares in the said capital stock.

In Witness whereof, We have hereunto set our hands and seals in London, the tenth day of January, 1834.

Sealed and delivered in the presence of } E. F.

A. B. (L. S.)
C. D. (L. S.)

III. Insurance (Fire).

Insurance against fire is a contract of indemnity, by which the insurer, in consideration of a certain premium received by him, either in a gross sum or by annual payments, undertakes to indemnify the insured against all loss or damage he may sustain in his houses or other buildings, stock, goods, and merchandise, by fire, during a specified period.

Insurances against fire are hardly ever made by individuals, but almost always by joint stock companies, of which there are several in all the considerable towns throughout the empire. Of these, the *Sun*, the *Phœnix*, the *British*, &c. insure at their own risk and for their own profit: but there are others, which are called *contribution societies*, in which every person insured becomes a member or proprietor, and participates in the profit or loss of the concern. The *Hand in Hand, Westminster*, &c. are of this description.

The conditions on which the different offices insure are contained in their *proposals*, which are printed on the back of every policy; and it is in most instances expressly conditioned, that they undertake to pay the loss, not exceeding the sum insured, "*according to the exact tenor of their printed proposals.*"

Nothing can be recovered from the insurers, in the event of loss, unless the party insuring had an interest or property in the thing insured at the time when the insurance was effected, and when the loss happened. It often occurs that no one office will insure to the full amount required by an individual who has a large property; and in such a case the party, to cover his whole interest, is obliged to insure at different offices. But, in order to prevent the frauds that might be practised by insuring the full value in various offices, there is, in the proposals issued by all the companies, an article which declares, that persons insuring must give notice of any other insurance made elsewhere upon the same houses or goods, that the same may be specified and allowed by indorsement on the policy, in order that each office may bear its rateable proportion of any loss that may happen; and unless such notice be given of each insurance to the office where another insurance is made on the same effects, the insurance made without such notice will be void.

Any trustee, mortgagee, reversioner, factor, or agent, has sufficient interest in the goods under his custody, to effect a policy of insurance, provided the nature of such property be distinctly specified at the time of executing such policy.

Most of the offices except in their proposals against making good any loss occasioned by "invasion," "foreign enemy," "civil commotions," &c.; and under this condition the Sun Fire Office was exonerated from the loss occasioned by the disgraceful proceedings of the mob in 1780.

One of the principal conditions in the proposals has reference to the proof of loss. The Sun Fire Office — (see *post*), and most other offices, make it a condition, that the individual claiming shall "procure a certificate, under the hands of the minister and churchwardens, and some other respectable inhabitants of the parish or place, not concerned or interested in such loss, importing that they are well acquainted with the character and circumstances of the person or persons insured or claiming; and do know, or verily believe, that he, she, or they, really, and by misfortune, without any fraud or evil practice, have sustained by such fire the loss or damage, as his, her, or their loss, to the value therein mentioned." This condition has given rise to a great deal of discussion in the courts; but it has been finally decided, that the procuring of the certificate is *a condition precedent to the payment of any loss, and that its being wrongfully refused will not excuse the want of it.*

The risk commences in general from the signing of the policy, unless there be some other time specified. Policies of insurance may be annual, or for a term of years at an annual premium; and it is usual for the office, by way of indulgence, to allow *fifteen* days after each year for the payment of the premium for the next year in succession; and provided the premium be paid within that time, the insured is considered as within the protection of the office.

A policy of insurance is not in its nature assignable, nor can it be transferred without the *express consent* of the office. When, however, any person dies, his interest remains in his executors or administrators respectively, who succeed or become entitled to the property, provided such representatives respectively procure their right to be indorsed on the policy.

(For further details, see *Marshall on Insurance*, book iv.; *Park on Insurance*, c. 23.)

Insurances are generally divided into *common*, *hazardous*, and *doubly hazardous*. The distinguishing characteristics of these may be learned from the subjoined proposals of the Sun Fire Office. The charge for insuring property of the first description is now usually 1*s.* 6*d.* per cent., the second 2*s.* 6*d.*, and the third 4*s.* 6*d.* These charges are exclusive of the duty payable to government, of 1*s.* on the policy, and 3*s.* per cent. on the sum in the policy.

We subjoin a copy of a policy of insurance on a house valued at 1,000*l.*, and furniture, plate, books, &c. in the same, valued also at 1,000*l.*, executed by the Sun Fire Office, and of the proposals indorsed on the same. The latter correspond in most particulars with those issued by the other offices.

"Received, for the insurance of the property undermentioned, from Xmas 1833, to Xmas 1834.

	£	s.	d.
Policy - - -	0	0	0
Premium - -	1	10	0
Duty - - -	3	0	0
	£4	10	0

SUN FIRE OFFICE.

To be paid annually at Xmas.

	£	s.	d.
Premium - - -	1	10	0
Duty - - -	3	0	0
	£4	10	0

No. ——

550.

Whereas A.B. Esq. of No. ———— Street, has paid the sum of one pound ten shillings to the Society of the Sun Fire Office in London, and has agreed to pay or cause to be paid, to them, at their said office, the sum of one pound ten shillings on the 25th of December, 1833, and the like sum of one pound ten shillings yearly on the 25th day of December during the continuance of this policy, for insurance from loss or damage by fire, on his now dwelling house only, situate as aforesaid, brick, one thousand pounds; household goods, wearing apparel, printed books, and plate therein only, one thousand pounds.

"Now, know ye, That, from the date of these presents, and so long as the said A.B. shall duly pay, or cause to be paid, the said sum of one pound ten shillings at the times and place aforesaid; and the trustees or acting members of the said Society, for the time being, shall agree to accept the same; the stock and fund of the said Society shall be subject and liable to pay to the said A. B., his executors, administrators, and assigns, all such his damage and loss which he, the said A. B., shall suffer by fire, not exceeding upon each head of insurance, the sum or sums above-mentioned, amounting in the whole to no more than two thousand pounds, according to the exact tenor of their printed proposals, endorsed on this policy, and of an act of parliament, of the 55th of George the Third, for charging a duty on persons whose property shall be insured against loss by fire. In Witness whereof, we (three of the trustees or acting members for the said Society) have hereunto set our hands and seals, the 24th day of December, 1833.

C. D. (L. S.)
E. F. (L. S.)
G. H. (L. S.)

Signed and sealed (being stamped according to act of parliament) in the presence of J. K.

"N. B.—The interest in this policy may be transferred by indorsement, made and entered at the office, if the trustees or acting members approve thereof, but not otherwise."

(INDORSEMENT ON THE POLICY.)

SUN FIRE OFFICE.

This office insures against loss or damage by fire, in Great Britain and Ireland, all descriptions of buildings, including mills and manufactories, and goods, wares, and merchandise, in the same; ships in harbour, or in dock; craft on navigable rivers and canals, and the goods laden on the same; wagons travelling the roads, and their contents; and farming stock of all descriptions, upon the following terms and conditions:—

Common Insurances.

1. Buildings covered with slates, tiles, or metals, and built on all sides with brick or stone, or separated by party-walls of brick or stone, and wherein no hazardous trade or manufacture is carried on, or hazardous goods deposited.

2. Goods in buildings as above described, such as household goods, plate, jewels in private use, apparel, and printed books; liquors in private use, merchandise, stock and utensils in trade, not hazardous, and farming stock.

At 1*s.* 6*d.* per cent. per annum, with certain exceptions.

Hazardous Insurances.

1. Buildings of timber or plaster, or not wholly separated by partition-walls of brick or stone, or not covered with slates, tiles, or metals, and thatched barns and out-houses having no chimney, nor adjoining to any building having a chimney; and buildings falling under the description of common insurance, but in which some hazardous trade or manufacture is carried on, such as brewers (without a steam-engine), bread and biscuit bakers (not sea biscuit bakers), bottlers and packers of wine, spirits, or beer; chemists (without a laboratory), inn-holders, maltsters (who make pale malt only), oilmen, soap-boilers, stable-keepers, and certain others; or in which hazardous goods are deposited, as the stock and utensils in the above trades; and, also, tallow, pitch, tar, hemp, flax, rosin, and turpentine; hay, straw, and all manner of fodder and corn unthrashed; apothecaries' stock, and oil; and wine and spirituous liquors as merchandise.

2. Ships and craft, with their contents (lime barges, with *their* contents, alone excepted).

At 2*s.* 6*d.* per cent. per annum, with certain exceptions.

Doubly Hazardous Insurances.

1. Buildings.—All thatched buildings having chimneys, or communicating with, or adjoining to, buildings having one, although no hazardous trade shall be carried on, nor hazardous goods deposited therein: and all hazardous buildings, in which hazardous goods are deposited, or hazardous trades carried on.

2. Goods.—All hazardous goods deposited in hazardous buildings, and in thatched buildings having no chimney, nor adjoining to any building having a chimney.

3. Trades—and their stock and utensils, such as maltsters (who make brown malt), and certain others; also china, glass, and earthenware, saltpetre, and wagons with their contents.

At 4*s.* 6*d.* per cent. per annum, with certain exceptions.

Farming stock on any part of a farm may be insured under general policies, without the average clause, at 1*s.* 6*d.* per cent., provided it be insured to a fair average value. This office will not be subject to any loss on hay or corn, occasioned by its own natural heating, but the loss of any other property in consequence of such fire will be made good; as will losses by fire from lightning.

Insurances may also be made by special agreement on the following risks, and on others of a similar description, not mentioned under the 2d and 3d heads of insurance, viz. on mills of all kinds, and the stock and utensils in them; also on buildings, containing kiln, steam-engine, stove, or oven, used in the process of any manufacture, and the stock therein; sugar refiners, sea biscuit bakers, distillers, varnish makers, chemists' laboratories, theatres, coach painters, colour manufacturers, varnishers, musical instrument makers, refiners of saltpetre, spermaceti, wax, and oil, barge and boat builders, carpenters, cabinet makers, coach makers, coopers, cork burners, floor-cloth painters, japanners, lampblack makers, letter-press printers, machine makers, melters of tallow and of rough fat, candle makers, cart-grease makers, rope and sail makers, ship chandlers, hemp and flax dressers, oil leather dressers, medals, curiosities, pictures, prints, drawings, statuary work, spinners of cotton, flax, lint, and wool, throughout all the operations attending the manufacturing of these materials, from the raw state into thread for the weaver, and such other risks as, by reason of the nature of the trade, the narrowness of the situation, or other dangerous circumstances, may increase the hazard thereof: all which special hazards must be inserted in the policy, to render the same valid and in force.

N. B.—Gunpowder, and buildings in which it is made, cannot be insured on any terms; neither does this office insure writings of any kind, books of accounts, ready money, bonds, bills, or any other securities for money.

N. B.—By an act of the 55th of Geo. 3. a duty of 3*s.* per annum is to be levied on every 100*l.* of property insured against fire.

N. B.—Persons may insure for more years than one, and in such cases there will be a discount allowed of 5 per cent. per annum, compound interest, on the premium and duty for every year except the first.

Conditions.

Art. I.—Any person desirous of effecting insurances upon buildings or goods must furnish the office, or its agents, with a particular description thereof, and of the process of manufacture carried on therein; and if there be any omission or misrepresentation in describing the building or goods, or process of manufacture, whereby the same may be charged at a different rate of premium than they otherwise would be, this office will not be responsible in case of any loss or damage. And if any alteration be made in the state of the buildings or goods, or process of manufacture, after such insurance shall have been effected, then the insured shall give due notice thereof, in writing, to the office or its agents, or in default of such notice, such insurance shall become void, and no benefit be derived therefrom.

Art. II.—All policies shall be signed and sealed by three or more trustees or acting members; and no receipts are to be taken for any premiums of insurance, but such as are printed and issued from the office, and witnessed by one of its clerks or agents.

Art. III.—Houses, buildings, and goods in trust, and merchandise on commission (except as aforesaid), may be insured, provided the same are declared in the policy to be in trust or on commission, but not otherwise.

Art. IV.—On bespeaking policies, all persons shall pay the premium to the next quarter day, and from thence for one year more at least, or shall make a deposit for the same, and shall, as long as the managers agree to accept the same, make all future payments annually at the said office, within fifteen days after the day limited by their respective policies, upon forfeiture of the benefit thereof.

Art. V.—Any number of houses and out-houses, and household goods, printed books, wearing apparel, plate, prints

jewels and trinkets in private use, stock in trade, goods in trust, or on commission, may be insured in one policy.

Art. VI.—Persons insured by this office shall receive no benefit from their policies, if the same houses, or goods, &c. are insured in any other office, unless such insurance, and the amount thereof, be first specified and allowed by indorsement on the policy, in which case this office will pay its rateable proportion on any loss or damage.

Art. VII.—When any person dies, the policy and interest therein shall continue to the heir, executor, or administrator, respectively, to whom the right of the property insured shall belong, provided, before any new payment be made, such heir, executor, or administrator, do procure his or her right to be indorsed on the policy at the said office, or the premium to be paid in the name of the said heir, executor, or administrator.

Art. VIII.—Persons changing their habitations or warehouses may preserve the benefit of their policies, if the nature and circumstance of such policy be not altered; but such insurance will be of no force till such removal or alteration is allowed at the office, by indorsement on the policy.

Art. IX.—No loss or damage will be paid on fire happening by any invasion, foreign enemy, civil commotion, or any military or usurped power whatever.

Art. X.—Persons insured sustaining any loss or damage by fire are forthwith to give notice thereof at the office; and, as soon as possible afterwards, deliver in as particular an account of their loss or damage as the nature of the case will admit of, and make proof of the same by their oath or affirmation, according to the form practised in the said office, and by their books of accounts, or such other proper vouchers as shall be reasonably required, and procure a certificate under the hands of the minister and churchwardens, and some other respectable inhabitants of the parish and place, not concerned or interested in such loss, importing that they are well acquainted with the character and circumstances of the person or persons insured or claiming; and do know, or verily believe, that he, she, or they, really, and by misfortune, without any fraud or evil practice, have sustained by such fire the loss or damage, as his, her, or their loss, to the value therein mentioned. And, till the affidavit and certificate of such the insured's loss shall be made and produced, the loss money shall not be payable. And, if there appear any fraud or false swearing, or that the fire shall have happened by the procurement, or wilful act, means, or contrivance of the insured or claimants, he, she, or they shall be excluded from all benefit from their policies. And in case any difference shall arise between the office and the insured, touching any loss or damage, such difference shall be submitted to the judgment and determination of arbitrators indifferently chosen, whose award in writing shall be conclusive and binding on all parties.

N. B.—In every case of loss the Company reserves the right of re-instatement in preference to the payment of claims, if it should judge the former course to be more expedient; but when any loss is settled and adjusted, the insured will receive immediate payment for the same, without any deduction or discount; and will not be liable to any covenants or calls for contribution to make good losses.

*** To encourage the removal of goods, in cases of fire, this office will allow the reasonable charges attending the same, and make good the sufferer's loss, whether destroyed, lost, or damaged, by such removal.

Insurance of Mills, &c.—We subjoin for the information of such of our readers as may be interested in the insurance of mills, the following statements, put forth by the Leeds and Yorkshire Assurance Company.

CLASSIFICATION OF MILLS.

Class I.—*Fire Proof.* Mills built entirely of stone or brick: the floors laid upon stone or brick arches, resting upon stone, brick, or iron pillars, and consisting of stone flags, tiles, cement, or plaster; the frame-work of the windows and roof of iron, the roof covered with slates, tiles, or metal; the staircase detached, constructed of solid masonry or brick-work, without any mixture of wood or timber, and having no communication with the mill but at the several landings; the openings for upright shafts or machinery (if any) to be boxed off with iron or stone.

Class II.—*Fire Proof.* Mills of which the construction is in all respects the same as Class I. except that the floors do not rest upon stone or brick arches, but consist of stone flags laid upon iron beams and joists.

Class III.—Mills constructed as Classes I. and II. but having the stone floors resting upon timber beams and joists, and the frame-work of the windows and roof of wood.

Class IV.—Mills built of stone or brick, and having one or more of the upper floors constructed of stone flags laid upon iron or wood beams, on which floors the dangerous processes are carried on; the staircase of stone, and detached.

Class V.—Mills constructed of stone or brick; having the floors, except the ground floor, of wood, planked and jointed with iron; the staircase of stone, being detached or on the outside.

Class VI.—Mills constructed of stone or brick; having the floors, except the ground floor, of wood; the staircase of stone, being detached or on the outside.

Class VII.—Mills constructed of stone or brick; having the stairs and floors of wood; the stairs being open to the building.

N.B.—In all the classes it is understood that the mill does not adjoin any other mill or extra-hazardous building; that the heating is by steam, and that the boilers and firing places are in a separate building, not endangering the mill.

Scale of Premiums.

	Flax Mills.						Cotton Mills.						Woollen Mills.						Corn Mills.						Oil Mills.						Worsted and Silk Mills.					
	Building.			Machinery and Stock.			Building.			Machinery and Stock.			Building.			Machinery and Stock.			Building.			Machinery and Stock.			Building.			Machinery and Stock.			Building.			Machinery and Stock.		
	L.	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
Class I.	0	5	0	0	10	0	0	5	0	0	9	0	0	5	0	0	8	0	0	3	0	0	6	0	0	4	0	0	7	0	0	3	0	0	5	0
II.	0	7	0	0	12	0	0	7	0	0	11	0	0	7	0	0	10	0	0	4	0	0	7	0	0	5	0	0	8	0	0	3	6	0	5	6
III.	0	9	0	0	14	0	0	9	0	0	12	0	0	9	0	0	12	0	0	5	0	0	8	0	0	6	0	0	9	0	0	4	0	0	6	0
IV.	0	12	0	0	15	0	0	11	0	0	14	0	0	11	0	0	13	0	0	7	0	0	9	0	0	7	0	0	10	0	0	4	6	0	6	6
V.	0	14	0	0	17	0	0	13	0	0	15	0	0	12	0	0	14	0	0	8	0	0	10	0	0	8	0	0	11	0	0	5	0	0	7	0
VI.	0	17	0	0	19	0	0	15	0	0	17	0	0	14	0	0	16	0	0	9	0	0	11	0	0	9	0	0	12	0	0	6	0	0	7	6
VII.	1	0	0	1	2	0	0	18	0	1	0	0	0	16	0	0	18	0	0	10	0	0	12	0	0	10	0	0	13	0	0	7	0	0	8	6

Remarks.—The premiums affixed in the above scale are on the supposition that 3-4ths of the value of the building or stock are given in for insurance. If only half the value is given in, the premium will be 1-3d more; if only 1-4th, the premium will be 2-3ds more; and so on. Buildings, machinery, and stock, may however be insured for any sum or sums, subject to the average clause; or machinery and stock may be insured by rooms.

The introduction of stoves or fires, for heating, in lieu of steam, will add to classes

I. and II. 6*d.* premium.	V. and VI. 1*s.* 6*d.* premium.
III. and IV. 1*s.* premium.	VII. - - 2*s.* premium.

When mills are more than 2 miles distant from any of the company's, or other public engine stations, or have not engines belonging to them, reported in good order, and properly served, there must be added to classes

I. and II. 6*d.* premium.	V. and VI. 1*s.* 6*d.* premium.
III. and IV. 1*s.* premium.	VII. - - 2*s.* premium.

In corn mills, the working of every additional pair of stones beyond 4, will add 6*d.* to the above premiums.

A kiln adjoining and communicating for the drying of oats or other grain, will add 2*s.* to the above premiums.

Wind corn mills, built of brick or stone, and having the roof of wood, will come under Class VII.

Amount of Property insured. — Duty. — Insurance against fire, though practised in France, Holland, and some other countries, is not general any where except in Great Britain. It has been known amongst us for a century and a half, and is now very widely extended. It appears from the official accounts, that the *gross* duty received on policies of insurance against fire in the United Kingdom, in 1832, amounted to 836,096*l.*; which, as the duty is 3*s.* per cent., shows that the property insured was valued at the immense sum of 557,397,533*l.*! But notwithstanding the magnitude of this sum, it is still true that most buildings are not insured up to their full value; even in towns, many are not insured at all; and in the country it is far from being customary to insure farm buildings or barn-yards. It is difficult to imagine that this can be owing to any thing other than the exorbitance of the duty. On common risks the duty is no less than 200 per cent. upon the premium; or, in other words, if a person pay to an insurance office 15*s.* for insuring 1,000*l.* worth of property, he must at the same time pay a duty of 30*s.* to government! On hazardous and doubly hazardous risks, the duty varies from about 120 to 75 and 80 per cent. upon the premium. Such a duty is in the last degree oppressive and impolitic. There cannot, in fact, be the slightest doubt that, were it reduced, as it ought to be, to *one third* its present amount, the business of insurance would be very much extended; and as it could not be extended without an increase of security, and without lessening the injurious consequences arising from the casualties to which property is exposed, the reduction of the duty would be productive of the best consequences in a public point of view; while the increase of business would prevent the revenue from being materially diminished.

During last session (1833), the duty on the insurance of farming stock was repealed. But the relief thence arising is immaterial; and the increase is, besides, highly objectionable in point of principle, inasmuch as there is no ground whatever for exempting farming stock from duty in preference to any other description of stock. A duty on insurance is not, in itself, objectionable. We do not wish to see it repealed, but to have it effectually reduced. Were it fixed at 1*s.* per cent., it would hardly be felt as a burden; while the revenue would suffer little or nothing from the measure.

Amount of Duty on Fire Insurances paid by the different London Offices, during each of the Ten Years ending with 1832.

Offices.	1823.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.
	L.	*L.*	*L.*	*L.*	*L.*	*L.*	*L.*	*L.*	*L.*	*L.*
Alliance	-	9,403	15,014	16,359	17,746	19,095	19,466	20,175	20,715	20,147
Atlas	16,075	17,385	18,356	19,222	20,898	19,522	20,199	20,700	20,783	21,010
British	15,126	17,606	14,804	15,274	15,464	16,293	15,812	15,819	15,572	15,644
County	41,239	45,444	29,568	40,680	43,522	47,413	44,822	44,172	48,519	48,507
Globe	26,814	26,462	25,128	24,117	26,169	25,367	25,566	26,462	26,597	27,198
Guardian	21,042	24,758	27,363	28,370	29,063	29,684	30,595	31,077	31,885	31,528
Hand-in-Hand	12,687	14,159	12,770	11,595	11,704	11,975	11,254	11,589	11,564	10,960
Imperial	32,392	32,122	30,938	28,965	28,334	28,647	28,510	27,081	28,230	28,234
London	8,338	8,112	7,244	7,411	7,077	7,262	7,485	8,019	7,953	8,125
Palladium	-	1,067	3,325	3,810	4,721	5,028	5,378	1,377	discontin.	
Phœnix	64,975	62,461	61,481	59,991	60,482	62,839	65,649	68,875	69,390	75,076
Protector	-	-	14,893	24,752	35,273	46,446	54,287	56,081	59,789	59,182
Royal Exchange	50,018	47,962	46,685	48,106	38,034	49,416	49,786	51,891	54,586	54,824
Sun	112,163	109,653	108,794	107,172	111,521	114,205	118,856	120,619	124,030	124,127
Union	15,307	16,034	16,752	15,665	15,705	16,412	16,285	15,714	15,833	15,315
Westminster	14,223	14,775	14,356	14,554	14,359	14,261	15,461	14,777	15,116	15,111
Albion	14,768	14,428	13,349	13,053	12,869	discontin.				
Total	445,167	459,831	459,840	479,086	492,948	513,868	529,411	534,428	550,562	554,988

Amount of Duty on Fire Insurance paid by the different Country Offices in England, during each of the Five Years ending with 1832.

Offices.	1828.	1829.	1830.	1831.	1832.
	L.	*L.*	*L.*	*L.*	*L.*
Bath Sun	1,620	1,628	1,583	1,542	1,592
Berks, Gloucestershire, and Provincial (*discon.*)	2,395	2,477	2,604	614	
Birmingham	6,126	6,186	6,593	7,016	7,049
Bristol	3,836	3,903	3,953	3,977	3,751
Bristol (Crown)	1,944	1,882	1,919	1,866	1,862
Bristol (Union)	2,490	2,488	2,560	2,581	2,567
Essex Economic	2,852	2,925	3,136	3,163	3,061
Essex and Suffolk	6,279	6,444	6,407	6,490	6,504
Hertford, Cambridge, and Country (*discon.*)	4,671	4,866	5,429	3,383	
Hants, Sussex, and Dorset	2,610	2,689	2,792	2,833	2,687
Kent	9,035	9,279	10,726	10,662	10,650
Leeds and Yorkshire	6,577	6,728	6,977	7,824	8,068
Manchester	16,178	16,703	16,787	17,350	17,532
Newcastle-upon-Tyne	4,755	4,948	5,093	5,229	5,126
New Norwich Equitable	-	-	1,094	1,330	1,430
Norwich Equitable	3,428	3,491	2,316	2,838	3,020
Norwich Union	61,946	61,186	62,385	68,356	66,889
Reading	112	108	131	150	182
Salamander	4,640	4,800	4,937	5,307	5,324
Salop	2,616	2,637	2,800	2,811	2,878
Sheffield	1,746	1,804	1,922	2,065	2,067
Shields (North and South)	706	743	727	719	737
Suffolk (East)	5,550	5,639	5,787	6,277	6,213
Suffolk (West)	5,989	6,120	6,332	6,961	6,956
West of England	22,531	23,858	25,123	25,683	26,601
Yorkshire	2,947	3,231	3,936	4,734	5,461
Total	183,389	186,763	194,049	201,761	198,212

The Hope, Eagle, Albion, Beacon, British Commercial, Palladium, Surrey, Sussex and Southwark, Brighton, Old Bath, Gloucestershire, Canterbury, Berks, Gloucester and Provincial, Hertford, Cambridge and Country, and others, (in all 22 offices, chiefly those lately established,) have discontinued their fire insurance business.

IV. Insurance (Life).

That part of the business of life insurance which consists of granting annuities upon lives, is treated of under Interest and Annuities; so that we have only to treat, in this place, of the insurance of sums payable at the death of the insurers or their nominees.

Suppose an individual of a given age wishes to insure 100*l.* payable at his death, the single premium, or the series of annual premiums, he ought to pay an office for such insurance, must plainly depend on the expectation of life of such individual, and on the rate of interest or nett profit which the insurers may make by investing the premiums.

With respect to the first of these conditions, or the *expectation of life*, it is usual in estimating it to have recourse to Tables framed from the mortality observed to take place in particular cities or districts, as in Northampton, Carlisle, &c. — (See Interest and Annuities.) But though the actual decrement and expectation of life among an average population, at every year of their lives, were accurately determined, it is doubted whether it would form a fair basis for an insurance office to proceed upon. The general opinion seems to be, that insured lives are decidedly above the average; for insurance offices invariably profess to act on the principle of rejecting bad lives, or of making them pay a proportional increase of premium; and it may, besides, it is said, be fairly presumed that persons insuring their lives are of a superior class, and are not, generally speaking, engaged in those manual and laborious occupations that are esteemed most injurious to health. But, on the other hand, the friends of parties whose lives are supposed to be bad, and the parties themselves, are most anxious they should be insured. It is also far from being an uncommon practice, for certain individuals to prevail on persons whom they happen to know, or believe to be bad lives, to insure; and then to get a legal assignment of the policy in their favour, on their giving the "men of straw" a bonus for their share in the fraud. At all events, there can be no question that large numbers of such lives are perpetually offered for insurance; and every individual conversant with the business knows that, in despite of all precautions, policies are very frequently effected upon them. Mr. Milne, on whose judgment every reliance may be placed, states distinctly that "all the caution and selection which the offices in general can exercise, is necessary to keep the lives insured up to the average goodness of the bulk of the population." — (*Ency. Brit.* new ed. art. *Annuities.*) Since the competition among the different offices became so very keen as it has been of late years, there are but few lives so bad that they will not be taken by one office or another; and we doubt, were the results of their experience made public, whether it would be found that there is much foundation for the opinion as to the superiority of insured lives.

With respect to the second condition in valuing an insurance, or the rate at which the interest of money may be estimated, it is impossible to arrive at any thing like accurate conclusions. At an average, perhaps, transactions in life insurance may extend over a period of 30 years from the time when they are entered into; and in such a lengthened term the greatest changes may take place in the rate of profit and the rate of interest. Mr. Finlaison, of the National Debt Office, appears to think that 4½ per cent. may be taken as the true average rate in this country; and that 4¼ is a rate at which no loss need be

apprehended.—(*Parl. Paper*, No. 284. Sess. 1829.) But this is not a point on which (as Mr. Finlaison seems to suppose) previous experience can be safely depended upon in forming engagements for the future; and were this the proper place for entering upon such discussions, we think we could assign pretty solid grounds for concluding that no institution, intended to last for the next half century, would be warranted in reckoning upon realising more than 3 per cent. upon its investments. We should look upon this as the *maximum*, and of course could expect nothing but ruin to fall upon any institution founded upon the hypothesis of realising 4½ per cent. of interest. At the same time, we would not be understood as laying any undue stress upon this opinion; and are ready to admit that there must always be more of conjecture than of certainty in such conclusions.

Security being the principal object to be aimed at by every insurance office established on sound principles, they would not act wisely, if they did not calculate their premiums considerably higher than may appear necessary to those who look only at what has taken place during the last 30 or 40 years. Societies contracting prospective engagements that may extend for half a century or more, are exposed to innumerable unforeseen contingencies; and they would be highly censurable, and altogether unworthy of the public confidence, were they so to conduct their affairs, that they might be liable to serious embarrassments from fluctuations in the rate of interest, or an increase of sickness, or any other cause. The success that has hitherto attended the Equitable, and some of the long-established offices, must not be taken as any criterion of what may befall them and others during the next 100 years. Mr. Morgan, the late able actuary of the Equitable, in his account of the rise and progress of that institution, published in 1828, has satisfactorily shown that its peculiar prosperity has been in a very great degree owing to circumstances which cannot possibly occur again. The premium, for example, charged by the Society, so late as 1771, for insuring 100*l.* on the life of a person aged 30, was 4*l.* 1*s.* 5½*d.*, whereas it is now only 2*l.* 13*s.* 4*d.*; and there was a corresponding difference in the premiums for the other ages.—(p. 36.) But the excessive magnitude of the premiums was not the only extraordinary source of profit enjoyed by this Society in the earlier part of its career. We learn from the same unquestionable authority, that *half the insurances made during the first twenty-five years of the Society's existence were abandoned by the insurers*, in many cases, after the premiums upon them had been paid for a considerable number of years, *without any valuable consideration being given for them by the Society!*—(p. 38.) So copious a source of profit was alone adequate to enrich any society; but such things rarely occur now,—people are become too familiar with life insurance, and sales of policies are of too frequent occurrence, to allow any office to realise any thing considerable in this way. Now, we ask, can any one who takes these facts into view, and couples them with the frugal and cautious management which has hitherto always distinguished the Equitable Society, be surprised at its success? and can any thing be more absurd than to appeal to its experience in casting the horoscope of the societies that have sprung into existence within the last few years. But, independently of these considerations, there are other circumstances sufficient to account for the great success of some of the old offices. Since the close of the American war, a very decided diminution has taken place in the rate of mortality; the public tranquillity has neither been disturbed by foreign invasion nor intestine commotion; we have not been once visited by any epidemic disorder; and the investments in the funds, during the war made at from 50 to 60, may now be realised at from 80 to 90. We do not presume to say that circumstances may not be even more advantageous for the insurance offices during the next half century; but we should not, certainly, think very highly of the prudence of those who proceeded to insure on such an assumption. Security, we take leave again to repeat, is, in life insurance, the paramount consideration. It is, we believe, admitted on all hands, that the premiums were at one time too high; but we doubt whether the tendency at present be not to sink them too low. A great relaxation has taken place, even in the most respectable offices, as to the selection of lives. And the advertisements daily appearing in the newspapers, and the practices known to be resorted to in different quarters to procure business, ought to make every prudent individual consider well what he is about before he decides upon the office with which he is to insure. Attractive statements, unless where they emanate from individuals of unquestionable character and science, ought not to go for much. Life insurance is one of the most deceptive of businesses; and offices may for a long time have all the appearance of prosperity, which are, notwithstanding, established on a very insecure foundation. If a man insure a house or a ship with a society, or an individual, of whose credit he gets doubtful, he will forthwith insure somewhere else. But life insurance is quite a different affair. The bargain is one that is not to be finally concluded for, perhaps, 50 years; and any inability on the part of an establishment in extensive business to make good its engagements, would be productive of a degree of misery not easy to be imagined.

Life insurance companies are divided into three classes. The first class consists of joint stock companies, who undertake to pay *fixed* sums upon the death of the individuals insuring with them; the profits made by such companies being wholly divided among the proprietors. Of this class are the Royal Exchange, the Sun, the Globe, &c. The second class are also joint stock companies, with proprietary bodies; but instead of undertaking, like the former, to pay certain specified sums upon the death of the insured, they allow the latter to participate to a certain extent, along with the proprietors, in the profits made by the business. The mode in which this sort of *mixed* companies allot the profit granted to the insured, is not the same in all; and in some, the principle on which the allotment is made is not disclosed. The Rock, Alliance, Guardian, Atlas, &c. belong to this mixed class. The third species of company is that which is formed on the basis of mutual insurance. In this sort of company there is no proprietary body distinct from the insured; the latter share among themselves the whole profits of the concern, after deducting the expenses of management. The Equitable Society, the Amicable, the Norwich Life, &c. belong to this class.

The advantage to a person insuring in any one office as compared with another, must plainly depend on a comparison between the premiums demanded, the conditions of the policy, and, above all, the security which it holds out. It may appear, on a superficial view, as if the mutual insurance companies would be in all respects the most eligible to deal with, inasmuch as they have no proprietors to draw away any share of the profits from the insured. It is doubtful, however, whether this advantage be not more than balanced by disadvantages incident to such establishments. Every one being a partner in the concern, has not only his own life insured, but is part insurer of the lives of all the other members; and may, in this capacity, should the affairs of the society get into disorder, incur some very serious responsibilities. The management, too, of such societies, is very apt to get into the hands of a junto; and to be conducted without the greater number of those interested knowing any thing of the matter. There is, also, considerable difficulty, in constituting such societies, in distinguishing clearly between the rights of old and new members: for, supposing a society to be prosperous, it is but reasonable that those who have belonged to it while it has accumulated a large fund, should object to new entrants participating in this advantage. But the affairs of a society conducted in this way, or making distinctions in the rights of the members during a long series of years, could hardly fail of becoming at last exceedingly complicated: nor is it, indeed, at all improbable that the conflicting claims of the parties in some of the societies of this sort now in existence, may ultimately have to be adjusted in the courts of law, or by an act of the legislature.

Supposing the premiums demanded by the societies which retain the whole profits to themselves, to be fairly proportioned to the values insured, we should be inclined to think that they are, on the whole, the most advisable to insure in. The subscribed capital of such associations as the Royal Exchange, Sun, Globe, Scottish Union, &c., and the wealth of the partners (which is all liable, except in the case of the chartered companies, to the claims of the insured), afford unquestionable security. individuals dealing with them know exactly what they are about. They know the precise premiums they will have to pay, and the exact amount of the sums that will be paid to their assignees in the event of their death. They

incur no responsibility of any kind whatever. For, unless some very unprecedented and unlooked-for change should take place in the condition of the country, they may reckon with certainty on the terms of the policy being fulfilled to the letter.

But, as already observed, every thing depends, in matters of this sort, on a comparison of the premium with the advantages to be realised. And where the premiums are believed, either through carelessness, or intentionally, in order to provide for the safety of the establishment, to be a little too high, it may be more expedient, perhaps, to deal with a mixed company. The subscribed capital and fortunes of the proprietary body afford a guarantee on which the public may depend in dealing with any *respectable* company of this sort; while, by receiving a share of the profits, the insured gain by the flourishing condition of the association, and it is of less consequence to them though the premiums should be too high.

It should, however, be borne in mind, that an individual insuring with a mixed company, on condition of his getting a proportion of the profits, becomes a *partner of such company;* and being so, incurs responsibilities. In dealing with such associations as the Alliance, the Rock, and a few others, this responsibility can hardly be said to amount to any thing. But there are companies of this class in the field, and holding out very tempting baits to the unwary, those insured in which may find, at some future period, that this responsibility is by no means a light matter.

A highly respectable company of this mixed class, with a large subscribed capital, — the Guardian, — inserts in all its policies the following condition, viz. — "That the responsibility of the individual members shall, in all cases, be limited to their respective shares." It may be doubted whether this condition be good in law; but if it be, it materially affects the security afforded by the Company, which otherwise would justly claim a place in the very first class of offices. As no one attempts to secure himself against a contingency which he is satisfied cannot happen, the existence of a condition of this sort implies a doubt, on the part of the proprietary body, of the perfect solidity of the establishment. Such a doubt may be, and we believe really is, very ill-founded; but the public will, most likely, be inclined to think that the proprietors ought to know better than any one else. The Albion Fire and Life Insurance Company also inserts in its policies a condition to the same effect.

The allotment of profit to the insured made by the mixed companies, is sometimes effected by a diminution of the premiums, and sometimes by increasing the sum in the policy; and individuals should, in dealing with such societies, select, other things being equal, the association with which to insure, according as they wish to insure a larger sum, or to get the premiums reduced.

We subjoin, from Mr. Babbage's work on *Life Assurance* *, the following statement of the terms of the various mixed companies, as to the division of profits with the insured. They are, for the most part, exceedingly vague. We also subjoin an account of the conditions, in respect of profits, under which new entrants are admitted into the Equitable.

Alliance. — At the periods of participation of the Company in the profits of its concerns, every policy for the whole term of life, which shall have paid 5 entire annual premiums, shall, if the allowance be made in reduction of annual premium, be entitled to such reduction from the original charge as shall then, and from time to time, be declared; but if the allowance be in addition to the amount assured, that addition shall also be continually declared from time to time.

Persons assuring their own lives have the option of declaring, at the time of effecting the assurance, whether they will participate in the profits by an addition to their policy, or by a reduction of premium.

Atlas. — Persons assuring for the whole term of life for 100*l.* and upwards, in Great Britain and Ireland respectively, will be entitled, at the end of every 7th year, to participate in the surplus premiums, to be then ascertained by actual valuation.

Asylum. — The directors have power to divide such portion of the profits quinquennially as may not imprudently check the growth of the funds intended for the benefit of the assured.

Crown. — Two thirds of such profits as shall periodically be declared divisible, will be apportioned amongst assurers for the whole term of life, and may be applied to the reduction of the future annual premiums, or to the increase of the sum assured, as may be desired.

Economic. — At present 3-4ths of the savings and profits divided amongst the assured entitled to participate therein, by additions to their policies, proportioned to their respective contributions, and in order to afford them the immediate benefit of such additions, interest thereon applied annually in reduction of their premiums.

Equitable. — That in case any prospective addition shall hereafter be ordered to be made to the claims upon policies of assurance in this Society, such order shall not take effect with respect to any policy granted after the 31st of December, 1816, until the assurances existing in the Society prior in number and date to such policy, and if of the same date, prior in the number thereof, shall be reduced to 5,000; but as soon as such reduction shall have been ascertained, in manner hereinafter mentioned, the said policy shall be within the effect and operation of the order for such addition, as to the payments made thereon subsequent to such ascertained reduction: so that if such order should be made to take effect generally from the 1st of January, 1820, for the space of 10 years then next following, a policy effected in the year 1817, shall not be within the operation of such order, until the assurances existing prior to the number and date of the policy, as aforesaid, shall have been reduced to 5,000; but such policy shall be within the operation thereof from the time when the reduction shall have been ascertained, in manner hereinafter mentioned, as to the payments made thereon subsequent to such ascertained reduction. And the like as to other cases. And this by-law shall be considered as a part of every such order, and shall be virtually incorporated therein, although the same may not be thereby expressly referred to.

That in case any retrospective addition shall hereafter be ordered to be made to claims upon policies of assurance in this Society, such order shall not take effect with respect to any policy granted after the 31st of December, 1816, until the assurances existing in the Society prior in number and date, and if of the same date, prior in the number thereof, shall be reduced to 5,000; but when the said reduction shall have been ascertained in manner hereinafter mentioned, such policy shall be within the effect and operation, and entitled to the benefit of such order, with respect to every payment made thereon subsequent to such ascertained reduction; so that if such order shall be made to take effect generally as to payments made before the 1st of January 1820, a policy effected in the year 1817 shall not be within the effect and operation thereof, unless the life assured shall exist, and the payments continue to be made, until the assurances existing in the Society prior to the number and date of the policy, as aforesaid, shall be reduced to 5,000; but as soon as such reduction shall have been ascertained, in manner hereinafter mentioned, such policy shall be within the effect and operation of such order for the several payments made thereon as aforesaid. And the like as to other cases. And this by-law shall be considered as a part of every such order, and be virtually incorporated therein, although the same may not be thereby expressly referred to.

That an inquiry be made on the 1st of April in every year, in order to ascertain the number of assurances made and existing in the Society; and when it shall have been ascertained by such inquiry that the assurances existing prior to the 1st of January, 1817, were, on the 31st of December immediately preceding such inquiry, reduced below the number of 5,000, the actuary do report the same to the court of directors, who shall communicate such report to the quarterly general court, to be holden in the June following; and that as many of such policies as had been made subsequent to the 31st of December, 1816, and which were existing in the Society on the 31st of December immediately preceding such inquiry, be added, according to the priority in their dates and numbers, and if of the same date, according to the priority in their numbers, to those above mentioned, as shall be sufficient to complete the number to 5,000; and that the persons holding the policies so added shall be considered thenceforward as entitled to such additions as shall be thereafter made in respect of all the payments made subsequent to such ascertained reduction, and, under the same restrictions, to the same privileges of attending at the general courts, and of being eligible to the office of director.

That after the vacant numbers in the assurances existing in the Society on the 1st of January, 1817, shall have been filled up agreeably to the foregoing order, the actuary, on the 1st of April in every succeeding year, do ascertain the vacancies which have taken place in the preceding year in the policies constituting the 5,000 mentioned in the 5th resolution, and report the same to the court of directors, who shall communicate such report to the quarterly general court in the month of June following; and that as many policies shall be added, according to the priority of their dates and numbers, and if of the same date, according to the priority in their numbers, as shall be sufficient to complete the number to 5,000; and that the persons holding those policies shall thenceforward be considered as entitled to such additions as shall be thereafter made in respect of all payments made subsequent to the 31st of the preceding December, and, under the same restrictions, to the same privileges of attending the general courts, and being eligible to the office of director.

Provided that nothing hereby ordered shall be construed to authorise an addition to the sum assured by any policy, upon which policy the number of payments required in that respect by the present by-laws of the Society shall not have been made.

N. B. — Those by-laws require that 6 annual payments at the least shall have been made before any addition to a claim can take place; and when such payments shall have been made, the party will be qualified to be received, in his turn, into the number of persons entitled to additions as aforesaid.

European. — The profits derived by this Company are distributed amongst the several persons connected with the esta-

* This work of Mr. Babbage contains a good deal of useful information, intermixed, however, with not a few errors and mis-statements. It was most ably reviewed in an article in the 90th Number of the *Edinburgh Review*.

blishment, according to the contingency or certainty of their contract.

Life insurers derive an immediate benefit by the reduction of the premiums generally taken, with the prospect of a liberal addition to their policies, or a further reduction of the premium, in 10 years.

Guardian. — Persons assured for the whole term of life will be entitled at the end of every 7 years to participate in the profits of the Company, after a deduction of such sum per annum, for the guaranty of the capital, as the directors may think reasonable; the extent of which is, however, limited by the deed of settlement.

The share of the profits to be so allowed to the insured, may either be added to the amount of their respective policies, or the value thereof be applied in reduction of the premiums hereafter to be payable on such policies, provided such option be declared in writing within 3 calendar months next after the dividend shall have been declared; but if such option be not declared, such share of profits will be added to the amount of policies.

Hope. — Every person effecting a policy of assurance at this office, is entitled to a participation in the profits equally with the proprietors of the Company, after a moderate deduction for the guaranty and the expenses of management.

Imperial. — Upon every policy effected for the whole term of life, the assured will participate in the profits of the Company, by having periodical additions made to the sums insured to the amount of 2-3d parts of such clear gains and profits.

Law Life. — At stated periods, the surplus of the fund arising from the premiums of assurance, and their accumulation beyond what may be thought necessary to answer the expected claims upon the Society, will be ascertained; and as large a portion of the savings as may be deemed consistent with the security of the institution, will be divided between the proprietors and the assured in the following manner: — 1-5th will be transferred to the proprietors' guaranty fund; and reversionary sums, equivalent to the remaining 4-5ths, will be added to the policies of those who shall have been 3 years assured for the whole term of life.

London Life Association. — The distinguishing principle of this Society is, that the benefits resulting from its transactions shall be enjoyed by the members during life, so as to render life assurance as easy to the assured, as a due regard to security will admit.

Medical and Clerical. — Persons assured for the whole term of life will be entitled to share with the original proprietors the general profits of the business, in proportion to the amount of their respective assurances.

Norwich Union. — The whole of the surplus premiums is added at stated periods to the policies of the members, in proportion to the sums they have respectively contributed.

Palladium. — A general investigation of the affairs of the Society is to take place every 7th year, when 4-5ths of the declared profit of the life department will be appropriated by way of bonus or addition, to be placed to the credit of the policies then in force for the whole term of life, upon the most equitable principles of division.

Rock. — That the said bonus shall be short of the actual surplus profits at the time of making the same, by the sum of 5,000*l.* at least.

That the bonus so declared shall be divided into 3 equal parts.

That one of the said parts shall be added to and consolidated with the subscription capital stock. (This is the proprietors, fund.)

That the remaining 2-3ds be allotted to the policies in the manner described in the deed.

That the sum to which any person assured by the Company may become entitled under any such distribution, shall be paid by the Company without interest, at the time when the sum assured by the policy shall become payable, and not before.

Union. — Those who assure with this Company will participate with the proprietors in the profits of the establishment, which will be added every 7 years to the respective policies.

United Empire. — Persons effecting assurances for the whole continuance of life will, at the end of the first 5 years, and of every subsequent 5 years, be entitled to participate in whatever nett surplus profits it may be declared by the directors expedient to divide.

Two-fifths of the aforesaid profits will be divided amongst the said assured, in proportion to the premiums they may respectively have paid, and will, at their option, be either added to the amount of their policies, or applied in reduction of their future premiums.

University. — As it is intended that the capital advanced shall be repaid to the shareholder, with a bonus of 10*l.* per cent., 1-10th of the profits, when ascertained by a valuation of all existing risks, will every 5 years be applied to form a fund for that purpose.

The remaining 9-10ths of the profits to be divided between the assured and the shareholder, in the proportion of 8 parts to the former and 1 to the latter.

The profit or bonus to the assured to be given either by a diminution of the rate of premium, or by an increase of the amount of policy, at the option of the party.

Westminster. — By a regulation taking effect from the 9th of May, 1832, this Society makes a positive addition of 10 per cent. every 10th year to all sums insured on single lives, for the whole term of life, by policies issued after that date.

In order to hinder the growth of gambling transactions upon life insurance, it was judiciously enacted, by stat. 14 Geo. 3. c. 48., that

No insurance shall be made by any person or persons, bodies politic or corporate, on the life or lives of any person or persons, or any other event or events whatsoever, where the person or persons, for whose use or benefit, or on whose account, such policy or policies shall be made, *shall have no interest*, or by way of gaining or wagering; and that every insurance made contrary to the true intent and meaning of this act, shall be null and void to all intents and purposes whatsoever. — Sect. 1.

It shall not be lawful to make any policy or policies on the life or lives of any person or persons, or other event or events, *without inserting in such policy or policies, the name or names of the person or persons interested therein, or for what use, benefit, or on whose account, such policy is so made or underwrote.* — Sect. 2.

In all cases where the insured has an interest in such life or lives, event or events, no greater sum shall be recovered or received from the insurer or insurers, than the amount or value of the interest of the insured in such life or lives, or other event or events. — Sect. 3.

A creditor has an insurable interest in the life of his debtor; but it was decided, in a case which arose out of a policy on the life of the late Mr. Pitt, that if, after the death of a debtor whose life is insured by a creditor, and before any action is brought on the policy, the debt be paid, no action will lie.

All insurance offices either insert in their policies or refer in them to a declaration signed by the insured, setting forth his age, or the age of the party upon whom he is making an insurance; whether he has or has not had the small-pox, gout, &c.; "that he is not afflicted with any disorder that tends to the shortening of life;" that this declaration is to be the basis of the contract between him and the society; and that, if there be any untrue averment in it, all the monies paid to the society upon account of the insurance shall be forfeited to them. — (See Form, *post.*)

The condition as to the party not being afflicted with any disorder that tends to the shortening of life is vague, and has given rise to a good deal of discussion. But it is now settled that this condition is sufficiently complied with, if the insured be in a reasonably good state of health; and though he may be afflicted with some disease, yet, if it can be shown that this disease does not tend to shorten life, and was not, in fact, the cause of the party's death, the insurer will not be exonerated: "Such a warranty," said Lord Mansfield, "can never mean, that a man has not in him the seeds of some disorder. We are all born with the seeds of mortality in us. The only question is, whether the insured was in a *reasonably good state of health*, and such a life as ought to be insured on common terms." — (See *Marshall on Insurance*, book iii.; *Park on Insurance*, c. 22.)

Policies of life insurance must be on stamped paper, the duty being as follows: — viz.

Where the sum in the policy shall not amount to 500*l.*	-	1*l.*		
Where it shall amount to 500*l.*	and not to	1,000*l.*	-	2*l.*
—	—	1,000*l.*	—	3,000*l.* - 3*l.*
—	—	3,000*l.*	—	5,000*l.* - 4*l.*
—	—	5,000*l.*	and upwards	- 5*l.*

We subjoin a statement of the terms and conditions on which the Sun Life Assurance and Equitable Societies transact business, and a copy of one of the policies of the former upon the life of a person aged 30, insuring his own life for 1,000*l.* The conditions of most of the other societies are similar, and may be learned by any one, on applying either at the head offices in town, or at their agents' in the country. The premiums demanded by the principal offices are exhibited in the annexed Table.

Sun Life.—An assurance for a term of years, or for the whole continuance of life, is a contract on the part of the office to continue the assurance during that term, on the payment of a certain annual premium, but the assured may drop it, whenever the end is answered for which the assurance was made.

The person whose life is proposed for assurance, is required to appear either before the managers at the office in London, or before an agent in the country; in default of which, the non-appearance fine must be paid when the assurance is effected; which, when the term is 1 year, is 10*s.* for every 100*l.* assured. When the term exceeds 1 year, but does not exceed 7 years, it is 15*s.* for every 100*l.* And when the term exceeds 7 years, the fine is 1 per cent.

Reference to be made to 2 persons of repute, to ascertain the identity of the person appearing.

Any premium remaining unpaid more than 15 days after the time stipulated in the policy, such policy becomes void; but the defaulter producing satisfactory proof to the managers, of the health of the person on whose life the assurance was made, and paying the said premium within 3 calendar months, together with the additional sum of 10*s.* upon every 100*l.* assured by such policy, then such policy is revived, and continues in force.

Conditions of Assurance made by Persons on their own Lives.

The assurance to be void, if the person whose life is assured shall depart beyond the limits of Europe; shall die upon the seas (except in any whole-decked vessel or steam-boat in passing between any one part of the United Kingdom of Great Britain and Ireland, including the islands of Guernsey, Jersey,

Alderney, and Sark, and any other part thereof; or in passing between any port of the said United Kingdom, and any port on the continent of Europe between Hamburgh and Bordeaux, both inclusive); or shall enter into or engage in any military or naval service whatsoever, without the previous consent of the Society; or shall die by suicide, duelling, or the hands of justice; or shall not be, at the time the assurance is made, in good health.

Conditions of Assurance made by Persons on the Lives of others.

The party on whose behalf the assurance is made, must be interested in the life of the other to the full amount assured thereon.

The assurance to be void, if the person whose life is assured shall depart beyond the limits of Europe; shall die upon the seas (except in any whole-decked vessel or steam-boat in passing between any one part of the United Kingdom of Great Britain and Ireland, including the islands of Guernsey, Jersey, Alderney, and Sark, and any other part thereof; or in passing between any port in the said United Kingdom, and any port on the continent of Europe between Hamburgh and Bordeaux, both inclusive); or shall enter into or engage in any military or naval service whatsoever, without the previous consent of the Society; or shall not be, at the time the assurance is made, in good health.

Assurances on the lives of persons engaged in the army or navy, or going beyond the limits of Europe, may be made by special agreement.

All claims are paid within 3 months after certificates (according to the required forms) of the death and burial of the deceased are approved by the managers.

Form of a Proposal for Assurance.

Name, and rank or profession, of the life to be assured.
Present residence.
Place of birth.
Date of birth.
Age next birthday.
Sum.
Term.
Reference to a medical practitioner, to ascertain the present and ordinary state of health of the person whose life is proposed to be assured.
Has he ever had gout or asthma, or any fit or fits?
Has he ever been afflicted with rupture?
Has he ever exhibited any symptom of consumption of the lungs?
Is he afflicted with any disorder tending to shorten life?
Has he had the small-pox or the cow-pox?
Whether the person whose life is proposed to be assured, intends to appear at the office?
In whose name or behalf the policy is desired?
Date of proposal.
Annual notices to be sent to

Form of Declaration to be made and signed by or on behalf of a Person making an Assurance on his or her own Life.

I
born in the parish of
in the county of
on the day of
and now residing at
in the county of
being desirous of making an assurance with the managers for the Sun Life Assurance Society, in the sum of £
upon and for the continuance of my own life, for the term of
Do hereby declare, that my age does not exceed * years; that I have had the * that I have had the gout, asthma, rupture, nor any fit or fits, and that I am not afflicted with any disorder which tends to the shortening of life; and this declaration is to be the basis of the contract between me and the Society; and if any untrue averment is contained in this declaration, in setting forth my age, state of health, profession, occupation, or circumstances, then all monies which shall have been paid to the said Society, upon account of the assurance so made by me, shall be forfeited. Dated the day of 18 .

Form of Declaration to be made and signed by or on behalf of a Person who proposes to make an Assurance on the Life of another.

I
now resident at
in the county of being
desirous of assuring with the Sun Life Assurance Society, the sum of £ for the term of
on the life of born in the parish of
in the county of on the
day of in the year
and now resident at in the county of
Do declare, that I have an interest in the life of the said to the full amount of the said sum of £ ; that to the best of my knowledge and belief the age of the said does not exceed years; that he has had the * that he had the gout, asthma, rupture, nor any fit or fits, and that he is not afflicted with any disorder tending to shorten life; and this declaration is to be the basis of the contract between me and the said Society; and if there be any untrue averment therein, all monies which shall have been paid to the Society upon account of the assurance made in consequence thereof, shall be forfeited. Dated the day of 18 .

* Insert small-pox or cow-pox, as the case may require.

Policy by the Sun Life Assurance Society for 1,000*l.*, *on the Life of A. B., aged Thirty, insuring his own Life.*

No. ——

SUN LIFE ASSURANCE SOCIETY.

THIS POLICY OF ASSURANCE WITNESSETH, that, whereas A. B. Esq. of —— Square, London, being desirous of making an assurance upon his own life, for the whole duration thereof, and having subscribed, or caused to be subscribed, and delivered into this office, a declaration setting forth his ordinary and present state of health, wherein it is declared that the age of the said A. B. did not then exceed 30 years; and having paid to the managers for the Sun Life Assurance Society, at their office in Cornhill, in the city of London, the sum of twenty-four pounds eleven shillings and eight-pence sterling, as a consideration for the assurance of the sum under-mentioned for *one year*, from the twentieth day of January, 1834.

NOW KNOW ALL MEN BY THESE PRESENTS, that in case the said assured shall happen to die at any time within the term of *one year*, as above set forth, the stock and funds of this Society shall be subject and liable to pay and make good to the executors, administrators, or assigns, of the said assured, within three months after the demise of the said assured shall have been duly certified to the managers aforesaid, at their said office, the sum of one thousand pounds sterling, of lawful money of Great Britain.

It is hereby agreed, that this policy may continue in force from *year* to *year*, until the expiration of the term first above-mentioned, provided that the said assured shall duly pay, or cause to be paid, to the managers, at their said office, on or before the nineteenth day of October next ensuing, the sum of twenty-four pounds eleven shillings and eight-pence sterling, and the like sum annually, on or before the day aforesaid; which annual payments shall be accepted, at every such period, as a full consideration for such assurance.

And it is hereby further agreed, that the assurance by this policy shall be extended during peace, to the risk of the above-named A. B. Esq. dying upon the sea in any whole-decked vessel or steam-boat, in passing between any one part of the United Kingdom of Great Britain and Ireland, including the islands of Guernsey, Jersey, Alderney, and Sark, and any other part thereof; or in passing between any port in the said United Kingdom, and any port on the continent of Europe, between Hamburgh and Bordeaux, both inclusive.

PROVIDED NEVERTHELESS, that should the said assured depart beyond the limits of Europe, die upon the seas (except as above stated), or engage in any military or naval service whatsoever, within the term for which this policy is granted; or should the assurance have been obtained through any misrepresentation of the age, state of health, or description of the assured; or should the said assured die by duelling, suicide, or the hands of justice; then this policy, and every thing appertaining thereto, shall cease, be void, and of none effect.

IN WITNESS WHEREOF, we, three of the managers for the said Society, have hereunto set our hands and seals, this twentieth day of January, 1834.

C. D. (L. S.)
E. F. (L. S.)
G. H. (L. S.)

Signed, sealed, and delivered, being first duly stamped.
J. K.

Table of Premiums.

The following tabular statement shows the premiums demanded by the principal Life Insurance Societies for insuring 100*l.* at every different age from 15 to 60, for the whole term of life.

Age.	Alliance and Sun.			Amicable.			Asylum.			British Commercial.			Crown.			Economic.			Equitable.			Eagle. Male.			Eagle. Female.			European.			Guardian.		
	L.	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
15	1	12	8	1	15	6	1	7	9	1	10	0	1	15	9	1	10	8	1	18	7	1	18	9	-		-	1	13	7	1	16	2
16	1	13	6	1	16	6	1	8	6	1	11	0	1	16	7	1	11	5	1	19	8	1	19	7	-		-	1	14	5	1	17	2
17	1	14	3	1	17	6	1	9	3	1	12	0	1	17	5	1	12	3	2	0	8	2	0	5	-		-	1	15	4	1	18	2
18	1	15	1	1	18	6	1	10	1	1	13	0	1	18	3	1	13	0	2	1	8	2	1	4	-		-	1	16	2	1	19	2
19	1	16	0	1	19	6	1	10	11	1	14	0	1	19	1	1	13	10	2	2	8	2	2	3	-		-	1	17	1	2	0	1
20	1	16	11	2	0	6	1	11	9	1	15	0	1	19	11	1	14	7	2	3	7	2	3	2	1	12	7	1	18	1	2	1	0
21	1	17	11	2	1	6	1	12	7	1	16	0	2	0	10	1	15	5	2	4	6	2	4	2	1	13	5	1	19	0	2	1	10
22	1	18	11	2	2	6	1	13	6	1	17	0	2	1	9	1	16	3	2	5	4	2	5	3	1	14	4	1	19	11	2	2	8
23	2	0	1	2	3	6	1	14	5	1	18	0	2	2	9	1	17	2	2	6	3	2	6	4	1	15	4	2	0	10	2	3	6
24	2	1	3	2	4	6	1	15	5	1	19	0	2	3	9	1	18	1	2	7	1	2	7	5	1	16	5	2	1	10	2	4	5
25	2	2	6	2	5	6	1	16	5	2	0	0	2	4	10	1	19	0	2	8	1	2	8	7	1	17	6	2	2	9	2	5	4
26	2	3	9	2	6	6	1	17	6	2	1	0	2	5	10	2	0	0	2	9	1	2	9	9	1	18	8	2	3	9	2	6	4
27	2	5	2	2	7	6	1	18	6	2	2	0	2	6	11	2	1	0	2	10	1	2	11	0	1	19	9	2	4	10	2	7	4
28	2	6	7	2	8	6	1	19	8	2	3	0	2	8	1	2	2	0	2	11	1	2	12	3	2	0	9	2	5	10	2	8	4
29	2	7	11	2	9	6	2	0	10	2	4	0	2	9	2	2	3	1	2	12	3	2	13	7	2	1	8	2	6	11	2	9	6
30	2	9	2	2	10	6	2	2	0	2	5	0	2	10	4	2	4	3	2	13	5	2	15	0	2	2	6	2	8	1	2	10	7
31	2	10	5	2	11	6	2	3	3	2	6	0	2	11	6	2	5	5	2	14	7	2	16	6	2	3	4	2	9	3	2	11	10
32	2	11	10	2	12	6	2	4	6	2	7	0	2	12	2	2	6	8	2	15	9	2	18	0	2	3	10	2	10	6	2	13	0
33	2	13	4	2	14	0	2	5	10	2	8	0	2	14	0	2	8	0	2	17	1	2	19	9	2	4	4	2	11	10	2	14	4
34	2	14	11	2	15	6	2	7	3	2	9	6	2	15	4	2	9	5	2	18	5	3	1	6	2	4	10	2	13	2	2	15	8
35	2	16	8	2	17	0	2	8	2	2	11	0	2	16	9	2	10	11	2	19	10	3	3	4	2	5	6	2	14	7	2	17	0
36	2	18	5	2	18	6	2	10	3	2	13	6	2	18	2	2	12	6	3	1	4	3	5	5	2	6	2	2	16	0	2	18	6
37	3	0	4	3	0	0	2	11	10	2	15	0	2	19	10	2	14	2	3	2	10	3	7	7	2	7	0	2	17	6	3	0	0
38	3	2	4	3	1	6	2	13	6	2	16	6	3	1	2	2	15	11	3	4	6	3	9	10	2	7	10	2	19	1	3	1	7
39	3	4	5	3	3	0	2	15	3	2	18	0	3	2	10	2	17	9	3	6	2	3	12	4	2	8	10	3	0	9	3	3	3
40	3	6	6	3	5	0	2	17	1	3	0	0	3	4	7	2	19	9	3	7	11	3	15	0	2	9	10	3	2	6	3	5	0
41	3	8	7	3	7	6	2	19	0	3	2	0	3	6	5	3	1	10	3	9	9	3	17	9	2	10	11	3	4	3	3	6	9
42	3	10	9	3	10	0	3	1	0	3	4	0	3	8	4	3	4	1	3	11	8	4	1	0	2	12	0	3	6	3	3	8	8
43	3	12	11	3	12	6	3	3	2	3	6	0	3	10	6	3	6	6	3	13	8	4	4	4	2	13	3	3	8	3	3	10	8
44	3	15	3	3	15	6	3	5	4	3	8	0	3	12	8	3	9	0	3	15	9	4	7	11	2	14	7	3	10	5	3	12	8
45	3	17	8	3	18	6	3	7	9	3	10	0	3	15	0	3	11	9	3	17	11	4	11	8	2	16	0	3	12	7	3	14	11
46	4	0	5	4	1	6	3	10	3	3	12	0	3	17	6	3	14	7	4	0	2	4	15	9	2	17	6	3	15	0	3	17	3
47	4	3	3	4	5	0	3	12	11	3	14	6	4	0	1	3	17	8	4	2	7	5	0	0	2	19	1	3	17	5	3	19	8
48	4	6	6	4	9	0	3	15	9	3	17	0	4	2	11	4	0	11	4	5	1	5	4	6	3	0	9	4	0	0	4	2	4
49	4	10	2	4	12	6	3	18	9	3	19	6	4	5	10	4	4	4	4	7	10	5	9	6	3	2	6	4	2	8	4	5	1
50	4	14	2	4	16	6	4	2	0	4	6	0	4	8	11	4	8	0	4	10	8	5	14	7	3	4	4	4	5	6	4	8	0
51	4	18	9	5	0	0	4	5	5	4	10	0	4	12	1	4	11	11	4	13	6	6	0	3	3	6	3	4	8	6	4	11	0
52	5	3	6	5	4	6	4	9	2	4	13	2	4	15	3	4	16	1	4	16	5	6	6	4	3	8	4	4	11	7	4	14	2
53	5	8	7	5	8	6	4	13	2	4	15	6	4	18	6	5	0	6	4	19	7	6	12	9	3	10	8	4	15	0	4	17	5
54	5	14	1	5	13	0	4	17	7	5	1	0	5	1	11	5	5	3	5	2	10	6	19	9	3	13	0	4	18	7	5	0	11
55	5	19	11	5	18	0	5	2	3	5	5	0	5	5	7	5	10	3	5	6	4	7	7	2	3	15	8	5	2	6	5	4	8
56	6	6	4	6	3	0	5	7	4	5	9	6	5	9	6	5	15	7	5	10	1	7	15	1	3	18	6	5	6	8	5	8	7
57	6	13	2	6	8	6	5	12	9	5	13	2	5	13	6	6	1	3	5	14	0	8	3	6	4	1	7	5	11	2	5	12	10
58	7	0	5	6	14	0	5	18	5	5	18	0	5	18	0	6	7	4	5	18	2	8	12	7	5	4	0	5	15	8	5	17	4
59	7	7	9	7	0	0	6	4	5	6	2	4	6	2	4	6	13	9	6	2	8	9	2	4	4	8	7	6	0	7	6	2	2
60	7	14	11	7	6	6	6	10	9	6	7	2	6	7	2	7	0	7	6	7	4	9	13	0	4	12	4	6	5	8	6	7	2

Age.	London, Birchin Lane.			London, Life for Members.			Norwich.			Pelican.			Promoter.			United Empire.			University.			West of England.			Scottish Widows' Fund.			Scottish Union.		
	L.	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
15	-		-	-		-	1	14	9	1	11	11	1	7	11	1	14	10	1	16	8	1	14	9	1	16	5	1	11	6
16	1	17	1	-		-	1	15	9	1	12	9	1	8	8	1	15	9	1	17	9	1	15	9	1	17	6	1	12	5
17	1	18	1	-		-	1	16	9	1	13	6	1	9	5	1	16	9	1	18	8	1	16	8	1	18	6	1	13	6
18	1	19	0	-		-	1	17	8	1	14	4	1	10	1	1	17	8	1	19	7	1	17	6	1	19	7	1	14	7
19	1	19	11	-		-	1	18	6	1	15	3	1	10	11	1	18	7	2	0	7	1	18	6	2	0	7	1	15	8
20	2	0	9	-		-	1	19	6	1	16	1	1	11	8	1	19	6	2	1	5	1	19	3	2	1	6	1	16	9
21	2	1	5	2	4	6	2	0	6	1	16	10	1	12	6	2	0	5	2	2	4	2	0	0	2	2	5	1	17	9
22	2	2	0	2	5	6	2	1	3	1	17	7	1	13	5	2	1	3	2	3	1	2	0	10	2	3	3	1	18	10
23	2	2	7	2	6	6	2	2	0	1	18	4	1	14	4	2	2	1	2	4	0	2	1	3	2	4	1	1	19	10
24	2	3	1	2	7	0	2	2	9	1	19	2	1	15	5	2	3	0	2	4	9	2	2	6	2	4	11	2	0	10
25	2	3	8	2	8	0	2	3	8	2	0	1	1	16	5	2	3	11	2	5	9	2	3	3	2	5	10	2	1	10
26	2	4	3	2	9	0	2	4	8	2	1	3	1	17	6	2	4	11	2	6	8	2	4	0	2	6	10	2	2	10
27	2	5	1	2	10	0	2	5	8	2	2	7	1	18	8	2	5	11	2	7	7	2	5	0	2	7	10	2	3	10
28	2	5	11	2	11	0	2	6	8	2	3	11	1	19	11	2	7	0	2	8	7	2	6	0	2	8	11	2	4	11
29	2	6	10	2	12	6	2	7	9	2	5	2	2	1	1	2	8	1	2	9	8	2	7	0	2	10	0	2	6	1
30	2	7	10	2	13	6	2	8	10	2	6	4	2	2	2	2	9	2	2	10	9	2	8	0	2	11	1	2	7	3
31	2	8	10	2	14	6	2	10	0	2	7	7	2	3	3	2	10	4	2	11	11	2	9	0	2	12	3	2	8	5
32	2	9	11	2	16	0	2	11	1	2	8	10	2	4	5	2	11	6	2	13	0	2	10	3	2	13	6	2	9	9
33	2	11	1	2	17	0	2	12	3	2	10	3	2	5	8	2	12	9	2	14	3	2	11	3	2	14	9	2	11	1
34	2	12	4	2	18	6	2	13	6	2	11	9	2	7	1	2	14	1	2	15	6	2	12	9	2	16	1	2	12	5
35	2	13	8	3	0	0	2	14	10	2	13	5	2	8	7	2	15	6	2	16	11	2	13	10	2	17	6	2	13	10
36	2	15	1	3	1	6	2	16	2	2	15	1	2	10	1	2	16	11	2	18	4	2	15	3	2	19	0	2	15	4
37	2	16	8	3	3	0	2	17	6	2	16	10	2	11	8	2	18	4	2	19	9	2	16	8	3	0	6	2	16	11
38	2	18	2	3	4	6	2	19	0	2	18	9	2	13	6	2	19	11	3	1	4	2	18	0	3	2	7	2	18	6
39	2	19	11	3	6	0	3	0	6	3	0	6	2	15	2	3	1	6	3	2	11	2	19	6	3	3	9	3	0	2
40	3	1	8	3	8	0	3	2	0	3	2	8	2	17	0	3	3	2	3	4	7	3	1	3	3	5	6	3	1	11
41	3	3	6	3	10	0	3	3	6	3	5	2	2	18	10	3	4	10	3	6	4	3	2	10	3	7	3	3	3	9
42	3	5	6	3	12	0	3	5	2	3	7	8	3	0	8	3	6	8	3	8	1	3	4	6	3	9	3	3	5	8
43	3	7	8	3	14	0	3	7	0	3	10	4	3	2	6	3	8	8	3	10	0	3	6	4	3	11	3	3	7	8
44	3	10	0	3	16	0	3	9	0	3	13	1	3	4	6	3	10	8	3	12	0	3	8	3	3	13	4	3	9	8
45	3	12	6	3	18	0	3	11	0	3	16	1	3	6	7	3	12	10	3	14	1	3	10	3	3	15	6	3	11	10
46	3	15	2	4	0	0	3	13	8	3	18	8	3	8	11	3	15	3	3	16	2	3	12	2	3	17	9	3	14	1
47	3	18	2	4	2	6	3	16	3	4	1	6	3	11	5	3	17	9	3	18	6	3	14	6	4	0	3	3	16	6
48	4	1	5	4	5	0	3	19	6	4	4	8	3	14	2	4	0	7	4	1	4	3	16	9	4	2	9	3	19	0
49	4	4	10	4	8	0	4	2	9	4	8	2	3	17	3	4	3	6	4	4	4	3	19	3	4	5	6	4	1	7
50	4	8	5	4	11	0	4	6	0	4	12	2	4	0	8	4	6	6	4	7	6	4	1	8	4	8	4	4	4	3
51	4	12	3	4	14	0	4	9	8	4	16	7	4	4	7	4	9	9	4	10	9	4	4	3	4	11	2	4	8	1
52	4	16	1	4	17	0	4	13	3	5	1	3	4	8	8	4	13	0	4	14	1	4	6	9	4	14	2	4	12	2
53	5	0	1	5	0	6	4	17	0	5	6	4	4	13	1	4	16	5	4	17	8	4	9	9	4	17	4	4	16	5
54	5	4	2	5	5	0	5	1	0	5	11	7	4	17	10	5	0	6	5	1	4	4	12	9	5	0	8	5	0	11
55	5	8	4	5	9	6	5	5	3	5	17	4	5	2	9	5	4	6	5	5	4	4	15	9	5	4	2	5	5	9
56	5	12	8	5	14	0	5	9	6	6	3	7	5	8	4	5	8	6	5	9	7	4	19	0	5	7	11	5	10	9
57	5	17	2	5	19	0	5	13	6	6	10	4	5	14	2	5	12	6	5	14	0	5	2	6	5	11	11	5	16	1
58	6	1	10	6	4	0	5	17	6	6	17	5	6	0	4	5	17	0	5	18	2	5	6	6	6	0	7	6	1	9
59	6	6	10	6	9	6	6	2	6	7	4	6	6	6	7	6	1	9	6	2	8	5	10	6	6	5	4	6	7	10
60	6	12	2	6	15	0	6	7	3	7	11	7	6	12	10	6	7	0	6	7	4	5	14	9	6	5	4	6	14	3

The following offices require the same premiums as the Equitable; viz. Atlas, Globe, Imperial, Law Life, London Life Association (for persons not members), Palladium, Provident, Rock, Royal Exchange, Union, Westminster.

The following are the premiums demanded by the Sun Life Assurance Society, for insurances on joint lives and survivorships.

Joint Lives. — A Table of Annual Premiums payable during the Joint Continuance of Two Lives, for assuring One Hundred Pounds, to be paid as soon as either of the Two shall drop.

Age next Birthday.	Age next Birthday.	Annual Premium.	Age next Birthday.	Age next Birthday.	Annual Premium.	Age next Birthday.	Age next Birthday.	Annual Premium.
		£ s. d.			£ s. d.			£ s. d.
10	10	2 7 5	20	35	3 17 3	35	45	5 7 5
	15	2 11 0		40	4 6 1		50	6 1 11
	20	2 14 6		45	4 16 1		55	7 6 5
	25	2 19 4		50	5 11 7		60	9 0 6
	30	3 5 3		55	6 16 8			
	35	3 11 11		60	8 11 1	40	40	5 5 8
	40	4 1 1					45	5 13 10
	45	4 11 5	25	25	3 9 6		50	6 7 9
	50	5 7 2		30	3 14 10		55	7 11 8
	55	6 12 5		35	4 0 11		60	9 5 5
	60	8 6 11		40	4 9 6			
				45	4 19 3	45	45	6 1 0
15	15	2 14 5		50	5 14 7		50	6 13 11
	20	2 17 9		55	6 19 7		55	7 16 11
	25	3 2 5		60	8 13 11		60	9 9 8
	30	3 8 3						
	35	3 14 9	30	30	3 19 10	50	50	7 5 6
	40	4 3 10		35	4 5 6		55	8 7 4
	45	4 14 9		40	4 13 10		60	9 18 11
	50	5 9 8		45	5 3 2			
	55	6 14 11		50	5 18 3	55	55	9 8 2
	60	8 9 6		55	7 3 1		60	10 18 11
				60	8 17 5			
20	20	3 0 11				60	60	12 8 10
	25	3 5 4	35	35	4 10 9			
	30	3 10 11		40	4 18 6			

Survivorship. — A Table of Annual Premiums payable during the Joint Continuance of Two Lives, for assuring One Hundred Pounds, to be paid at the Decease of One Person, A., provided another, B., be then living.

Age of A., the Life to be assured.	Age of B., the Life against which the Assurance is to be made.	Annual Premium.	Age of A., the Life to be assured.	Age of B., the Life against which the Assurance is to be made.	Annual Premium.	Age of A., the Life to be assured.	Age of B., the Life against which the Assurance is to be made.	Annual Premium.
		£ s. d.			£ s. d.			£ s. d.
10	10	1 3 9	30	10	2 2 5	50	10	4 7 2
	20	1 4 7		20	2 2 1		20	4 7 0
	30	1 2 10		30	1 19 11		30	4 3 3
	40	1 1 6		40	1 18 6		40	4 1 7
	50	1 0 0		50	1 15 0		50	3 12 9
	60	0 18 5		60	1 12 2		60	3 1 6
	70	0 16 11		70	1 9 10		70	2 11 4
	80	0 15 7		80	1 7 4		80	2 3 2
20	10	1 9 11	40	10	2 19 7	60	10	7 8 6
	20	1 10 6		20	2 19 6		20	7 8 5
	30	1 8 10		30	2 15 4		30	7 5 3
	40	1 6 7		40	2 12 10		40	7 4 11
	50	1 4 7		50	2 6 2		50	6 17 5
	60	1 2 8		60	2 0 6		60	6 4 5
	70	1 0 9		70	1 16 3		70	5 8 8
	80	0 19 3		80	1 13 6		80	4 14 4

From the specimens of premiums in the two preceding Tables, the reader will easily judge of the proportional premiums for any combination of two ages not inserted in them.

Instead of a gross sum payable at the decease of A. provided B. be then living, a reversionary annuity on the remainder of the life of B. after the decease of A. may be insured by the payment of an annual premium during the joint continuance of the two lives; which annual premium may be learnt by application at the office.

Equitable Assurance Society. — The following is the

*Declaration required to be made and signed in the Office, by or on the Behalf of a Person * who proposes to make an Assurance on* his or her own Life.

I

being desirous of becoming a member of the Society for Equitable Assurances on Lives and Survivorships, and intending to make assurance in the sum of

upon and for the continuance of my own life, and having perused and considered that * clause of the deed of settlement of the said Society which requires a declaration in writing of the age, state of health, and other circumstances attending the person whose life shall be proposed to be assured, do hereby declare and set forth, That my age does not exceed ; that I have had the small-pox; and have had the gout; and that I am not afflicted with any disorder which tends to the shortening of life; and I do hereby agree that this declaration be the basis of the contract between the said Society and me, and that if any untrue averment is contained in this declaration, all monies which shall have been paid to the Society upon account of the assurance made in consequence thereof, shall be forfeited. Dated the day of in the year of our Lord .

* *The Clause which is referred to in the Declaration.*

That every person desirous of making assurance with the Society, shall sign or execute a declaration in writing (in the presence of one credible witness, who shall attest the same), setting forth the age, state of health, profession, occupation, and other circumstances attending the person or persons whose life or lives shall be proposed to be assured; which declaration shall be the basis of the contract between the said Society and the person desiring to make assurance with them; in which declaration if any artful, false, or fraudulent representation shall be used, and the same shall at any time thereafter be discovered, from thenceforth the sums which shall have been paid to the Society on account of any assurance so fraudulently obtained, shall be forfeited to the use of the Society; and all claims to be made on that behalf shall cease, determine, and be void, to all intents and purposes whatsoever.

Form of a Proposal to be presented to a Weekly Court of Directors.

Name and profession of the life to be assured.
Place and date of birth.
Place of residence.
Age. Sum. Term.
By whom made.
To give reference to two † persons of good repute, (one, if possible, of the medical profession,) to ascertain the present and general state of health of the life to be assured.
If had the small-pox. If vaccinated.
If afflicted with the gout. If ever ruptured.

† Parties who do not appear before the Court of Directors are required to give a reference to 3 persons for an account of the present and general state of their health.

A Table of Annual Premiums payable during the Continuance of Two Joint Lives for assuring One Hundred Pounds, to be paid when either of the Lives shall drop.

Age.	Age.	£ s. d.	Age.	Age.	£ s. d.	Age.	Age.	£ s. d.	Age.	Age.	£ s. d.	Age.	Age.	£ s. d.
10	10	2 17 1	15	35	4 3 1	20	67	9 13 9	30	60	7 15 0	45	45	6 7 4
	15	3 1 1		40	4 10 4	25	25	4 0 10		67	9 18 1		50	6 17 9
	20	3 5 7		45	4 19 5		30	4 5 0	35	35	4 19 0		55	7 11 0
	25	3 9 3		50	5 11 3		35	4 10 3		50	5 5 6		60	8 9 6
	30	3 13 9		55	6 6 1		40	4 17 4		55	5 18 10		67	10 11 1
	35	3 19 6		60	7 6 0		45	5 6 2		60	6 5 0	50	50	7 7 8
	40	4 6 10		67	9 9 5		50	5 17 10		55	6 19 2		55	8 0 3
	45	4 15 11	20	20	3 13 11		55	6 12 6		60	7 18 6		60	8 18 2
	50	5 7 10		25	3 17 5		60	7 12 5		67	10 1 2		67	10 18 10
	55	6 2 8		30	4 1 9		67	9 15 9	40	40	5 11 9	55	55	8 12 2
	60	7 2 9		35	4 7 3	30	30	4 8 11		45	5 19 9		60	9 9 0
	67	9 6 3		40	4 14 6		35	4 14 1		50	6 10 8		67	11 8 5
15	15	3 5 0		45	5 3 6		40	5 0 11		55	7 4 5	60	60	10 4 9
	20	3 9 6		50	5 15 4		45	5 9 6		60	8 3 4		67	12 2 1
	25	3 13 1		55	6 10 2		50	6 1 0		67	10 5 6	67	67	13 15 8
	30	3 17 6		60	7 10 2		55	6 15 5						

An addition of 22 per cent. *computed upon the premium*, is charged upon military persons; and an addition of *eleven per cent.* on officers on half-pay, officers in the militia, fencibles, and the like levies; also on persons not having had the small-pox, or having had the gout.

Persons preferring the payment of a gross sum or single premium upon an assurance for any certain term, are chargeable in a due proportion to the annual premium for such term.

Every person making any assurance with the Society, pays 5*s.* in the name of entrance money; and if the sum assured exceeds 100*l.*, the entrance money is charged after the rate of 5*s.* for every 100*l.* But if the person upon whose life an assurance is proposed, does not appear before the directors, the entrance money is charged after the rate of 1*l.* for every 100*l.*

The following are the premiums demanded by the Equitable Society for insuring 100*l.*, or an equivalent annuity on the contingency of one life's surviving the other: —

Ages.		Premium.	Annuity equivalent to 100*l.* to be paid from the Death of the Life assured, during the Remainder of the other Life.
Life to be assured.	Life against which the Assurance is to be made.		
		£ s. d.	£ s. d.
10	10	1 8 6	5 14 6
	20	1 9 1	6 14 10
	30	1 8 3	7 14 11
	40	1 7 8	9 5 6
	50	1 6 11	11 13 0
	60	1 6 0	15 13 5
	70	1 4 11	23 13 0
	80	1 3 4	40 10 8
20	10	1 16 6	5 6 11
	20	1 17 0	6 4 1
	30	1 15 9	7 0 6
	40	1 14 8	8 4 11
	50	1 13 6	10 1 9
	60	1 12 1	13 0 7
	70	1 10 6	18 12 8
	80	1 8 3	30 9 6
30	10	2 5 5	5 5 8
	20	2 6 0	6 2 9
	30	2 4 6	6 19 6
	40	2 2 9	8 3 8
	50	2 0 11	10 0 6
	60	1 18 10	13 0 0
	70	1 16 7	18 12 10
	80	1 13 9	30 9 3
40	10	2 19 2	5 3 6
	20	2 19 10	5 19 9
	30	2 18 2	6 16 8
	40	2 15 11	8 1 0
40	50	2 12 10	9 16 6
	60	2 9 4	12 14 3
	70	2 5 11	18 5 6
	80	2 1 10	29 19 10
50	10	4 0 11	5 1 4
	20	4 1 10	5 16 2
	30	4 0 1	6 12 2
	40	3 17 10	7 16 9
	50	3 13 10	9 12 8
	60	3 7 7	12 6 8
	70	3 1 6	17 11 5
	80	2 15 0	28 12 6
60	10	5 16 9	4 19 3
	20	5 18 1	5 12 10
	30	5 16 3	6 7 7
	40	5 14 0	7 10 10
	50	5 10 7	9 8 0
	60	5 2 4	12 5 6
	70	4 9 10	17 5 8
	80	3 17 11	27 19 10
67	10	8 1 0	4 17 8
	20	8 2 9	5 10 5
	30	8 0 10	6 4 0
	40	7 18 7	7 5 5
	50	7 15 6	9 0 6
	60	7 8 8	12 0 3
	70	6 10 8	17 1 8
	80	5 8 9	27 5 11

It is stated by Mr. Morgan, in his Account of the Equitable Society already referred to, that the number of insurances in that institution for terms of years does not much exceed *one hundredth part* of those for the whole period of life; and that the business of the office at present is almost wholly confined to the assurance of persons on *their own lives* — those on the lives of *others*, whether for terms or for continuance, being, in consequence of the commission money allowed to agents and attorneys, engrossed by the new offices. — (*Account of the Equitable Society*, p. 53.)

INTEREST AND ANNUITIES. Interest is the sum paid by the borrower of a sum of money, or of any sort of valuable produce, to the lender, for its use.

The rate of interest, supposing the security for and facility of re-possessing the principal, or sum lent, to be equal, must obviously depend on what may be made by the employment of capital in industrious undertakings, or on the rate of profit. Where

profits are high, as in the United States, interest is also high; and where they are comparatively low, as in Holland and England, interest is proportionally low. In fact, the rate of interest is nothing more than the *nett* profit on capital: whatever returns are obtained by the borrower, beyond the interest he has agreed to pay, really accrue to him on account of risk, trouble, or skill, or of advantages of situation and connection.

But besides fluctuations in the rate of interest caused by the varying productiveness of industry, the rate of interest on each particular loan must, of course, vary according to the supposed solvency of the borrowers, or the degree of risk supposed to be incurred by the lender, of either not recovering payment at all, or not recovering it at the stipulated term. No person of sound mind would lend on the personal security of an individual of doubtful character and solvency, and on mortgage over a valuable estate, at the same rate of interest. Wherever there is risk, it must be compensated to the lender by a higher premium or interest.

And yet, obvious as this principle may appear, all governments have interfered with the adjustment of the terms of loans; some to prohibit interest altogether, and others to fix certain rates which it should be deemed legal to charge, and illegal to exceed. The prejudice against taking interest seems to have principally originated in a mistaken view of some enactments of the Mosaical law — (see *Michaelis on the Laws of Moses*, vol. ii. pp. 327—353. Eng. ed.), and, a statement of Aristotle, to the effect that, as money did not produce money, no return could be equitably claimed by the lender! But whatever may have been the origin of this prejudice, it was formerly universal in Christendom; and is still supported by law in all Mohammedan countries. The famous reformer, Calvin, was one of the first who saw and exposed the absurdity of such notions — (see an extract from one of his epistles in *M'Culloch's Political Economy*, 2d ed. p. 510.); and the abuses caused by the prohibition, and the growing conviction of its impolicy, soon after led to its relaxation. In 1554, a statute was passed, authorising lenders to charge 10 per cent. interest. In 1624, the legal rate was reduced to 8 per cent.; and in the reign of Queen Anne it was further reduced to 5 per cent., at which it still continues. It is enacted, by the statute (12 Ann. c. 16.) making this reduction, that "all persons who shall receive, by means of any corrupt bargain, loan, exchange, chevizance, or interest of any wares, merchandise, or other thing whatever, or by any deceitful way or means, or by any covin, engine, or deceitful conveyance for the forbearing or giving day of payment, for one whole year for their money or other thing, above the sum of 5*l.* for 100*l.* for a year, shall forfeit for every such offence, the *treble* value of the monies, or other things, so lent, bargained," &c.

It is needless to waste the reader's time by entering into any lengthened arguments to show the inexpediency and mischievous effect of such interferences. This has been done over and over again. It is plainly in no respect more desirable to limit the rate of interest, than it would be to limit the rate of insurance, or the prices of commodities. And though it were desirable, it cannot be accomplished. The real effect of all legislative enactments having such an object in view, is to increase, not diminish, the rate of interest. When the rate fixed by law is less than the market or customary rate, lenders and borrowers are obliged to resort to circuitous devices to evade the law; and as these devices are always attended with more or less trouble and risk, the rate of interest is proportionally enhanced. During the late war it was not uncommon for a person to be paying 10 or 12 per cent. for a loan, which, had there been no usury laws, he might have got for 6 or 7 per cent. Neither is it by any means uncommon, when the rate fixed by law is more than the market rate, for borrowers to be obliged to pay more than they really stipulated for. It is singular that an enactment which contradicts the most obvious principles, and has been repeatedly condemned by committees of the legislature, should still be allowed to preserve a place in the statute book.

Distinction of Simple and Compound Interest. — When a loan is made, it is usual to stipulate that the interest upon it should be regularly paid at the end of every year, half year, &c. A loan of this sort is said to be at simple interest. It is of the essence of such loan, that no part of the interest accruing upon it should be added to the principal to form a new principal; and though payment of the interest were not made when it becomes due, the lender would not be entitled to charge interest upon such unpaid interest. Thus, suppose 100*l.* were lent at simple interest at 5 per cent., payable at the end of each year; the lender would, at the end of 3 or 4 years, supposing him to have received no previous payments, be entitled to 15*l.* or 20*l.*, and no more.

Sometimes, however, money or capital is invested so that the interest is not paid at the periods when it becomes due, but is progressively added to the principal; so that at every term a new principal is formed, consisting of the original principal, and the successive accumulations of interest upon interest. Money invested in this way is said to be placed at *compound interest.*

It appears not unreasonable, that when a borrower does not pay the interest he has contracted for, at the period when it is due, he should pay interest upon such interest. This, however, is not allowed by the law of England; nor is it allowed to make a loan at compound interest. But this rule is often evaded, by taking a new obligation for the principal with the interest included, when the latter becomes due. Investments compound interest are also very frequent. Thus, if an individual buy into the funds, and regularly buy fresh stock with the dividends, the capital will increase at compound interest; and so in any similar case.

Calculation of Interest. — Interest is estimated at so much per cent. per annum, or by dividing t principal into 100 equal parts, and specifying how many of these parts are paid yearly for its use. Thus 5 per cent., or 5 parts out of 100, means that 5*l.* are paid for the use of 100*l.* for a year, 10*l.* for the use 200*l.*, and 2*l.* 10*s.* for the use of 50*l.* for the same period, and so on.

Suppose, now, that it is required to find the interest of 210*l.* 13*s.* for 3½ years at 4 per cent. simple interest. In this case we must first divide the principal, 210*l.* 13*s.* into 100 parts, 4 of which will be the interest for 1 year; and this being multiplied by 3½ will give the interest for 3½ years. But instead of first dividing by 100, and then multiplying by 4, the result will be the same, and the process more expeditious, if we first multiply by 4, and then divide by 100. Thus, —

L.	*s.*		
210	13	principal.	
	4	rate per cent.	
		L. *s.* *d.*	
1,00) 8,42	12 (	8 8 6½	1 year's interest.
20		3½	
5,52		25 5 6¾	3 years' interest.
12		4 4 5	½ a year's interest.
6,24			
4		*L.* 29 9 9¾	3½ years' interest.
96			

It is almost superfluous to observe, that the same result would have been obtained by multiplying the product of the principal and rate by the number of years, and then dividing by 100.

Hence, to find the interest of any sum at any rate per cent. for a year, multiply the sum by the rate per cent., and divide the product by 100.

To find the interest of any sum for a number of years, multiply its interest for one year by the number of years; or, without calculating its interest for one year, multiply the principal by the rate per cent. and that product by the number of years, and divide the last product by 100.

When the interest of any sum is required for a number of days, they must be treated as fractional parts of a year; that is, we must multiply the interest of a year by them, and divide by 365.

Suppose that it is required to find the interest of 210*l.* for 4 years 7 months and 25 days, at 4½ per cent. —

Principal -	*L.* 210	Interest for 4 years	= *L.* 37·8000
Rate per cent. -	4½	6 months = ½ of 1 year	= 4·7250
	840	1 month = ⅙ of 6 months	= ·7875
	105	25 days	= ·6472
Interest for 1 year -	*L.* 9·45		*L.* 43·9597 = *L.* 43 19*s.* 2½*d.*

× 4 = *L.* 37·80 do. for 4 years.

The interest for 25 days is $\frac{9{\cdot}45 \times 25}{365} = {\cdot}6472$; that is, it is equal to the interest for a year multiplied by the fraction $\frac{25}{365}$. Division by 100 is performed by cutting off two figures to the right.

Many attempts have been made to contrive more expeditious processes than the above for calculating interest. The following is the best: —

Suppose it were required to find the interest upon 172*l.* for 107 days at 5 per cent.

This forms what is called in arithmetical books a double rule of three question, and would be stated as follows: —

£ *Days.* £ £ *Days.*
100 × 365 : 5 : : 172 × 107 : 2*l.* 10*s.* 4¾*d.* the interest required.

Hence, to find the interest of any sum for any number of days at any rate per cent., multiply the sum by the number of days, and the product by the rate, and divide by 36,500 (365 × 100); the quotient is the interest required.

When the rate is 5 per cent., or 1-20th of the principal, all that is required is to divide the product of the sum multiplied by the days by 7,300 (365, the days in a year, multiplied by 20).

Five per cent. interest being found by this extremely simple process, it is usual in practice to calculate 4 per cent. interest by deducting 1-5th; 3 per cent. by deducting 2-5ths; 2½ per cent. by dividing by 2; 2 per cent. by taking the half of 4, and so on.

In calculating interest upon accounts current, it is requisite to state the number of days between each receipt, or payment, and the date (commonly the 31st of December) to which the account current is made up. Thus, 172*l.* paid on the 15th of September, bearing interest to the 31st of December, 107 days. The amount of such interest may, then, be calculated as now explained, or by the aid of Tables. The reader will find, in the article BOOKKEEPING (p. 161.) an example of interest on an account current computed as above, without referring to Tables.

The 30th of June is, after the 31st of December, the most usual date to which accounts current are made up, and interest calculated. In West India houses, the 30th of April is the common date, because at that season the old crop of produce is generally sold off, and the new begins to arrive.

It is of great importance, in calculating interest on accounts current, to be able readily to find the number of days from any day in any one month to any day in any other month. This may be done with the utmost ease by means of the following Table: —

Table for ascertaining the Number of Days from any one Day in the Year to any other Day.

Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	32	60	91	121	152	182	213	244	274	305	335	17	48	76	107	137	168	198	229	260	290	321	351
2	33	61	92	122	153	183	214	245	275	306	336	18	49	77	108	138	169	199	230	261	291	322	352
3	34	62	93	123	154	184	215	246	276	307	337	19	50	78	109	139	170	200	231	262	292	323	353
4	35	63	94	124	155	185	216	247	277	308	338	20	51	79	110	140	171	201	232	263	293	324	354
5	36	64	95	125	156	186	217	248	278	309	339	21	52	80	111	141	172	202	233	264	294	325	355
6	37	65	96	126	157	187	218	249	279	310	340	22	53	81	112	142	173	203	234	265	295	326	356
7	38	66	97	127	158	188	219	250	280	311	341	23	54	82	113	143	174	204	235	266	296	327	357
8	39	67	98	128	159	189	220	251	281	312	342	24	55	83	114	144	175	205	236	267	297	328	358
9	40	68	99	129	160	190	221	252	282	313	343	25	56	84	115	145	176	206	237	268	298	329	359
10	41	69	100	130	161	191	222	253	283	314	344	26	57	85	116	146	177	207	238	269	299	330	360
11	42	70	101	131	162	192	223	254	284	315	345	27	58	86	117	147	178	208	239	270	300	331	361
12	43	71	102	132	163	193	224	255	285	316	346	28	59	87	118	148	179	209	240	271	301	332	362
13	44	72	103	133	164	194	225	256	286	317	347	29		88	119	149	180	210	241	272	302	333	363
14	45	73	104	134	165	195	226	257	287	318	348	30		89	120	150	181	211	242	273	303	334	364
15	46	74	105	135	166	196	227	258	288	319	349	31		90		151		212	243		304		365
16	47	75	106	136	167	197	228	259	289	320	350												

By this Table may be readily ascertained the number of days from any given day in the year to another. For instance, from the 1st of January to the 14th of August (first and last days included), there are 226 days. To find the number, look down the column headed January, to Number 14, and then look along in a parallel line to the column headed August, you find 226, the number required.

To find the number of days between any other two given days, when they are both after the 1st of January, the number opposite the 1st day must, of course, be deducted from that opposite to the second. Thus, to find the number of days between the 13th of March and the 19th of August, deduct from 231, the number in the Table opposite to 19 and under August, 72, the number opposite to 13 and under March, and the remainder, 159, is the number required, last day included.

In leap years, *one* must be added to the number after the 28th of February.

For the mode of calculating discount, or of finding the present values of sums due at some future date, at simple interest, see DISCOUNT.

In counting-houses, Interest Tables are very frequently made use of. Such publications have, in consequence, become very numerous. Most of them have some peculiar recommendation; and are selected according to the object in view.

When interest, instead of being simple, is compound, the first year's or term's interest must be found, and being added to the original principal, makes the principal upon which interest is to be calculated for the second year or term; and the second year's or term's interest being added to this last principal, makes that upon which interest is to be calculated for the third year or term; and so on for any number of years.

But when the number of years is considerable, this process becomes exceedingly cumbersome and tedious, and to facilitate it Tables have been constructed, which are subjoined to this article.

The first of these Tables (No. I.) represents the amount of 1*l.* accumulating at compound interest, at 3, 3½, 4, 4½, and five per cent. every year, from 1 year to 70 years, in pounds and decimals of a pound. Now, suppose that we wish to know how much 500*l.* will amount to in 7 years at 4 per cent. In the column marked 4 per cent. and opposite to 7 years, we find 1·315,932*l.*, which shows that 1*l.* will, if invested at 4 per cent. compound interest, amount to 1·315,932 in 7 years; and consequently, 500*l.* will, in the same time and at the same rate, amount to 500 × 1·315,932*l.* or 657·966*l.*; that is, 657*l.* 19*s.* 4*d.*

For the same purpose of facilitating calculation, the present value of 1*l.* due any number of years hence, not exceeding 70, at 3, 3½, 4, 4½, and 5 per cent. compound interest, is given in the subjoined Table No. II. The use of this Table is precisely similar to the foregoing. Let it, for example, be required to find the present worth of 500*l.* due 7 years hence, reckoning compound interest at 4 per cent. Opposite to 7 years, and under 4 per cent., we find ·75291,781*l.*, the present worth of 1*l.* due at the end of 7 years; and multiplying this sum by 500*l.*, the product, being 379·9589*l.*, or 379*l.* 19*s.* 2*d.*, is the answer required.

ANNUITIES.

1. *Annuities certain.* — When a sum of money is to be paid yearly for a certain number of years, it is called an annuity. The annuities usually met with are either for a given number of years, which are called *annuities certain*; or they are to be paid so long as one or more individuals shall live, and are thence called *contingent annuities.*

By the amount of an annuity at any given time, is meant the sum to which it will then amount, supposing it to have been regularly improved at compound interest during the intervening period.

The present value of an annuity for any given period, is the sum of the present values of all the payments of that annuity.

Numbers III. and IV. of the subjoined Tables represent the amount and present value of an annuity of 1*l.*, reckoning compound interest at 2½, 3, 3½, 4, 4½, 5, and 6 per cent., from 1 year to 70. They, as well as Nos. I. and II., are taken from "Tables of Interest, Discount, and Annuities, by John Smart, Gent. 4to. London, 1726." They are carried to 8 decimal places, and enjoy the highest character, both here and on the Continent, for accuracy and completeness. The original work is now become very scarce.

The uses of these Tables are numerous; and they are easily applied. Suppose, for example, it were required to tell the amount of an annuity of 50*l.* a year for 17 years at 4 per cent. compound interest.

Opposite to 17 (Table III.) in the column of years, and under 4 per cent., is 23·69751,239, being the amount of an annuity of 1*l.* for the given time at the given rate per cent.; and this multiplied by 50 gives 1184·8756195, or 1,184*l.* 17*s.* 6*d.*, the amount required.

Suppose now that it is required what sum one must pay down to receive an annuity of 50*l.* to continue for 17 years, compound interest at 4 per cent.?

Opposite to 17 years (Table IV.) and under 4 per cent. is 12·16566,886, the present value of an annuity of 1*l.* for the given time and at the given rate per cent.; and this multiplied by 50 gives 608·283443, or 608*l.* 5*s.* 8*d.*, the present value required.

When it is required to find the *time* which must elapse, in order that a given sum improved at a specified rate of compound interest may increase to some other given sum, divide the latter sum by the former, and look for the quotient, or the number nearest to it, in Table No. I. under the given rate per cent., and the years opposite to it are the answer.— Thus,

In what time will 523*l.* amount to 1,087*l.* 5*s.* 7*d.* at 5 per cent. compound interest?

Divide 1087·2794, &c., by 523, and the quotient will be 2·0789, &c., which under 5 per cent. in Table I. is opposite to 15 years, the time required.

If it had been required to find the time in which a given annuity, improved at a certain rate of compound interest, would have increased to some given sum, the question would have been answered by dividing, as above, the given sum by the annuity; and looking for the quotient (not in Table No. I., but) in Table No. III., under the given rate per cent., it would be found on a line with the time required. Thus,

A. owes 1,000*l.* and resolves to appropriate 10*l.* a year of his income to its discharge: in what time will the debt be extinguished, reckoning compound interest at 4 per cent.?

1,000 divided by 10 gives 100, the number in Table No. III. under 4 per cent., and nearest to this quotient is 99·8265, &c. opposite to 41 years, the required time. Had the rate of interest been 5 per cent., the debt would have been discharged in somewhat less than 37 years. This example is given by Dr. Price (*Annuities*, 6th ed. vol. ii. p. 289.); and on this principle the whole fabric of the sinking fund was constructed. Of the abstract truth of the principle there cannot, indeed, be a doubt. But every thing depends on the increasing sums annually produced being immediately invested on the same terms; and this, when the sum is large, and the period long, is altogether impracticable.

Let it next be required to find an annuity which, being increased at a given rate of compound interest during a given time, will amount to a specified sum: in this case we divide the specified sum by the amount of 1*l.* for the time and rate given, as found in Table III., and the quotient is the answer.—Thus,

What annuity will amount to 1,087*l.* 5*s.* 7*d.* in 15 years at 5 per cent. compound interest?

Opposite to 15 years in Table III., and under 5 per cent., is 21·5785, &c., the amount of 1*l.* for the given time and rate; and dividing 1087·2794, &c. by this sum, the quotient 50·387, &c., or 50*l.* 7*s.* 9*d.*, is the annuity required.

Deferred Annuities are those which do not commence till after a certain number of years; and *reversionary annuities*, such as depend upon the occurrence of some uncertain event, as the death of an individual, &c.

The present value of a deferred annuity is found by deducting, from the value of an annuity for the whole period, the value of an annuity to the term at which the reversionary annuity is to commence. — Thus,

What is the present value of an annuity of 50*l.* to continue for 25 years, commencing at 7 years from the present time, interest at 4 per cent.?

According to Table No. IV., the value of an annuity of 1*l.* for 25 years at 4 per cent. is 15·62207,995, and that of 1*l.* for 7 years is 6·00205,467, which being deducted from the other, leaves 9·62002,528, which multiplied by 50 gives 481*l.*, the answer required.

Supposing the annuity, instead of being for 25 years, had been a perpetuity, it would have been worth 1,250*l.*, from which deducting 300*l.* 2*s.*, the value of an annuity for 7 years at 4 per cent., there remains 949*l.* 18*s.*, the value of the reversion.

For a selection of problems that may be solved by Tables of annuities certain, see *Smart's Tables*, pp. 92—100.

2. *Life Annuities.* — After what has been stated in the article on Insurance (General Principles of), respecting Tables of mortality, it will be easy to see how the value of a life annuity is calculated. Supposing, — to revert to the example given before (p. 693.), — that it were required to find the present value of 1*l.*, the receipt of which is dependent on the contingency of a person, now 56 years of age, being alive 10 years hence, taking the Carlisle Table of mortality, and interest at 4 per cent.: Now, according to that Table, of 10,000 persons born together, 4,000 attain to 56, and 2,894 to 66 years of age. The probability that a person, now 56 years, will be alive 10 years hence, is, consequently, $\frac{2,894}{4,000}$; and the present value of 1*l.*, to be received certain 10 years hence being 0·675564*l.*, it follows, that if its receipt be made to depend on a life 56 years of age, attaining to 66, its value will be reduced by that contingency to $\frac{2,894 \times 0{\cdot}675564l.}{4,000} = 0{\cdot}48877l.$, or 9*s.* 9¼*d.* If, then, we had to find the present value of an annuity of 1*l.* secured on the life of a person now 56, we should calculate in this way the present value of each of the 48 payments, which, according to the Carlisle Table, he might receive, and their sum would, of course, be the present value of the annuity.

This statement is enough to show the principle on which all calculations of annuities depend; and this also was, in fact, the method according to which they were calculated, till Mr. Simpson and M. Euler invented a shorter and easier process, deriving from the value of an annuity at any age, that of an annuity at the next younger age. There is a considerable discrepancy in the sums at which different authors, and different insurance offices, estimate the present value of life annuities payable to persons of the same age. This does not arise from any difference in the mode of calculating the annuities, but from differences in the Tables of mortality employed. These can only be accurate when they are deduced from multiplied and careful observations made, during a long series of years, on a large body of persons; or when the average numbers of the whole population, and of the deaths at every age, for a lengthened period, have been determined with the necessary care. It is to be regretted, that governments, who alone have the means of ascertaining the rate of mortality by observations made on a sufficiently large scale, have been singularly inattentive to their duty in this respect. And until a very few years since, when Mr. Finlaison was employed to calculate Tables of the value of annuities from the ages of the nominees in public tontines, and of individuals on whose lives government had granted annuities, all that had been done in this country to lay a solid foundation on which to construct the vast fabric of life insurance had been the work of a few private persons, who had, of course, but a limited number of observations to work upon.

The celebrated mathematician, Dr. Halley, was the first who calculated a Table of mortality, which he deduced from observations made at Breslaw, in Silesia. In 1724, M. De Moivre published the first edition of his tract on *Annuities on Lives*. In order to facilitate the calculation of their values, M. De Moivre assumed the annual decrements of life to be equal; that is, he supposed that out of 86 (the utmost limit of life on his hypothesis) persons born together, one would die every year till the whole were extinct. This assumption agreed pretty well with the true values between 30 and 70 years of age, as given in Dr. Halley's Table; but was very remote from the truth in the earlier and later periods. Mr. Thomas Simpson, in his work on *Annuities and Reversions*, originally published in 1742, gave a Table of mortality deduced from the London bills, and Tables founded upon it of the values of annuities. But at the period when this Table was calculated, the mortality in London was so much higher than in the rest of the country, that the values of the annuities given in it were far too small for general use. In 1746, M. Deparcieux published, in his *Essai sur les Probabilités de la Durée de la Vie Humaine* — a work distinguished by its perspicuity and neatness — Tables of mortality deduced from observations made on the mortuary registers of several religious houses,

and on lists of the nominees in several tontines. In this work, separate Tables were first constructed for males and females, and the greater longevity of the latter rendered apparent. M. Deparcieux's Tables were a very great acquisition to the science; and are decidedly superior to some that are still extensively used. Dr. Price's famous work on *Annuities*, the first edition of which was published in 1770, contributed powerfully to direct the public attention to inquiries of this sort; and was, in this respect, of very great utility. Of the more recent works, the best are those of Mr. Baily and Mr. Milne, which, indeed, are both excellent. The latter, besides all that was previously known as to the history, theory, or practice of the science, contains much new and valuable matter; and to it we beg to refer such of our readers as wish to enter fully into the subject.

The Table on which Dr. Price laid the greatest stress, was calculated from the burial registers kept in the parish of All Saints in Northampton, containing little more than half the population of the town. There can be no doubt, however, as well from original defects in the construction of the Table, as from the improvement that has since taken place in the healthiness of the public, that the mortality represented in the Northampton Table is, and has long been, decidedly above the average rate of mortality in England. Mr. Morgan, indeed, the late learned actuary of the Equitable Society, contended that this is not the case, and that the Society's experience shows that the Northampton Table is still remarkably accurate. But the facts Mr. Morgan disclosed in his *View of the Rise and Progress of the Equitable Society* (p. 42.), published in 1828, are quite at variance with this opinion: for he there states, that the deaths of persons insured in the Equitable Society, from 50 to 60 years of age, during the 12 years previously to 1828, were 339; whereas, according to the Northampton Table, they should have been 545! And Mr. Milne has endeavoured to show (Art. *Annuities*, new ed. of *Ency. Brit.*) that the discrepancy is really much greater.

The only other Table used to any extent in England for the calculation of life annuities, is that framed by Mr. Milne from observations made by Dr. Heysham on the rate of mortality at Carlisle. It gives a decidedly lower rate of mortality than the Northampton Table; and there are good grounds for thinking that the mortality which it represents is not very different from the actual rate throughout most parts of England; though it cannot be supposed that a Table founded on so narrow a basis should give a perfectly fair view of the average mortality of the entire kingdom.

In life insurance, the first annual premium is always paid at the commencement of the assurance, and the others at the termination of each year so long as the party assured survives. Hence, at the beginning of the assurance, the whole of the annual premiums payable for it exceed the value of an equal annuity on the life by one year's purchase. And, therefore, when the value of an assurance in present money is given, to find the equivalent annual premium during the life, the whole present value must be divided by the number of years' purchase an annuity on the life is worth, increased by 1. Thus, for an assurance of 100*l.* on a life 40 years of age, an office, calculating by the Carlisle Table of mortality, and at 4 per cent. interest, requires 53·446*l.* in present money. Now, according to that Table and rate of interest, an annuity on a life just 40 years of age is worth 15·074 years' purchase, so that the equivalent annual premium is $\frac{53 \cdot 446l.}{15 \cdot 074 + 1} = 3 \cdot 325l.$, or 3*l.* 6*s.* 8*d.* The annual premium may, however, be derived directly from the value of an annuity on the life, without first calculating the total present value of the assurance. — (See Mr. Milne's *Treatise on Annuities*, or the art. *Annuities* in the new edition of the *Ency. Britannica.*)

In order to exhibit the foundations on which Tables of life annuities and insurance have been founded in this and other countries, we have given, in No. V. of the following Tables, the rate of mortality that has been observed to take place among 1,000 children born together, or the numbers alive at the end of each year, till the whole become extinct, in England, France, Sweden, &c., according to the most celebrated authorities.* The rate of mortality at Carlisle, represented in this Table, is less than that observed any where else: the rates which approach nearest to it are those deduced from the observations already referred to, of M. Deparcieux, and those of M. Kersseboom, on the nominees of life annuities in Holland.

In order to calculate from this Table the chance which a person of any given age has of attaining to any higher age, we have only to divide the number of persons alive at such higher age, given in that column of the Table selected to decide the question, by the number of persons alive at the given age, and the fraction resulting is the chance

* The greater part of this Table was originally published by Dr. Hutton in his *Mathematical Dictionary*, art. *Life Annuities*. Mr. Baily inserted it with additions in his work on *Annuities*; and it was published, with the column for Carlisle added, in the *Report of the Committee of the House of Commons on Friendly Societies.*

We have added, by way of supplement to this Table, Mr. Finlaison's Table (No. VI.) of the rate of mortality among 1,000 children born together, according to the decrement of life observed to take place among the nominees in government tontines and life annuities in this country, distinguishing males from females. The rate of mortality which this Table exhibits is decidedly less than that given in the Carlisle Table; but the lives in the latter are the average of the population, while those in the former are all picked. The nominees in tontines are uniformly chosen among the healthiest individuals; and none but those who consider their lives as good ever buy an annuity. Still, however, the Table is very curious; and it sets the superiority of female life in a very striking point of view.

Tables VII. and VIII. give the *expectation of life*, according to the mortality observed at Northampton and Carlisle; the former by Dr. Price, and the latter by Mr. Milne.

The next Table, No. IX., extracted from the *Second Report of the Committee of the House of Commons on Friendly Societies*, gives a comparative view of the results of some of the most celebrated Tables of mortality, in relation to the rate of mortality, the expectation of life, the value of an annuity, &c. The coincidence between the results deduced from M. Deparcieux's Table, and that for Carlisle, is very striking. And to render the information on these subjects laid before the reader as complete as the nature of this work will admit, we have given Tables (Nos. X.—XV.) of the value of an annuity of 1*l.* on a single life, at every age, and at 3, 4, 5, 6, 7, and 8 per cent., according to the Northampton and Carlisle Tables; we have also given Tables of the value of an annuity of 1*l.* on 2 equal lives, and on 2 lives differing by 5 years, at 3, 4, 5, and 6 per cent., according to the same Tables. It is but seldom, therefore, that our readers will require to resort to any other work for the means of solving the questions that usually occur in practice with regard to annuities; and there are not many works in which they will find so good a collection of Tables. — We subjoin one or two examples of the mode of using the Tables of life annuities.

Suppose it were required, what ought a person, aged 45, to give, to secure an annuity of 50*l.* a year for life, interest at 4 per cent., according to the Carlisle Table?

In Table No. XI., under 4 per cent., and opposite 45, is 14·104, the value of an annuity of 1*l.*, which being multiplied by 50, gives 705·2, or 705*l.* 4*s.*, the value required. According to the Northampton Table, the annuity would only have been worth 614*l.* 3*s.*

The value of an annuity on 2 lives of the same age, or on 2 lives differing by 5 years, may be found in precisely the same way.

Some questions in *reversionary* life annuities admit of an equally easy solution. Thus, suppose it is required to find the present value of A.'s interest in an estate worth 100*l.* a year, falling to him at the death of B., aged 40, interest 4 per cent., according to the Carlisle Table?

The value of the perpetuity of 100*l.* a year, interest 4 per cent., is 2,500*l.*; and the value of an annuity of 100*l.* on a person aged 40, interest at 4 per cent., is 1,507*l.* 8*s.*, which deducted from 2,500*l.* leaves 992*l.* 12*s.*, the present value required.

A person, aged 30, wishes to purchase an annuity of 50*l.* for his wife, aged 25, provided she survive him; what ought he to pay for it, interest at 4 per cent. according to the Carlisle Table?

The value of an annuity of 1*l.* on a life aged 30 is 16·852; from which subtracting the value of an annuity of 1*l.* on 2 joint lives of 25 and 30, 14·339, the difference, $2{\cdot}513 \times 50 = 125{\cdot}650$, or 125*l.* 13*s.*, the sum required.

For the solution of the more complex cases of survivorship, which do not often occur in practice, recourse may be had to the directions in Mr. Milne's *Treatise on Annuities*, and other works of that description. To attempt explaining them here would lead us into details quite inconsistent with the objects of this work.

Tables of Interest and Annuities.

I. Table showing the Amount of £1 improved at Compound Interest, at 2½, 3, 3½, 4, 4½, 5, and 6 per Cent., at the End of every Year, from 1 to 70.

Years.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	5 per Cent.	6 per Cent.
1	1·02500,000	1·03000,000	1·03500,000	1·04000,000	1·04500,000	1·05000,000	1·06000,000
2	1·05062,500	1·06090,000	1·07122,500	1·08160,000	1·09202,500	1·10250,000	1·12360,000
3	1·07689,062	1·09272,700	1·10871,787	1·12486,400	1·14116,612	1·15762,500	1·19101,600
4	1·10381,289	1·12550,881	1·14752,300	1·16985,856	1·19251,860	1·21550,625	1·26247,696
5	1·13140,821	1·15927,407	1·18768,631	1·21665,290	1·24618,194	1·27528,156	1·33822,558
6	1·15969,342	1·19405,230	1·22925,533	1·26531,902	1·30226,012	1·34009,564	1·41851,911
7	1·18868,575	1·22987,387	1·27227,926	1·31593,178	1·36086,183	1·40710,042	1·50363,026
8	1·21840,290	1·26677,008	1·31680,904	1·36856,905	1·42210,061	1·47745,544	1·59384,807
9	1·24886,297	1·30477,318	1·36289,735	1·42331,181	1·48609,514	1·55132,822	1·68947,896
10	1·28008,454	1·34391,638	1·41059,876	1·48024,428	1·55296,942	1·628·9,463	1·79084,770
11	1·31208,666	1·38423,387	1·45996,972	1·53945,406	1·62285,305	1·71033,936	1·89829,856
12	1.34488,882	1·42576,089	1·51106,866	1·60103,222	1·69588,143	1·79585,633	2·01219,647
13	1·37851,104	1·46853,371	1·56395,606	1·66507,351	1·77219,610	1·88564,914	2·13292,826
14	1·41297,382	1·51258,972	1·61869,452	1·73167,645	1·85194,492	1·97993,160	2·26090,396
15	1·44829,817	1·55796,742	1·67534,883	1·80094,351	1·93528,244	2·07892,818	2·39655,819
16	1·48450,562	1·60470,644	1·73398,604	1·87298,125	2·02237,015	2·18287,459	2·54035,168
17	1·52161,826	1·65284,763	1·79467,555	1 94790,050	2·11337,681	2·29201,832	2·69277,279
18	1·55965,872	1·70243,306	1·85748,920	2·02581,652	2·20847,877	2·40661,923	2·85433,915
19	1·59865,019	1·75350,605	1·92250,132	2·10684,918	2·30786,031	2·52695,020	3·02559,950
20	1·63861,644	1·80611,123	1·98978,856	2·19112,314	2·41171,402	2·65329,771	3·20713,547
21	1·67958,185	1·86029,457	2·05943,147	2·27876,807	2·52024,116	2·78596,259	3·39956,360
22	1·72157,140	1·91610,341	2·13151,158	2·36991,879	2·63365,201	2·92526,072	3·60353,742
23	1·76461,068	1·97358,651	2·20611,448	2·46471,555	2·75216,635	3·07152,376	3·81974,966
24	1·80872,595	2·03279,411	2·28332,849	2·56330,417	2·87601,383	3·22509,994	4·04893,464
25	1·85394,410	2·09377,793	2·36324,498	2·66583,633	3·00543,446	3·38635,494	4·29187,072
26	1·90029,270	2·15659,127	2·44595,856	2·77246,979	3·14067,901	3·55567,269	4·54938,296
27	1·94780,002	2·22128,901	2·53166,711	2·88336,858	3·28200,956	3·73345,632	4·82234,594
28	1·99649,502	2·28792,768	2·62017,696	2·99870,332	3·42969,999	3·92012,914	5·11168,670
29	2·04640,739	2·35656,551	2·71187,798	3·11865,145	3·58403,649	4·11613,560	5 41838,790
30	2·09756,758	2·42726,247	2·80679,370	3·24339,751	3·74531,813	4·32194,238	5·74349,117
31	2·15000,677	2·50000,035	2·90503,148	3·37313,341	3·91385,745	4·53803,949	6·08810,064
32	2·20375,694	2·57508,276	3·00670,759	3·50805,875	4·08998,104	4·76494,147	6·45338,668
33	2·25885,086	2·65233,524	3·11194,235	3·64838,110	4·27403,018	5·00318,854	6·84058,988
34	2·31532,213	2·73190,530	3·22086,033	3·79431,634	4·46636,154	5·25334,797	7·25102,528
35	2·37320,519	2·81386,245	3·33359,045	3·94608,899	4·66734,781	5·51601,537	7 68608,679
36	2·43253,532	2·89827,833	3·45026,611	4·10393,255	4·87737,846	5 79181,614	8·14725,200
37	2·49334,870	2·98522,668	3·57102,543	4·26808,986	5·09686,049	6·08140,694	8·63608,712
38	2·55568,242	3·07478,348	3·69601,132	4·43881,345	5·32621,921	6·38547,729	9·15425,235
39	2·61957,448	3·16702,698	3·82537,171	4·61636,599	5·56589,908	6·70475,115	9·70350,749
40	2·68506,384	3·26203,779	3·95925,972	4·80102,063	5·81636,454	7·03998,871	10·28571,794
41	2·75219,043	3·35989,893	4·09783,381	4·99306,145	6·07810,094	7·39198,815	10·90286,101
42	2·82099,520	3·46069,589	4·24125,799	5·19278,391	6·35161,548	7·76158,755	11·55703,267
43	2·89152,008	3·56451,677	4·38970,202	5·40049,527	6·63743,818	8·14966,693	12·25045,463
44	2·96382,808	3·67145,227	4·54334,160	5·61651,508	6·93612,290	8·15715,028	12·98548,191
45	3·03790,328	3·78159,584	4·70235,855	5·84117,568	7·24824,843	8·98500,779	13·76461,083
46	3·11385,086	3·89504,372	4·86694,110	6·07482,271	7·57441,961	9·43425,818	14·59048,748
47	3·19169,713	4·01189,503	5·03728,404	6·31781,562	7·91526,849	9·90597,109	15·46591,673
48	3·27148,956	4·13225,188	5·21358,898	6·57052,824	8·27145,557	10·40126,965	16·39387,173
49	3·35327,680	4·25621,944	5·39606,459	6·83334,937	8·64367,107	10·92133,313	17·37750,403
50	3·43710,872	4·38390,602	5·58492,686	7·10668,335	9·03263,627	10·46739,978	18·42015,427
51	3·52303,644	4·51542,320	5·78039,930	7·39095,068	9·43910,490	12·04076,977	19·52536,353
52	3·61111,235	4·65088,590	5·98271,327	7·68658,871	9·86386,463	12·64280,826	20·69688,534
53	3·70139,016	4·79041,247	6·19210,824	7·99405,226	10·30773,853	13·27494,868	21·93869,846
54	3·79392,491	4·93412,485	6·40883,202	8·31381,435	10·77158,677	13·93869,611	23·25502,037
55	3·88877,303	5·08214,859	6·63314,114	8·64636,692	11·25680,817	14·63563,092	24·65032,159
56	3·98599,236	5·23461,305	6·86530,108	8·99222,160	11·76284,204	15·36741,246	26·12934,089
57	4·08564,217	5·39165,144	7·10558,662	9·35191,046	12·29216,993	16·13578,308	27·69710,134
58	4·18778,322	5·55340,098	7·35428,215	9·72598,688	12·84531,758	16·94257,224	29·35892,742
59	4·29247,780	5·72000,301	7·61168,203	10·11502,636	13·42335,687	17·78970,085	31·12046,307
60	4·39978,975	5·89160,310	7·87809,090	10·51962,741	14·02740,793	18·67918,589	32·98769,085
61	4·50978,419	6·06835,120	8·15382,408	10·94041,251	14·65864,129	19·61314,519	34·96695,230
62	4·62252,910	6·25040,173	8·43920,793	11·37802,901	15·31828,014	20·59380,245	37·06496,944
63	4·73809,233	6·43791,379	8·73458,020	11·83315,017	16·00760,275	21·62349,257	39·28886,761
64	4·85654,464	6·63105,120	9·04029,051	12·30647,617	16·72794,487	22·70466,720	41·64619,967
65	4·97795,826	6·82998,273	9·35670,068	12·79873,522	17 48070,239	23·83990,056	44·14497,165
66	5·10240,721	7·03488,222	9·68418,520	13·31068,463	18·26733,400	25·03189,559	46·79366,994
67	5·22996,739	7·24592,868	10·02313,168	13·84311,201	19·08936,403	26·28349,036	49·60129,014
68	5·36071,658	7·46330,654	10·37394,129	14·39683,649	19·94838,541	27·59766,488	52·57736,755
69	5·49473,449	7·68720,574	10·73702,924	14·97270,995	20·84606,276	28·97754,813	55·73200,960
70	5·63210,286	7·91782,191	11·11282,526	15·57161,835	21·78413,558	30·42642,553	59·07593,018

II. Table showing the PRESENT VALUE of £1 receivable at the End of any given Year, from 1 to 70 reckoning Compound interest at 2½, 3, 3½, 4, 4½, 5, and 6 per Cent.

Years.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	5 per Cent.	6 per Cent.
1	0·97560,976	0·97087,379	0·96618,357	0·96153,846	0·95693,780	0·95238,095	0·94339,623
2	·95181,440	·94259,591	·93351,070	·92455,621	·91572,995	·90702,948	·88999,644
3	·92859,941	·91514,166	·90194,270	·88899,636	·87629,660	·86383,760	·83961,928
4	·90595,064	·88848,705	·87144,223	·85480,419	·83856,134	·82270,247	·79209,366
5	·88385,429	·86260,878	·84197,317	·82192,711	·80245,105	·78352,616	·74725,817
6	·86229,687	·83748,426	·81350,064	·79031,453	·76789,574	·74621,540	·70496,054
7	·84126,524	·81309,151	·78599,096	·75991,781	·73482,846	·71068,133	·66505,711
8	·82074,657	·78940,923	·75941,156	·73069,020	·70318,513	·67683,936	·62741,237
9	·80072,836	·76641,673	·73373,097	·70258,674	·67290,443	·64460,892	·59189,846
10	·78119,840	·74409,391	·70891,881	·67556,417	·64392,768	·61391,325	·55839,478
11	·76214,478	·72242,126	·68494,571	·64958,093	·61619,874	·58467,929	·52678,753
12	·74355,589	·701,37988	·66178,330	·62459,705	·58966,386	·55683,742	·49696,936
13	·72542,038	68095,134	·63940,415	·60057,409	·56427,164	·53032,135	·46883,902
14	·70772,720	·66111,781	·61778,179	·57747,508	·53997,286	·50506,795	·44230,096
15	·69046,556	·64186,195	·59689,062	·55526,450	·51672,044	·48101,710	·41726,506
16	·67362,493	·62316,694	·57670,591	·53390,818	·49446,932	·45811,152	·39364,628
17	·65719,506	·60501,645	·55720,378	·51337,325	·47317,639	·43629,669	·37136,442
18	·64116,594	·58739,461	·53836,114	·49362,812	·45280,037	·41552,065	·35034,379
19	·62552,772	·57028,603	·52015,569	·47464,242	·43330,179	·39573,396	·33051,301
20	·61027,094	·55367,575	·50256,588	·45638,695	·41464,286	·37688,948	·31180,473
21	·59538,629	·53754,928	·48557,090	·43883,360	·39678,743	·35894,236	·29415,540
22	·58086,467	·52189,250	·46915,063	·42195,539	·37970,089	·34184,987	·27750,510
23	·56669,724	·50669,175	·45328,563	·40572,633	·36335,013	·32557,131	·26179,726
24	·55287,535	·49193,374	·43795,713	·39012,147	·34770,347	·31006,791	·24697,855
25	·53939,059	·47760,556	·42314,699	·37511,680	·33273,000	·29530,277	·23299,863
26	·52623,472	·46369,473	·40883,767	·36068,923	·31840,248	·28124,073	·21981,003
27	·51339,973	·45018,906	·39501,224	·34681,657	·30469,137	·26784,832	·20736,795
28	·50087,778	·43707,675	·38165,434	·33347,747	·29157,069	·25509,364	·19563,014
29	·48866,125	·42434,636	·36874,815	·32065,141	·27901,502	·24294,632	·18455,674
30	·47674,269	·41198,676	·35627,841	·30831,867	·26700,001	·23137,745	·17411,013
31	·46511,481	·39998,714	·34423,035	·29646,026	·25550,241	·22035,947	·16425,484
32	·45377,055	·38833,703	·33258,971	·28505,794	·24449,991	·20986,617	·15495,740
33	·44270,298	·37702,625	·32134,271	·27409,417	·23397,121	·19987,254	·14618,622
34	·43190,534	·36604,490	·31047,605	·26355,209	·22389,589	·19035,480	·13791,153
35	·42137,107	·35538,340	·29997,686	·25341,547	·21425,444	·18129,029	·13010,522
36	·41109,372	·34503,243	·28983,272	·24366,872	·20502,817	·17265,741	·12274,077
37	·40106,705	·33498,294	·28003,161	·23429,685	·19619,921	·16443,563	·11579,318
38	·39128,492	·32522,615	·27056,194	·22528,543	·18775,044	·15660,536	·10923,885
39	·38174,139	·31575,355	·26141,250	·21662,061	·17966,549	·14914,797	·10305,552
40	·37243,062	·30655,684	·25257,247	·20828,904	·17192,870	·14204,569	·09722,219
41	·36334,695	·29762,800	·24403,137	·20027,792	·16452,507	·13528,160	·09171,905
42	·35448,483	·28895,922	·23577,910	·19257,493	·15744,026	·12883,962	·08652,740
43	·34583,886	·28054,294	·22780,590	·18516,820	·15066,054	·12270,440	·08162,962
44	·33740,376	·27237,178	·22010,231	·17804,635	·14417,276	·11686,133	·07700,908
45	·32917,440	·26443,862	·21265,924	·17119,841	·13796,437	·11129,651	·07265,007
46	·32114,576	·25673,652	·20546,787	·16461,386	·13202,332	·10599,668	·06853,781
47	·31331,294	·24925,877	·19851,968	·15828,256	·12633,810	·10094,921	·06465,831
48	·30567,116	·24199,880	·19180,645	·15219,476	·12089,771	·09614,211	·06099,840
49	·29821,576	·23495,029	·18532,024	·14634,112	·11569,158	·09156,391	·05754,566
50	·29094,221	·22810,708	·17905,337	·14071,262	·11070,965	·08720,373	·05428,836
51	·28384,606	·22146,318	·17299,843	·13530,059	·10594,225	·08305,117	·05121,544
52	·27692,298	·21501,280	·16714,824	·13009,672	·10138,014	·07909,635	·04831,645
53	·27016,876	·20875,029	·16149,589	·12509,300	·09701,449	·07532,986	·04558,156
54	·26357,928	·20267,019	·15603,467	·12028,173	·09283,683	·07174,272	·04300,147
55	·25715,052	·19676,717	·15075,814	·11565,551	·08883,907	·06832,640	·04056,742
56	·25087,855	·19103,609	·14566,004	·11120,722	·08501,347	·06507,276	·03827,115
57	·24475,957	·18547,193	·14073,433	·10693,002	·08135,260	·06197,406	·03610,486
58	·23878,982	·18006,984	·13597,520	·10281,733	·07784,938	·05902,291	·03406,119
59	·23296,568	·17482,508	·13137,701	·09886,282	·07449,701	·05621,230	·03213,320
60	·22728,359	·16973,309	·12693,431	·09506,040	·07128,901	·05353,552	·03031,434
61	·22174,009	·16478,941	·12264,184	·09140,423	·06821,915	·05098,621	·02859,843
62	·21633,179	·15998,972	·11849,453	·08788,868	·06528,148	·04855,830	·02697,965
63	·21105,541	·15532,982	·11448,747	·08450,835	·06247,032	·04624,600	·02545,250
64	·20590,771	·15080,565	·11061,591	·08125,803	·05978,021	·04404,381	·02401,179
65	·20088,557	·14641,325	·10687,528	·07813,272	·05720,594	·04194,648	·02265,264
66	·19598,593	·14214,879	·10326,114	·07512,760	·05474,253	·03994,903	·02137,041
67	·19120,578	·13800,853	·09976,922	·07223,809	·05238,519	·03804,670	·02016,077
68	·18654,223	·13398,887	·09639,538	·06945,970	·05012,937	·03623,495	·01901,959
69	·18199,242	·13008,628	·09313,563	·06678,818	·04797,069	·03450,948	·01794,301
70	·17755,358	·12629,736	·08998,612	·06421,940	·04590,497	·03286,617	·01692,737

III. Table showing the AMOUNT OF AN ANNUITY of £1 per Annum, improved at Compound Interest, at 2½, 3, 3½, 4, 4½, 5, and 6 per Cent., at the end of each Year, from 1 to 70.

Years.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	5 per Cent.	6 per Cent.
1	1·00000,000	1·00000,000	1·00000,000	1·00000,000	1·00000,000	1·00000,000	1 00000,000
2	2·02500,000	2·03000,000	2·03500,000	1·04000,000	2·04500,000	2·05000,000	2·06000,000
3	3·07562,500	3·09090,000	3·10622,500	3·12160,000	3·13702,500	3·15250,000	3·18360,000
4	4·15251,562	4·18362,700	4·21494,287	4·24646,400	4·27819,112	4·31012,500	4·37461,600
5	5·25632,852	5·30913,581	5·36246,588	5·41632,256	5·47070,973	5·52563,125	5·63709,296
6	6·38773,673	6·46840,988	6·55015,218	6·63297,546	6·71689,166	6·80191,281	6·97531,854
7	7·54743,015	7·66246,218	7·77940,751	7·89829,448	8·01915,179	8·14200,845	8·39383,765
8	8·73611,590	8·89233,605	9·05168,677	9·21422,626	9·38001,362	9·54910,888	9·89746,791
9	9·95451,880	10·15910,613	10·36849,581	10·58279,531	10·80211 423	11·02656,432	11·49131,598
10	11·20338,177	11·46387,931	11·73139,316	12·00610,712	12·28820,937	12·57789,254	13·18079,494
11	12·48346,631	12·80779,569	13·14199,192	13·48635,141	13·84117,879	14·20678,716	14·97164,264
12	13·79555,297	14·19202,956	14·60196,164	15·02580,546	15·46403,184	15·91712,652	16·86994,120
13	15·14044,179	15·61779,045	16·11303,030	16·62683,768	17·15991,327	17·71298,285	18·88213,767
14	16·51895,284	17·08632,416	17·67698,636	18·29191,119	18·93210,937	19·59863,199	21·01506,593
15	17·93192,666	18·59891,389	19·29568,088	20·02358,764	20·78405,429	21·57856,359	23·27596,988
16	19·38022,483	20·15688,130	20·97102,971	21·82453,114	22·71933,673	23·65749,177	25·67252,808
17	20·86473,045	21·76158,774	22·70501,575	23·69751,239	24·74170,689	25·84036,636	28·21287,976
18	22·38634,871	23·41443,577	24·49969,130	25·64541,288	26·85508,370	28·13238,467	30·90565,255
19	23·94600,743	25·11686,844	26·35718,050	27·67122,940	29·06356,246	30·53900,391	33·75999,170
20	25·54465,761	26·87037,449	28·27968,181	29·77807,858	31·37142,277	33·06595,410	36·78559,120
21	27·18327,405	28·67648,572	30·26947,068	31·96920,172	33·78313,680	35·71925,181	39·99272,668
22	28·86285,590	30·53678,030	32·32890,215	34·24796,979	36·30337,795	38·50521,440	43·39229,028
23	30·58442,730	32·45288,370	34·46041,373	36·61788,858	38·93702,996	41·43047,512	46·99582,769
24	32·34903,798	34·42647,022	36·66652,821	39·08260,413	41·68919,631	44·50199,887	50·81557,735
25	34·15776,393	36·45926,432	38·94985,669	41·64590,830	44·56521,014	47·72709,882	54·86451,200
26	36·01170,803	38·55304,225	41·31310,168	44·31174,463	47·57064,460	51·11345,376	59·15638,272
27	37·91200,073	40·70963,352	43·75906,024	47·08421,441	50·71132,361	54·66912,645	63·70576,568
28	39·85980,075	42·93092,252	46·29062,734	49·96758,299	53·99333,317	58·40258,277	68·52811,162
29	41·85629,577	45·21885,020	48·91079,930	52·96628,631	57·42303,316	62·32271,191	73·63979,832
30	43·90270,316	47·57541,571	51·62267,728	56·08493,776	61·00706,966	66·43884,750	79·05818,622
31	46·00027,074	50·00267,818	54·42947,098	59·32833,527	64·75238,779	70·76078,988	84·80167,739
32	48·15027,751	52·50275,852	57·33450,247	62·70146,868	68·66624,524	75·29882,936	90·88977,803
33	50·35403,445	55·07784,128	60·34121,005	66·20952,743	72·75622,628	80·06377,083	97·34316,471
34	52·61288,531	57·73017,652	63·45315,240	69·85790,853	77·03025,646	85·06695,937	104·18375,460
35	54·92820,744	60·46208,181	66·67401,274	73·65222,487	81·49661,800	90·32030,734	111·43477,987
36	57·30141,263	63·27594,427	70·00760,318	77·59831,387	86·16396,581	95·83632,271	119·12086,666
37	59·73394,794	66·17422,259	73·45786,930	81·70224,642	91·04134,427	101·62813,884	127·26811,866
38	62·22729,664	69·15944,927	77·02889,472	85·97033,628	96·13820,476	107·70954,579	135·90420,578
39	64·78297,906	72·23423,275	80·72490,604	90·40914,973	101·46442,398	114·09502,308	145·05845,813
40	67·40255,354	75·40125,973	84·55027,775	95·02551,572	107·03032,306	120·79977,423	154·76196,562
41	70·08761,737	78·66329,753	88·50953,747	99·82653,635	112·84668,759	127·83976,294	165·04768,356
42	72·83980,781	82·02319,645	92·60737,128	104·81959,780	118·92478,854	135·23175,109	175·95054,457
43	75·66080,300	85·48389,234	96·84862,928	110·01238,171	125·27640,402	142·99333,864	187·50757,724
44	78·55232,308	89·04840,911	101·23833,130	115·41287,698	131·91384,220	151·14300,558	199·75803,188
45	81·51613,116	92·71986,139	105·78167,290	121·02939,206	138·84996,510	159·70015,586	212·74351,379
46	84·55403,443	96·50145,723	110·48403,145	126·87056,774	146·09821,353	168·68516,365	226·50812,462
47	87·66788,529	100·39650,095	115·35097,255	132·94539,045	153·67263,314	178·11942,183	241·09861,209
48	90·85958,243	104·40839,598	120·38825,659	139·26320,607	161·58790,163	188·02539,292	256·56452,882
49	94·13107,199	108·54064,785	125·60184,557	145·83373,431	169·85935,720	198·42666,257	272·95840,055
50	97·48434,879	112·79686,729	130·99791,016	152·66708,368	178·50302,828	209·34799,570	290·33590,458
51	100·92145,751	117·18077,331	136·58283,702	159·77376,703	187·53566,455	220·81539,548	308·75605,886
52	104 44449,395	121·69619,651	142·36323,631	167·16471,771	196·97476,946	232·85616,526	328·28142,239
53	108·05560,629	126·34708,240	148·34594,958	174·85130,642	206·83863,408	245·49897,352	348,97830,773
54	111·75699,645	131·13749,488	154·53805,782	182·84535,868	217·14637,261	258·77392,220	370·91700,620
55	115·55092,136	136·07161,972	160·94688,984	191·15917,302	227·91795,938	272·71261,831	394·17202,657
56	119·43969,440	141·15376,831	167·58003,099	199·80553,994	239·17426,755	287·34824,922	418·82234,816
57	123·42568,676	146·38838,136	174·44533,207	208·79776,154	250·93710,959	302·71566,168	444·95168,905
58	127·51132,893	151·78003,280	181·55091,869	218·14967,200	263·22927,953	318·85144,477	472·64879,039
59	131·69911,215	157·33343,379	188·90520,085	227·87565,888	276·07459,710	335·79401,700	502·00771,782
60	135·99158,995	163·05343,680	196·51688,288	237·99068,524	289·49795,397	353·58371,785	533·12818,089
61	140·39137,970	168·94503,991	204·39497,378	248·51031,265	303·52536,190	372·26290,375	566·11587,174
62	144·90116,419	175·01339,110	212·54879,786	259·45072,516	318·18400,319	391·87604,893	601·08282,404
63	149·52369,330	181·26379,284	220·98800,579	270·82875,416	333·50228,333	412·46985,138	638·14779,349
64	154·26178,563	187·70170,662	229·72258,599	282·66190,433	349·50988,608	434·09334,395	677·43666,110
65	159·11833,027	194·33275,782	238·76287,650	294·96838,050	366·23783,096	456·79801,115	719·08286,076
66	164·09628,853	201·16274,055	248·11957,718	307·76711,572	383·71853,335	480·63791,170	763·22783,241
67	169·19869,574	208·19762,277	257·80376,238	321·07780,035	401·98586,735	505·66980,729	810·02150,235
68	174·42866,313	215·44355,145	267·82689,406	334·92091,236	421·07523,138	531·95329,765	859·62279,249
69	179·78937,971	222·90685,800	278·20083,535	349·31774,886	441·02361,679	559·55096,254	912·20016,004
70	185·28411,421	230·59406,374	288·93786,459	364·29045,881	461·86967,955	588·52851,066	967·93216,964

IV. Table showing the PRESENT VALUE OF AN ANNUITY of £1 per Annum, to continue for any given Number of Years, from 1 to 70, reckoning Compound Interest at 2½, 3, 3½, 4, 4½, 5, and 6 per Cent.

Years.	2½ per Cent.	3 per Cent.	3½ per Cent.	4 per Cent.	4½ per Cent.	5 per Cent.	6 per Cent.
1	0·97560,976	0·97087,379	0·96618,357	0·96153,846	0 95693,780	0·95238,095	0·94339,623
2	1·92742,415	1·91346,969	1·89969,427	1·88609,467	1·87266,775	1·85941,043	1·83339,267
3	2·85602,356	2·82861,135	2·80163,698	2·77509,103	2·74896,435	2·72324,803	2·67301,195
4	3·76197,421	3·71709,840	3·67307,921	3·62989,522	3·58752,570	3·54595,050	3·46510,561
5	4·64582,849	4·57970,719	4·51505,237	4·45182,233	4·38997,674	4·32947,667	4·21236,378
6	5·50812,536	5·41719,144	5·32855,302	5·24213,686	5·15787,248	5·07569,207	4·91732,432
7	6·34939,060	6·23028,295	6·11454,398	6·00205,467	5·89270,094	5·78637,340	5·58238,144
8	7·17013,717	7·01969,219	6·87395,553	6·73274,488	6·59588,607	6·46321,276	6·20979,381
9	7·97086,553	7·78610,892	7·60768,651	7·43533,161	7·26879,049	7·10782,167	6·80169,227
10	8·75206,393	8·53020,284	8·31660,532	8·11089,578	7·91271,818	7·72173,493	7·36008,705
11	9·51420,871	9·25262,410	9·00155,103	8·76047,671	8·52891,692	8·30641,422	7·88687,457
12	10·25776,460	9·95400,398	9·66333,433	9·38507,376	9·11858,078	8·86325,164	8·38384,393
13	10·98318,497	10·63495,532	10·30273,848	9·98564,785	9·68285,242	9·39357,299	8·85268,295
14	11·69091,217	11·29607,312	10·92052,027	10·56312,293	10·22282,528	9·89864,094	9·29498,392
15	12·38137,773	11·93793,507	10·51741,089	11·11838,744	10·73954,573	10·37965,804	9·71224,898
16	13·05500,266	12·56110,201	12·09411,681	11·65229,561	11·23401,505	10·83776,956	10·10589,526
17	13·71219,772	13·16611,845	12·65132,058	12·16566,886	11·70719,143	11·27406,625	10·47725,968
18	14·35336,363	13·75351,306	13·18968,172	12·65929,698	12·15999,180	11·68958,690	10·82760,347
19	14·97889,134	14·32379,909	13·70983,741	13·13393,940	12·59329,359	12·08532,086	11·15811,648
20	15·58916,228	14·87747,484	14·21240,330	13·59032,635	13·00793,645	12·46221,034	11·46992,121
21	16·18454,857	15·41502,412	14·69797,420	14·02915,995	13·40472,388	12·82115,271	11·76407,661
22	16·76543,824	15·93691,662	15·16712,483	14·45111,534	13·78442,476	13·16300,258	12·04158,171
23	17·33211,048	16·44360,837	15·62041,047	14·85684,167	14·14777,489	13·48857,388	12·30337,897
24	17·88498,583	16·93554,210	16·05836,760	15·24696,314	14·49547,837	13·79864,179	12·55035,752
25	18·42437,642	17·41314,766	16·48151,459	15·62207,995	14·82820,896	14·09394,457	12·78335,615
26	18·95061,114	17·87684,239	16·89035,226	15·98276,918	15·14661,145	14·37518,530	13·00316,618
27	19·46401,087	18·32703,145	17·28536,450	16·32958,575	15·45130,282	14·64303,362	13·21053,413
28	19·96488,865	18·76410,820	17·66701,884	16·66306,322	15·74287,351	14·89812,726	13·40616,428
29	20·45354,991	19·18845,456	18·03576,700	16·98371,464	16·02188,853	15·14107,358	13·59072,101
30	20·93029,259	19·60044,132	18·39204,541	17·29203,330	16·28888,854	15·37245,103	13·76483,115
31	21·39540,741	20·00042,847	18·73627,576	17·58849,356	16·54439,095	15·59281,050	13·92908,599
32	21·84917,796	20·38876,550	19·06886,547	17·87355,150	16·78889,086	15·80267,667	14·08404,338
33	22·29188,093	20·76579,175	19·39020,818	18·14764,567	17·02286,207	16·00254,921	14·23022,961
34	22·72378,628	21·13183,665	19·70068,423	18·41119,776	17·24675,796	16·19290,401	14·36814,114
35	23·14515,734	21·48722,004	20·00066,109	18·66461,323	17·46101,240	16·37419,429	14·49824,636
36	23·55625,107	21·83225,247	20·29049,381	18·90828,199	17·66604,058	16·54685,171	14·62098,713
37	23·95731,811	22·16723,541	20·57052,542	19·14257,880	17·86223,979	16·71128,734	14·73678,031
38	24·34860,304	22·49246,156	20·84108,736	19·36786,424	18·04999,023	16·86789,271	14·84601,916
39	24·73034,443	22·80821,510	21·10249,987	19·58448,484	18·22965,572	17·01704,067	14·94907,468
40	25·19277,505	23·11477,195	21·35507,234	19·79277,389	18·40158,442	17·15908,636	15·04629,687
41	25·46612,200	23·41239,995	21·59910,371	19·99305,181	18·56610,949	17·29436,796	15·13801,591
42	25·82060,683	23·70135,917	21·83488,281	20·18562,674	18·72354,976	17·42320,758	15·22454,331
43	26·16644,569	23·98190,211	22·06268,870	20·37079,494	18·87421,029	17·54591,198	15·30617,294
44	26·50384,945	24·25427,389	22·28279,102	20·54884,129	19·01838,306	17·66277,331	15·38318,202
45	26·83302,386	24·51871,251	22·49545,026	20·72003,970	19·15634,742	17·77406,982	15·45583,209
46	27·15416,962	24·77544,904	22·70091,812	20·88465,356	19·28837,074	17·88006,650	15·52436,990
47	27·46748,255	25·02470,780	22·89943,780	21·04293,612	19·41470,884	17·98101,571	15·58902,821
48	27·77315,371	25·26670,660	23·09124,425	21·19513,088	19·53560,655	18·07715,782	15·65002,661
49	28·07136,947	25·50165,689	23·27656,449	21·34147,200	19·65129,813	18·16872,173	15·70757,227
50	28·36231,168	25·72976,397	23·45561,787	21·48218,462	19·76200,778	18·25592,546	15·76186,063
51	28·64615,774	25·95122,716	23·62861,630	21·61748,521	19·86795,003	18·33897,663	15·81307,607
52	28·92308,072	26·16623,996	23·79576,454	21·74758,193	19·96933,017	18·41807,298	15·86139,252
53	29·19324,948	26·37499,025	23·95726,043	21·87267,493	20·06634,466	18·49340,284	15·90697,407
54	29·45682,877	26·57766,043	24·11329,510	21·99295,667	20·15918,149	18·56514,556	15·94997,554
55	29·71397,928	26·77442,761	24·26405,323	22·10861,218	20·24802,057	18·63347,196	15·99054,296
56	29·96485,784	26·96540,370	24·40971,327	22·21981,940	20·33303,404	18·69854,473	16·02881,412
57	30·20961,740	27·15098,563	24·55044,760	22·32674,943	20·41438,664	18·76051,879	16·06491,898
58	30·44840,722	27·33100,546	24·68642,281	22·42956,676	20·49223,602	18·81954,170	16·09898,017
59	30·68137,290	27·50583,055	24·81779,981	22·52842,957	20·56673,303	18·87575,400	16·13111,336
60	30·90865,649	27·67556,364	24·94473,412	22·62348,997	20·63802,204	18·92928,953	16·16142,770
61	31·13039,657	27·84035,304	25·06737,596	22·71489,421	20·70624,119	18·98027,574	16·19002,613
62	31·34672,836	28·00034,276	25·18587,049	22·80278,289	20·77152,267	19·02886,404	16·21700,579
63	31·55778,377	28·15567,258	25·30035,796	22·88729,124	20·83399,298	19·07508,003	16·24245,829
64	31·76369,148	28·30647,823	25·41097,388	22·96854,927	20·89377,319	19·11912,384	16·26647,008
65	31·96457,706	28·45289,149	25·51784,916	23·04668,199	20·95097,913	19·16107,033	16·28912,272
66	32·16056,298	28·59504,028	25·62111,030	23·12180,959	21·00572,165	19·20101,936	16·31049,313
67	32·35176,876	28·73304,881	25·72087,951	23·19404,768	21·05810,685	19·23906,606	16·33065,390
68	32·53831,099	28·86703,768	25·81727,489	23·26350,739	21·10823,622	19·27530,101	16·34967,349
69	32·72030,341	28·99712,396	25·91041,053	23·33029,556	21·15620,691	19·30981,048	16·36761,650
70	32·89785,698	29·12342,132	26·00039,664	23·39451,497	21·20211,187	19·34267,665	16·38454,387

V. Table of MORTALITY; showing the Number of Persons alive at the End of every Year, from 1 to 100 Years of Age, out of 1,000 born together, in the different Places, and according to the Authorities undermentioned.

Ages.	England.			France.			Sweden.	Vienna.	Berlin.	Switzerland.	Silesia.	Holland.
	Simpson. London.	*Price.* Northampton.	*Heysham.* Carlisle.	*Deparcieux.* Annuitants, &c.	*Buffon.* Part Population.	*Duvillard.* Whole Population.	*Wargentin.* Whole Population.	*Susmilch.*	*Susmilch.*	*Muret.* Pays de Vaud.	*Halley.* Breslaw.	*Kersseboom.* Life Annuitants.
1	680	743	846	745	731	768	780	542	633	811	769	804
2	548	625	778	709	632	672	730	471	528	765	638	768
3	492	582	725	682	591	625	695	430	485	735	614	736
4	452	553	700	662	557	599	671	400	434	715	585	709
5	426	536	680	647	540	583	656	377	403	701	563	689
6	410	521	668	634	523	573	644	357	387	688	546	676
7	397	509	659	624	511	566	634	344	376	677	532	664
8	388	499	654	615	501	560	625	337	367	667	523	652
9	380	492	649	607	494	556	618	331	361	659	515	646
10	373	487	646	600	489	551	611	327	356	653	508	639
11	367	483	643	595	486	547	606	322	353	648	502	633
12	361	478	640	590	482	543	602	318	350	643	497	627
13	356	474	637	585	479	538	597	314	347	639	492	621
14	351	470	634	581	476	534	594	310	344	635	488	616
15	347	465	630	578	472	529	590	306	341	631	483	611
16	343	461	626	574	468	524	586	302	338	626	479	606
17	338	457	622	570	464	519	582	299	335	622	474	601
18	334	452	618	565	459	514	578	295	332	618	470	596
19	329	446	613	561	455	508	574	291	328	614	465	590
20	325	441	609	556	449	502	570	288	324	610	461	584
21	321	434	605	551	445	496	565	284	320	606	456	577
22	316	428	601	545	438	490	560	280	315	602	451	571
23	310	421	596	540	432	484	555	276	310	597	446	566
24	305	415	592	534	430	478	551	273	305	592	441	559
25	299	409	588	529	419	471	546	269	297	587	436	551
26	294	402	584	523	414	465	541	265	293	582	431	543
27	288	396	579	517	408	458	535	261	287	577	426	535
28	283	389	575	512	402	452	530	256	281	572	421	526
29	278	383	570	506	398	445	525	251	275	567	415	517
30	272	376	564	500	388	438	519	247	269	563	409	508
31	266	370	559	495	384	432	513	243	264	558	403	499
32	260	364	553	490	377	425	507	239	259	553	397	490
33	254	357	547	484	371	418	501	235	254	548	391	482
34	248	351	542	479	366	411	495	231	249	544	384	474
35	242	344	536	474	355	404	488	226	243	539	377	467
36	236	338	531	460	339	397	482	221	237	533	370	460
37	230	331	525	464	341	390	477	216	230	527	363	453
38	224	325	519	459	334	383	471	211	223	520	356	446
39	218	318	514	454	330	376	465	205	216	513	349	439
40	212	312	508	449	314	369	459	199	209	506	342	432
41	207	305	501	444	310	362	453	194	203	500	335	425
42	201	299	499	439	302	355	445	189	197	494	328	419
43	194	292	487	434	297	348	437	185	192	488	321	413
44	187	285	480	429	292	341	430	181	187	482	314	407
45	180	279	473	424	279	334	422	176	182	476	307	400
46	174	272	466	419	273	327	414	171	177	469	299	393
47	167	265	459	413	269	320	407	165	172	461	291	386
48	159	259	452	408	262	312	400	159	167	451	283	378
49	153	252	456	402	258	305	392	153	162	441	275	370
50	147	245	440	396	242	297	385	147	157	431	267	362
51	141	238	434	390	239	289	376	142	152	422	259	354
52	135	231	428	384	233	282	367	137	147	414	250	345
53	130	224	421	378	229	274	358	133	142	406	241	336
54	125	217	414	371	224	265	349	128	137	397	232	327
55	120	210	407	363	212	258	340	123	132	388	224	318
56	116	203	400	355	207	249	331	117	127	377	216	309
57	111	196	392	346	202	240	322	111	121	364	209	300
58	106	189	384	338	194	232	312	106	115	348	201	291
59	101	182	375	329	190	223	303	101	109	331	193	282
60	96	175	364	319	168	214	293	96	103	314	186	273
61	92	168	352	309	165	204	282	91	97	299	178	264
62	87	161	340	299	157	195	271	87	92	286	170	255
63	83	154	327	288	150	186	259	82	88	274	163	245
64	78	147	314	278	144	176	247	77	84	262	155	235
65	74	140	302	267	135	166	285	72	80	250	147	225
66	70	133	289	256	126	157	224	67	75	236	140	215
67	65	126	277	245	117	147	212	62	70	220	132	205
68	61	119	265	234	106	137	200	57	65	202	124	195
69	56	113	251	222	96	129	187	52	60	184	117	185
70	52	106	240	211	90	118	175	48	55	168	109	175
71	47	99	228	199	86	108	162	44	51	153	101	165
72	43	92	214	187	75	99	149	40	47	140	93	155
73	39	85	200	175	70	89	135	36	43	129	85	145
74	35	78	184	162	63	80	121	33	39	119	77	135
75	32	71	168	148	52	72	108	30	35	109	69	125

Table of Mortality — (*continued.*)

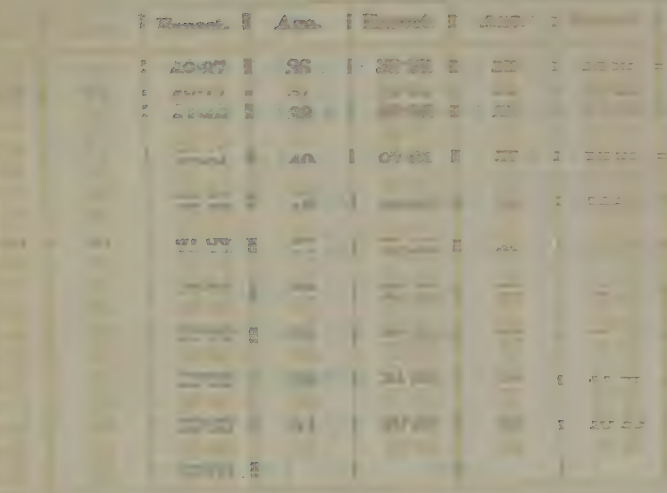
Ages.	England.			France.			Sweden.	Vienna.	Berlin.	Switzerland.	Silesia.	Holland.
	Simpson. London.	*Price.* Northampton.	*Heysham.* Carlisle.	*Deparcieux.* Annuitants, &c.	*Buffon.* Part Population.	*Duvillard.* Whole Population.	*Wargentin.* Whole Population.	*Susmilch.*	*Susmilch.*	*Muret.* Pays de Vaud.	*Halley.* Breslaw.	*Kersseboom.* Life Annuitants.
76	28	65	152	134	47	63	96	27	32	98	61	114
77	25	58	136	120	42	56	84	24	29	85	53	103
78	22	52	121	106	36	48	75	21	26	71	55	92
79	19	46	108	94	34	41	65	18	23	58	38	82
80	17	40	95	81	23	35	56	16	20	46	32	72
81	14	35	84	70	21	29	47	14	18	36	26	62
82	12	30	73	59	18	24	38	12	16	29	22	53
83	10	25	62	49	15	19	31	10	14	24	18	45
84	8	20	53	40	12	15	24	8	12	20	15	38
85	7	16	45	33	10	12	19	7	10	17	12	31
86	6	12	37	26	8	9	14	6	8	14	9	25
87	5	9	30	21	7	7	11	5	7	11	6	19
88	4	7	23	16	5	6	8	4	6	9	4	14
89	3	5	18	12	4	5	6	3	5	7	2	10
90	2	4	14	8	3	4	5	2	4	5	1	7
91	1	3	10	5	3	3	3	1	3	4		5
92		2	8	3	2	3	2		2	3		4
93		1	5	1	2	2	1		1	2		2
94		1	4	1	1	2				1		1
95			3		1	1						
96			2			1						
97			2			1						
98			1									
99			1									
100												

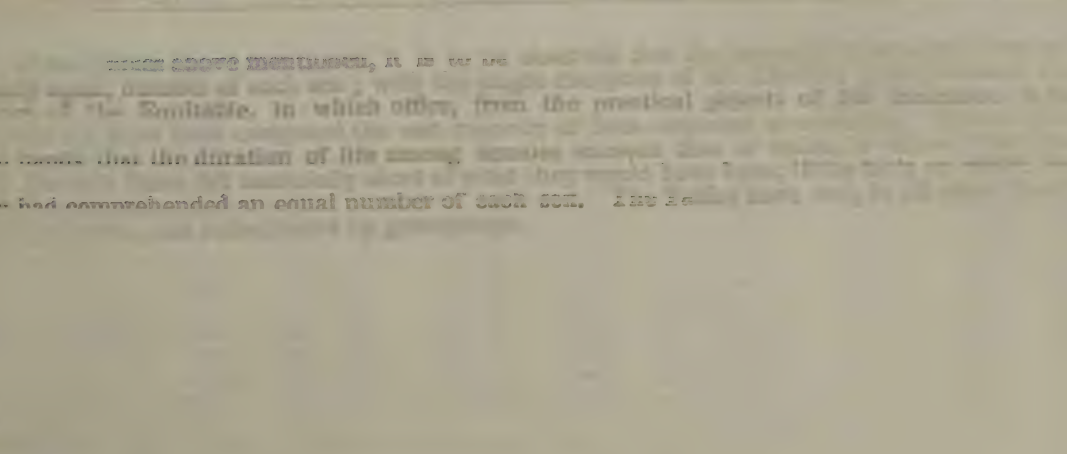
VI. Table of the PROGRESSIVE DECREMENT OF LIFE among 1,000 Infants of each Sex, born together, according to Mr. Finlaison's Observations on the Mortality of the Nominees in the Government Tontines and Life Annuities in Great Britain.

Age.	Males.	Females.	Age.	Males.	Females.	Age.	Males.	Females.	Age.	Males.	Females.	Age.	Males.	Females.	Age.	Males.	Females.
0	1,000	1,000	17	860	870	34	696	748	51	552	616	68	322	443	85	56	117
1	981	981	18	854	863	35	687	740	52	542	608	69	305	428	86	44	103
2	963	967	19	846	856	36	679	732	53	531	601	70	288	412	87	34	89
3	949	955	20	837	848	37	670	724	54	520	593	71	270	395	88	24	76
4	937	945	21	827	841	38	662	716	55	508	585	72	253	377	89	17	64
5	927	935	22	816	834	39	653	708	56	495	576	73	235	358	90	11	52
6	919	926	23	804	827	40	644	700	57	482	568	74	218	339	91	7	41
7	912	919	24	793	820	41	636	693	58	468	559	75	202	319	92	4	30
8	906	913	25	782	813	42	627	685	59	454	549	76	185	298	93	3	21
9	901	908	26	771	805	43	619	677	60	440	539	77	171	277	94	1	14
10	896	903	27	761	798	44	610	669	61	426	529	78	156	255	95		8
11	891	899	28	751	791	45	602	661	62	413	519	79	141	233	96		5
12	886	895	29	742	784	46	594	654	63	399	508	80	125	210	97		2
13	881	892	30	732	777	47	586	646	64	385	496	81	110	189	98		1
14	876	887	31	723	770	48	578	638	65	370	484	82	95	168	99		
15	872	883	32	714	763	49	570	631	66	355	471	83	81	149	100		
16	866	876	33	705	755	50	561	623	67	339	457	84	68	132			

VII. Table showing the EXPECTATION OF LIFE at every Age, according to the Observations made at Northampton.

Age.	Expect.	Age.	Expect.	Age.	Expect.	Age.	Expect.	Age.	Expect.	Age.	Expect.
0	25·18	17	35·20	33	26·72	49	18·49	65	10·88	81	4·41
1	32·74	18	34·58	34	26·20	50	17·99	66	10·42	82	4·09
2	37·79	19	33·99	35	25·68	51	17·50	67	9·96	83	3·80
3	39·55	20	33·43	36	25·16	52	17·02	68	9·50	84	3·58
4	40·58	21	32·90	37	24·64	53	16·54	69	9·05	85	3·37
5	40·84	22	32·39	38	24·12	54	16·06	70	8·60	86	3·19
6	41·07	23	31·88	39	23·60	55	15·58	71	8·17	87	3·01
7	41·03	24	31·36	40	23·08	56	15·10	72	7·74	88	2·86
8	40·79	25	30·83	41	22·56	57	14·63	73	7·33	89	2·66
9	40·36	26	30·33	42	22·04	58	14·15	74	6·92	90	2·41
10	39·78	27	29·82	43	21·54	59	13·68	75	6·54	91	2·09
11	39·14	28	29·30	44	21·03	60	13·21	76	6·18	92	1·75
12	38·49	29	28·79	45	20·52	61	12·75	77	5·83	93	1·37
13	37·83	30	28·27	46	20·02	62	12·28	78	5·48	94	1·05
14	37·17	31	27·76	47	19·51	63	11·81	79	5·11	95	0·75
15	36·51	32	27·24	48	19·00	64	11·35	80	4·75	96	0·50
16	35·85										





X. Table showing the VALUE OF AN ANNUITY ON A SINGLE LIFE, according to the Northampton Table of Mortality.

Age.	3 per Cent.	4 per Cent.	5 per Cent	Age.	3 per Cent.	4 per Cent.	5 per Cent.	Age.	3 per Cent.	4 per Cent.	5 per Cent.
1	16·021	13·465	11·563	33	16·348	14·347	12·740	65	8·304	7·761	7·276
2	18·599	15·633	13·420	34	16·142	14·195	12·623	66	7·994	7·488	7·034
3	19·575	16·462	14·135	35	15·938	14·039	12·502	67	7·682	7·211	6·787
4	20·210	17·010	14·613	36	15·729	13·880	12·377	68	7·367	6·930	6·536
5	20·473	17·248	14·827	37	15·515	13·716	12·249	69	7·051	6·647	6·281
6	20·727	17·482	15·041	38	15·298	13·548	12·116	70	6·734	6·361	6·023
7	20·853	17·611	15·166	39	15·075	13·375	11·979	71	6·418	6·075	5·764
8	20·885	17·662	15·226	40	14·848	13·197	11·837	72	6·103	5·790	5·504
9	20·812	17·625	15·210	41	14·620	13·018	11·695	73	5·794	5·507	5·245
10	20·663	17·523	15·139	42	14·391	12·838	11·551	74	5·491	5·230	4·990
11	20·480	17·393	15·043	43	14·162	12·657	11·407	75	5·199	4·962	4·744
12	20·283	17·251	14·937	44	13·929	12·472	11·258	76	4·925	4·710	4·511
13	20·081	17·103	14·826	45	13·692	12·283	11·105	77	4·652	4·457	4·277
14	19·872	16·950	14·710	46	13·450	12·089	10·947	78	4·372	4·197	4·035
15	19·657	16·791	14·588	47	13·203	11·890	10·784	79	4·077	3·921	3·776
16	19·435	16·625	14·460	48	12·951	11·685	10·616	80	3·718	3·643	3·515
17	19·218	16·462	14·334	49	12·703	11·475	10·443	81	3·499	3·377	3·263
18	19·013	16·309	14·217	50	12·436	11·264	10·269	82	3·229	3·122	3·020
19	18·820	16·167	14·108	51	12·183	11·057	10·097	83	2·982	2·887	2·797
20	18·638	16·033	14·007	52	11·930	10·849	9·925	84	2·793	2·708	2·627
21	18·470	15·912	13·917	53	11·674	10·637	9·478	85	2·620	2·543	2·471
22	18·311	15·797	13·833	54	11·414	10·421	9·567	86	2·461	2·393	2·328
23	18·148	15·680	13·746	55	11·150	10·201	9·382	87	2·312	2·251	2·193
24	17·983	15·560	13·658	56	10·882	9·977	9·193	88	2·185	2·131	2·080
25	17·814	15·438	13·567	57	10·611	9·749	8·999	89	2·015	1·967	1·924
26	17·642	15·312	13·473	58	10·337	9·516	8·801	90	1·794	1·758	1·723
27	17·467	15·184	13·377	59	10·058	9·280	8·599	91	1·501	1·474	1·447
28	17·289	15·053	13·278	60	9·777	9·039	8·392	92	1·190	1·171	1·153
29	17·107	14·918	13·177	61	9·493	8·795	8·181	93	0·839	0·827	0·816
30	16·922	14·781	13·072	62	9·205	8·547	7·966	94	0·536	0·530	0·524
31	16·732	14·639	12·965	63	8·910	8·291	7·742	95	0·242	0·240	0·238
32	16·540	14·495	12·854	64	8·611	8·030	7·514	96	0·000	0·000	0·000

XI. Table showing the VALUE OF AN ANNUITY ON A SINGLE LIFE, according to the Carlisle Table of Mortality.

Age.	3 per Cent.	4 per Cent.	5 per Cent.	Age.	3 per Cent.	4 per Cent.	5 per Cent.	Age.	3 per Cent.	4 per Cent.	5 per Cent.
1	20·085	16·556	13·995	36	18·183	15·856	13·987	70	7·123	6·709	6·336
2	21·501	17·728	14·983	37	17·928	15·666	13·843	71	6·737	6·358	6·015
3	22·683	18·717	15·824	38	17·669	15·471	13·695	72	6·373	6·026	5·711
4	23·285	19·233	16·271	39	17·405	15·272	13·542	73	6·044	5·725	5·435
5	23·693	19·592	16·590	40	17·143	15·074	13·390	74	5·752	5·458	5·190
6	23·846	19·747	16·735	41	16·890	14·883	13·245	75	5·512	5·239	4·989
7	23·867	19·790	16·790	42	16·640	14·694	13·101	76	5·277	5·024	4·792
8	23·801	19·766	16·786	43	16·389	14·505	12·957	77	5·059	4·825	4·609
9	23·677	19·693	16·742	44	16·130	14·308	12·806	78	4·838	4·622	4·422
10	23·512	19·585	16·669	45	15·853	14·104	12·648	79	4·592	4·394	4·210
11	23·327	19·460	16·581	46	15·585	13·889	12·480	80	4·365	4·183	4·015
12	23·143	19·336	16·494	47	15·294	13·662	12·301	81	4·119	3·953	3·799
13	22·957	19·210	16·406	48	14·986	13·419	12·107	82	3·898	3·746	3·606
14	22·769	19·082	16·316	49	14·654	13·153	11·892	83	3·672	3·534	3·406
15	22·582	18·956	16·227	50	14·303	12·869	11·660	84	3·454	3·329	3·211
16	22·404	18·837	16·144	51	13·932	12·566	11·410	85	3·229	3·115	3·009
17	22·232	18·723	16·065	52	13·558	12·258	11·154	86	3·033	2·928	2·830
18	22·058	18·608	15·987	53	13·180	11·945	10·892	87	2·873	2·776	2·685
19	21·879	18·488	15·904	54	12·798	11·627	10·624	88	2·776	2·683	2·597
20	21·694	18·363	15·817	55	12·408	11·300	10·347	89	2·665	2·577	2·495
21	21·504	18·233	15·726	56	12·014	10·966	10·063	90	2·499	2·416	2·339
22	21·304	18·095	15·628	57	11·614	10·625	9·771	91	2·481	2·398	2·321
23	21·098	17·951	15·525	58	11·218	10·286	9·478	92	2·577	2·492	2·412
24	20·885	17·801	15·417	59	10·841	9·963	9·199	93	2·687	2·600	2·518
25	20·665	17·645	15·303	60	10·491	9·663	8·940	94	2·736	2·650	2·569
26	20·442	17·486	15·187	61	10·180	9·398	8·712	95	2·757	2·674	2·596
27	20·212	17·320	15·065	62	9·875	9·137	8·487	96	2·704	2·628	2·555
28	19·981	17·154	14·942	63	9·567	8·872	8·258	97	2·559	2·492	2·428
29	19·761	16·997	14·827	64	9·246	8·593	8·016	98	2·388	2·332	2·278
30	19·556	16·852	14·723	65	8·917	8·307	7·765	99	2·131	2·087	2·045
31	19·348	16·705	14·617	66	8·578	8·010	7·503	100	1·683	1·653	1·624
32	19·134	16·552	14·506	67	8·228	7·700	7·227	101	1·228	1·210	1·192
33	18·910	16·390	14·387	68	7·869	7·380	6·941	102	0·771	0·762	0·753
34	18·675	16·219	14·260	69	7·499	7·049	6·643	103	0·324	0·321	0·317
35	18·433	16·041	14·127								

XII. Table showing the VALUE OF AN ANNUITY ON THE JOINT CONTINUANCE OF TWO LIVES OF EQUAL AGES, according to the Northampton Table of Mortality.

Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.
1 & 1	9·490	8·252	7·287	33 & 33	12·079	10·902	9·919	65 & 65	5·471	5·201	4·960
2 — 2	12·789	11·107	9·793	34 — 34	11·902	10·759	9·801	66 — 66	5·231	4·982	4·759
3 — 3	14·191	12·325	10·862	35 — 35	11·722	10·612	9·680	67 — 67	4·989	4·760	4·555
4 — 4	15·181	13·185	11·621	36 — 36	11·539	10·462	9·555	68 — 68	4·747	4·537	4·348
5 — 5	15·638	13·591	11·984	37 — 37	11·351	10·307	9·427	69 — 69	4·504	4·312	4·140
6 — 6	16·099	14·005	12·358	38 — 38	11·160	10·149	9 294	70 — 70	4·261	4·087	3·930
7 — 7	16·375	14·224	12·596	39 — 39	10·964	9·986	9·158	71 — 71	4·020	3·862	3·719
8 — 8	16·510	14·399	12·731	40 — 40	10·764	9·820	9·016	72 — 72	3·781	3·639	3·510
9 — 9	16·483	14·396	12·744	41 — 41	10·565	9·654	8·876	73 — 73	3·548	3·421	3·304
10 — 10	16·339	14·277	12·669	42 — 42	10·369	9·491	8·737	74 — 74	3·324	3·211	3·105
11 — 11	16·142	14·133	12·546	43 — 43	10·175	9·326	8·599	75 — 75	3·114	3·015	2·917
12 — 12	15·926	13·966	12·411	44 — 44	9·977	9·161	8·457	76 — 76	2·926	2·833	2·750
13 — 13	15·702	13·789	12·268	45 — 45	9·776	8·990	8·312	77 — 77	2·741	2·656	2·583
14 — 14	15·470	13·604	12·118	46 — 46	9·571	8·815	8·162	78 — 78	2·550	2·470	2·410
15 — 15	15·229	13·411	11·960	47 — 47	9·362	8·637	8·008	79 — 79	2·338	2·271	2·217
16 — 16	14·979	13·212	11·795	48 — 48	9·149	8·453	7·849	80 — 80	2·122	2·068	2·018
17 — 17	14·737	13·019	11·630	49 — 49	8·930	8·266	7·686	81 — 81	1·917	1·869	1·827
18 — 18	14·516	12·841	11·483	50 — 50	8·714	8·080	7·522	82 — 82	1·719	1·681	1·642
19 — 19	14·316	12·679	11·351	51 — 51	8·507	7·900	7·366	83 — 83	1·538	1·510	1·472
20 — 20	14·133	12·535	11·232	52 — 52	8·304	7·723	7·213	84 — 84	1·416	1·387	1·357
21 — 21	13·974	12·409	11·131	53 — 53	8·098	7·544	7·056	85 — 85	1·309	1·339	1·256
22 — 22	13·830	12·293	11·042	54 — 54	7·891	7·362	6·897	86 — 86	1·218	1·195	1·171
23 — 23	13·683	12·179	10·951	55 — 55	7·681	7·179	6·735	87 — 87	1·141	1·124	1·098
24 — 24	13·534	12·062	10·858	56 — 56	7·470	6·993	6·571	88 — 88	1·103	1·030	1·063
25 — 25	13·383	11·944	10·764	57 — 57	7·256	6·805	6·404	89 — 89	1·036	1·015	1·001
26 — 26	13·230	11·822	10·667	58 — 58	7·041	6·614	6·234	90 — 90	0·938	0·922	0·909
27 — 27	13·074	11·699	10·567	59 — 59	6·826	6·421	6·062	91 — 91	0·769	0·756	0·748
28 — 28	12·915	11·573	10·466	60 — 60	6·606	6·226	5·888	92 — 92	0·591	0·583	0·576
29 — 29	12·754	11·445	10·362	61 — 61	6·386	6·030	5·712	93 — 93	0·369	0·365	0·361
30 — 30	12·589	11·313	10·255	62 — 62	6·166	5·831	5·533	94 — 94	0·203	0·201	0·199
31 — 31	12·422	11·179	10·146	63 — 63	5·938	5·626	5·347	95 — 95	0·060	0·060	0·059
32 — 32	12·252	11·042	10·034	64 — 64	5·709	5·417	5·158	96 — 96	0·000	0·000	0·000

XIII. Table showing the VALUE OF AN ANNUITY ON THE JOINT CONTINUANCE OF TWO LIVES OF EQUAL AGES, according to the Carlisle Table of Mortality.

Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.
1 & 1	14·079	11·924	10·299	36 & 36	14·477	12·919	11·627	70 & 70	4·556	4·367	4·191
2 — 2	16·155	13·671	11·793	37 — 37	14·231	12·724	11·470	71 — 71	4·217	4·050	3·893
3 — 3	18·030	15·260	13·162	38 — 38	13·981	12·525	11·309	72 — 72	3·904	3·755	3·615
4 — 4	19·065	16·147	13·932	39 — 39	13·727	12·322	11·144	73 — 73	3·631	3·497	3·371
5 — 5	19·815	16·801	14·507	40 — 40	13·481	12·125	10·984	74 — 74	3·400	3·279	3·165
6 — 6	20·156	17·112	14·789	41 — 41	13·254	11·945	10·839	75 — 75	3·231	3·119	3·015
7 — 7	20·280	17·242	14·917	42 — 42	13 036	11·772	10·701	76 — 76	3·068	2·966	2·870
8 — 8	20·261	17·251	14·942	43 — 43	12·822	11·602	10·566	77 — 77	2·927	2·833	2·744
9 — 9	20·146	17·179	14·898	44 — 44	12·600	11·426	10·425	78 — 78	2·784	2·698	2·617
10 — 10	19·963	17·049	14·803	45 — 45	12·371	11·243	10·278	79 — 79	2·610	2·533	2·460
11 — 11	19·748	16·891	14·684	46 — 46	12·128	11·047	10·119	80 — 80	2·459	2·390	2·324
12 — 12	19·538	16·737	14·568	47 — 47	11·870	10·837	9·947	81 — 81	2·283	2·222	2·163
13 — 13	19·327	16·582	14·450	48 — 48	11·591	10·607	9·756	82 — 82	2·135	2·079	2·027
14 — 14	19·115	16·425	14·331	49 — 49	11·279	10·345	9·535	83 — 83	1·978	1·929	1·882
15 — 15	18·908	16·272	14·215	50 — 50	10·942	10·059	9·291	84 — 84	1·825	1·782	1·741
16 — 16	18·719	16·134	14·112	51 — 51	10·579	9·748	9·023	85 — 85	1·657	1·619	1·583
17 — 17	18·542	16·007	14·018	52 — 52	10·215	9·434	8·751	86 — 86	1·509	1·476	1·444
18 — 18	18·365	15·880	13·925	53 — 53	9·849	9·117	8·474	87 — 87	1·389	1·359	1·331
19 — 19	18·182	15·748	13·827	54 — 54	9·480	8·796	8·192	88 — 88	1·328	1·301	1·275
20 — 20	17·993	15·610	13·724	55 — 55	9·103	8·465	7·900	89 — 89	1·248	1·223	1·199
21 — 21	17·797	15·466	13·616	56 — 56	8·721	8·128	7·600	90 — 90	1·088	1·066	1·045
22 — 22	17·588	15·310	13·497	57 — 57	8·334	7·783	7·293	91 — 91	1·050	1·028	1·007
23 — 23	17·372	15·148	13·372	58 — 58	7·954	7·444	6·988	92 — 92	1·120	1·096	1·073
24 — 24	17·148	14·978	13·240	59 — 59	7·605	7·131	6·705	93 — 93	1·226	1·199	1·173
25 — 25	16·916	14·800	13·101	60 — 60	7·295	6·854	6 456	94 — 94	1·302	1·273	1·245
26 — 26	16·681	14·620	12·960	61 — 61	7·044	6·630	6·257	95 — 95	1·383	1·353	1·323
27 — 27	16·437	14·431	12·811	62 — 62	6·804	6·417	6·067	96 — 96	1·424	1·394	1·364
28 — 28	16·196	14·244	12·663	63 — 63	6·563	6·202	5·875	97 — 97	1·395	1·366	1·339
29 — 29	15·976	14·075	12·530	64 — 64	6·308	5 974	5·669	98 — 98	1·375	1·349	1·323
30 — 30	15·784	13·930	12·419	65 — 65	6·047	5·738	5·456	99 — 99	1·294	1·272	1·251
31 — 31	15·591	13·784	12·308	66 — 66	5·774	5·490	5·230	100 — 100	0·991	0·976	0·962
32 — 32	15·392	13·632	12·191	67 — 67	5·486	5·228	4·990	101 — 101	0 687	0·679	0·670
33 — 33	15·180	13·469	12·064	68 — 68	5·186	4·954	4·737	102 — 102	0·387	0·383	0·379
34 — 34	14·954	13·294	11·926	69 — 69	4·877	4·666	4·471	103 — 103	0·108	0·107	0·106
35 — 35	14·720	13·111	11·780								

XIV. Table showing the VALUE OF AN ANNUITY on the Joint Continuance of Two Lives, when the DIFFERENCE OF AGE IS FIVE YEARS, according to the Northampton Table of Mortality.

Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.
1 & 6	12·346	10·741	9·479	32 & 37	11·775	10·659	9·716	62 & 67	5·503	5·285	4·986
2 — 7	14·461	12·581	11·100	33 — 38	11·591	10·508	9·591	63 — 68	5·265	5·017	4·786
3 — 8	15·300	13·319	11·755	34 — 39	11·404	10·354	9·463	64 — 69	5·025	4·798	4·585
4 — 9	15·809	13·775	12·165	35 — 40	11·213	10·196	9·331	65 — 70	4·782	4·573	4·378
5 — 10	15·974	13·933	12·315	36 — 41	11·021	10·037	9·198	66 — 71	4·540	4·349	4·169
6 — 11	16·110	14·068	12·447	37 — 42	10·828	9·877	9·062	67 — 72	4·298	4·124	3·960
7 — 12	16·137	14·111	12·498	38 — 43	10·634	9·716	8·927	68 — 73	4·059	3·901	3·752
8 — 13	16·089	14·089	12·492	39 — 44	10·437	9·550	8·787	69 — 74	3·825	3·683	3·547
9 — 14	15·957	13·992	12·421	40 — 45	10·235	9·381	8·643	70 — 75	3·599	3·471	3·347
10 — 15	15·762	13·841	12·302	41 — 46	10·033	9·210	8·497	71 — 76	3·386	3·270	3·159
11 — 16	15·538	13·664	12·158	42 — 47	9·829	9·037	8·350	72 — 77	3·175	3·070	2·971
12 — 17	15·308	13·480	12·009	43 — 48	9·623	8·862	8·200	73 — 78	2·963	2·869	2·780
13 — 18	15·086	13·303	11·864	44 — 49	9·414	8·683	8·046	74 — 79	2·743	2·659	2·580
14 — 19	14·870	13·130	11·723	45 — 50	9·204	8·503	7·891	75 — 80	2·526	2·448	2·381
15 — 20	14·660	12·961	11·585	46 — 51	8·997	8·326	7·737	76 — 81	2·325	2·258	2·195
16 — 21	14·457	12·799	11·452	47 — 52	8·790	8·147	7·582	77 — 82	2·131	2·077	2·013
17 — 22	14·265	12·646	11·327	48 — 53	8·579	7·965	7·424	78 — 83	1·947	1·899	1·838
18 — 23	14·082	12·500	11·209	49 — 54	8·366	7·780	7·262	79 — 84	1·792	1·751	1·750
19 — 24	13·908	12·361	11·096	50 — 55	8·151	7·593	7·098	80 — 85	1·645	1·608	1·573
20 — 25	13·741	12·229	10·989	51 — 56	7·910	7·409	6·936	81 — 86	1·510	1·478	1·447
21 — 26	13·584	12·105	10·890	52 — 57	7·730	7·225	6·774	82 — 87	1·385	1·356	1·329
22 — 27	13·433	11·987	10·796	53 — 58	7·518	7·039	6·609	83 — 88	1·284	1·259	1·235
23 — 28	13·280	11·866	10·699	54 — 59	7·304	6·850	6·442	84 — 89	1·187	1·164	1·145
24 — 29	13·124	11·743	10·600	55 — 60	7·088	6·659	6·272	85 — 90	1·074	1·054	1·038
25 — 30	12·966	11·618	10·499	56 — 61	6·870	6·465	6·100	86 — 91	0·921	0·902	0·892
26 — 31	12·805	11·489	10·396	57 — 62	6·651	6·270	5·925	87 — 92	0·755	0·738	0·734
27 — 32	12·641	11·359	10·289	58 — 63	6·427	6·070	5·744	88 — 93	0·561	0·554	0·547
28 — 33	12·474	11·225	10·181	59 — 64	6·201	5·867	5·561	89 — 94	0·377	0·373	0·369
29 — 34	12·304	11·088	10·069	60 — 65	5·970	5·658	5·372	90 — 95	0·179	0·177	0·175
30 — 35	12·131	10·948	9·954	61 — 66	5·737	5·447	5·180	91 — 96	0·000	0·000	0·000
31 — 36	11·955	10·805	9·837								

XV. Table showing the VALUE OF AN ANNUITY on the Joint Continuance of Two Lives, when the DIFFERENCE OF AGE IS FIVE YEARS, according to the Carlisle Table of Mortality.

Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.	Ages.	3 per Cent.	4 per Cent.	5 per Cent.
1 & 6	16·828	14·269	12·331	34 & 39	14·290	12·773	11·508	67 & 72	4·580	4·386	4·207
2 — 7	18·087	15·341	13·258	35 — 40	14·048	12·581	11·354	68 — 73	4·297	4·123	3·961
3 — 8	19·100	16·214	14·019	36 — 41	13·812	12·394	11·204	69 — 74	4·035	4·878	3·731
4 — 9	19·584	16·644	14·402	37 — 42	13·579	12·209	11·056	70 — 75	3·804	3·661	3·528
5 — 10	19·874	16·913	14·649	38 — 43	13·346	12·024	10·907	71 — 76	3·568	3·439	3·319
6 — 11	19·935	16·989	14·731	39 — 44	13·107	11·833	10·753	72 — 77	3·353	3·237	3·127
7 — 12	19·889	16·975	14·736	40 — 45	12·868	11·641	10·598	73 — 78	3·152	3·047	2·948
8 — 13	19·771	16·900	14·689	41 — 46	12·630	11·450	10·444	74 — 79	2·952	2·857	2·767
9 — 14	19·606	16·785	14·606	42 — 47	12·389	11·256	10·287	75 — 80	2·790	2·704	2·623
10 — 15	19·410	16·643	14·500	43 — 48	12·139	11·053	10·121	76 — 81	2·618	2·540	2·467
11 — 16	19·208	16·495	14·389	44 — 49	11·868	10·830	9·937	77 — 82	2·471	2·400	2·333
12 — 17	19·014	16·354	14·284	45 — 50	11·580	10·591	9·737	78 — 83	2·318	2·255	2·194
13 — 18	18·820	16·213	14·178	46 — 51	11·271	10·332	9·519	79 — 84	2·155	2·099	2·045
14 — 19	18·622	16·068	14·069	47 — 52	10·955	10·065	9·292	80 — 85	1·993	1·943	1·895
15 — 20	18·423	15·922	13·959	48 — 53	10·628	9·787	9·054	81 — 86	1·834	1·790	1·747
16 — 21	18·230	15·781	13·853	49 — 54	10·284	9·492	8·799	82 — 87	1·704	1·664	1·626
17 — 22	18·036	15·639	13·746	50 — 55	9·924	9·181	8·528	83 — 88	1·606	1·569	1·535
18 — 23	17·838	15·493	13·636	51 — 56	9·550	8·855	8·242	84 — 89	1·496	1·464	1·433
19 — 24	17·633	15·341	13·520	52 — 57	9·172	8·524	7·950	85 — 90	1·835	1·307	1·279
20 — 25	17·421	15·182	13·398	53 — 58	8·797	8·194	7·657	86 — 91	1·255	1·229	1·203
21 — 26	17·204	15·019	13·272	54 — 59	8·439	7·876	7·375	87 — 92	1·245	1·218	1·192
22 — 27	16·977	14·846	13·137	55 — 60	8·098	7·574	7·106	88 — 93	1·272	1·245	1·219
23 — 28	16·747	14·670	13·000	56 — 61	7·788	7·299	6·860	89 — 94	1·266	1·240	1·214
24 — 29	16·524	14·500	12·867	57 — 62	7·480	7·025	6·615	90 — 95	1·217	1·191	1·167
25 — 30	16·311	14·339	12·742	58 — 63	7·175	6·752	6·370	91 — 96	1·210	1·185	1·161
26 — 31	16·097	14·176	12·615	59 — 64	6·875	6·482	6·127	92 — 97	1·230	1·205	1·181
27 — 32	15·875	14·006	12·482	60 — 65	6·589	6·225	5·89	93 — 98	1·262	1·238	1·215
28 — 33	15·648	13·830	12·344	61 — 66	6·323	5·986	5·678	94 — 99	1·234	1·212	1·191
29 — 34	15·424	13·657	12·206	62 — 67	6·054	5·743	5·458	95 — 100	1·072	1·055	1·038
30 — 35	15·209	13·491	12·078	63 — 68	5·779	5·493	5·230	96 — 101	0·851	0·839	0·828
31 — 36	14·989	13·321	11·944	64 — 69	5·490	5·229	4·988	97 — 102	0·568	0·562	0·555
32 — 37	14·764	13·146	11·806	65 — 70	5·193	4·956	4·737	98 — 103	0·254	0·252	0·249
33 — 38	14·531	12·964	11·661	66 — 71	4·882	4·667	4·469				

The Northampton Table (No. VII.), by under-rating the duration of life, was a very advantageous guide for the insurance offices to go by in insuring lives; but to whatever extent it might be beneficial to them in this respect, it became equally injurious when they adopted it as a guide in selling annuities. And yet, singular as it may seem, some of the insurance offices granted annuities on the *same* terms that they insured lives; not perceiving that, if they gained by the latter transaction, they must obviously lose by the former. Government also continued for a lengthened period to sell annuities according to the Northampton Tables, and without making any distinction between male and female lives! A glance at the Tables of M. Deparcieux ought to have satisfied them that they were proceeding on entirely false principles. But, in despite even of the admonitions of some of the most skilful mathematicians, this system was persevered in till within these few years! We understand that the loss thence arising to the public may be moderately estimated at 2,000,000*l.* sterling. Nor will this appear a large sum to those who recollect that, supposing interest to be 4 per cent., there is a difference of no less than 91*l.* 1*s.* in the value of an annuity of 50*l.* for life, to a person aged 45, between the Northampton and Carlisle Tables.

INVOICE, an account of goods or merchandise sent by merchants to their correspondents at home or abroad, in which the peculiar marks of each package, with other particulars, are set forth. — (See example, *antè*, p. 149.)

IONIAN ISLANDS, the name given to the islands of Corfu, Paxo, Santa Maura, Ithaca, Cephalonia, Zante, Cerigo, and their dependent islets. With the exception of Cerigo, which lies opposite to the south-eastern extremity of the Morea, the rest lie pretty contiguous, along the western coasts of Epirus and Greece; the most northerly point of Corfu being in lat. 39° 48′ 15″ N., and the most southerly point of Zante (Cape Kieri, on which there is a light-house) being in lat. 37° 38′ 35″ N. Kapsali, the port of Cerigo, is in lat. 36° 7′ 30″ N., lon. 23° E.

The area and present population of the different islands may be estimated as follows: —

Islands.	Area in Square Miles, 15 to a Degree.	Population.
Corfu	10·76	59,839
Cephalonia	16·20	56,589
Zante	5·60	35,422
Santa Maura	5·25	18,108
Ithaca and Calamos	3·32	9,387
Cerigo and Cerigotto	4·50	8,550
Paxo and Antipaxo	1·90	4,953
Totals	47·12*	192,848

Soil and Climate. — These are very various — Zante is the most fruitful. It consists principally of an extensive plain, occupied by plantations of currants, and having an air of luxuriant fertility and richness. Its climate is comparatively equal and fine, but it is very subject to earthquakes. Corfu and Cephalonia are more rugged and less fruitful than Zante; and the former from its vicinity to the snowy mountains of Epirus, and the latter from the Black Mountain (the Mount Ænos of antiquity) in its interior, are exposed in winter to great and sudden variations of temperature. In January, 1833, the cold was more rigorous than usual, the frost damaging to a great extent the oranges and vines of these islands and those of Santa Maura. The latter is, in the hot season, exceedingly unhealthy, — a consequence of the vapours arising from the marshes, and the shallow seas to the N.E. Cerigo is rocky and sterile; it is subject to continued gales, and the currents seldom permit its waters to remain unruffled.

History, Government, &c. — These islands have undergone many vicissitudes. Corfu, the ancient Corcyra, was famous in antiquity for its naval power, and for the contest between it and its mother state Corinth, which eventually terminated in the Peloponnesian war. Ithaca, the kingdom of Ulysses; Cephalonia, sometimes called Dulichium, from the name of one of its cities; Zante, or Zacynthus; Santa Maura, known to the ancients by the names of Leucas or Leucadia, celebrated for its promontory, surmounted by a temple of Apollo, whence Sappho precipitated herself into the ocean; and Cerigo, or Cythera, the birth-place of Helen, and sacred to Venus; — have all acquired an immortality of renown. But, on comparing their present with their former state, we may well exclaim, —

Heu quantum hæc Niobe, Niobe distabat ab illâ! —

After innumerable revolutions, they fell, about 350 years ago, under the dominion of Venice. Since the downfall of that republic, they have had several protectors, or rather masters, being successively under the dominion of the Russians, the French, and the English. By the treaty of Paris, in 1815, they were formed into a sort of semi-independent state. They enjoy an internal government of their own, under the protection of Great Britain; a Lord High Commissioner, appointed by the king of England, having charge of the foreign relations, and of the internal, maritime, and sanitary police. His Majesty's commander-in-chief has the custody of the fortresses, and the disposal of the forces. It is stipulated in the treaty of Paris, that the islands may be called upon for the pay and subsistence of 3,000 men, as well as for the repair of their fortresses occupied by the British troops. The executive government is vested in a president nominated by the commissioner, and a senate of 5 members (1 for each of the larger islands of Corfu, Cephalonia, Zante, and Santa Maura, and 1 representing collectively the smaller ones of Ithaca, Cerigo, and Paxo, by each of which he is elected in rotation). The senators are elected at the commencement of every quinquennial parliament (subject to a negative from the commissioner) from a legislative chamber of 40 members, themselves elected by the constituencies of the different islands, for 5 years. The senate and legislative assembly, together with the commissioner, are thus the supreme authority: they are, when united, termed the Parliament, and, as such, pass, amend, and repeal laws, in the mode prescribed by the constitution of 1817. Besides the general government, there is in each island a local administration, composed of a regent, named by the senate, and from 2 to 5 municipal officers elected by their fellow citizens.

The State of Society, in these islands, is far from being good, and was formerly the most depraved imaginable. The people, when they were placed under the ægis of England, were at once lazy, ignorant, superstitious, cowardly, and bloodthirsty. Their vices may, we believe, be, in a great degree, ascribed to the government and religion established amongst them. The latter consisted of little more than a series of fasts and puerile observances; while the former was both weak and corrupt. The Venetians appointed to situations of power and emolument belonged mostly to noble but decayed families, and looked upon their offices merely as means by which they might repair their shattered fortunes. Hence the grossest corruption pervaded every department. There was no crime for which impunity might not be purchased. Justice, in fact, was openly bought and sold; and suits were decided, not according to the principles of law or equity, but by the irresistible influence of faction or of gold. In consequence, the islands became a prey to all the vices that afflict and degrade a corrupt and semi-barbarous society. Sandys, one of the best English travellers who ever visited the Levant, having touched at Zante in 1610, expresses himself with respect to the inhabitants as follows: — "In habite they imitate the Italians, but transcend them in their revenges, and infinitely less civil. They will threaten to kill a merchant that will not buy their commodities; and make more conscience to breake a fast than commit a murther. He is weary of his life that hath a difference with any of them, and will walke abroad after daylight. But cowardice is joined with their crueltie, who dare doe nothing but sodainly upon advantage; and are ever privately armed. They are encouraged to villainies by the remissnesse of their laws. The labourers do go into the fields with swords and partizans, as if in an enemie's countrey; bringing home their oils and wines in hogskins, the inside turned out."— (p. 7. ed. 1637.)

* This is equal to 1001·3 English square miles of 69·15 to the degree.

If the Zantiotes did not deteriorate during the next 2 centuries, which, indeed, was hardly possible, they certainly did not improve. Dr. Holland, by whom they were visited in 1812, tells us that he heard, "on sure authority, that the number of assassinations in Zante has been more than 1 for each day of the year, though the population was only 40,000!"—(*Travels in the Ionian Isles, &c.* 4to ed. p. 23.)

Matters were, if not quite so bad, very little better in the other islands. In Cephalonia, the inhabitants were divided into factions, entertaining the most implacable animosities, and waging a war of extermination against each other. A little vigour on the part of their rulers would have served to suppress their murderous contests. But this was not an object they wished to attain: on the contrary, their selfish and crooked policy made them seek to strengthen their own power by fomenting the dissensions that prevailed amongst their subjects.—(*Bellin, Description du Golfe de Venise*, p. 165.) Considering the state of society at home, we need not wonder that the Cephalonians, who were distinguished among the islanders for activity and enterprise, were much addicted to emigration. The Venetians attempted to check its prevalence; but, as they neglected the only means by which it could be prevented,—the establishment of security and good order at home,—their efforts were wholly unsuccessful.

The islanders did not, however, satisfy themselves with attempting to stab and prey upon each other. They were much addicted to piracy, particularly the inhabitants of Santa Maura and Cerigo; and it has been alleged that the Venetian government participated in the profits of this public robbery, which, at all events, they took little pains to suppress.

A long series of years will be required to eradicate vices so deeply rooted, and to effect that thorough change in the habits and morals of the people that is so indispensable. The power and influence of the British government has already, however, had a very decided effect: assassination has become comparatively unknown; piracy has been suppressed; and a spirit of industry, sincerity, and fair dealing is beginning to manifest itself. The present generation of nobles possess a superior degree of information, and a knowledge of the true interests of their country, which, if not all that could be wished, was, at least, unknown to their fathers. It is not easy to exaggerate the difficulties with which Sir Thomas Maitland had to struggle during the first years of the British government. He was opposed by every means that feudal rancour, corruption, and duplicity could throw in his way. Those accustomed to the treachery, shuffling, and jobbing of the Venetian and Russo-Turkish governments, and the intrigues of the French, could neither appreciate nor understand the plain, straightforward course natural to British officers. These difficulties have, however, materially diminished; and it is to be hoped that the influence of our example, and of that education now pretty generally diffused, will gradually accomplish the regeneration of the islanders.

Manufactures, &c.—These islands possess few manufactures properly so termed. The wives of the villani, or peasants, spin and weave a coarse kind of woollen cloth, sufficient in great part for the use of their families. A little soap is made at Corfu and Zante. The latter manufactures a considerable quantity of silk gros-de-Naples and handkerchiefs; the art of dyeing is, however, too little studied, and the establishments are on too small a scale. The peasantry, in general, are lazy, vain, delighting in display, and very superstitious. Those of Zante and Cephalonia are more industrious than the Corfiotes; in the first, particularly, their superior condition is probably to be ascribed, in part at least, to the nobles residing more on their estates in the country, and contributing, by their example, to stimulate industry. In Corfu, the taste for the city life, which prevailed in the time of the Venetian government, still operates to a great degree. The Corfiote proprietor resides but little in his villa; his land is neglected, while he continues in the practice of his forefathers, who preferred watching opportunities at the seat of a corrupt government, to improving their fortunes by the more legitimate means of honourable exertion and attention to their patrimony. In this respect, however, a material change for the better has taken place during the last 20 years.

Imports of Grain, &c.—Great part of the land is held under short tenures, on the *metayer system*, the tenant paying half the produce to the landlord. Owing to the nature of the soil, and the superior attention given to the culture of olives and currants, the staple products of the islands, most part of the grain and cattle required for their consumption is imported. The hard wheat of Odessa is preferred, and about 800,000 dollars may be annually sent to the Black Sea in payment. The imports of wheat in 1826 were 178,288 moggi, or about 891,440 bushels. The parliament, in March, 1833, repealed the duties on the introduction of corn; and the grain monopoly of Corfu, which had been established in favour of government, in order to provide against the possibility of a general or partial scarcity, was then also suffered to expire. These 2 sources of revenue, while they existed, did not probably produce less than 20,000*l.* annually.

Cattle.—They are similarly dependent upon Greece and Turkey for supplies of butcher's meat; a small number only of sheep and goats being bred in the islands. Oxen, whether for agriculture or the slaughter-house, are brought from Turkey, to the annual amount of more than 90,000 dollars. The beef eaten by the troops is 6 weeks or 2 months walking down from the Danube, and the provinces that skirt it, to the shores of Epirus, where they remain in pasture until fit for the table.

Exports.—The staple exports from these islands are oil, currants, valonia, wine, soap, and salt. The first is produced in great abundance in Corfu and Paxo, and in a less quantity in Zante, Santa Maura, and Cephalonia. Corfu has, in fact, the appearance of a continuous olive wood; a consequence, partly, of the extraordinary encouragement formerly given to the culture of the plant by the Venetians. Although there is a harvest every year, the great crop is properly biennial; the tree generally reposing for a year after its effort. (In France and Piedmont the period of inactivity is of 2 and 3 years.) During 5 or 6 months, from October till April, the country, particularly in Corfu, presents an animated appearance, persons of all ages being busily employed in picking up the fruit. It is calculated that the islands produce, one year with another, about 95,000 barrels, of 18 gallons each, and that of this quantity 80,000 are exported, principally to Trieste. The average price may be about 1*l.* 11*s.* per barrel. Under the old Venetian system, the oil could only be carried to Trieste. An *ad valorem* duty of 19½ per cent., payable on the export, produces upon an average 28,000*l.* annually. The quality might be much improved by a little more care in the manufacture, the trees being generally finer than in any other country.

Currants, originally introduced from the Morea, are grown in the isles of Zante, Cephalonia, and Ithaca, but principally in the first. The plant is a vine of small size and delicate nature, the cultivation of which requires much care. Six or 7 years elapse after a plantation has been made, before it yields a crop. In the beginning of October, the earth about the roots of the plant is loosened, and gathered up in small heaps, away from the vine, which is pruned in March; after which the ground is again laid down smooth around the plant, which grows low, and is supported by sticks. The crops are liable to injury in spring from the blight called the "brina," and rainy weather at the harvest season produces great mischief. The currants are gathered towards September, and, after being carefully picked, are thrown singly upon a stone floor, exposed to the sun in the open air. The drying process may occupy a fortnight or longer, if the weather be not favourable. A heavy shower or thunderstorm (no unfrequent occurrence at that season) not only interrupts it, but sometimes causes fermentation. The fruit is then only fit to be given to animals. Should it escape these risks, it is deposited in magazines called "*seraglie*," until a purchaser casts up. The "*seragliente*," or warehouse keeper, delivers to the depositor a paper acknowledging the receipt of the quantity delivered, which passes currently in exchange from hand to hand till the time of export. Under the old Venetian government, the liberty of traffic in this produce was exceedingly restricted. In Zante, 5 persons chosen out of the council of nobles assembled in presence of the *proveditore*, regulated what should be the price; and those who wished to purchase were under the necessity of declaring to the govern-

ment the quantity they desired. This system was called the "*collegetto*."* The export duties consisted of an original duty of 9 per cent. *ad valorem;* a *dazio fisso*, or fixed duty of about 4*s.* 4*d.* per cwt.; and afterwards of a *novissimo*, or most recent duty, of 2*s.* 2*d.* per cwt. This latter was remitted in favour of vessels bringing salt fish, &c. from the northern ports (chiefly English, Danes, and Dutch): it was afterwards relaxed in favour of Russian vessels from Odessa, and abandoned altogether as vexatious and unproductive. The *proveditore* received in addition 2 per cent., and each of his 2 Venetian councillors 1 per cent; so that the fruit, the original cost of which was about 9*s.* the cwt., stood the exporter in little less than 18*s.* or 19*s.* Even under British protection, the fruit, which some years before had fetched as much as 30*s.* and 32*s.* the cwt., but had declined in 1832 to 8*s.* the cwt., was burdened with the *dazio fisso* of 4*s.* 4*d.*, and a duty of 6 per cent. *ad valorem*, being equivalent together, *at that price*, to an *ad valorem* duty of nearly 60 per cent.! In the mean time the British parliament had, in 1829, raised the import duties payable in England to the enormous amount of 44*s.* 4*d.* the cwt., which, at the same low price, made an *ad valorem* duty of 500 per cent.! The consequence was rapidly visible; a decline took place in the culture of the plant, as well as in the circumstances and in the *affections* of the proprietors, whose staple export and means of existence were almost annihilated. As the prices fell, and the distress became greater, the necessitous grower was obliged to borrow money at ruinous interest from foreign merchants, or from the Jews, who were, consequently, able to dictate the price at which they would take his produce. A legislative enactment, on a scale commensurate with the difficulties which it had to grapple with, was, after much deliberation, matured and adopted by the 4th parliament in its session of 1833. By it the whole of the duties upon currants were commuted for an *ad valorem* tax of 19½ per cent., being the same as that laid upon oil. The same act increased, in a small degree, the duties previously paid on the importation of coffee, tea, and sugar, and upon foreign wines, silks, and gloves, — articles which, being chiefly consumed by the affluent, were more appropriately subjected to an increase of duty, to supply in part the serious defalcation of revenue naturally consequent to the reduction of the currant duty. The duties thus increased upon objects of luxury may now amount to from 20 to 25 per cent., which is far from exorbitant. The good effects of this enactment were manifested by an almost instantaneous rise in the price of the fruit which had remained on hand of the crop of 1832. It is calculated that the average quantity of currants produced during the 4 years ending with 1832, has been 19,686,800 lbs. a year; the export has been 17,885,300 lbs. It appears from the accounts laid before the finance committee, that, in 1826, there were exported from the islands 176,974 lbs. of valonia; 32,063 casks of wine; and 723,646 lbs. of soap.

Tonnage Duty. — The late act of parliament abolished the tonnage duty of 1*s.* 1*d.* per ton payable by every ship sailing under Ionian colours, which, together with the heavy fees demanded by the British consuls in the Levant, had driven most of the Cephalonite vessels to seek for protection under the flag of Russia.

Loan Banks. — Another act, intended to alleviate the distress experienced by the growers who had been the victims of usury in consequence of their pecuniary difficulties, provided for the establishment of loan banks with capitals (in the larger isles of 20,000*l.* each, and in the smaller ones in proportion), for lending money at 6 per cent. to the agricultural interest, on agricultural security, and thus employing the surplus which might otherwise lie idle in the treasury. These measures, it is presumed, will go far towards bettering the condition of the islands; and the anticipated reduction of the oppressive import duty upon currants in this country will do more. — (See CURRANTS.)

Salt may be obtained in considerable quantities in Corfu, Zante, and Santa Maura, for exportation: the latter island alone produced it until the late act of parliament, which provided that government should let the salt pans in all the islands to those bidders who should offer, by sealed tenders, to supply it at the lowest rate to the consumer, paying at the same time the highest price to government. No export duty is charged upon it.

It is apparent from these statements, that heavy duties are levied upon the exportation of the staple products of the islands, — an objectionable system, and one which, if it is to be excused at all, can only be so by the peculiar circumstances under which they are placed. There is no land tax or impost on property in the Ionian Islands, such as exists in many other rude countries; and, supposing it were desirable to introduce such a tax, the complicated state of property in them, the feudal tenures under which it is held, and the variety of usages with respect to it, oppose all but invincible obstacles to its imposition on fair and equal principles. At the same time, too, a large amount of revenue is required to meet the expenses of the general and local governments, to maintain an efficient police, and to prevent smuggling and piracy. However, we cannot help thinking that some very material retrenchments might be made from the expenditure; and it is to this source, more, perhaps, than to any other, that the inhabitants must look for any real or effectual relief from their burdens.

Revenue and Expenditure. — In 1830, the revenue and expenditure were as follows: —

Revenue.	*L.*	*s.*	*d.*
Customs	30,037	14	0¾
Transit duty	845	9	7
Export { Oil	35,048	7	9¾
Export { Currants	28,407	10	10
Wines and spirits	5,767	15	4½
Tobacco	5,600	16	5½
Cattle	2,939	0	9½
Corn, in commutation of tithes	13,338	10	1¾
Salines (salt pans)	3,767	0	4¾
Public lands and houses	7,587	6	6
Tonnage duties	860	11	10
Port duties	2,432	12	7
Sanitá, post office, police, judicial tariff, surplus received	8,169	19	9
Valonia and gunpowder monopolies, and municipal balances	9,145	7	6¾
Total income	153,948	3	0½

Expenditure.	*L.*	*s.*	*d.*
General and local governments, salaries	56,831	2	3½
Public quarters (hire)	10,119	15	9¾
Education	6,666	11	0¼
General and local contingencies, hospital, &c.	8,369	0	1
Collection of revenue	11,169	0	8½
Flotilla	8,698	2	8½
Public works, fortresses	35,481	15	6
Staff pay and contingencies	11,600	1	3½
Inspectors of Ionian militia	2,629	15	6½
Mounted orderlies	440	4	4½
Half-pay (Ionian officers)	935	12	8½
Barrack stores, papers of officers, couriers, &c.	2,504	12	4½
Engineer department	2,478	15	1½
Total expenditure	157,934	7	8½

The Ionian republic affords, perhaps, the only example of a state expending nearly a *fourth* part of its revenue on public works and fortresses. Without, however, questioning the importance of the objects for which so heavy an expense has been incurred, we are inclined to think that the industry and prosperity of the islands would be far more likely to be advanced by the effectual reduction of the duties on the exportation of oil and currants than by any, even the most judicious outlay of the revenue derived from them.

Ports. — The principal ports in the Ionian republic are Corfu and Zante in the islands of the same name, and Argostoli in Cephalonia. The city and port of Corfu lie on the east side of the island, on the canal or channel between it and the opposite continent, which is here about 5 miles wide. The citadel, which projects into the sea, is furnished with a light-house, 240 feet high; the latter being in lat. 39° 37′ N., lon. 19° 56′ E. The town is but indifferently built. Population about 17,000, exclusive of the military. The fortifications are very strong, both towards the sea and the land. The canal has deep water throughout; its navigation, which is a little difficult, has been much facilitated by the erection of a light-house on the rock of Tignoso in the northern entrance, where the channel is less than a mile in width; and by the mooring of a floating light off

* A bill for reviving this institution, brought in by a Zantiote member, passed the legislative assembly in May, 1833; but the senate threw it out, trusting that the enactments mentioned in this article would suffice to relieve the grower from the usurious oppression of the currant speculator.

Point Lesckimo, in the southern entrance. Ships anchor between the small but well fortified island of Vido and the city, in from 12 to 17 fathoms water.

The port, or rather gulf, of Argostoli in Cephalonia lies on the south-west side of the island. Cape Aji, forming its south-western extremity, is in lat. 38° 8′ 10″ N., lon. 20° 27′ 30″ E. Cape San Nicolo, forming the other extremity, is about 4¾ miles from Cape Aji; and between them, within about 1½ mile of the latter, is the small islet of Guardiani, on which is a light-house. From this island the gulf stretches N. ½ W. from 7 to 8 miles inland. The town of Argostoli lies on the west side of a haven on the east side of the gulf formed by Point Statura. The situation is low and rather unhealthy. When visited by Dr. Holland, its population did not exceed 4,000. Its appearance and police, particularly the latter, have been much improved since its occupation by the English. There is deep water and good anchorage ground in most parts of the gulf. The best entrance is between Cape San Nicolo and Guardiani, keeping rather more than a mile to the eastward of the latter, on account of a reef that extends N.E. and S.W. from it nearly that distance.

The port and city of Zante are situated on the eastern side of the island, in lat. 37° 47′ N., lon. 20° 54′ 42″ E. The city, the largest in the Ionian Islands, extends along the shore for nearly 1½ mile, but it is no where above 300 yards in breadth, except where it ascends the hill on which the citadel is erected. The style of building is chiefly Italian; and the interior of the city displays every where great neatness, and even a certain degree of magnificence. Population estimated by Dr. Holland at from 16,000 to 18,000. It has a mole or jetty of considerable utility, at the extremity of which a light-house is erected; and a lazaretto, situated a little to the south-west. The harbour is capacious. Ships anchor opposite the town at from 500 to 1,000 yards' distance, in from 12 to 15 fathoms, availing themselves of the protection of the mole when the wind is from the N.E. When our troops took possession of Zante, in 1810, the fortifications were found to be in very bad repair; but immense sums have since been expended upon their improvement and extension.

Trade with England. — This is but of very limited extent; a consequence, principally, of the enormous duty on currants. During the year 1831, we imported from the Ionian Islands 162,363 cwt. currants, 22½ tons fustic, 251 cwt. flax, 100,242 gallons olive oil, 7,461 cwt. valonia, and 898 gallons wine. The real or declared value of the articles of British produce and manufacture exported to them during the same year, amounted to only 50,883*l.*

The total value of the imports from all countries in 1831 is estimated at 510,753*l.*, and that of the exports at 248,058*l.* But a considerable part of the imports is not destined for the consumption of the islands, but is sent thither merely as to a convenient *entrepôt*, being intended for the supply of the contiguous provinces of Greece and Turkey. The amount of exports depends materially on the circumstance whether the year be one in which there is, or is not, a crop of olives.

Shipping. — The entries (in tons) for 1826, the last year for which we have seen any detailed statement, were as follows: —

Flags.	Tons.	Flags.	Tons.
Ionian - -	169,371	Papal - -	11,856
British - -	27,116	Sardinian -	9,753
Austrian -	92,511	Turkish - -	5,421
Russian - -	3,869	Greek - -	7,[illegible]20
French - -	2,908	All other - -	5,393
Neapolitan -	13,179		
		Total -	347,027

Money. — Accounts are kept in sterling money. Spanish doubloons pass at 3*s.* 6*d.*, Spanish dollars at 4*s.* 4*d.*, and Venetian dollars at 4*s.* Exchange with England at *d.* per dollar.

Weights. —
The pound, *peso grosso*, or great weight of 12 oz. = 7,384 grains Troy; 94·8 lbs. = 100 lbs. avoirdupois.
The pound, *peso sottile*, or small weight, used for precious metals and drugs, is 1-3d lighter than the foregoing; 12 oz. peso sottile corresponding to 8 oz. peso grosso.
The oke, used in the southern islands, weighs about 18,900 grains Troy, or 27/10 lbs. avoirdupois. The Levant cantar, or quintal, should contain 44 okes.
The migliajo (1,000 lbs.), for currants, in Zante, is 1 per cent. lighter than for other articles.

Measures of Length. —
The Venetian foot of 12 onué = 13¾ inches English.
Passo = 5 Venetian feet.
Braccio, for cloths, &c. = 27 3/16 inches English.
Do. for silks = 25 3/8
Land is measured by the *misura* or 1/8 of a moggio, or bacile; 400 square *passi* being 1 misura, or bacile, about 3/10 of an acre English.
Vineyards are measured by the *zappada*; 3 zappade (a computed day's work) being 1 misura.
Fire-wood is measured by the square passo, usually, however, only 2 feet thick, this depending on the quality of the wood.
Stone is measured by the passo cubo.

Measures of Capacity. —
Corn. Corfu and Paxo: Moggio of 8 misure, about 5 Winchester bushels.
Cephalonia: Bacile should contain 80 lbs. peso grosso, best quality wheat.
Zante: Bacile should contain 72 lbs. peso grosso, best quality wheat.
Santa Maura: Cado, of 8 crivelli, 4 = 3 mog.; 1 cado = 3¾ bushels English.
Ithaca: 5 Bacile = 1 moggio.
Cerigo: Chiló, the measure of Constantinople, = 1 bushel English.
Wine. — Corfu and Paxo: 32 quartucci = 1 jar, and 4 jars = 1 barrel = 18 English wine gallons.
Cephalonia and Ithaca: 2 quartucci = 1 boccale; 12 boccali = 1 secchio; 6 secchio = 1 barrel = 18 English wine gallons.
Zante: 13 1/3 quartucci = 1 lire; 40 quartucci = 1 jar; 3 jars = 1 barrel = 17 5/8 English wine gallons.
Santa Maura: 22 quartucci = 1 stamno; 6 stamni = 1 barrel = 18 English wine gallons.
Cerigo: 2 agosten = 1 boccia; 30 boccie = 1 barrel = 18 English wine gallons.
Oil. — Corfu and Paxo: 4 quartucci = 1 miltro; 6 miltri = 1 jar; 4 jars = 1 barrel = 18 English wine gallons.
Cephalonia: 9 pagliazzi = 1 barrel = 18 Eng. wine galls.
Zante: 9 lire, or 3 jars of 46 qu. each = 1 barrel = 17 5/8 English wine gallons.
Santa Maura: 7 stamni = 1 barrel = 18 Eng. wine galls.
Ithaca: 13 pagliazzi = 1 — = 18 —
Cerigo: 24 bozze = 1 — = 14 0/5 —
Salt. — Centinajo, about 4,000 lbs. Venetian peso grosso.
Lime. — Corfu, measure of 4 English cubic feet.

In compiling this article, we have consulted, besides the works referred to above, the *Voyage Historique, Pittoresque, &c.*, by Saint Sauveur, — a diffuse but valuable work. The account of Zante, in the last volume (tome iii. pp. 101—278.), is particularly good. We have also looked into the *Voyage en Grèce* of Scrofani, 3 tomes, Paris, 1801; the *Archives du Commerce*; the *Papers laid before the Finance Committee*, &c. But by far the most important part of the information we have been able to lay before the reader has been derived from manuscript notes obligingly communicated by Lord King, late secretary to the British government in these islands.

IPECACUANHA (Fr. *Ipecacuanha*; Ger. *Amerikanische brechwurzel*; It. *Ipecoacanna*; Port. *Cipo de camaras, Ipecacuanha*; Sp. *Ipecacuana, Raiz de oro*), the root of a perennial plant (*Cephaëlis ipecacuanha*) growing in Brazil and other parts of South America. It is, from its colour, usually denominated *white, grey*, or *ash-coloured*, and *brown*. Little of the first variety is found in the shops. The grey and brown varieties are brought to this country in bales from Rio Janeiro. Both are in short, wrinkled, variously bent and contorted pieces, which break with a resinous fracture. The grey is about the thickness of a small quill, full of knots and deep circular fissures, that nearly reach down to a white, woody, vascular cord that runs through the heart of each piece; the external part is compact, brittle, and looks smooth: the brown is smaller, more wrinkled, of a blackish brown colour on the outside, and whitish within: the white is woody, and has no wrinkles. The entire root is inodorous; but the powder has a faint, disagreeable odour. The taste is bitter, sub-acrid, and extremely nauseous. In choosing ipecacuanha, the larger roots, which are compact and break with a resinous fracture, having a whitish grey, somewhat semi-transparent, appearance in the outside of the cortical part, with a pale straw-coloured medullary fibre, are to be preferred. When pounded, ipecacuanha forms the mildest and safest emetic in the whole materia medica. Though probably employed in America from time immemorial, it was not introduced into Europe till the time of Louis XIV., when one Grenier, a French merchant, brought 150 lbs. of it from Spain, with which trials were made at the Hôtel Dieu. Helvetius first made known its use in dysentery, for which Louis XIV. munificently rewarded him by a douceur of 1,000*l.* sterling. — (*Thomson's Dispensatory; Thomson's Chemistry.*)

IRON (Dan. *Jern*; Du. *Yzer*; Fr. *Fer*; Ger. *Eisen*; It. *Ferro*; Lat. *Ferrum, Mars*; Pol. *Zelazo*; Por. *Ferro*; Rus. *Scheleso*; Sp. *Hierro*; Sw. *Jern*; Gr. Σίδηρος; Sans. *Loha*; Arab. *Hedeed*; Pers. *Ahun*), the most abundant and most useful of all the metals. It is of a bluish white colour; and, when polished, has a great deal of

brilliancy. It has a styptic taste, and emits a smell when rubbed. Its hardness exceeds that of most other metals; and it may be rendered harder than most bodies by being converted into steel. Its specific gravity varies from 7·6 to 7·8. It is attracted by the magnet or loadstone, and is itself the substance which constitutes the loadstone. But when iron is perfectly pure, it retains the magnetic virtue for a very short time. It is malleable in every temperature, and its malleability increases in proportion as the temperature augments; but it cannot be hammered out nearly as thin as gold or silver, or even as copper. Its ductility is, however, more perfect; for it may be drawn out into wire as fine at least as a human hair. Its tenacity is such, that an iron wire 0·078 of an inch in diameter, is capable of supporting 549·25 lbs. avoirdupois without breaking.

Historical Notice. — Iron, though the most common, is the most difficult of all the metals to obtain in a state fit for use; and the discovery of the method of working it seems to have been posterior to the use of gold, silver, and copper. We are wholly ignorant of the steps by which men were led to practise the processes required to fuse it and render it malleable. It is certain, however, that it was prepared in ancient Egypt, and some other countries, at a very remote epoch; but it was very little used in Greece till after the Trojan war. — (See the admirable work of *M. Goguet* on the *Origin of Laws, Arts, &c.*, vol. i. p. 140.)

Species of Iron. — There are many varieties of iron, which artists distinguish by particular names; but all of them may be reduced under one or other of the 3 following classes: *cast* or *pig iron*, *wrought* or *soft iron*, and *steel*.

1. Cast or pig iron is the name given to this metal when first extracted from its ores. The ores from which iron is usually obtained are composed of oxide of iron and clay. The object of the manufacturer is to reduce the oxide to the metallic state, and to separate all the clay with which it is combined. This is effected by a peculiar process; and the iron, being exposed to a strong heat in furnaces, and melted, runs out into moulds prepared for its reception, and obtains the name of cast or pig iron.

The cast iron thus obtained is distinguished by manufacturers into different varieties, from its colour and other qualities. Of these the following are the most remarkable: —

a. White cast iron, which is extremely hard and brittle, and appears to be composed of a congeries of small crystals. It can neither be filed, bored, nor bent, and is very apt to break when suddenly heated or cooled.

b. Grey or *mottled* cast iron, so called from the inequality of its colour. Its texture is granulated. It is much softer and less brittle than the last variety; and may be cut, bored, and turned on the lathe. Cannons are made of it.

c. Black cast iron is the most unequal in its texture, the most fusible, and least cohesive, of the three.

2. Wrought or soft iron is prepared from cast iron by a process termed a refinement or finery. The wrought iron manufactured in Sweden is reckoned the finest in the world.

3. Steel consists of pieces of wrought iron hardened by a peculiar process. The Swedish iron imported into this country is mostly used in the manufacture of steel. — (See STEEL.) — (*Thomson's Chemistry.*)

Uses of Iron. — To enumerate the various uses of iron would require a lengthened dissertation. No one, who reflects for a moment on the subject, can doubt that its discovery and employment in the shape of tools and engines has been of the utmost importance to man; and has done more, perhaps, than any thing else, to accelerate his advance in the career of improvement. Mr. Locke has the following striking observations on this subject: — "Of what consequence the discovery of one natural body, and its properties, may be to human life, the whole great continent of America is a convincing instance; whose ignorance in useful arts, and want of the greatest part of the conveniences of life, in a country that abounded with all sorts of natural plenty, I think may be attributed to their ignorance of what was to be found in a very ordinary, despicable stone — I mean the mineral of iron. And whatever we think of our parts or improvements in this part of the world, where knowledge and plenty seem to vie with each other; yet, to any one that will seriously reflect upon it, I suppose it will appear past doubt, that, were the use of iron lost among us, we should in a few ages be unavoidably reduced to the wants and ignorance of the ancient savage Americans, whose natural endowments and provisions came no way short of those of the most flourishing and polite nations; so that he who first made use of that one contemptible mineral, may be truly styled the father of arts and author of plenty." — (*Essay on the Understanding*, book iv. c. 12.)

Manufacture of Iron in Great Britain. — Iron mines have been wrought in this country from a very early period. Those of the Forest of Dean, in Gloucestershire, are known to have existed in the year 1066. In consequence of the great consumption of timber which they occasioned, they were restrained by act of parliament in 1581. Soon after this, Edward Lord Dudley invented the process of smelting iron ore with pit-coal instead of wood fuel; and it is impossible, perhaps, to point out an instance of another invention that has proved more advantageous. The patent which his Lordship had obtained in 1619, was exempted from the operation of the act of 1623 (21 Jac. 1. c. 23.), setting aside monopolies: but though in its consequences it has proved of immense value to the country, the works of the inventor were destroyed by an ignorant rabble, and he was well nigh ruined by his efforts to introduce and perfect his process; nor was it till about a century after, that it was brought into general use. In the early part of last century, well-founded complaints were repeatedly made of the waste and destruction of woods caused by the smelting of iron; and the dearth and scarcity of fuel that was thus occasioned, led, about 1740, to the general adoption of Lord Dudley's process for using pit-coal, which was found to be in every respect superior to that previously in use. — (*Report of Committee of the House of Commons on Patents*, p. 168. &c.) From this period, the progress of the manufacture has exceeded the most sanguine expectations. In 1740, the quantity of pig iron manufactured in England and Wales amounted to about 17,000 tons, produced by 59 furnaces. The quantities manufactured at the undermentioned epochs, in Great Britain, have been as follows: —

1750	22,000 tons.	1806	250,000 tons, produced by 169 furnaces.
1788	68,000 — produced by 85 furnaces.	1820	400,000 — unknown.
1796	125,000 — — 121 —		

(See next page.)

The extraordinary increase that has taken place in the production of iron since 1823, is principally to be ascribed to the high prices of 1824, 1825, and 1826, when pig iron met with a ready sale at from 9*l.* to 12*l.* and 13*l.* a ton. But, in consequence partly of the failure or postponement of most of the projects as to rail-roads, &c., that were then on foot, and partly of the vast additional supplies which the extension of the manufacture threw on the market, the price fell in 1828 to from 5*l.* to 7*l.* a ton: and continued gradually to decline, till in 1832 it was only worth 4*l.* 15*s.* So heavy a fall had the effect of introducing the severest economy into every department of the manufacture. In despite, however, of all the saving that could be effected in this way, many of the manufacturers were involved in much distress, and the production of iron is believed to have been considerably diminished. This, coupled with the increasing demand for iron, naturally led to a reaction. Prices began to rise early in 1833; and the advance has been such, that at present (January, 1834), pig iron fetches 6*l.* a ton, and the manufacture is in a state of great activity.

The following statements as to the number of furnaces and the quantity of iron produced in the different districts where the manufacture is carried on, in 1823, 1825, 1828, and 1830, appeared originally in the *Birmingham Journal*. — We have been assured that their accuracy may be depended upon.

Districts.	Number of Furnaces.								Tons of Iron produced.			
	1823.	1825.			1828.			1830.				
	Total.	Total.	In Blast.	Out.	Total.	In Blast.	Out.	Total.	1823.	1825.	1828.	1830.
South Wales	72	109	80	27	100	89	11	113	182,325	230,412	279,512	277,643
Staffordshire	84	108	80	27	120	95	25	123	133,590	182,156	219,492	212,601
Shropshire	38	42	36	13	48	31	17	48	73,418	89,596	81,224	73,418
Yorkshire	26	34	22	12	34	17	17	27	27,311	39,104	32,968	27,926
Scotland	22	25	17	8	25	18	8	27	24,500	33,540	37,700	37,500
Derbyshire	15	19	14	5	18	14	4	18	14,038	22,672	22,360	17,999
North Wales	20	14	8	6	19	12	7	20	12,000	17,756	25,768	25,000
Forest of Dean		14	- -	5	2	1	1		- -	- -	2,600	
Various			- -		1	1	-		2,379	- -	1,560	5,327
Ireland		2	2	-	-	- -	-		- -	3,000		
Total	277	374	259	103	367	278	90	376	469,561	618,236	703,184	678,417

About 3-10ths of the total quantity of iron produced are used as cast iron, being consumed principally in Great Britain and Ireland; the exports, not exceeding 12,000 tons, go chiefly to the United States and British North America. The other 7-10ths are converted into wrought iron, being formed into bars, bolts, rods, &c. The exports of the different sorts of iron amount at present to about 145,000 tons, which, at 8*l.* 10*s.* a ton, would be worth 1,232,500*l.*

The increase of the iron manufacture has not only led to its exportation in very large quantities, but has reduced our imports of foreign iron for home consumption from about 34,000 tons, which they amounted to at an average of the 5 years ending with 1805, to about 18,000 or 20,000 tons, consisting principally of Swedish iron, which is subsequently manufactured into steel. The following is

An Account of the British Iron (including unwrought Steel) exported from Great Britain in the Year 1832.—
*** Quarters of a Hundred Weight and Pounds are omitted in the printing of this Table, but they are taken into account in the summing up.

Countries to which exported.	Bar Iron.	Bolt and Rod Iron.	Pig Iron.	Cast Iron.	Iron Wire.	Wrought, viz.			Of all other Sorts (except Ordnance.)	Unwrought Steel.
						Anchors and Grapnels.	Hoops.	Nails.		
	Tons. cwt.	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tns. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tns. cwt.*
Russia	155 1	2 0	57 0	2 0	13 11	- -	0 10	- -	15 1	40 15
Sweden	11 11	2 0	- -	41 13	- -	4 10	5 0	- -	59 10	
Norway	39 4	26 12	- -	1 5	1 0	1 0	12 8	0 10	38 8	6 5
Denmark	523 5	125 14	580 14	87 8	3 16	51 9	278 7	1 2	195 2	0 15
Prussia	117 17	137 6	75 0	7 6	- -	- -	120 10	11 15	12 3	3 8
Germany	4,252 9	816 9	477 0	198 17	150 12	55 12	912 14	77 2	1,803 10	39 13
The Netherlands	6,291 10	338 17	1,186 15	196 3	86 12	197 12	1,397 9	13 11	2,102 17	51 18
France	1,556 14	99 19	2,759 0	346 10	3 3	84 11	331 15	- -	381 2	92 11
Portugal, Azores, and Madeira	1,518 12	1,119 10	20 0	63 12	3 17	29 9	276 1	67 6	195 7	4 18
Spain, and the Canaries	314 15	92 5	91 15	180 19	16 7	5 9	811 17	9 6	175 1	6 1
Gibraltar	593 18	27 0	- -	33 8	4 10	77 19	414 5	19 2	96 11	1 0
Italy	9,174 11	1,659 8	420 10	94 18	3 5	135 15	824 16	19 11	559 9	7 11
Malta	477 10	- -	126 0	85 12	- -	20 12	65 0	- -	40 4	
The Ionian Islands	133 0	- -	- -	19 8	- -	16 16	- -	4 8	33 16	0 6
Turkey and Continental Greece	4,453 17	331 10	48 10	145 13	6 13	94 13	110 5	85 1	666 18	
Morea and Greek islands	506 12	- -	- -	0 7	0 5	- -	4 0	- -	2 1	
Asia	18,159 10	1,167 19	322 0	594 9	4 18	169 19	928 9	404 18	2,082 16	62 17
Africa	2,492 11	6 10	1,691 5	506 6	18 8	125 11	172 7	109 10	452 19	6 17
British colonies in North America	4,601 17	330 15	1,167 0	2,099 12	19 12	111 1	694 6	1,409 10	1,485 3	75 19
British West Indies	444 17	55 4	55 0	807 6	5 18	37 12	986 10	878 10	1,397 9	8 0
Foreign West Indies	658 11	10 15	40 0	373 9	1 2	37 12	62 2	495 9	331 17	0 7
United States of America	14,871 1	403 9	8,195 8	5,837 8	320 5	134 15	485 19	242 12	5,844 19	686 17
Brazil	912 3	88 11	- -	424 3	- -	183 8	51 13	316 19	228 1	5 6
Mexico, and the States of South America	1,169 5	10 13	- -	248 16	0 9	1 19	426 13	116 14	170 11	4 17
Guernsey, Jersey, Alderney, and Man	503 17	85 10	253 4	398 5	1 17	29 4	44 13	65 6	223 15	5 9
Total	74,924 5	6,938 1	17,566 1	12,495 1	666 7	1,606 18	9,417 14	4,347 18	18,595 0	1,112 0

Prices of Hardware. — We noticed, under the article HARDWARE (which see), the extraordinary fall which has taken place in the price of that description of goods since the peace. Since that article was printed, we have obtained from Mr. William Weston, accountant, Birmingham, the following Table of the prices of hardware articles, on which, we believe, every reliance may be placed.

Comparative Prices of Hardware in and near Birmingham, in 1818, 1824, 1832; and in January, 1834.

Articles.		1818.			1824.			1828.			1832.			1834.		
	Per	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
Anvils	cwt.	1	5	0	1	0	0	0	16	0	0	12	9	0	14	0
Awls, polished	gross	0	2	6	0	2	0	0	1	6	0	1	0	0	1	3
Bed screws, 6 inch	—	0	18	0	0	15	0	0	6	0	0	4	9	0	6	0
Bolts for doors, do.	dozen	0	6	0	0	5	0	0	2	3	0	1	6	0	1	6
Braces for carpenters, 12 bits	set	0	9	0	0	6	3	0	4	2	0	2	10	0	3	2
Bits, tinned, for bridles	dozen	0	5	0	0	5	0	0	3	3	0	2	3	0	2	3
Buttons for coats	gross	0	4	6	0	4	6	0	3	0	0	2	0	0	2	0
for waistcoats	—	0	2	0	0	2	0	0	1	2	0	0	7	0	0	7
Currycombs, 6 barred	dozen	0	2	9	0	2	6	0	1	5	0	0	11	0	1	0
Candlesticks, brass, 6 inch	pair	0	2	11	0	2	0	0	1	7	0	1	2	0	1	0
Commode knobs, brass, 2 inch	dozen	0	4	0	0	3	6	0	1	6	0	1	2	0	1	4
Frying pans	cwt.	1	5	0	1	1	0	0	18	0	0	18	0	0	16	6
Hinges, cast butts, 6 inch	dozen	0	0	10	0	0	7½	0	0	3¾	0	0	2¾	0	0	4
Shoe hammers	—	0	6	9	0	3	9	0	3	0	0	2	9	0	2	5
Latches for doors, bright thumbs	—	0	2	3	0	2	2	0	1	0	0	0	9	0	0	8
Locks for doors, iron rims, 6 inch	—	1	18	0	1	12	0	0	15	0	0	13	6	0	9	0
for guns, single rollers	each	0	6	0	0	5	2	0	1	10	0	1	6	0	1	8
Plated stirrups	pair	0	4	6	0	3	9	0	1	6	0	1	0	0	0	8
Sad irons and other castings	cwt.	1	2	6	1	0	0	0	14	0	0	11	0	0	10	0
Shovel and tongs, fire-irons	pair	0	1	0	0	1	0	0	0	9	0	0	5½	0	0	7
Tinned table spoons	gross	0	17	0	0	15	0	0	10	0	0	6	9	0	6	0
Trace chains	cwt.	1	8	0	1	5	0	0	19	6	0	15	6	0	18	6
Vices for blacksmiths	—	1	10	0	1	8	0	1	2	0	0	17	0	0	18	6
Japanned tea trays, 30 inch	each	0	4	6	0	3	6	0	2	0	0	1	5	0	1	4
Iron wire, No. 6.	bundle	0	16	0	0	13	0	0	9	0	0	6	0	0	5	6
Brass wire	lb.	0	1	10	0	1	4	0	1	0	0	0	9	0	0	9½

In 1767, the iron exported from Great Britain amounted to only 11,000 tons. At an average of the 3 years ending with 1806, the exports amounted to 28,000 tons; being less than a *fifth part* of their amount in 1832.

Supposing the total quantity of pig iron produced in Great Britain in 1833 to have amounted to 670,000 tons, and to have been worth at an average 7*l.* a ton, its total value will have been 4,690,000*l.*; and the additional labour expended in forming the pig iron into bar iron, that is, into bars, bolts, rods, &c., may probably have added about 1,250,000*l.* more to its value; making it worth in all about 5,940,000*l.*

IRON-WOOD (Ger. *Eisenholz;* Du. *Yserhout;* Fr. *Bois de fer;* It. *Legno di ferro;* Sp. *Palo hierro;* Lat. *Sideroxylon, Lignum ferreum*), a species of wood of a reddish cast, so called on account of its corroding as that metal does, and its being remarkably hard and ponderous, — even more so than ebony. The tree which produces it grows principally in the West India islands, and is likewise very common in South America, and in some parts of Asia, especially about Siam.

ISINGLASS (Ger. *Hausenblase, Hausblase;* Fr. *Colle de poisson, Carlock;* It. *Cola di pesce;* Rus. *Klei rübii, Karluk*), one of the purest and finest of the animal glues. It is a product, the preparation of which is almost peculiar to Russia. It is made of the air-bladders and sounds of different kinds of fish which are found in the large rivers that fall into the North Sea and the Caspian. That prepared from the sturgeon is generally esteemed the best; next to that the beluga; but isinglass is also prepared from sterlets, shad, and barbel, though not so good. The best is usually rolled in little ringlets; the second sort is laid together like the leaves of a book; and the common sort is dried without any care. When fine, it is of a white colour, semi-transparent, and dry. It dissolves readily in boiling water, and is used extensively in cookery. It is also used for stiffening silk, making sticking plaster, &c. The imports, in 1831 and 1832, amounted, at an average, to 1,984½ cwt. a year. The price varies at present (January, 1834) from 5*s.* to 14*s.* 6*d.* per lb. — (See *Thomson's Chemistry;* and *Tooke's View of Russia,* 2d ed. vol. iii. p. 343.)

ISLE OF MAN. See MAN, ISLE OF.

JUICE OF LEMONS, LIMES, OR ORANGES. The 9th section of the act 6 Geo. 4. c. 111. is as follows: — "For ascertaining the degrees of specific gravity or strength, according to which the duty on the juice of lemons, limes, and oranges shall be paid, it is enacted, that the degrees of such specific gravity or strength shall be ascertained by a glass citrometer, which shall be graduated in degrees in such manner, that distilled water being assumed as unity at the temperature of 60° by Fahrenheit's thermometer, every degree of the scale of such citrometer shall be denoted by a variation of $\frac{4}{1000}$ parts of the specific gravity of such water."

JUNIPER BERRIES. See BERRIES.

IVORY, the name given to the teeth or tusks of the elephant, and of the walrus or sea-horse. Each male elephant come to maturity has 2 tusks. These are hollow at the root, tapering, and of various sizes, depending principally on the age of the animal. Colour externally yellowish, brownish, and sometimes dark, internally white. The best are large, straight, and light-coloured, without flaws; not very hollow in the stump, but solid and thick. The most esteemed come from Africa, being of a closer texture, and less liable to turn yellow, than those from the East Indies.

The trade in London thus divide them: —

First sort, weighing 70 lbs. or upwards; second sort, weighing 56 lbs. to 60 lbs.; third sort, weighing 38 lbs. to 56 lbs.; fourth sort, weighing 28 lbs. to 37 lbs.; fifth sort, weighing 18 lbs. to 27 lbs.

All under 18 lbs. are called *scrivelloes*, and are of the least value. In purchasing elephants' teeth, those that are very crooked, hollow, and broken at the ends, or cracked and decayed in the inside, should be rejected; and care taken that lead or any other substance has not been poured into the hollow. The freight is rated at 16 cwt. to the ton. — (*Milburn's Orient. Com.*)

Supply of Ivory. — The imports of elephants' teeth, in 1831 and 1832, were, at an average, 4,130 cwt., of which 2,950 cwt. were retained for consumption. The medium weight of a tusk may be taken at about 60 lbs.; so that the yearly imports of 1831 and 1832 may be taken at 7,709 tusks; a fact which supposes the destruction of at least 3,854 male elephants! But, supposing the tusks could only be obtained by killing the animal, the destruction would really be a good deal greater, and would most probably, indeed, amount to 4,500 or 5,000 elephants. Occasionally, however, tusks are accidentally broken, one lost in this way being replaced by a new one; and a good many are, also, obtained from elephants that have died in the natural way. Still it is sufficiently obvious, that the supply from the sources now alluded to cannot be very large; and if to the quantity of ivory required for Great Britain, we add that required for the other countries of Europe, America, and Asia, the slaughter of elephants must, after every reasonable deduction is made, appear immense; and it may well excite surprise, that the breed of this noble animal has not been more diminished. The western and eastern coasts of Africa, the Cape of Good Hope, Ceylon, India, and the countries to the eastward of the Straits of Malacca, are the great marts whence supplies of ivory are derived. The imports from Western Africa into Great Britain, in 1831, amounted to 2,575 cwt.; the Cape only furnished 198 cwt. The imports during the same year from India, Ceylon and other Eastern countries, were 2,173 cwt. — (*Parl. Paper.* No. 550.

Sess. 1833.) The Chinese market is principally supplied with ivory from Malacca, Siam, and Sumatra.

The chief consumption of ivory in England is in the manufacture of handles for knives; but it is also extensively used in the manufacture of musical and mathematical instruments, chess-men, billiard-balls, plates for miniatures, toys, &c. Ivory articles are said to be manufactured to a greater extent, and with better success, at Dieppe, than in any other place in Europe. But the preparation of this beautiful material is much better understood by the Chinese than by any other people. No European artist has hitherto succeeded in cutting concentric balls after the manner of the Chinese: and their boxes, chess-men, and other ivory articles, are all far superior to any that are to be met with any where else.

Historical Notice. — It is a curious fact, that the people of all Asiatic countries in which the elephant is found, have always had the art of taming the animal and applying it to useful purposes, but that no such art has ever been possessed by any native African nation. Is this owing to any difference between the Asiatic and African elephants, or to the inferior sagacity of the African people? We incline to think that the latter is the true hypothesis. Alexander the Great is believed to have been the first European who employed elephants in war. It appears pretty certain, that the elephants made use of by the Carthaginians were mostly, if not wholly, brought from India; and that they were managed by Indian leaders. Some of the latter were captured by the Romans, in the great victory gained by Metellus over Asdrubal. — (See, on this curious subject, two very learned and valuable notes in the *Ancient Universal History*, 8vo ed. vol. xvii. p. 529. and p. 549. *Buffon's Article on the Elephant* is a splendid piece of composition.)

The price per cwt., duty (1*l.* per cwt.) included, of elephants' teeth in the London market, in December, 1833, was —

	£	s.	d.		£	s.	d.		£	s.	d.		£	s.	d.
1st, 79 to 90 lbs. - -	29	0	0	to	31	0	0	5th, 18 to 27 lbs. - -	18	0	0	to	21	0	0
2d, 56 — 60 — - -	25	0	0	—	23	0	0	Scrivelloes - -	14	0	0	—	35	0	0
3d, 38 — 55 — - -	23	0	0	—	26	0	0	Sea horse teeth -	0	0	0	—	5	0	0
4th, 28 — 37 — - -	20	0	0	—	24	0	0								

K.

KELP. A substance composed of different materials, of which the fossil or mineral alkali, or, as it is commonly termed, soda, is the chief. This ingredient renders it useful in the composition of soap, in the manufacture of alum, and in the formation of crown and bottle glass. It is formed of marine plants; which, being cut from the rocks with a hook, are collected and dried on the beach to a certain extent; they are afterwards put into kilns prepared for the purpose, the heat of which is sufficient to bring the plants into a state of semifusion. They are then strongly stirred with iron rakes; and when cool, condense into a dark blue or whitish mass, very hard and solid. Plants about 3 years old yield the largest quantity of kelp. The best kelp has an acrid caustic taste, a sulphurous odour, is compact, and of a dark blue greenish colour. It yields about 5 per cent. of its weight of soda. — (*Barry's Orkney's Islands*, p. 377.; *Thomson's Dispensatory.*)

The manufacture of kelp is, or rather *was*, principally carried on in the Western Islands, and on the western shores of Scotland, where it was introduced from Ireland, about the middle of last century. Towards the end of the late war, the kelp shores of the island of North Uist let for 7,000*l.* a year. It has been calculated that the quantity of kelp annually manufactured in the Hebrides only, exclusive of the mainland, and of the Orkney and Shetland isles, amounted, at the period referred to, to about 6,000 tons a year; and that the total quantity made in Scotland and its adjacent isles amounted to about 20,000 tons. At some periods during the war, it sold for 20*l.* a ton; but at an average of the 23 years ending with 1822, the price was 10*l.* 9*s.* 7*d.* — (Art. *Scotland*, *Edinburgh Encyclopædia.*)

Unluckily, however, the foundations on which this manufacture rested were altogether factitious. Its existence depended on the maintenance of the high duties on barilla and salt. Inasmuch, however, as kelp could not be substituted, without undergoing a very expensive process, for barilla, in a great many departments of industry in which the use of mineral alkali is indispensable, it became necessary materially to reduce the high duty laid on barilla during the war. The ruin of the kelp manufacture has been ascribed to this reduction; but though barilla had been altogether excluded from our markets, which could not have been done without great injury to many most important manufactures, the result would have been perfectly the same, in so far as kelp is concerned, unless the high duty on salt had also been maintained. It was the repeal of the latter that gave the kelp manufacture the *coup de grace.* The purification of kelp so as to render it fit for soap-making, is a much more troublesome and expensive process than the decomposition of salt; and the greatest quantity of alkali used, is now obtained by the latter method. Had the duty on salt not been repealed, kelp might still have been manufactured, notwithstanding the reduction of duty on barilla.

The manufacture is now almost extinct. Shores that formerly yielded the proprietors a rent of 200*l.* to 500*l.* a year, are now worth nothing. The price of kelp since 1822 has not been, at an average, above 4*l.* a ton; and the article will, most probably, soon cease to be produced.

This result, though injurious to the proprietors of kelp shores, and productive of temporary distress to the labourers employed in the manufacture, is not to be regretted. It could not have been obviated, without keeping up the price of some of the most important necessaries of life at a forced and unnatural elevation. The high price of kelp was occasioned by the exigencies of the late war, which, besides obstructing the supply of barilla, forced government to lay high duties on it and on salt. The proprietors had not the vestige of a ground for considering that such a state of things would be permanent; they

did right in profiting by it while it lasted; but they could not expect that government was to subject the country, during peace, to some of the severest privations occasioned by the war, merely that *they* might continue to enjoy an accidental advantage.

KENTLEDGE, the name sometimes given to the iron pigs cast in a particular form for ballasting ships, and employed for that purpose.

KERMES (Ger. *Scharlachbeeren;* Du. *Grein, Scharlakenbessen;* It. *Grana, Chermes, Cremese, Cocchi;* Sp. *Grana Kermes, Grana de la coscoja*), an insect (*Coccus ilicis* Lin.) of the same species as the true Mexican cochineal, found upon the *quercus ilex*, a species of oak growing in Spain, France, the Levant, &c. Before the discovery of America, kermes was the most esteemed drug for dyeing scarlet, and had been used for that purpose from a very remote period. Beckmann inclines to think that it was employed by the Phœnicians, and that it excelled even the famous Tyrian purple. — (*Hist. of Invent.* vol. ii. p. 197. Eng. ed.) From the name of *coccum* or *coccus*, cloth dyed with kermes was called *coccinum*, and persons wearing this cloth were said by the Romans to be *coccinati*. — (*Mart.* lib. i. epig. 97. lin. 6.) It is singular, however, notwithstanding its extensive use in antiquity, that the ancients had the most incorrect notions with respect to the nature of kermes; many of them supposing that it was the grains (*grana*) or fruit of the *ilex*. This was Pliny's opinion: others after him considered it in the same light, or as an excrescence formed by the puncture of a particular kind of fly, like the gall nut. It was not till the early part of last century that it was finally and satisfactorily established that the kermes is really nothing but an insect, assuming the appearance of a berry in the process of drying. The term kermes is of Persian origin. The Arabians had been acquainted with this production from the earliest periods in Africa; and having found it in Spain, they cultivated it extensively as an article of commerce, as well as a dye drug for their own use. But since the introduction of cochineal, it has become an object of comparatively trifling importance. It is still, however, prepared in some parts of Spain. Cloths dyed with kermes are of a deep red colour; and though much inferior in brilliancy to the scarlet cloths dyed with real Mexican cochineal, they retain the colour better, and are less liable to stain. The old tapestries of Brussels, and other places in Flanders, which have scarcely lost any thing of their original vivacity, though 200 years old, were all dyed with kermes. The history of this production has been treated with great learning by Beckmann (*Hist. of Invent.* vol. i. pp. 171—191. 1st ed. trans.); and by Dr. Bancroft (*Permanent Colours*, vol. i. pp. 393—409.)

KINO (Fr. *Gomme de Kino;* Ge. *Kinoharz;* It. *Chino*), a gum, the produce of trees that grow in the East and West Indies, Africa, Botany Bay, &c. The kino now found in the shops is said by Dr. A. T. Thomson to come from India, and to be the produce of the *nauclea gambir*. The branches and twigs are bruised and boiled in water. The decoction is then evaporated until it acquires the consistence of an extract, which is kino. It is imported in chests containing from 1 to 2 cwt.; and on the inside of the lid of each chest is a paper, inscribed with the name of John Brown, the month and year of its importation, and stating that it is the produce of Amboyna. It is inodorous, very rough, and slightly bitter when first taken into the mouth: but it afterwards impresses a degree of sweetness on the palate. It is in small, uniform, deep brown, shining, brittle fragments, which appear like portions of a dried extract broken down; being perfectly uniform in their appearance. It is easily pulverised, affording a powder of a lighter brown colour than the fragments. But it may be doubted whether the inspissated juice of the *nauclea gambir* ought to be considered as kino. Dr. Ainslie says that Botany Bay kino is the only kind he had seen in an Indian bazaar. The tree which yields it grows to a great height: it flows from incisions made into the wood of the trunk. — (*Thomson's Dispensatory; Ainslie's Materia Indica.*)

KNIVES (Ger. *Messer;* Du. *Messen;* Fr. *Couteaux;* It. *Coltelli;* Sp. *Cuchillos;* Rus. *Noshi*) well known utensils made of iron and steel, and employed to cut with: they are principally manufactured in London and Sheffield. Knives are made for a variety of purposes, as their different denominations imply; such as table knives, penknives, oyster knives, pruning knives, &c. Although England at present excels every part of the world in the manufacture of knives, as in most branches of cutlery, the finer kinds were imported until the reign of Elizabeth. It is stated by Mr. Macpherson (*Annals of Com. Anno* 1563), that knives were not made for use in England till 1563; but there can be no doubt that this is an error. They had been made, though probably of a rude and clumsy pattern, for centuries before, in the district called Hallamshire, of which Sheffield is the centre; and the cutlers of London were formed into a corporation in 1417. — (*Manufactures in Metal*, vol. ii. c. i. in *Lardner's Cyclopædia.*)

KÖNIGSBERG, the capital of East Prussia, in lat. 54° 42″ 11′ N., lon. 20° 29′ 15″ E. Population 68,000.

Port, &c.—Königsberg is situated on the Pregel, which flows into the Frische Haff, or Fresh Bay, — a large lake having from 10 to 14 feet water. The bar at the mouth of the Pregel has only from 5 to 6 feet water, so that none but flat-bottomed boats can ascend to the city. Pillau, in lat. 54° 33′ 39″ N., lon.

KÖNIGSBERG.

19° 52′ 30″ E., on the north side of the entrance from the Baltic to the Frische Haff, is properly the port of Königsberg. Within these few years, a light-house has been erected on a rising ground, a little to the south of Pillau, the lantern of which is elevated 103 feet above the level of the sea. The light is fixed and brilliant. The entrance to the harbour is marked by buoys; those on the larboard side being surmounted by small flags. A Gothic building, 121 feet above the level of the sea, has been erected to serve for a land-mark; at a distance it looks like a three-masted ship under sail. There is usually from 15 to 16 feet water between the buoys on entering the harbour; but particular winds occasion material differences in this respect.

Trade of Königsberg. — Being situated on a navigable river of considerable importance, Königsberg has a large command of internal navigation, and is the principal emporium of a large extent of country. Wheat, rye, and other species of grain, are the chief articles of export. The wheat is somewhat similar to that of Dantzic, but of inferior quality, being larger in the berry, and thicker skinned. The rye is thin, and also the barley, with few exceptions, and light. Peas are of a remarkably large quality. Oats are common feed, with a slight admixture of tares; but as these last answer in some degree the purpose of beans, the value of the oats is rather enhanced than otherwise by the circumstance. More tares are shipped here than from any other port in the Baltic. The prices of all sorts of grain are usually lower at Königsberg than at the neighbouring Prussian ports. Hemp, flax, linseed, yarn, and bristles, are largely exported; with smaller quantities of wool, ashes, feathers, wax, hides and skins, &c. The bristles are the best in the Baltic. Timber, deals, and staves, are as good as at Memel, but are rather scarce. The imports are coffee, sugar, cotton stuffs and yarn, hardware, dye woods, spices, tobacco, coals, rum, &c. Salt is a government monopoly; any person being allowed to import it, but he must either sell it to government at a price fixed by them, or export it again.

Money, Weights, and Measures, same as at DANTZIC; which see.

Account of the Exports of the different Species of Grain from Königsberg during each of the Fourteen Years ending with 1831.

	1818.	1819.	1820.	1821.	1822.	1823.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.
	Lasts.	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*	*Lasts.*
Wheat	3,129	1,232	2,861	1,559	591	428	1,002	816	1,483	3,754	9,543	7,698	7,505	7,565
Rye	8,429	7,360	6,769	1,459	100	1,030	393	657	692	7,228	12,920	8,154	25,420	16,900
Barley	4,425	2,952	818	215	232	24	298	1,531	201	2,322	1,346	2,272	1,687	988
Oats	3,859	1,513	5,565	864	200	116	1,566	593	5,321	8,480	1,368	3,660	8,510	4,092
Peas	2,953	1,991	1,210	234	298	215	412	712	863	503	919	422	2,360	1,506
Beans	-	136	41	-	-	-	-	-	98	56	607	380	99	154
Tares	-	439	488	78	-	22	926	716	929	318			141	326
Linseed, hemp, and rapeseed	1,823	2,197	1,864	3,173	320	1,257	1,016	2,271	2,728	2,884	3,718	3,873	3,321	1,884
Malt	4	28	49	30	-	2	-	10						
Total	24,622	18,148	19,665	7,612	1,711	3,094	5,613	7,306	12,315	25,545	30,421	26,459	48,843	33,395

Exclusive of corn, the quantities of the principal articles exported from Königsberg in 1830 and 1831 were —

Articles.	1830.	1831.	Articles.	1830.	1831.
Ashes - - - lbs.	82,170		Hides and skins - - - lbs.	53,707	17,523
Bristles - - - —	167,997	107,811	Linseed cakes - - - stone	- -	31,830
Feathers - - - —	13,860	15,411	Wax - - lbs.	31,955	23,760
Flax and flax codilla - - stone	75,230	35,900	Wool - - - —	- -	118,668
Hemp and hemp codilla - —	60,276	9,473	Yarn, Lith. and Erml. - bundles	8,000	9,000

Arrivals in 1831. — In 1831, there entered the port of Königsberg (Pillau) 704 ships, of the burden of 43,928 tons. In 1832, 43 British ships, of the burden of 3,592 tons, cleared out.

Prices free on board of the principal Articles of Export from Königsberg, 1st of June, 1832.

Articles.	Prime Cost in Prussian Currency.	Free on board in Sterling Money.	Articles.	Prime Cost in Prussian Currency.	Free on board in Sterling Money.
	Sil. gr. Per last.	*L. s. d. L. s. d. Per quarter.*		*Sil. gr. Per st. of 33 lb.*	*L. s. d. L. s. d. Per ton.*
Wheat, old, mixed and high mixed	450 to 500	2 3 8 to 2 8 4	Hemp, clean	11½	39 5 0
old, inferior kind	400 — 430	1 18 10 — 2 1 3	cut	10½ to 11	35 18 0 to 37 10 0
new, best mixed and high mixed	450 — 500	2 3 8 — 2 8 4	Lagen	9½ — 10	32 11 0 — 34 6 0
new inferior red, mixed and best red	380 — 430	1 16 10 — 2 1 3	Flax, Druana, crown, No. 1.	10½ — 11½	36 2 0 — 39 9 0
Rye, old and new	250 — 260	1 2 9 — 1 5 8	Podolia, crown, No. 1.	10½ — 11½	36 2 0 — 39 9 0
Barley, large	190 — 200	0 19 0 — 0 19 6		*Per 330 lbs.*	*Per cwt.*
small	176 — 185	0 17 2 — 0 18 6	Ashes, calcined crown	70	1 5 4
Oats	110 — 130	0 11 6 — 0 13 4		*Per lb.*	
Peas, white, new	240 — 270	1 3 8 — 1 6 7	Bristles, best white	65 gr. — 72 gr.	12 13 0 — 13 8 6
grey	240 — 270	1 3 8 — 1 6 7	crown	42	8 0 0
Beans	210 — 230	1 0 10 — 1 2 9		*Per bundle.*	*Per bundle.*
Tares	150 — 170	0 15 3 — 0 17 2	Yarn, Lith. 12—20 lbs.	5½	0 5 8
	Per barrel.	*Per barrel.*	20—40 lbs.	5·8	0 6 3
Linseed, crushing	13½ — 14	1 11 6 — 1 12 10	40—60 lbs.	6	0 6 9 — 0 6 10
sowing	19 — 21	1 0 0 — 1 2 0			

The above prices in sterling money, free on board, are calculated at the exchange of 205 s. gr., and at the proportion of 10½ Imp. qrs. per last.

L.

LAC, OR GUM LAC (Ger. *Lack, Gummilack;* Fr. *Lacque, Gomme lacque;* It. *Lacca, Gommalacca;* Sp. *Goma laca;* Rus. *Laka, Gummilak;* Arab. *Laak;* Hind. *Lak'h;* Sans. *Lākshā*), a substance, which has been improperly called a gum, produced in Bengal, Assam, Pegu, Siam, &c. on the leaves and branches of certain trees, by an insect (*chermes lacca*). The trees selected by the insect on which to deposit its eggs are known by the names of the bihar tree (*Croton lacciferum* Lin.), the pepel (*Butea frondosa*), bott, and coosim trees, &c. After being deposited, the egg is covered by the insect with a quantity of this peculiar substance, or lac, evidently intended to serve, in the economy of nature, as a nidus and protection to the ovum and insect in its first stage, and as food for the maggot in its more advanced stage. It is formed into cells, finished with as much art as a honeycomb, but differently arranged. Lac yields a fine red dye, which, though not so bright as the true Mexican cochineal, is said to be more permanent; and the resinous part is extensively used in the manufacture of sealing wax and hats, and as a varnish.

Lac, when in its natural state, encrusting leaves and twigs, is called *stick lac*: it is collected twice a year; and the only trouble in procuring it is in breaking down the leaves and branches, and carrying them to market. When the twigs or sticks are large, or only partially covered, the lac is frequently separated from them, as it always ought to be when shipped for Europe, to lessen the expense of freight. The best stick lac is of a deep red colour. When held against the light, it should look bright, and when broken should appear in diamond-like points. If it be not gathered till the insects have left their cells, it becomes pale, and pierced at the top; and is of little use as a dye, though probably better for a varnish.

Lac dye, lac lake, or *cake lac*, consists of the colouring matter extracted from the stick lac. Various processes have been adopted for this purpose. It is formed into small square cakes or pieces, like those of indigo. It should, when broken, look dark-coloured, shining, smooth, and compact; when scraped or powdered, it should be of a bright red colour, approaching to that of carmine. That which is sandy, light-coloured and spongy, and which, when scraped, is of a dull brickdust colour, should be rejected.

Notwithstanding the continued fall in the price of cochineal, the use of lac dye has been extending in this country. The annual consumption may at present amount to about 600,000 lbs., having trebled since 1818. The finest qualities of lac dye are seldom met with for sale in Calcutta, being generally manufactured under contract for the European market.

When stick lac has been separated from the twigs to which it naturally adheres, and coarsely pounded, the native silk and cotton dyers extract the colour as far as it conveniently can be done by water. The yellowish, hard, resinous powder which remains, having somewhat of the appearance of mustard seed, is called *seed lac*. When liquified by fire, it is formed into cakes, and denominated *lump lac*. The natives use the latter in making bangles, or ornaments in the form of rings, for the arms of the lower class of females; the best *shellac* being used in manufacturing these ornaments for the superior classes.

Shellac is produced from seed lac, by putting the latter into bags of cotton cloth, and holding it over a charcoal fire, when the lac melts, and being strained through the bag, the resinous part, which is the most liquefiable, is obtained in a considerable degree of purity; it is formed into thin sheets or plates. Thin-transparent, or amber-coloured shellac is best; avoid that which is thick, dark, or speckled; it should always, when broken, be amber-coloured on the edge; that which has a dark brown fracture, however thin, should be rejected. When laid on a hot iron, shellac, if pure, will instantly catch fire, and burn with a strong but not disagreeable smell. It used to be principally employed in this country in the manufacture of sealing wax, and as a varnish; but within these few years it has begun to be very extensively used in the manufacture of hats. Shellac has advanced rapidly in price during the last three or four years; a circumstance which has had a considerable effect in accelerating the fall in the price of lac dye; the quantity of the latter being necessarily increased in consequence of the greater demand for the former.

In Bengal, lac is chiefly produced in the forests of Sylet and Burdwan. The finest dye is said to be obtained from the stick lac of Siam and Pegu; but the shellac or resinous part obtained from the latter, is inferior to that produced from Sylet stick lac. It may be obtained in almost any quantity.

Account of the Quantities of Lac Dye or Lac Lake, Shellac and Seed Lac, and Stick Lac, imported into Great Britain, from the Countries eastward of the Cape of Good Hope, since 1814.

Years.	Lac Dye or Lac Lake.	Shellac and Seed Lac.	Stick Lac.	Years.	Lac Dye or Lac Lake.	Shellac and Seed Lac.	Stick Lac.
	Lbs.	*Lbs.*	*Lbs.*		*Lbs.*	*Lbs.*	*Lbs.*
1814	278,829	110,670	44,439	1824	592,197	571,684	427
1815	598,592	575,629	32,677	1825	535,505	708,687	13,521
1816	269,080	587,153	4,200	1826	760,729	443,589	90,396
1817	384,909	653,256	254,005	1827	729,242	499,813	8,835
1818	242,387	839,977	562,051	1828	689,205	681,271	
1819	178,088	531,549	40,478	1829	590,721	725,780	
1820	439,439	845,569	342,340	1830	485,269	649,636	37,595
1821	640,864	718,063	58,880	1831	753,252	1,146,128	149,144
1822	872,967	282,621	18,429	1832	459,379	1,070,261	319,373 *
1823	425,231	366,321	15,517				

* In addition to the above, an inconsiderable quantity of lac dye, &c. is sometimes imported at second hand from other countries.

The finest lac dye is distinguished by the mark D. T.; the second by J. Mc. R.; the third, by C. E., &c. In January, 1831, the prices of the different species of lac in bond in the London market were as follows:—

		L.	s.	d.		L.	s.	d.
Lac lake	per lb.	0	0	4	to	0	1	0
dye, D. T.	—	0	2	3	-	0	2	6
— J. Mc. R.	—	0	1	8	-	0	1	9
— C. E.	—	0	1	4	-	0	1	5
— low and mid.	—	0	0	9	-	0	1	1
Seed lac	per cwt.	2	0	0	-	4	0	0
Stick lac	—	2	10	0	-	2	15	0
Shellac, liver	—	6	0	0	-	6	10	0
Shellac, liver, D. T., per cwt.		6	0	0	to	0	0	0
— orange	—	7	0	0	-	7	10	0
— block	—	6	0	0	-	6	10	0

In 1823, D. T. lac dye was as high as 8*s.* 3*d.* and 8*s.* 6*d.* per lb. The duties used to be 5 per cent. on lac dye, seed lac, and stick lac; and 20 per cent. on shellac; but it was obviously absurd to charge shellac, which, as already seen, is prepared from the refuse of lac dye, with *four* times the duty laid upon the latter. This ridiculous distinction is now, however, put an end to; the present duties being 6*s.* a cwt. on lac dye and shellac, and 1*s.* a cwt. on stick lac.—(*Bancroft on Permanent Colours*, vol. ii. pp. 1—60.; *Ainslie's Mat. Med.*; *Milburn's Orient. Com.*; and *private information.*)

LACE (Du. *Kanten*; Fr. *Dentelle*; Ger. *Spitzen*; It. *Merletti, Pizzi*; Rus. *Krushewo*; Sp. *Encajes*), a plain or ornamented net-work, tastefully composed of many fine threads of gold, silver, silk, flax, or cotton, interwoven, from *Lacinia* (Lat.), the guard hem or fringe of a garment.

The origin of this delicate and beautiful fabric is involved in considerable obscurity, but there is no doubt it lays claim to high antiquity. In Mr. Hope's Costumes of the Ancients, many beautiful lace patterns are portrayed on the borders of the dresses of Grecian females; and from the derivation of the word "*lace*," it is probable it was not unknown to the Romans. It is supposed that Mary de' Medici was the first who brought lace into France, from Venice, where, and in the neighbouring states of Italy, it is understood to have been long previously worn; but we find that in England, so early as 1483, "laces of thread, and laces of gold, and silk and gold," were enumerated among the articles prohibited to be imported.—(1 *Rich.* 3. c. 10.) It is, therefore, fair to presume that this manufacture had begun in England *prior* to that period, as this and many subsequent acts were passed—(19 Hen. 7. c. 21.; 5 Eliz. c. 7.; 13 & 14 Car. 2. c. 13.; 4 & 5 W. & M. c. 10., &c.)—for the encouragement and protection of our home manufacture; but it may equally be concluded, that as *pins* (which are indispensable in the process of lace making) were not used in England till 1543, the manufacture of lace must have been vulgar in fabric, and circumscribed in its extent. Tradition says that the lace manufacture was introduced into this country by some refugees from Flanders, who settled at or near Cranfield, now a scattered village on the west side of Bedfordshire, and adjoining Bucks; but there is no certain evidence that we are indebted to the Flemings for the original introduction of this beautiful art, although from them we have undoubtedly derived almost all the different manufactures relating to dress. We have, however, imitated many of their lace fabrics, and greatly improved our manufacture at various periods, from the superior taste displayed in the production of this article in the Low Countries. In 1626, Sir Henry Borlase founded and endowed the free school at Great Marlow, for 24 boys, to read, write, and cast accounts; and for 24 girls, to knit, spin, and make *bone lace*—(*Lewis's Topography*); so that there is reason to suppose that at this time the manufacture had commenced in Buckinghamshire, which by degrees extended to the adjoining counties of Bedford and Northampton. In 1640, the lace trade was a flourishing interest in Buckinghamshire—(*Fuller's Worthies*, and different *Itineraries*); and so greatly had it advanced in England, that by a royal ordinance in France, passed in 1660, a mark was established upon the thread lace *imported from this country* and from Flanders, and upon the point lace from Genoa, Venice, and other foreign countries, in order to secure payment of the customs duties.—(*Universal Dictionary.*)

Pillow Lace,—the original manufacture,—is worked upon a hard stuffed pillow, with silk, flax, or cotton threads, according to a parchment pattern placed upon it, by means of pins, bobbins, and spindles, which are placed and displaced, twisting, and interweaving the threads, so as to imitate the pattern designed. This manufacture has been long pursued in almost every town and village in the midland counties, particularly in Buckinghamshire, Bedfordshire, and Northamptonshire, besides at Honiton, in Devon, and various other places in the west of England. The principal places where it is made in the Netherlands are Antwerp, Brussels, Mechlin, Louvaine, Ghent, Valenciennes, and Lisle. It is also made at Chantilly near Paris (celebrated for veils), Charleville, Sedan, Le Compté de Bourgoyne, Liege, Dieppe, Havre de Grace, Harfleur, Pont l'Evesque, Gosors, Fescamp, Caen, Arras, Bapaume, &c. in France; and at various places in Spain, Portugal, and Italy. We can form no estimate of the number of persons employed on the Continent; but in Brussels alone not less than 10,000 are said to be engaged in this manufacture.—(*Ency. Metrop.*) In England and Ireland, besides the laws passed at different times to encourage and protect the manufacture, associations were formed in various places, with the view of exciting a spirit of emulation and improvement, by holding out premiums for the production of the best pieces of bone lace; and although smuggling of foreign lace was carried on to a great extent, (in 1772, 72,000 ells of French lace were seized in the port of Leigh, and lodged in the king's warehouse there, besides numerous other seizures,) the British manufacture advanced in an unparalleled degree.—(*Gentleman's Mag.* 1751, vol. xxi. p. 520.; vol. xlii. p. 434.) It is imagined that the first lace ever

made in this country was of the sort called *Brussels point*, the net work made by bone bobbins on the pillow, and the pattern and sprigs worked with the needle. Such appears to have been the kind worn by the nobility and people of high rank, as is evident by the different portraits now in existence, painted by Vandyke, in the time of Charles I., and afterwards by Sir Peter Lely and Sir Godfrey Kneller, in the succeeding reigns of Charles II., Queen Anne, and George I. About a century since, the *grounds* in use were the old Mechlin, and what the trade termed the *wire ground*, which was very similar, if not identical, with the *modern* Mechlin, the principal article in the present French manufacture. The laces made in these grounds were singularly rich and durable; the designs of the *old Mechlin* resembled the figures commonly introduced in ornamental carving. Between 70 and 80 years ago, a great deterioration was occasioned by the introduction of the *Trolly* ground, which was exceedingly coarse and vulgar, the figures angular, and altogether in the worst taste conceivable. An improvement, however, took place about the year 1770, when the ground, which is probably the most ancient known, was reintroduced; this was no other than the one still in partial use, and denominated the *old French ground*. About 1777 or 1778, quite a *new* ground was attempted by the inhabitants of Buckingham and its neighbourhood, which quickly superseded all the others; this was the *point ground*, which had (as is supposed) been imported from the Netherlands. From the first appearance of this ground may be dated the origin of the modern pillow lace trade; but it was not until the beginning of the present century that the most striking improvements were made; for during the last quarter of the eighteenth century, the article, though certainly much more light and elegant from the construction of the ground, was miserably poor and spiritless in the design. Soon after the year 1800, a freer and bolder style was adopted; and from that time to 1812, the improvement and consequent success were astonishing and unprecedented. At Honiton, in Devon, the manufacture had arrived at that perfection, was so tasteful in the design, and so delicate and beautiful in the workmanship, as not to be excelled even by the best specimens of Brussels lace. During the late war, veils of this lace were sold in London at from 20 to 100 guineas; they are now sold from 8 to 15 guineas. The effects of the competition of machinery, however, were about this time felt; and in 1815, the broad laces began to be superseded by the new manufacture. The pillow lace trade has since been gradually dwindling into insignificance, and has at length sunk into a state which, compared with its condition 20 years back, is truly deplorable. It is difficult to form an estimate of the number of persons employed in pillow lace making during its prosperity; but in a petition from the makers in Buckingham and the neighbourhood, presented to her present Majesty in 1830, it was stated that 120,000 persons were dependent on this trade; but this number has since been materially diminished.

Nottingham Lace.—A frame-work knitter of Nottingham, named Hammond, about the year 1768, was the first who made lace by machinery. Dissipated in habits, and destitute of money, employment, or credit, the idea struck him, while looking at the broad lace on his wife's cap, that he could fabricate a similar article by means of his stocking frame.—(*Gravenor Henson on Hosiery, Lace, &c.* p. 295.) He tried, and succeeded. The first machine ostensibly for lace (introduced at Nottingham about the same period, by A. Else and Harvey of London) was called a pin machine, for making single press *point net* in imitation of the Brussels ground. This machine, although lost here, is still used in France to a great extent in manufacturing the net called *tulle*. This was the age of experiments; and workmen at their leisure hours employed themselves in forming new meshes on the hand, in the hope of perfecting a complete hexagon, which had hitherto eluded all their efforts to discover. In 1782, the warp frame was introduced, which is still in use for making *warp lace*; and in 1799, it was first attempted to make *bobbin net* by machinery; but this was not found to answer. During the succeeding 10 years many alterations were made in the construction of the machines, with no better success, until at length, in 1809, Mr. Heathcoat of Tiverton succeeded in discovering the correct principle of the bobbin net frame, and obtained a patent for 14 years for his invention.* Steam power was first introduced by Mr. John Lindley, in 1815–16; but did not come into active operation till 1820. It became general in 1822–23; and a great stimulus was at this period given to the trade, owing to the expiration of Mr. Heathcoat's patent, the increased application of power, and the perfection to which the different hand frames had by this time been brought. A temporary prosperity shone on the trade; and numerous individuals—clergymen, lawyers, doctors, and others—readily embarked capital in so tempting a spe-

* Since this article was printed in our first edition, Mr. Heathcoat was pointed out to us as the original inventor of the bobbin net machine, and that, prior to his patent being obtained, bobbin net by machinery was unknown, although numerous attempts had been made to produce it by its means. Mr. Brunel, engineer, who was examined, as a witness, in the action *Boville* v. *Moore*, tried before Sir Vicary Gibbs, in March, 1816, stated, in reference to this machine, that when Mr. Heathcoat had separated one half of the threads, and placed them on a beam as warp threads, and made the bobbin which carried the other half of the threads act between those warp threads, so as to produce Buckinghamshire or pillow lace, *the lace machine was invented*. Relying upon the authenticity of this statement, we feel it due to Mr. Heathcoat to give this explanation.

culation. Prices fell in proportion as production increased; but the demand was immense; and the Nottingham lace frame became the organ of general supply, — rivalling and supplanting, in plain nets, the most finished productions of France and the Netherlands.

Mr. William Felkin, of Nottingham, the author of a very able statement relative to this manufacture, considers that the amount of capital and the number of hands employed in the bobbin net trade may be thus estimated. — (Published August, 1833.)

Capital employed in spinning and doubling the Yarn.

	L.	*L.*
Fixed capital in 35 spinning and 24 doubling factories — 724,000 spinning, 296,700 doubling spindles	715,000	
Floating capital in spinners' and doublers' stock, and necessary sundries	200,000	
	915,000	
Deduct 1-6th employed for foreign bobbin net trade	155,000	
Total capital in spinning and doubling for English bobbin net trade		760,000

Capital employed in Bobbin Net making.

Fixed capital in 25 factories, principally for power machines	85,000	
1,100 power machines, averaging 11-4ths wide	170,000	
3,900 hand machines, averaging 9-4ths wide	267,000	
Floating capital in stock on hand: Power owners - 150,000 Hand owners - 250,000	400,000	
		922,000
Capital in embroidering, preparing, and stock		250,000
Total capital employed in the trade		*L.* 1,932,000

Number of Hands employed.

In spinning: adults, 4,800; children, 5,500	1,300
In doubling: adults, 1,300; children, 2,000	3,300
	13,600
Deduct 1-6th, employed for foreign demand	2,300
	11,300
In power net making: adults, 1,500; youths, 1,000; children, 500; women and girls, mending, 2,000	5,000
In hand machine working: small machine owners, 1,000; journeymen and apprentices, 4,000; winders, 4,000; menders, 4,000	13,000
Mending, pearling, drawing, finishing, &c.	30,000
In embroidering: at present very uncertain; probably about	100,000
Total of hands employed	*159,300

* We expressed our conviction, in the former edition of this work, that Mr. Felkin had exaggerated the number of persons employed; and we observe, that in this estimate the number is materially diminished; but it must be remarked, that during the last 2 years an extraordinary depression has taken place in the embroidery branch, and many have abandoned the trade.

In 1831 (*vide* former edition of this work), the annual produce was estimated at 23,400,000 square yards, worth 1,891,875*l.* It is now estimated at 30,771,000 square yards, worth 1,850,650*l.* It would therefore appear that 7,000,000 square yards more per annum are now produced for about the same amount of wages and profits. This increase in quantity is understood to have arisen from the new and improved machinery which in the mean time has been introduced. At this moment, there are, perhaps, 20 new applications of known principles, all tending to promote variety and increased production; but it is doubtful if any *new* principle has been brought into operation. A considerable increase has also taken place in bobbin net machinery on the Continent, particularly at Calais, where, in 1823, there were not 35 machines, and, perhaps, not 100 on the Continent altogether. Mr. Felkin states the number of frames now employed there, as under: —

Calais	600	8-4ths 11 point hand circular quillings. 100 of these built this year and last.
Do.	60	7-4ths 11 point hand levers.
Do.	45	various widths; old machines, pusher, traverse, &c.
Boulogne	30	hand circular; chiefly 8-4ths quillings.
St. Omers	30	hand machines; plain nets.
Douay	145	part power, part hand machines; plain net.
Lisle	120	chiefly 8-4ths, 10-4ths, and 12-4ths, power; plain net.
Ghent	35	power, 12-4ths.
St. Quentin	90	chiefly hand; plain nets.
Do.	80	8-4ths, 10-4ths, and 12-4ths, power; plain nets chiefly.
Caen	35	hand; quillings chiefly.
Paris	10	hand machines chiefly.
Lyons	50	do. do.
Villages in the north of France	340	do. do.
Switzerland	50	nearly all hand machines.
Saxony	70	do. do.
Austria	60	power and hand do.
Russia and Prussia	20	probably; and both hand and power.
Total	1,850	machines.

N. B. — The last mentioned countries, if we may judge from their efforts to obtain model machines, are preparing to manufacture very extensively.

The produce of these machines is estimated at 9,824,000 square yards of net, of the value in English money of 570,250*l.* In France alone, it was stated in an address presented to the Chamber of Deputies in March, 1833, that bobbin net to the value of 1,000,000*l.* sterling was annually used in that country, formed of equal moieties of French and English manufacture. But in other parts of Europe, where the manufacture was previously unknown, it is now also beginning to be established. Besides Austria, Russia, and Prussia, it is stated that orders have been sent to this country for bobbin net frames from Barcelona and Astorga in Spain, and even from some places in Persia. The attention of government has been called to the circumstance, and measures taken to prevent the illegal exportation of machinery. At a public meeting, held in Nottingham in August last, a committee was formed for the same purpose.

The population of Nottingham and the surrounding villages in 1811, when the bobbin net manufacture commenced, was 47,000; the present number is 79,000. As the hosiery and the point net trade are understood to have declined in the mean time, and no other branch materially advanced or sprung up, this large increase may fairly be attributed to the bobbin net manufacture.

By comparing the value of 1,270,000 lbs. of Sea Island cotton, worth 148,000*l.*, and about 10,000*l.* worth of thrown silk, which appears to be annually used in this manufacture, with the manufactured value of the same, worked into 30,771,000 square yards or bobbin net, the estimated value of which is 1,850,650*l.*, the great national utility of this trade becomes

at once evident. A clear surplus of more than a pound sterling is realised upon every pound avoirdupois of the raw material, which is distributed over the trade in rent, profit, and wages, and this is altogether independent of the profits arising from embroidering, in itself a most extensive and important branch. About half, or perhaps three fourths, of this production is supposed to be exported in a plain state, chiefly to Hamburgh, the Leipsic and Frankfort fairs, Antwerp and the rest of Belgium, to France (contraband), Italy, Sicily, and North and South America. Of the remainder, three fourths are sold unembroidered, and the remaining fourth embroidered, in this country.

The English manufacture from machinery is now confined to *point net*, *warp net*, and *bobbin net*, so called from the peculiar construction of the machines by which they are produced. There were various other descriptions made; viz. *two-plain net*, *square* or *tuck knotted net*, the *fish mesh net*, and the *platted* or *Urling's net*; but they are now discontinued. — (*Gravenor Henson.*) Nottingham is the *depôt* of the lace trade; and the supplies, collected from all the surrounding villages, and even from the more distant counties where it is manufactured, are thence distributed to the four quarters of the world.

Present Condition of the Lace Trade, Wages, &c. — We are grieved to say that the manufacture, not only of pillow but also of Nottingham lace, is at this moment in a state of great depression. The growth of the latter has been the means of destroying the former; but as the new manufacture is by far the most valuable, the change, though severely felt by many thousands of poor persons in Bucks, Bedford, and other counties, is, in a national point of view, decidedly advantageous. The depression in the Nottingham lace trade seems to be the result of its previous prosperity; which, besides contributing to the extraordinary increase in the powers of production, attracted too much capital and too many hands to the trade. So long as the demand kept pace with the supply, workmen were kept in full employment, wages and profits were good, and the stocks on hand small. But of late years the supply has been a question of *quantity* rather than of *quality*, and prices have consequently suffered a great depression. Lace, having become a common ornament, easily accessible to all classes, has lost its attractions in the fashionable circles, by which it was formerly patronised, so that very rich lace is no longer in demand. And many articles of dress, which, in our drawing-rooms and ball-rooms, lately consisted of the most costly and tasteful patterns in lace, are now either superseded, or made of a different manufacture.

The wages of the *power loom* workmen have fallen, within the last 4 years, from 1*l.* 4*s.* to 18*s.* per week — (*Felkin*, p. 2.); and, in 1830 and 1831, machines had increased one eighth in number, and one sixth in capacity of production. But wider or speedier machines than heretofore have since come into more general use, worked by 3 men in 6 hour shifts, or 18 hours per day, and calculated to produce about *a fourth more net for the same wages*; the effect of which is to supersede the single-handed machines, (now much depreciated in value), and reduce many of the small owners to journeymen. The tendency of the increase in power machinery is still further to depreciate the wages of the *hand machine* workmen (already below the standard of the power loom weaver); and the increased and accumulating production, beyond a proportionate demand, renders it hopeless to expect any immediate amelioration in their condition. A favourable reaction is now taking place in the *embroidering* branch; but many of the embroiderers in Nottingham were recently unemployed, and had to leave the trade; and even for the most splendid and beautiful specimens of embroidery (some of which have occupied 6 weeks, working 6 days a week and 14 hours a day,) the young women did not earn more than 1*s.* a day. The depressed condition of the embroiderers is believed to be owing in no inconsiderable degree to the competition of the Belgians, who have acquired a superiority in *this* department which it is not easy to account for. The condition of the *pillow lace* workers is still more deplorable. Many have now abandoned that pursuit for straw plaiting, which offers a more certain, though not a much more profitable employment; but those who still linger on in the fabrication of thread lace, working from 12 to 14 hours a day, cannot obtain more, on the average, than *two shillings and sixpence a week* for their anxious and unremitting labour. Ten years ago they could, with greater ease, earn 10*s.* a week, working only 8 hours a day.

The health of the power machine workman is, on the whole, understood to be good; the factories are neither hot nor confined; and the hands have only to superintend, not work the machines. Hand machine labour is much heavier; but as it is the custom to work by "*shifts*," the men are seldom more than 6 hours a day at the frame. It is, however, believed, that the gradual depression of wages, requiring increased exertion, will tend to deteriorate the general health of this class, particularly of those employed in wide machines. The embroidery frame is, perhaps, the most destructive. The workers, in general, commence at a tender age; and, from constantly leaning over the frame, while their bodies remain in a state of inactivity, they are frequently distorted in their persons, and become the victims of pulmonary disease. Notwithstanding the

sedentary habits of the pillow lace workers, their general health is understood to be better than that of the lace embroiderers; but, in both these employments, the hours of labour are too long for children. They are, however, purely domestic employments, under the superintendence of parents; but as the existence of the latter depends on the quantity of labour they can bring into operation, their necessities place filial considerations beyond the reach of legislative, or even social, interference.

The most celebrated foreign laces are —

1. *Brussels*, the most valuable. There are 2 kinds: *Brussels ground*, having a hexagon mesh, formed by plaiting and twisting 4 threads of flax to a perpendicular line of mesh; *Brussels wire ground*, made of silk — meshes partly straight and partly arched. The pattern is worked separately, and set on by the needle.
2. *Mechlin*; a hexagon mesh formed of 3 flax threads twisted and platted to a perpendicular line or pillar. The pattern is worked in the net.
3. *Valenciennes*; an irregular hexagonal formed of 2 threads, partly twisted and platted at the top of the mesh. The pattern is worked in the net similar to Mechlin lace.
4. *Lisle*; a diamond mesh, formed of 2 threads platted to a pillar.
5. *Alencon* (called blond); hexagon of 2 threads, twisted similar to Buckingham lace; considered the most inferior of any made on the cushion.
6. *Alencon Point*; formed of 2 threads to a pillar, with octagon and square meshes alternately.

The French nets made by machinery, are—

1. *Single Presspoint*, called, when not ornamented, *tulle*, and when ornamented, *dentelle*; made of silk; is an inferior net, but is attractive from the beautiful manner in which it is stiffened.
2. *Trico Berlin*; so called from being invented at Berlin, and the stitch being removed 3 needles from its place of looping; is fanciful and ornamented in appearance, but not in demand in England.
3. *Fleur de Tulle*, made from the warp lace machine; mesh of 2 descriptions, which gives a shaded appearance to the net.
4. *Tulle Anglois* is double pressed point lace.
5. *Bobbin net*, } principally made by English emigrants, who
6. *Warp net*, } have settled in France.

*** We are indebted for this learned and very excellent article to Mr. Robert Slater, of Fore Street, London.

LACK, a word used in the East Indies to denote the sum of 100,000 rupees, which, supposing them standards, or siccas, at 2*s.* 6*d.*, amounts to 12,500*l.* sterling.

LADING, BILL OF. See Bill of Lading.

LAGAN. See Flotsam.

LA GUAYRA, the principal sea-port of the republic of Venezuela, in the province of Caraccas, on the Caribbean Sea, in lat. 10° 36′ 19″ N., lon. 67° 6′ 45″ W. Population 6,000. In 1810, the population is believed to have amounted to 13,000; the reduction, being a consequence of the loss of life caused by the tremendous earthquake of 1812, and the massacres and proscriptions incident to the revolutionary war. The population of the city of Caraccas, of which La Guayra may be considered as the port, fell off, from the same causes, from 43,000 in 1810, to 23,000 in 1830; but they are now both increasing.

Port. — There is neither quay nor mole at La Guayra. Ships moor E.N.E. and W.S.W., with their head to the north, at from ¼ to ⅜ of a mile from the land, in from 9 to 18 fathoms. The holding ground is good; and notwithstanding the openness of the road, vessels properly found in anchors and cables run very little risk of being driven from their moorings.

Trade. —The principal articles of export are coffee, cacao, indigo, hides, sarsaparilla, &c. The quantities and values of these articles exported in 1829, 1830, and 1831, are exhibited in the following Table: —

Years.	Coffee.		Cacao.		Indigo.		Hides.		Sarsaparilla.		Sugar.	
	Weight.	Value in Sterl. Money.	Weight.	Value in Sterl. Money.	Weight.	Value in Sterl. Money.	Number.	Value in Sterl. Money.	Weight.	Value in Sterl. Money.	Weight.	Value in Sterl. Money.
	Lbs.	*L.*	*Lbs.*	*L.*	*Lbs.*	*L.*		*L.*	*Lbs.*	*L.*	*Lbs.*	*L.*
1829	4,682,221	53,753	1,844,222	45,029	393,974	81,069	8,983	2,295	4,201	90	3,214	56
1830	4,870,609	51,801	2,121,453	57,043	217,052	38,237	6,990	2,330	32,172	782	73,410	966
1831	6,268,646	66,830	1,791,814	42,741	192,055	31,456	12,508	4,169	14,820	365	232,672	2,289

The principal articles of import are cotton, linen, and woollen goods, principally from England; with provisions, hats, machinery and utensils, hardware, wine, &c. The entire value of the imports, in 1831, was supposed to amount to 162,503*l.*; of which 62,423*l.* was furnished by England; 26,082*l.* by Germany; 32,759*l.* by the United States; 29,344*l.* at second hand by St. Thomas; and the residue by France, Spain, &c.

The duties are moderate. Cottons and linens pay 27 per cent. *ad valorem.* Smuggling has been very prevalent; but efforts have recently been made, by establishing a sort of coast-guard, to effect its suppression.

Arrivals in 1831.

Countries.	Vessels.	Tons.	Countries.	Vessels.	Tons.
England - - -	9	1,411	United States - - -	29	3,254
France - - -	3	130	Colombia - - -	16	982
Germany - - -	4	744			
Holland - - -	13	649	Total -	91	8,792
Denmark - - -	17	1,322			

Port Charges payable by a Ship of 300 Tons, discharging and loading at the Port of La Guayra.

	National.		Foreign (not privileged).			National.		Foreign (not privileged).	
	Dollars.	*cents.*	*Dollars.*	*cents.*		*Dollars.*	*cents.*	*Dollars.*	*cents.*
Tonnage duty - -	37	50	150	0	Municipal bill of health -	2	0	2	0
Entrance fee - -	4	0	6	0	Permit to load, and stamp -	1	12½	1	12½
Anchorage - - -	12	0	16	0	Certificate of sea-worthiness from captain of port, prior to loading, and stamp -	2	0	2	0
Captain of port's fee -	3	0	6	0					
Interpreter's fee and translating manifest - -	2	0	4	0		108	75	232	25
Permit to discharge and stamp	1	12½	1	12½					
Health officer's fee -	4	0	4	0					
Municipal charge for water	40	0	40	0	Value in sterling money -	*L.* 17	15 10	*L.* 38	14 2

N.B. — A ship introducing a cargo, and sailing in ballast, would be liable to all the above charges, with the exception of the last two.

The charge for water is levied without regard to tonnage; viz. sloops and schooners, 20 dollars each, brigs 30, and ships 40.

Port Regulations. — On casting anchor, a visit is paid by the collector of customs, or his agent, accompanied by other officers, who take from the master his register, manifest, and muster-roll, and an officer is left on board until the cargo is discharged. The master must swear to his manifest within 24 hours after his arrival, when the permit to discharge is granted, and within 3 days all invoices must be presented. The discharge completed, the same officers repair on board to examine the vessel, and all being found in order, the officer is withdrawn. The clearing of a vessel outwards (that has entered with cargo) in ballast is then completed by paying the port charges; proof whereof being produced, the permission to sail is signed by the governor and harbour master. If the vessel take cargo on board, then the same formality, as to visiting, is pursued, as on the entry of a vessel.

Credit. — Goods imported are almost invariably sold upon credit; those exported are, on the other hand always sold for ready money. The terms of credit vary from 2 to 6 months, or more. Bankruptcy is very rare.

Commission, Brokerage, &c. — Any one who pleases may undertake the functions of broker, factor, or merchant in Venezuela. The only obligation is the paying the patent or licence, that must be taken out by every one exercising such trades. This varies, according to the business, from about 1*l.* 13*s.* 4*d.*, to 60*l.* 18*s.* 4*d.* a year, and falls on natives as well as foreigners. The rates of commission are as follows: —

On sales of goods imported	5	per cent.	But when monies are collected, and remittance is ordered in bills of exchange, including guarantee of the same	2½	per cent.
Guaranteeing the same without regard to time	2½	—	Negotiating and indorsing bills	2½	—
On sales of produce	2½	—	On money remitted as return for goods sold	1	—
On shipping produce, as returns for goods imported, or upon orders where cash is provided for the purchase	2½	—	On bills remitted as return for goods sold, including guarantee thereof, as may be agreed	1 to 2½	—
But upon orders where the amount has to be drawn for, or when provision is made in bills of exchange	5	—	Advancing money upon letters of credit, and drawing for the same	2½	—
Collecting monies, and remitting the same	1	—	Collecting or procuring freight for vessels	5	—

Insurance. — There are no establishments for conducting the business of insurance in Venezuela.

Money, Weights, and Measures.—The currency of the country consists of silver money, known by the name of *macuquéna*, divided into dollars of 8 reals, ½ do. of 4 reals, besides reals, ⅛ reals, and quartillas or ¼ reals. This money is of very unequal weight and purity, the coins issued since the commencement of the revolutionary war having been often a good deal defaced. The real should be worth 5*d.* sterling.

Weights and measures same as those of Spain, but it is intended to introduce the British Imperial gallon.

Tares. — Real tare is taken both at the Custom-house and by the merchant.

Commercial Prospects.—The commerce and industry of Venezuela suffered severely from the revolutionary struggle of which she has been the theatre. But the country is now comparatively tranquil, and there seem to be good reasons for thinking that she is about to enter on a career of prosperity. As the riches of Venezuela consist entirely of the products of her agriculture, the legislature has wisely exerted itself to give it all the encouragement possible. In this view tithes have been abolished, and their collection was finally to cease on the 1st of January, 1834. The tobacco monopoly has also been abol shed, and invitations have been held out to foreigners to settle in the country; but there is little prospect of their being much attended to, at least for some considerable time. The final recognition by Spain of the independence of this and the other new states would materially promote their interests; and it is to be hoped that it may not be much longer deferred.

We have derived these details principally from the carefully drawn up *Answers* made by Sir Robert Ker Porter, the British consul at Caraccas, to the *Circular Queries.*

LAMB-SKINS (Ger. *Lammsfelle;* Fr. *Peaux d'agneaux;* It. *Pelli agnelline;* Sp. *Pielles de corderos*). The value of lamb-skins varies according to the fineness, brilliancy, and colour of the wool. Black lamb-skins are more generally esteemed than those of any other colour. English lamb-skins are seldom to be met with perfectly black; but since the introduction of Merino sheep into this country, many of the white fleeces have, in point of quality, arrived at a pitch of perfection which justly entitles them to be ranked with some of the best fleeces in Spain. The importation of lamb-skins is immense, having amounted, on an average of 1831 and 1832, to 2,365,635. Eight tenths of the whole quantity are supplied by Italy. They are mostly used in the glove manufacture.

LAMP (Ger. *Lampe;* Fr. *Lampe;* It. *Lucerna;* Sp. *Lampara;* Rus. *Lampadu*), an instrument used for the combustion of liquid inflammable bodies, for the purpose of producing artificial light.

It is unnecessary to give any description of instruments that are so well known. We may, however, remark that the discovery of Sir H. Davy, who, by covering the flame with wire gauze, succeeded in producing a lamp that may be securely used in coal mines charged with inflammable gas, is one of the most ingenious and valuable that has ever been made. The following extracts from a communication of Mr. Buddle, one of the ablest and best-informed coal engineers in the kingdom, evince the great importance of Sir Humphry Davy's invention.

"Besides the facilities afforded by this invention to the working of coal mines abounding in fire damp, it has enabled the directors and superintendents to ascertain, with the utmost precision and expedition, both the presence, the quantity, and correct situation of the gas. Instead of creeping inch by inch with a candle, as is usual, along the galleries of a mine suspected to contain fire damp, in order to ascertain its presence, we walk firmly on with the safe lamps, and, with the utmost confidence, prove the actual state of the mine. By observing attentively the several appearances upon the flame of the lamp, in an examination of this kind, the cause of accidents which happened to the most experienced and cautious miners is completely developed; and this has hitherto been in a great measure matter of mere conjecture.

"It is not necessary that I should enlarge upon the national advantages which must necessarily result from an invention calculated to prolong our supply of mineral coal, because I think them obvious to every reflecting mind; but I cannot conclude without expressing my highest sentiments of admiration for those talents which have developed the properties, and controlled the power, of one of the most dangerous elements which human enterprise has hitherto had to encounter."

LAMP-BLACK (Ger. *Kienruss;* Fr. *Noir de fumée;* It. *Nero di fumo, Negro-fumo;* Sp. *Negro de humo*). "The finest lamp-black is produced by collecting the smoke from a lamp with a long wick, which supplies more oil than can be perfectly consumed, or by suffering the flame to play against a metalline cover, which impedes the combustion, not only by conducting off part of the heat, but by obstructing the current of air.

Lamp-black, however, is prepared in a much cheaper way for the demands of trade. The dregs which remain after the eliquation of pitch, or else small pieces of fir wood, are burned in furnaces of a peculiar construction, the smoke of which is made to pass through a long horizontal flue, terminating in a close boarded chamber. The roof of this chamber is made of coarse cloth, through which the current of air escapes, while the soot remains." — (*Ure's Dictionary.*)

LAND-WAITER, an officer of the Custom-house, whose duty it is, upon landing any merchandise, to taste, weigh, measure, or otherwise examine the various articles, &c., and to take an account of the same. They are likewise styled searchers, and are to attend, and join with, the patent searchers, in execution of all cockets for the shipping of goods to be exported to foreign parts; and, in cases where drawbacks or bounties are to be paid to the merchant on the exportation of any goods, they, as well as the patent searchers, are to certify the shipping thereof on the debentures.

LAPIS LAZULI. See Ultramarine.

LAST, an uncertain quantity, varying in different countries, and with respect to different articles. Generally, however, a last is estimated at 4,000 lbs.; but there are great discrepancies.

The following quantities of different articles make a last, viz. — 14 barrels of pitch, tar, or ashes; 12 dozen of hides or skins; 12 barrels of cod-fish, potash, or meal; 20 cades, each of 1,000 herrings, every 1,000 ten hundred, and every 100 five score; 10½ quarters of cole-seed; 10 quarters of corn or rape-seed; in some parts of England, 21 quarters of corn go to a last; 12 sacks of wool; 20 dickers (every dicker 12 skins) of leather; 18 barrels of unpacked herrings; 10,000 pilchards; 24 barrels (each barrel containing 100 lbs.) of gunpowder; 1,700 lbs. of feathers or flax.

Last is sometimes used to signify the burden or lade of a ship.

LATH, LATHS (Du. *Latten;* Fr. *Lattes;* Ger. *Latten;* It. *Correnti;* Rus. *Slegü*), long, thin, and narrow slips of wood, nailed to the rafters of a roof or ceiling, in order to sustain the covering. Laths are distinguished into various sorts, according to the different kinds of wood of which they are made, and the different purposes to which they are to be applied. They are also distinguished, according to their length, into 5, 4, and 3 feet laths. Their ordinary breadth is about an inch, and their thickness $\frac{1}{4}$ of an inch. Laths are sold by the bundle, which is generally called a hundred: but 7 score, or 140, are computed in the hundred for 3 feet laths; 6 score or 120, in such as are 4 feet; and for those which are denominated 5 feet, the common hundred, or 5 score.

LATTEN, a name sometimes given to tin plates; that is, to thin plates of iron tinned over. — (See Tin.)

LAWN (Ger. and Fr. *Linon;* It. *Linone, Rensa;* Sp. *Cambray clarin*), a sort of clear or open worked cambric, which, till of late years, was exclusively manufactured in France and Flanders. At present, the lawn manufacture is established in Scotland, and in the north of Ireland, where articles of this kind are brought to such a degree of perfection, as nearly to rival the productions of the French and Flemish manufactories. In the manufacture of lawns, finer flaxen thread is used than in that of cambric.

LAZARETTO. See Quarantine.

LEAD (Ger. *Bley, Blei;* Du. *Lood, Loot;* Fr. *Plomb;* It. *Piombo;* Sp. *Plomo;* Rus. *Swinetz;* Pol. *Olow;* Lat. *Plumbum;* Arab. *Anuk;* Hind. *Sisa;* Pers. *Surb*), one of the most useful metals. It is of a bluish white colour, and when newly melted is very bright, but it soon becomes tarnished by exposure to the air. It has scarcely any taste, but emits, on friction, a peculiar smell. It stains paper or the fingers of a bluish colour. When taken internally, it acts as a poison. It is one of the softest of the metals: its specific gravity is 11·35. It is very malleable, and may be reduced to thin plates by the hammer; it may also be drawn out into wire, but its ductility is not very great. Its tenacity is so small, that a lead wire $\frac{1}{126}$ inch diameter is capable of supporting only 18·4 lbs. without breaking. It melts at 612°. — (*Thomson's Chemistry.*)

Lead is a metal of much importance, as, from its durability, it is extensively used in the construction of water-pipes and cisterns, as a covering for flat surfaces or tops of buildings, &c. &c. Its salts, which are poisonous, are used in medicine to form sedative external applications; and frequently not a little, by the disreputable wine merchant, to stop the progress of acetous fermentation. Wine thus poisoned, may, however, be readily distinguished; a small quantity of the bicarbonate of potassa producing a white precipitate, and sulphureted hydrogen a black one. Pure wine will not be effected by either of these tests. "The oxide of lead enters into the composition of white glass, which it renders clearer and more fusible: it is also used in glazing common earthen vessels; hence the reason that pickles kept in common red pans become poisonous. Lead, with tin, and a small quantity of some of the other metals, forms pewter; with antimony, it forms the alloy of which printing types are made." — (*Joyce's Chem. Mineralogy.*)

The lead mines of Great Britain have been wrought from a very remote era. Previously to 1289, however, it would seem that those of Derbyshire only had been ex-

plored. But in the year now mentioned, lead mines were discovered in Wales; and the fact being ascertained, that the ore of these mines produced some silver, increased attention was paid to their working. The produce of the lead mines at present wrought in Great Britain cannot be accurately ascertained. Mr. Stevenson supposes (art. *England, Edin. Ency.*) that the lead mines of Derbyshire annually produce 5,000 or 6,000 tons; but they seem to be on the decline. Those on the borders of Cumberland and Northumberland are supposed to yield, at an average, from 11,000 to 12,000 tons. The total produce of the Scotch lead mines is estimated at 65,000 bars; which as each bar is 1 cwt. 1 qr. 2 lbs., is equal to 4,120 tons. — (*General Report of Scotland*, vol. iii. Addenda, p. 7.) Some of the most productive of the Welch lead mines have either been wrought out, or have been rendered unserviceable from inundations. Subjoined is

An Account of the Exports and Imports of Lead and Lead Ore, &c. for Thirteen Years, ending the 5th of January, 1833.

Years.	Exports.								Imports.	
	Pig and Rolled Lead and Shot.	Litharge.	Red Lead.	White Lead.	Lead Ore.	Total British Lead and Lead Ore.	Foreign Lead in Pig.	Foreign Lead Ore.	Lead.	Lead Ore.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
1821	18,300	395	229	603	252	19,779	4	- -	4	
1822	15,646	573	242	652	287	17,400	- -	- -	- -	275
1823	13,784	576	441	574	455	15,830	69	12	72	811
1824	11,044	816	280	549	225	12,914	298	9	369	177
1825	10,833	586	338	885	350	12,991	749	- -	712	191
1826	8,616	831	338	616	139	10,560	3,655	- -	6,163	1,603
1827	10,222	901	408	629	249	12,409	1,847	- -	913	1,150
1828	13,275	1,140	534	1,012	256	16,217	2,282	- -	2,164	1,076
1829	10,001	1,545	382	1,133	195	13,256	1,785	- -	2,450	5,016
1830	6,832	463	382	750	220	8,647	1,700	- -	1,533	175
1831	7,442	490	520	662	194	9,308	859	- -	662	341
1832	6,777	335	281	435	105	7,933	1,234	- -	1,232	321
1833	12,181	433	396	652	236	13,898	957	- -	1,090	269

An Account of British Lead and Lead Ore exported from the United Kingdom from the 1st of January, 1832, to the 1st of January, 1833; distinguishing the Countries to which it was sent. — (Quarters and Pounds omitted in the Columns, but allowed for in the summing up.)

Countries to which exported.	British Lead and Lead Ore.						Foreign Lead and Lead Ore.	
	Pig and Rolled Lead and Shot.	Litharge.	Red Lead.	White Lead.	Lead Ore.	Total of British Lead and Lead Ore.	Pig Lead.	White Lead.
	Tons. cwt.	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*	*Tons. cwt.*
Russia	1,324 9	141 5	6 19	10 11	-	1,483 6	498 10	
Sweden	49 3	9 11	11 9	44 15	-	115 0		
Norway	51 7	0 16	0 1	18 4	-	70 9		
Denmark	128 12	18 4	9 17	125 11	-	282 5		
Prussia	69 8	29 11	7 1	49 19	-	156 1		
Germany	173 13	126 19	123 3	54 0	-	477 17	4 7	
The Netherlands	186 0	29 10	89 0	2 10	149 0	456 1	371 18	
France	65 7	0 19	4 5	-	-	70 11	32 14	
Portugal, Azores, and Madeira	104 2	5 0	7 10	38 11	-	155 3		
Spain and the Canaries	27 0	1 4	2 0	3 1	-	33 5		
Gibraltar	18 15	-	0 4	-	-	18 19		
Italy	40 14	45 0	17 11	3 7	45 5	151 17		
Malta	4 0	-	-	3 5	-	7 5		
Ionian Islands	1 0	-	1 4	-	-	2 4		
Turkey and the Levant	55 12	0 10	4 15	4 0	-	64 17	-	22 18
Isles of Guernsey, Jersey, Alderney, and Man	248 3	0 15	0 1	10 7	-	259 7	6 4	
East Indies and China	2,908 12	-	55 14	15 10	-	2,979 16	18 14	
New South Wales, Van Diemen's Land, and Swan River	206 18	-	0 9	15 15	-	223 3	15 0	
Cape of Good Hope	85 7	-	4 16	6 17	1 10	98 11		
Other parts of Africa	284 15	-	-	11 10	40 0	336 5		
British North American colonies	382 16	-	6 2	91 12	-	480 11		
British West Indies	413 7	-	0 13	25 14	-	439 15		
Foreign West Indies	69 5	-	-	4 0	-	73 5		
United States of America	4,844 14	-	-	51 2	-	4,895 17		
Brazil	402 3	22 6	42 16	58 15	-	526 1		
Mexico	-	-	0 5	0 12	-	0 18		
Colombia	2 16	0 7	-	-	-	3 3		
Chili	11 7	-	-	-	-	11 7		
Peru	7 0	0 7	-	-	-	7 7	9 6	
States of La Plata	14 7	0 5	0 4	2 10	-	17 6		
Total	12,181 3	432 14	396 5	652 5	235 15	13,898 3	956 15	22 18

Fall of Prices. Spanish Lead Mines. — The falling off in the exports of British lead, the increased amount of the imports, and the extraordinary fall that has taken place in the price of lead since 1825, seem to be principally owing to the vast supplies of that metal that have recently been furnished by the mines of Adra, in Granada, in Spain. These have been wrought to a vastly greater extent within the last few years than previously; and the richness of the ore, and the facility with which it is obtained, enable the Spaniards, who are but indifferently skilled in the art of mining, to undersell every other people, and to supply most markets to which they have ready access. So much is this the case, that several of the least productive of the lead mines of Germany, and other countries, have been already abandoned; and it is even doubtful whether the duties on foreign lead will be sufficient to hinder some of our mines from sharing the same fate. Inasmuch, however, as lead is of primary importance in the arts, the reduction of its price, though injurious to those engaged in its production, is, undoubtedly, a great public benefit. We therefore trust that nothing may be done, either by raising the duties on foreign lead, or

otherwise, artificially to increase its price. The competition of the Spaniards has already led, both here and in Saxony, to the adoption of various processes calculated to lessen the expense of lead-making; and to the introduction of a degree of economy into every department of the business that was not previously thought of. This is the only way in which the natural advantages on the side of the Spaniards can be met with any prospect of success. We understand too, that there are good grounds for thinking that it will answer the object in view; but though it were to fail, it would be ridiculous to suppose that the miners could be beneficially assisted by Custom-house regulations. Neither is there any thing so peculiarly valuable about the mere manufacture of lead as to make us prefer a high-priced indigenous metal to a cheaper article brought from abroad.

Price of Lead per Ton in Great Britain since 1800.

Years	Price per Ton.	Average for Ten Years.	Years.	Price per Ton.	Average for Ten Years.	Years.	Price per Ton.	Average for Ten Years.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.		£ s. d.	£ s. d.
1800	19 16 0		1811	24 0 6		1822	22 7 0	
1801	22 8 6		1812	23 3 6		1823	22 5 0	
1802	24 16 6		1813	25 14 0		1824	21 0 0	
1803	27 15 6		1814	26 11 0		1825	25 6 0	
1804	28 0 0		1815	20 16 0		1826	19 0 0	
1805	27 11 0		1816	16 5 0		1827	18 7 0	
1806	35 12 6		1817	18 5 0		1828	17 0 0	
1807	30 3 6		1818	27 5 6		1829	14 5 0	20 7 0
1808	30 1 0		1819	22 11 0	23 6 6	1830	14 0 0	
1809	31 3 0	27 14 6	1820	21 10 6		1831	14 0 0	
1810	28 16 0		1821	22 10 0		1832	13 10 0	

The consumption of lead in France is rapidly increasing. It is nearly all imported; and the importations have increased from 6,211,800 kilogrammes, at an average of the 4 years ending with 1822, to 15,742,192 kilogrammes, at an average of the 2 years ending with 1830. The imports are almost entirely from Spain; and their increase is, no doubt, principally a consequence of the fall of prices. — (*Journal des Mines, Troisième Série*, tom. iii. p. 517.)

Lead Mines of the United States. — These have recently become of considerable importance. We subjoin an

Account of the Lead manufactured in the United States, during each of the Ten Years, ending the 30th of September, 1832.

Years.	Fever River.	Missouri.	Total.	Years.	Fever River.	Missouri.	Total.
	Lbs.	*Lbs.*	*Lbs.*		*Lbs.*	*Lbs.*	*Lbs.*
1823	335,130	- -	335,130	1829	13,348,150	1,198,160	14,511,310
1824	175,220	- -	175,220	1830	8,323,998	8,060	8,332,058
1825	661,550	386,590	1,048,140	1831	6,381,900	67,180	6,449,080
1826	958,842	1,374,972	2,333,814	1832	4,281,876	- -	4,281,876
1827	5,182,180	910,380	6,092,560				
1828	11,105,810	1,205,920	12,311,730	Total	50,752,636	5,151,252	55,903,888

The decrease has been explained, partly, at least, by the fact of no leases having been granted in Missouri, since the act of 1829, authorising the sale of all the mineral lands in that State, and by the interruption of the works on the Upper Mississippi in consequence of the Indian war.

LEAD, BLACK, or PLUMBAGO. See Black Lead.

LEAD, RED, or MINIUM. See Minium.

LEAGUE, a measure of length, containing more or fewer geometrical paces, according to the customs of different countries. — (See Weights and Measures.)

LEAKAGE, in commerce, an allowance in the customs, granted to importers of wine, for the waste and damage the goods are supposed to receive by keeping. — (See *Warehousing Act*, in art. Warehousing System.)

LEATHER (Ger. *Leder*; Du. *Leder, Leêr*; Da. *Læder*; Sw. *Läder*; Fr. *Cuir*; It. *Cuojo*; Sp. *Cuero*; Rus. *Kosha*; Lat. *Corium*), the skins of various quadrupeds, dressed in a particular manner for the use of manufacturers, whose business it is to make them up, according to their different employments.

The leather manufacture of Great Britain is of very great importance, and ranks either third or fourth on the list; being inferior only in point of value and extent to those of cotton, wool, and iron, if it be not superior to the latter. Sir F. M. Eden, in his work on *Insurance*, estimated the value of the different articles manufactured of leather, in 1803, at 12,000,000*l.*; and there is reason to think that this statement was not very wide of the mark. The total quantity of all sorts of leather tanned, tawed, dressed, and curried in Great Britain, may at present be estimated at about 50,000,000 lbs.; which, at 1*s.* 8*d.* per lb., gives 4,166,000*l.* as the value of the leather only. Now, supposing, as is sometimes done, the value of the leather to amount to *one third* of the value of the finished articles produced from it, that would show the value of the manufacture to be about 12,500,000*l.*: but if, as others contend, the value of the leather does not exceed *one fourth* part of the value of the finished articles, then the value of the manufacture must exceed 16,000,000*l.* We, however, are inclined to think that we shall be nearer the truth, if we take the smaller sum, and estimate the value of the manufacture at 12,500,000*l.* To get the number of persons employed, we have first to deduct from this sum, 4,000,000*l.* for the material, which leaves 8,500,000*l.* as the aggregate amount of profits, wages, &c. And setting aside 20 per cent. as profit, rent of workshops, compensation for capital wasted, &c., we have a sum of 6,800,000*l.* remaining as wages:

and supposing those employed as shoemakers, saddlers, glovers, &c. to make at an average 30*l.* a year each, the entire number of such persons will amount to 226,000.

This, however, does not give the total number of persons employed in the leather trade, inasmuch as it excludes the tanners, curriers, &c. employed in dressing and preparing the leather. But if, from the value of the prepared leather, 4,000,000*l.*, we deduct 1,000,000*l.* for the value of the hides, and 2,000,000*l.* for tanners' and curriers' profits, including the expense of lime, bark, pits, &c., we shall have 1,000,000*l.* left as wages. Now, as the wages of tanners, curriers, leather dressers, &c. may, we believe, be taken at 35*l.* a year at an average, we shall have 28,300 as the number employed in these departments. And adding these to the persons employed in manufacturing the leather, we have a grand total of 254,300 persons employed in the various departments of the business.

Those who may be inclined to suspect these estimates of exaggeration, would do well to reflect on the value of the shoes annually manufactured. It is generally supposed that the expenditure upon shoes may be taken, at an average of the whole population, at 10*s.* each individual, young and old; which, supposing the population to amount to 16,000,000, would give EIGHT millions for the value of shoes only; but taking the value of the shoes at only 8*s.* 6*d.* each individual, it gives 6,800,000*l.* for the amount. Mr. Stevenson (art. *England, Edin. Ency.*) supposes that the value of the saddlery, harness, gloves, &c. may be assumed to be at least equal to that of the shoes; but we believe this is too high, and have taken it at 1,100,000*l.* below the value of the shoes. In estimating the value of the entire manufacture at 12,500,000*l.*, we incline to think that we are as near the mark as it is easy to come in such investigations.

In speaking of the leather manufacture, Dr. Campbell has the following striking observations:—"If we look abroad on the instruments of husbandry, on the implements used in most mechanic trades, on the structure of a multitude of engines and machines; or if we contemplate at home the necessary parts of our clothing — breeches, shoes, boots, gloves — or the furniture of our houses, the books on our shelves, the harness of our horses, and even the substance of our carriages; what do we see but instances of human industry exerted upon leather? What an aptitude has this single material in a variety of circumstances for the relief of our necessities, and supplying conveniences in every state and stage of life? Without it, or even without it in the plenty we have it, to what difficulties should we be exposed?—(*Political State of Great Britain*, vol. ii. p. 176.)

Leather was long subject to a duty; the manufacture being, in consequence, necessarily conducted under the *surveillance* of the excise. In 1812, the duty, which had previously amounted to 1½*d.* per lb., was doubled; and continued at 3*d.* per lb. till July, 1822, when it was again reduced to 1½*d.* per lb. The reduced duty produced a nett revenue of about 360,000*l.* It is clear, however, that either the duty ought not to have been reduced in 1822, or that it ought to have been totally repealed. The continuance of any part of the duty rendered it necessary to continue all the vexatious regulations required to insure the collection of the revenue, while the reduction of 1½*d.* in the cost of preparing a pound of leather was so trifling as hardly to be sensible. It is, however, unnecessary to enter into any discussion to show the extreme inexpediency of laying any duty on an article so indispensable to the labouring class, and to the prosecution of many branches of industry, as leather; and still less to show the inexpediency of subjecting so very important and valuable a manufacture to a vexatious system of revenue laws, for the sake of only 360,000*l.* a year. Luckily, however, these have become matters of history. The leather duties were totally abolished in 1830; and as the manufacture is now relieved from every sort of trammel and restraint, its rapid increase may be confidently expected. It is to be hoped that no future necessity may arise to occasion the re-imposition of the leather duty.

Account of the Number of Pounds' Weight of Leather charged with Duties of Excise in England, in 1824—1829.

1824	-	53,429,539	1826	-	44,927,216	1828	-	50,233,689
1825	-	52,274,957	1827	-	47,616,316	1829	-	46,200,843

The quantity annually charged with duty in Scotland during the same period was, at an average, about 6,000,000 lbs.

The quantity of wrought and unwrought leather exported in 1829, amounted to 1,338,937 lbs., of the declared value of 268,380*l.* The value of the saddlery and harness exported during the same year was 83,303*l.* Nearly two thirds of the leather exported, is sent, principally in the shape of shoes, to the British West Indian and North American colonies.

LEDGER, the principal book of accounts kept by merchants and tradesmen, wherein every person's account is placed by itself, after being extracted from the Journal. — (See BOOK-KEEPING.)

LEECH FISHERY. The demand for the medicinal leech (*Hirudo medicinalis*) is so great as to afford employment to a considerable number of persons in catching and selling the animal. It is common throughout Europe, America, and India, inhabiting lakes and pools. Norfolk supplies the greater part of the leeches brought to the London market; but some are taken in Kent, Suffolk, Essex, and Wales; and large quantities are imported from Bordeaux and Lisbon. They are caught in spring and autumn, by people who wade into the pools and allow them to fasten on their limbs; or more generally the catchers beat, as they wade in, the surface of the water with poles, which sets the leeches in motion, and brings them to the surface; when they are taken with the hand and put into bags. As they come to the surface just before a thunder storm, this is regarded a good time for collecting them. — (*Thomson's Dispensatory.*)

We extract from the *Gazette des Hopitaux*, the following interesting account of the fishery of leeches at La Brenne, in Paris: —

"The country about La Brenne is, perhaps, the most uninteresting in France. The people are miserable looking, the cattle wretched, the fish just as bad — but the leeches are admirable.

"If ever you pass through La Brenne, you will see a man, pale and straight haired, with a woollen cap on his head, and his legs and arms naked; he walks along the borders of a marsh, among the spots left dry by the surrounding waters, but particularly wherever the vegetation seems to preserve the subjacent soil undisturbed: this man is a leech fisher. To see him from a distance, — his woe-begone aspect — his hollow eyes — his livid lips — his singular gestures, — you would take him for a patient who had left his sick bed in a fit of delirium. If you observe him every now and then raising his legs, and examining them one after the other, you might suppose him a fool; but he is an intelligent leech fisher. The leeches attach themselves to his legs and feet as he moves among their haunts; he feels their presence from their bite, and gathers them as they cluster about the roots of the bullrushes and sea weeds, or beneath the stones covered with green and gluey moss. Some repose on the mud, while others swim about; but so slowly, that they are easily gathered with the hand. In a favourable season, it is possible, in the course of 3 or 4 hours, to stow 10 or 12 dozen of them in the little bag which the gatherer carries on his shoulder. Sometimes you will see the leech fisher armed with a kind of spear or harpoon: with this he deposits pieces of decayed animal matter in places frequented by the leeches; they soon gather round the prey, and are presently themselves gathered into a little vessel half full of water. Such is the leech fishery in spring.

"In summer, the leech retires into deep water; and the fishers have then to strip themselves naked, and walk immersed up to the chin. Some of them have little rafts to go upon; these rafts are made of twigs and rushes, and it is no easy matter to propel them among the weeds and aquatic plants. At this season, too, the supply in the pools is scanty; the fisher can only take the few that swim within his reach, or those that get entangled in the structure of his raft.

"It is a horrid trade, in whatever way it is carried on. The leech gatherer is constantly more or less in the water, breathing fog and mist and fetid odours from the marsh; he is often attacked with ague, catarrhs, and rheumatism. Some indulge in strong liquors, to keep off the noxious influence, but they pay for it in the end by disorders of other kinds. But, with all its forbidding peculiarities, the leech fishery gives employment to many hands; if it be pernicious, it is also lucrative. Besides supplying all the neighbouring *pharmaciens*, great quantities are exported, and there are regular traders engaged for the purpose. Henri Chartier is one of those persons; and an important personage he is when he comes to Meobecq, or its vicinity; his arrival makes quite a fête — all are eager to greet him.

"Among the interesting particulars which I gathered in La Brenne relative to the leech trade, I may mention the following: — One of the traders — what with his own fishing and that of his children, and what with his acquisitions from the carriers, who sell quantities *second-hand* — was enabled to hoard up 17,500 leeches in the course of a few months; he kept them deposited in a place where, in one night, they all became frozen *en masse*. But the frost does not immediately kill them; they may generally be thawed into life again. They easily, indeed, bear very hard usage. I am told by one of the carriers, that he can pack them as closely as he pleases in the moist sack which he ties behind his saddle; and sometimes he stows his cloak and boots on top of the sack. The trader buys his leeches *pêle mêle*, big and little, green and black — all the same; but he afterwards sorts them for the market. Those are generally accounted the best which are of a green ground, with yellow stripes along the body."

LEGHORN, a city and sea-port of Italy, in Tuscany, in lat. 43° 33′ 5″ N., lon. 10° 16¾′ E. Population, in 1830, according to consul's report, 72,924.

Harbour, Road, &c. — Leghorn has an outer harbour protected by a fine mole, running in a N.N.W. direction upwards of ½ a mile into the sea, and a small inner harbour or basin. The water in the harbour is rather shallow, varying from 8 feet in the inner basin to 18 or 19 feet at the end of the mole. The rise of the tides is about 14 inches. Ships lie within the mole with their sterns made fast to it by a cable, and an anchor out ahead. The light-house is built on a rock a little to the S. W. of the mole. It is a conspicuous object, being about 170 feet above the level of the sea. The roadstead lies W. N. W. of the harbour, between it and the Melora bank. The latter is a sand, lying N. and S., 4 miles in length by 2 in breadth, the side nearest the shore being about 4 miles from it. It consists, for the most part, of sand and mud, and has from 3 fathoms to ½ do. water over it; but towards its southern extremity it is rocky; and there, on some of the points which project above the water, the Melora tower has been constructed to serve as a sea-mark; it bears from the light-house W. ½ N., distant about 4 miles. The best course for entering the roads is to keep to the northward of the Melora bank at about a mile from it, and then having doubled it, to stand on for the light-house about 2½ miles, anchoring in from 7 to 9 fathoms, the light-house bearing S. S. E. ½ E. 4 miles off. The entrance by the channel to the south of the Melora bank is also quite safe; but it is not so suitable for large ships as that by the north. During southerly winds there is sometimes a heavy sea in the roads, but the holding ground is good; and with sufficient anchors and cables, and ordinary precaution, there is no danger. The lazaretto lies to the south, about 1 mile from the tower, and is said to be one of the best in Europe.

Trade, &c. — The comparative security and freedom which foreigners have long enjoyed in Tuscany, still more than its advantageous situation, render Leghorn the greatest commercial city of Italy. Its exports are similar to those from the other Italian ports; consisting principally of raw and manufactured silks, olive oil, fruits, shumac, valonia, wines, rags, brimstone, cheese, marble, argol, anchovies, manna, juniper berries, hemp, skins, cork, &c. Leghorn platting for straw hats is the finest in the world; and large quantities are imported into Britain. — (See HATS, STRAW.) Besides the above, all sorts of articles the produce of the Levant may be had at Leghorn. Recently, however, this trade has fallen off; the English and other nations who used to import Levant produce at second hand from Italy, preferring now, at least for the most part, to bring it direct from Smyrna, Alexandria, &c. The imports are exceedingly numerous and valuable, comprising all sorts of commodities, with the exception of those produced by Italy. Sugar, coffee, and all sorts of colonial produce; cotton stuffs, yarn, and wool; corn, woollen stuffs, spices, dried fish, indigo, dye woods, rice, iron, tin, hides, &c.; are among the most prominent articles. Ships with corn on board may unload within the limits of the lazaretto, without being detained to perform quarantine; a circumstance which has contributed to make Leghorn one of the principal *depôts* for the wheat of the Black Sea. Hard wheat, particularly from Taganrog, is in high estimation here and in the other Italian ports. It is particularly well fitted for making vermicelli, macaroni, &c. The government do not publish any official account of the imports and

exports of Leghorn; and no mercantile circulars that we have been fortunate enough to fall in with, afford the means of supplying the deficiency.

Money. — Accounts are principally kept in *pezze da otto reali* (or dollars of 8 reali), the pezza being divided into 20 soldi or 240 denari. The *lira* is another money of account, chiefly used in inferior transactions; it also is divided into 20 soldi and 240 denari: 1 pezza = 5⅔ lire.

The monies of Leghorn have two values; the one called *moneta buona*, the other *moneta lunga*. The former is the effective money of the place. Moneta buona is converted into moneta lunga, by adding 1/23, and the latter is reduced to the former by subtracting 1/24. The lira of account = 8 1/8*d.* sterling very nearly; hence the pezza = 3*s.* 10¾*d.* very nearly.

The principal silver coins are, the Francescone, or Leopoldo, of 10 *paoli*, or 6 2/3 lire = 4*s.* 6*d.* sterling very nearly. The piece of 5 lire = 3*s.* 4·4*d.*, and the lira = 7·45*d.* sterling.

Weights and Measures. — The pound by which gold and silver and all sorts of merchandise are weighed, is divided into 12 ounces, 96 drachms, 288 denari, and 6,912 grani. It is = 339·542 French grammes, or 5,240 English grains. Hence 100 lbs. of Leghorn = 74·864 lbs. avoirdupois; but in mercantile calculations it is usual to reckon 100 lbs. of Leghorn = 77 lbs. avoirdupois: this, perhaps, has arisen from taking the tares and other allowances, as to which there is a good deal of uncertainty, into account. Thus it is found that the English cwt. seldom renders more than 140 or 142 lbs. at Leghorn, though it is = 150 lbs.; in the instances of logwood, tobacco, and a few others, it does not render more than 135 lbs. The quintal, or centinajo = 100 lbs. The cantaro is generally 150 lbs.; but a cantaro of sugar = 151 lbs.; that of oil = 88 lbs.; of brandy = 120 lbs.; of stock-fish, and some other articles = 160 lbs. The rottolo = 3 lbs.

Corn is sold by the sacco or sack, = 2·0739 Winch. bushels; hence 4 sacks = 1 Imperial quarter very nearly.

The liquid measures are —

2 Mezzette = 1 Boccale.
2 Boccali = 1 Fiasco.
20 Fiaschi = 1 Barile = 12 English wine gallons.

The barile of oil is 16 fiaschi, of two boccali each, = 8·83 wine gallons; it weighs about 66 lbs. avoirdupois. A large jar of oil contains 30 gallons; a small one 15; and a box with 30 bottles = 4 gallons.

The long measure is the braccio, which is divided into 20 soldi, 60 quattrini, or 240 denari; it contains 22·98 English inches. 155 bracci = 100 English yards. The canna of 4 bracci = 92 English inches.

Credit, Charges, &c. — Goods in general are bought and sold for silver money; between which, and the money in which bills of exchange are bought, there is a difference of 7 per cent. (agio) against silver; *i. e.* 107 dollars in silver are equal to 100 in gold.

On goods bought or sold (unless it be in effective money, where there is no discount) there is, generally speaking, a discount of 3 per cent.; on all cotton manufactures, 4 per cent.

Charges on sales, including commission, are generally from 6 to 8 per cent.; on fish, 8 or 10 per cent.

Prices of Corn. — The subjoined account of the prices of the different sorts of grain free on board at Leghorn in January, 1833, is interesting, as negativing the notions so current in this country as to the extraordinary cheapness at which corn may be brought from the Black Sea.

Prices of Corn free on board at Leghorn, January, 1833.

Species of Corn.	Price in Italian Money per Sack.	Price in Sterling per Imp. Qr.	Species of Corn.	Price in Italian Money per Sack.	Price in Sterling per Imp. Qr.
	Lir. *Lir.*	*L.* *s.* *d.*		*Lir.* *Lir.*	*L.* *s.* *d.*
Wheat, Tuscan white	16½ to 17½	2 9 1	Wheat, Meschiglie	11 — 12	1 13 11
red, 1st quality	15 — 16	2 4 10	Romagna, 1st quality	15½ — 16	2 5 4
2d quality	14 — 15	2 2 1	2d quality	14 — 15	2 2 5
Odessa, 1st quality	13 — 13½	1 18 3	Beans, Alexandria, new	6½ — 6½	0 18 7
2d quality	11½ — 12	1 13 11	Barley, Odessa	3½ — 5	0 14 4
hard Taganrok, 1st	14 — 14½	2 1 1	Indian corn	8½ — 9	1 5 4
2d	11½ — 12	1 13 11	Linseed, Egyptian	14 — 14½	1 18 11
Odessa	12 — 13	1 16 9			

Shipping. — Arrivals in 1829, 1830, and 1831.

	Years.	Ships.	Crews.	Tons.
British	1829	189	1,732	28,451
	1830	219	2,072	33,990
	1831	193	1,792	29,468

The crews and tonnage of the foreign ships entering the port are not given. Their numbers in 1831 were as follows:—

Flags.	Ships.	Flags.	Ships.	Flags.	Ships.	Flags.	Ships.
French	180	Dutch	12	Neapolitan	266	Lucchese	81
Russian	47	Austrian	106	Sardinian	680	Roman	32
Swedish	29	Spanish	13	Tuscan	1,257	Greek	32
Danish	10	American	29				

The greater portion of the Neapolitan, Sardinian, Tuscan, Roman, and Lucchese vessels consists of small coasting craft of from 15 to 20 tons burden.

Port Charges are the same on native and foreign ships. The anchorage dues on a vessel of 300 tons amount to 112 current lire, or to 3*l.* 14*s.* sterling; besides which she must have a bill of health, which costs 7*s.* 2*d.* sterling. These, if she clear out in ballast, are the only charges to which she is subject; but if she clear out loaded, the bill of health will cost about 9*s.* sterling, and there is besides a charge of about 3*d.* sterling for each bill of lading. There are no other port charges whatever. Good water may be had at about 11*d.* sterling per tun; and beef, bread, and fuel are all reasonably cheap. There are companies for the insurance of ships, but not of lives or houses. — (We have gleaned these particulars from the *Annuaire du Commerce* for 1833, p. 303.; *Kelly's Cambist; Nelkenbrecher, Manuel Universel; Circular Statement of Grant and Co.*, Leghorn, 2d of January, 1833; *Consul's Answer to Circular Queries, &c.* A plan of the road of Leghorn is given in Captain Smyth's *General Chart of the Mediterranean.*)

Trade of Italy and the Italian Islands with England. — It is not generally known that with the single exception of Germany, Italy is the largest European importer of English goods. During the year 1831, the real or declared value of the different articles of British and Irish produce shipped from the United Kingdom direct for Italy, amounted to 2,490,376*l.* Cotton stuffs and twist formed about ⅔ds of this immense sum (see *ante*, p. 446.). The articles next in importance were refined sugar, value 504,145*l.*; woollens, value 204,186*l.*; iron and steel, value 50,269*l.*; with hardware, linens, fish, earthenware, &c. It is right, however, to add, that a part of these articles was not intended for the consumption of Italy; but was sent to Genoa and Trieste, for the purpose of being subsequently forwarded to Switzerland, Austria, Hungary, &c. There are no means of accurately estimating the value of the products destined for such

ulterior consumption, but there are good grounds for thinking that they do not amount to 1-4th part of the total value of the exports; leaving above 2,000,000*l.* for the consumption of Italy.

During the same year (1831), we imported from Italy 23,867 cwt. barilla; 95,163 do. oak and cork bark; 264,944 do. sulphur; 253,059 quarters of wheat (a good deal at second hand from the Black Sea); 76,547 straw bonnets; 64,848 packages of oranges and lemons; 2,557,983 gallons olive oil; 105,448 bushels linseed; 127,331 cwt. shumac; 526,516 lbs. raw silk; 516,457 kid skins; 2,113,678 lamb skins; 17,644 cwt. valonia; 287,468 gallons wine; exclusive of various other articles of inferior importance.

LEMONS (Ger. *Limonen;* Du. *Limoenen;* Fr. *Limons, Citrons;* It. *Limoni;* Sp. *Limones;* Port. *Limões;* Rus. *Limonii;* Arab. *Lémōn*), the fruit of the lemon tree (*Citrus medica*, var. β. C.). It is a native of Assyria and Persia, whence it was brought into Europe; first to Greece and afterwards to Italy. It is now cultivated in Spain, Portugal, and France, and is not uncommon in our greenhouses. Lemons are brought to England from Spain, Portugal and the Azores, packed in chests, each lemon being separately rolled in paper. The Spanish lemons are most esteemed. —(For an account of the imports, see Oranges.)

LEMON JUICE, or CITRIC ACID (Ger. *Zitronensaft;* Fr. *Jus de limon;* It. *Agro o Sugo de' limone;* Sp. *Jugo de limon*), the liquor contained in the lemon. It may be preserved in bottles for a considerable time by covering it with a thin stratum of oil; thus secured, great quantities of the juice are exported from Italy to different parts of the world; from Turkey, also, where abundance of lemons are grown, it is a considerable article of export, particularly to Odessa. The discovery of the antiscorbutic influence of lemon juice is one of the most valuable that has ever been made. The scurvy, formerly so fatal in ships making long voyages, is now almost wholly unknown; a result that is entirely to be ascribed to the regular allowance of lemon juice served out to the men. The juice is also frequently administered as a medicine, and is extensively used in the manufacture of punch.

LEMON PEEL (Ger. *Zitronenshalen, Limonschellen;* Fr. *Lames d'écorce de citron;* It. *Scorze de' limone;* Sp. *Cortezas de citra*). The outward rind of lemons is warm, aromatic, and slightly bitter, — qualities depending on the essential oil it contains. It is turned to many uses; and when well candied, constitutes a very good preserve. In Barbadoes, a *liqueur*, known under the name of *Eau de Barbade*, is manufactured from lemon peel, which the inhabitants have the art of preserving in a manner peculiar to themselves. Both the liqueur and the conserve used to be in high repute, especially in France.

LETTER. (See Post Office.)

LETTER OF CREDIT, a letter written by one merchant or correspondent to another, requesting him to credit the bearer with a certain sum of money. Advice by post should always follow the granting of a letter of credit; a duplicate of it accompanying such advice. It is prudent, also, in giving advice, to describe the bearer of the letter, with as many particulars as possible, lest it fall improperly into other hands.

LETTERS OF MARQUE AND REPRISAL, "are grantable by the law of nations, whenever the subjects of one state are oppressed and injured by those of another, and justice is denied by that state to which the oppressor belongs."—(*Chitty's Com. Law*, vol. iii. p. 604.) Before granting letters of marque, government is directed by the 5 Hen. 5. c. 7., to require that satisfaction be made to the party aggrieved; and in the event of such satisfaction not being made within a reasonable period, letters of marque and reprisal may be issued, authorising the aggrieved party to attack and seize the property of the aggressor nation, without hazard of being condemned as a robber or pirate. Such letters are now only issued to the owners or captains of privateers during war, or when war has been determined upon. They may be revoked at the pleasure of the sovereign; and when hostilities terminate, they cease to have any effect.

LICENCES, in commercial navigation. The rules and regulations to be observed in the granting of licences to ships are embodied in the act 3 & 4 Will. 4. c. 53., and are as follow: —

Vessels of certain Proportions, not being square-rigged, &c., to be licensed. —All vessels belonging in the whole or in part to his Majesty's subjects, not being square-rigged, or propelled by steam, and all vessels belonging as aforesaid, whether propelled by steam or otherwise, being of less burden than 200 tons, of which the length is to the breadth in a greater proportion than 3 feet 6 inches to 1 foot, and all such last-mentioned vessels carrying arms for resistance, and all vessels of more than 200 tons burden, belonging as aforesaid, armed with more than 2 carriage guns of a calibre exceeding 4 pounds, and with more than 2 muskets for every 10 men, and all boats belonging as aforesaid, which shall be found within 100 leagues of the coast of the United Kingdom, shall be forfeited, unless the owners thereof shall have obtained a licence from the commissioners of his Majesty's customs in the manner herein-after directed.—§ 16.

British Vessels and Boats, or those whereof Half the Persons on board are British Subjects, not to be navigated with more than a specified Number of Persons, unless licensed. —Every vessel or boat belonging in the whole or in part to his Majesty's subjects, or whereof half the persons on board shall be subjects of his Majesty, (not being a lugger, and at the time fitted and rigged as such,) which shall be navigated by a greater number of men (officers and boys included) than in the following proportions; (that is to say,) if of 30 tons or under, and above 5 tons, 4 men; if of 60 tons or under, and above 30 tons, 5 men; if of 80 tons or under, and above 60 tons, 6 men; if of 100 tons or under, and above 80 tons, 7 men; and above that tonnage, 1 man for every 15 tons of such additional tonnage; or if a lugger, than

in the following proportions; (that is to say,) if of 30 tons or under, 8 men; if of 50 tons or under, and above 30 tons, 9 men; if of 60 tons or under, and above 50 tons, 10 men; if of 80 tons or under, and above 60 tons, 11 men; if of 100 tons or under, and above 80 tons, 12 men; and if above 100 tons, 1 man for every 10 tons of such additional tonnage, which shall be found within 100 leagues of the coast of the United Kingdom, shall be forfeited, unless such vessel, boat, or lugger, shall be especially licensed for that purpose by the commissioners of customs. — § 17.

Certain Particulars to be inserted in Licences for Vessels and Boats. — Every licence granted by the commissioners of customs under this act shall contain the proper description of the vessel or boat, the name or names of the owner or owners, with his or their place or places of abode, and the manner and the limits in which the same is to be employed, and, if armed, the numbers and description of arms, and the quantity of ammunition, together with any other particulars which the said commissioners may require and direct; and it shall be lawful for the commissioners of customs to restrict the granting of a licence for any vessel or boat in any way that they may deem expedient for the security of the revenue. — § 18.

The Owners to give Security by Bond, with the Condition herein-mentioned. — Before any such licence shall be issued or delivered, or shall have effect for the use of such vessel or boat, the owner or owners of the same shall give security by bond in the single value of such vessel or boat, with condition as follows; (that is to say,) that the vessel or boat shall not be employed in the importation, landing, or removing of any prohibited or uncustomed goods, contrary to the true intent and meaning of this act or any other act relating to the revenues of customs or excise, nor in the exportation of any goods which are or may be prohibited to be exported, nor in the relanding of any goods contrary to law, nor shall receive or take on board or be found at sea or in port with any goods subject to forfeiture, nor shall do any act contrary to this act, or any act hereafter to be made relating to the revenues of customs or excise, or for the protection of the trade and commerce of the United Kingdom, nor shall be employed otherwise than mentioned in the licence, and within the limits therein mentioned; and in case of loss, breaking up, or disposal of the vessel or boat, that the licence shall be delivered, within 6 months from the date of such loss, breaking up, or disposal of such vessel or boat, to the collector or principal officer of customs at the port to which such vessel or boat shall belong; and that no such bond given in respect of any boat shall be liable to any stamp duty. — § 19.

Penalty not to exceed 1,000*l.*, *or single Value of the Vessel.* — Nothing herein contained shall authorise the requiring any bond in any higher sum than 1,000*l.*, although the single value of the vessel or boat for which such licence is to be issued may be more than 1,000*l.* — § 20.

Licence Bonds given by Minors to be valid. — All bonds given by persons under the age of 21 years, in pursuance of the directions herein contained, shall be valid and effectual to all intents and purposes, any thing in any act, or any law or custom, to the contrary in anywise notwithstanding. — § 21.

Vessels not to be used in any Manner not mentioned in the Licence. — When any vessel or boat shall be found or discovered to have been used or employed in any manner or in any limits other than such as shall be specified in the licence, or if such licence shall not be on board such vessel or boat, or shall not at any time be produced and delivered for examination to any officer or officers of the army, navy, or marines duly employed for the prevention of smuggling, and on full pay, or any officer of customs or excise, demanding the same, then and in every such case such vessel or boat, and all the goods laden on board, shall be forfeited. — § 22.

Certain Vessels, Boats, and Luggers not required to be licensed. — Nothing herein contained shall extend or be deemed or taken to extend to any vessel, boat, or lugger belonging to any of the royal family, or being in the service of the navy, victualling, ordnance, customs, excise, or post-office, nor to any whale boat, or boat solely employed in the fisheries, nor to any boat belonging to any square-rigged vessel in the merchant service, nor to any life boat, or tow boat used in towing vessels belonging to licensed pilots, nor to any boat used solely in rivers or inland navigation, nor to any boats solely used in fishing on the coasts of the North and West Highlands of Scotland, nor to any boats so used on the coast of Ireland. — § 23.

Penalty for counterfeiting or falsifying Licences, or making Use thereof. — If any person or persons shall counterfeit, erase, alter, or falsify, or cause to be counterfeited, erased, altered, or falsified, any licence so to be granted as aforesaid, or shall knowingly make use of any licence so counterfeited, erased, altered, or falsified, such person or persons shall for every such offence forfeit the sum of 500*l.* — § 24.

How long Bonds are to be in Force. — No bond given on account of the licence of any vessel or boat under the said act for the prevention of smuggling shall be cancelled until the space of 12 months after the licence for which such bond had been entered into shall have been delivered up to the proper officer of the customs, and such bond shall remain in full force and effect for 12 months after the delivering up of the licence as aforesaid. — § 25.

Licences and Bonds granted previous to this Act to continue valid. — § 26.

Provisions as to Licences to extend to Guernsey, Jersey, Alderney, Sark, and Man. — § 27.

LICENCES, in the excise, are required in order that individuals may engage in certain businesses. — (See Table in next page.)

LICENCES, in the stamps, are required by those engaged in the professions and businesses mentioned below: —

	Per Annum. L.	s.	d.
Pawnbrokers, in London and Westminster, or within twopenny post limits - - -	15	0	0
In any other place - - - - -	7	10	0
Appraisers (not being auctioneers) - - -	0	10	0
Bankers - - - - - -	30	0	0
Physic, to exercise the faculty of - - -	15	0	0
All persons trading in gold or silver plate, in which any quantity of gold exceeding 2 pennyweights, and under 2 ounces, or any quantity of silver exceeding 5 pennyweights and under 30 ounces, in 1 piece - - - - -	2	6	0
Do. of greater weight, and every pawnbroker taking in or delivering out pawns of such plate, and every refiner of gold or silver - - -	5	15	0

Gold or silver lace is not deemed plate.

LIGHT-HOUSE, a tower situated on a promontory, or headland on the sea coast, or on rocks in the sea, for the reception of a light for the guidance of ships at night.* There are also floating lights, or lights placed on board vessels moored in certain stations, and intended for the same purposes as those on shore.

Historical Notice. — The lighting of fires for the direction of ships at night is of such obvious utility, that we need not wonder at the practice having originated at a very remote era. The early history of light-houses is, however, involved in much obscurity; but it is reasonable to suppose that no long period would elapse after fires were lighted for the premonition and guidance of mariners, till towers would begin to be con-

* *Usus ejus, nocturno navium cursu ignes ostendere, ad prænuntianda vada, portusque introitum.* (*Plin. Hist. Nat.* lib. xxxvi. cap. 13.)

An Account of the Businesses that cannot be carried on in Great Britain without Excise Licences; of the Sums charged for such Licences; of the Number of Licences granted for carrying on each Business in the Year ended the 5th of January, 1833, and of the Total Amount of Revenue derived therefrom.

Description of Licence.	Rate of Licence per Annum.	Number of Annual Licences granted.
	L. *s.* *d.*	
Auctions.		
Auctioneers	5 0 0	3,392
Beer.		
Brewers of strong beer, not exceeding 20 brls.	0 10 0	8,593
Exceeding 20 — 50 —	1 0 0	6,844
— 50 — 100 —	1 10 0	9,162
— 100 — 1,000 —	2 0 0	13,528
— 1,000 — 2,000 —	3 0 0	619
— 2,000 — 5,000 —	7 10 0	488
— 5,000 — 7,500 —	11 5 0	124
— 7,500 — 10,000 —	15 0 0	71
— 10,000 — 20,000 —	30 0 0	89
— 20,000 — 30,000 —	45 0 0	23
— 30,000 — 40,000 —	60 0 0	6
exceeding 40,000 —	75 0 0	16
Brewers of table beer, not exceeding 20 brls.	0 10 0	51
Exceeding 20 — 50 —	1 0 0	9
— 50 — 100 —	1 10 0	12
exceeding 100 —	2 0 0	27
Retail brewers of strong beer only, under the act 5 Geo. 4. c. 54.	5 5 0	50
Sellers of strong beer only, not being brewers	3 3 0	910
Retailers of beer, cyder, or perry, whose premises are rated at a rent under 20*l.* per annum	1 1 0	53,595
at 20*l.* per annum or upwards	3 3 0	15,417
Retailers of beer, cyder, or perry, under the provisions of the act 1 Will. 4. c. 64., "England only"	2 2 0	33,515
Retailers of cyder and perry only, under said act, "England only"	1 1 0	188
Coffee.		
Dealers in coffee, cocoa nuts, chocolate, tea, or pepper	0 11 0	89,204
Glass.		
Glass makers, for every glass house	20 0 0	110
Malt.		
Maltsters, or makers of malt, not exceeding 50 qrs.	0 7 6	2,610
Exceeding 50 — 100 —	0 15 0	1,034
100 — 150 —	1 2 6	1,021
150 — 200 —	1 10 0	1,008
200 — 250 —	1 17 6	822
250 — 300 —	2 5 0	712
300 — 350 —	2 12 6	577
350 — 400 —	3 0 0	485
400 — 450 —	3 7 6	381
450 — 500 —	3 15 0	345
500 — 550 —	4 2 6	308
exceeding 550 —	4 10 0	1,862
not exceeding 5 —	0 2 6	1,340
Paper.		
Makers of paper, pasteboard, or scale-board	4 0 0	535
Printers, painters, or stainers of paper	4 0 0	104
Soap.		
Soap makers	4 0 0	278
Spirits.		
Distillers	10 0 0	246
Rectifiers	10 0 0	119
Dealers in spirits, not being retailers	10 0 0	3,415
Retailers of spirits whose premises are rated under 10*l.* per annum	2 2 0	25,842
at 10*l.* and under 20 —	4 4 0	22,733
20 — 25 —	6 6 0	3,262
25 — 30 —	7 7 0	1,875
30 — 40 —	8 8 0	3,527
40 — 50 —	9 9 0	2,293
50 per annum or upwards	10 10 0	4,338
Makers of stills, "Scotland only"	0 10 0	18
Persons not being distillers or rectifiers, using stills, "Scotland only"	0 10 0	32
Starch.		
Starch makers	5 0 0	33
Sweets and mead.		
Makers of sweets or made wines, mead or metheglin	2 2 0	18
Retailers of ditto	1 1 0	762
Tobacco.		
Manufacturers of tobacco and snuff, not exceeding 20,000 lbs.	5 0 0	259
Exceeding 20,000 — 40,000 —	10 0 0	78
40,000 — 60,000 —	15 0 0	25
60,000 — 80,000 —	20 0 0	21
80,000 — 100,000 —	25 0 0	9
exceeding 100,000 —	30 0 0	43
Dealers in tobacco and snuffs	0 5 0	153,379
Vinegar.		
Makers of vinegar or acetous acid	5 0 0	49
Wine.		
Dealers in foreign wine, not having a licence for retailing spirits and a licence for retailing beer	10 0 0	1,765
Retailers of foreign wine, having a licence to retail beer, but not having a licence to retail spirits	4 4 0	49
Retailers having a licence to retail beer and spirits	2 2 0	20,656
Passage.		
Vessels on board which liquors and tobacco are sold	1 0 0	255

Total amount of revenue derived from licences, *L.*785,622 19*s.* 3*d.*

Excise Office, London, 5th of August, 1833. G. A. COTTRELL, First General Accountant.

structed for their reception. The most celebrated of all the ancient light-houses was that erected by Ptolemy Soter, on the small island of Pharos, opposite to Alexandria, —*nocturnis ignibus cursum navium regens.* — (*Plin.* lib. v. cap. 31.) It was of great height, and is said to have cost 800 talents.* Its celebrity was such, that Pharos rapidly became, and still continues to be in many countries, a generic term equivalent to light-house. In the ancient world, there were light-houses at Ostia, Ravenna, Puteoli, Caprea, Rhodes, on the Thracian Bosphorus, &c. — (See *Suetonii Opera*, ed. *Pitisci*, tom. i. p. 755.; and the *Ancient Universal History*, vol. ix. p. 366. 8vo ed.)

The *Tour de Cordouan*, at the entrance of the Gironde, the Eddystone light-house, opposite to Plymouth Sound, and that more recently constructed on the Bell Rock, opposite to the Frith of Tay, are the most celebrated modern light-houses. The Tour de Cordouan was begun in 1584, by order of Henry IV., and was completed in 1611. It was at first 169 feet (Fr.) high; but in 1727 it was enlarged, by the addition of an iron lantern, to the height of 175 French, or 186½ English feet. It used to be lighted by a coal fire, but it is now lighted by reflecting lamps of great power and brilliancy. It is altogether a splendid structure; and is, besides, remarkable for being the first light-house on which a revolving light was exhibited. — (See Bordeaux.)

The first light-house erected on the Eddystone rocks only stood about 7 years, having been blown down in the dreadful storm of the 27th of November, 1703; a second, erected in 1708, was burnt down in 1755. The present light-house, constructed by the celebrated engineer Smeaton, was completed in 1759. It is regarded as a master-piece of its kind; and bids fair to be little less lasting than the rocks on which it stands.

* Dr. Gillies tells us (*Hist. of Alexander's Successors*, vol. ii. p. 138. 8vo ed.) that the tower was 450 feet in height; that each side of its square base measured 600 feet, and that its "beaming summit" was seen at the distance of 100 miles! It is almost needless to add, that there is no authority for such statements, which, indeed, carry absurdity on their face.

The Bell Rock light-house was built by Mr. Stevenson on the model of the Eddystone. Numerous light-houses, marking the most dangerous points, and the entrances to the principal harbours, are now erected in most civilised maritime countries. They are particularly abundant in the Baltic and in the Sound, and have contributed, in no ordinary degree, to render their navigation comparatively safe. Within these few years several new ones have been erected on the British coasts, and on those of France, the United States, &c.

Precautions as to Light-houses. — Many fatal accidents have arisen from ships mistaking one light for another; and hence the importance of those on the same coast being made to differ distinctly from each other, and of their position and appearance being accurately laid down and described. The modern inventions of revolving, intermitting, and coloured lights, afford facilities for varying the appearance of each light unknown to our ancestors, and have been, in that respect, of the greatest importance.

Chart of Light-houses, &c. — A good descriptive work on light-houses, beacons, &c. is a desideratum. That of Coulier, *Guide des Marins pendant la Navigation nocturne*, Paris, 1829, is perhaps the best. It must not be judged by its preface, which is as bad as possible; consisting of scraps from the most fantastical parts of Bryant's Mythology, and of attacks on the English for our conduct in relation to Parga, and the alleged ill-treatment of the crew of a vessel wrecked on the island of Alderney! The book is really pretty good, which could not certainly be anticipated from such a commencement. The reader will find the positions and leading particulars of the existing English and Irish light-houses, and of the greater number of those belonging to Scotland, laid down in the chart attached to the article CANALS in this work. The accuracy of the details may be depended upon; as they have been copied from the beautiful chart of the light-houses on the British and contiguous coasts recently published by the Trinity House; the corporation having readily and obligingly granted permission to that effect.

Law as to British Light-houses. — The 8 Eliz. c. 13. empowers the corporation of the Trinity House to erect beacons, &c. to prevent accidents to ships; and though the act does not expressly mention light-houses, it has been held to extend to them; but the corporation have generally acted under authority of letters patent from the Crown. Light-houses have also been erected, though not recently, by private individuals, in virtue of letters patent. The first light-house erected by the Trinity Corporation was in 1680; but several had been previously erected by private parties. The duties for the support of light-houses are payable by stat. 4 & 5 Anne, c. 20., and 8 Anne, c. 17.; which prohibit the customs' officers from making out any cocket or other discharge, or taking any report outwards for any ship, until the light duties are paid, and the master shall have produced a light-bill testifying the receipt thereof. It is lawful for every person authorised by the Trinity House to go on board any foreign ship to receive the duties, and for non-payment to distrain the tackle of the ship; and in case of delay of payment for 3 days after distress, the receivers of the said duties may cause the same to be appraised by two persons, and proceed to sell the distress.

All the light-houses, floating lights, &c., exclusive of harbour lights, from the Fern Islands, on the coast of Northumberland, round by Beachy Head and the Land's End, to the extremity of North Wales, belong to the Trinity House, with the exception of about a dozen lights, viz. Tynemouth, Spurn (shore), Winterton and Orford, Harwich, Dungeness, Longships, Smalls, Skerries, &c. These lights are partly public and partly private property. The duties on their account are, for the most part, payable to the Trinity collectors.

Trinity Lights. — The rules and regulations as to lights may be altered by the Trinity House, with consent of the privy council. We subjoin a copy of the existing instructions issued by the Corporation to their collectors.

TRINITY HOUSE, LONDON.

Instructions to for the collection of the duties payable to the Corporation of Trinity House, at the port of

1st. You are to demand and receive from the master or agent of every ship or vessel which hath passed, or is about to pass, in any direction, the several lights belonging to this Corporation, the respective tolls and duties as particularly set forth in the Table hereunto annexed; observing, nevertheless, the regulation contained in the 3d article, and also that British vessels, and such foreign vessels as are or shall be privileged in respect to charges as British vessels, are exempt from payment of duties to this Corporation, when navigated *wholly in ballast.*

2d. You are to take care to rate all British vessels, of every class or description, to the full amount of their register tonnage, except for those particular lights, for the duties to which colliers and coasters are chargeable per vessel only. Foreign vessels are to be charged to the full amount of their tonnage, as ascertained by the officer of his Majesty's customs.

3d. You are to observe that neither British nor foreign vessels are to be charged with the duties on account of a passage which may have taken place, or may be thereafter contemplated, being from one foreign port to another foreign port, unless in the prosecution of such voyages they shall actually arrive or touch at a port or roadstead in Great Britain.

4th. The duties are to be collected from all British ships at the ports in Great Britain where they load or deliver their cargoes. No collection is therefore to be made from any British ship which may happen to touch at your port on her passage to another port in Great Britain; but you are to observe that this rule is not to be applied in respect of vessels touching at your port in their passages to ports not in Great Britain.

5th. You are to charge all vessels belonging to the following states with the same duties in every respect as British vessels:— The vessels of those states are in fact to be considered, so far as respects charges made on account of this Corporation, as British ships, until further orders; viz. Portugal, Brazil, United States of America, the kingdom of the Netherlands, Hanover, Sweden, Norway, Russia, Hamburgh, Bremen, Lubeck, Denmark, and Prussia; to which are to be added vessels belonging to the duchies of Oldenburgh and Mecklenburgh, as well as those belonging to the kingdom of France, which have been also admitted to the privilege of reciprocity in respect of charges; but as that privilege is granted to vessels of those states under some limitations, it is necessary you should particularly observe the directions contained in the recitals of the orders in council and treaty hereunder given *.

* *Oldenburgh Vessels.*—Extract of his Majesty's order in council, dated the 19th of October, 1824:— "His Majesty, by virtue of the powers vested in him by the acts above recited, and by and with the advice of his privy council, is pleased to order, and it is hereby ordered, that from and after the date of this order, Oldenburgh vessels entering the ports of the United Kingdom of Great Britain and Ireland, in ballast or laden, direct from any of the ports of Oldenburgh, or departing from the ports of the said United Kingdom, together with the cargoes on board the same, such cargoes consisting of articles which may be legally imported or exported, shall not be subject to any other or higher duties or charges whatever than are or shall be levied on British vessels entering or departing from such ports."

Mecklenburgh Vessels. — The purport of the order in council granting the privilege of reciprocity to Mecklenburgh vessels,

whereby you will perceive that vessels of those states are still liable, in certain cases, to the foreign rate of duty.

6th. All vessels belonging to the United Kingdom, and trading between Great Britain and Ireland, are to be deemed and charged as coasting vessels, in respect of all light and other duties payable to this Corporation.

7th. You are to give your receipt on a light-bill, to the master of every ship or vessel who shall pay you any of the hereinafter-mentioned tolls or duties, expressing (plainly and fully) his name, the name of the vessel, and the place to which she belongs, her voyage and tonnage, the money paid, and time of payment. You are to insert all those several particulars in the counterpart of each light-bill, which counterpart is to be signed by the master or his agent, and the books returned, containing the same, to this house, at the end of every . You are to take care that none of the blank light-bills which shall be lodged with you fall into improper hands, or be wasted. You are in all cases to require the production of the light-bill for the duties last paid; and you are not to admit or allow that the master of any vessel hath paid elsewhere without seeing the light-bill, duly signed by the collector for the port at which it may be alleged the duties have been paid; and whenever you shall be satisfied that the duties for any ship or vessel have been paid at any other port or place, you are to note the same in your book, and also in your accounts in the column prepared for that purpose, expressing the several particulars as in your light-bills, with the time and place of payment. Books, containing each a number of blank light-bills, will be furnished you from this house, on your application, whenever required. You are to keep an exact account of all monies which you shall from time to time collect; and, before you fill up your light-bills, to enter the same distinctly in a book to be provided by yourself for that purpose, wherein all the particulars which are herein-before directed to be expressed in your light bills, are to be entered; — of all which you are, *within* 14 *days* after the 1st of January, the 1st of April, the 1st of July, and the 1st of October (to which periods you are to make up your accounts), to send a copy on the printed form furnished from this house, together with the balance of your collection, after a deduction of in the pound for your care, trouble, and ordinary expenses therein, to the secretary of the Corporation at this house.

By command of the Corporation,
(Signed) J. HERBERT, Secretary.

Fees on Account of Light-houses. — A wish to keep the charges on native ships as low as possible, and to insure them a preference, seems to have given rise to the practice that has long existed, of exacting comparatively high duties from the foreign shipping passing near our light-houses. But whatever may have been the motives for making this distinction, its policy seems more than questionable. It is quite right that the foreign ships coming to our ports for commercial purposes should be made to pay the *same* light duties as British vessels; but the imposition of comparatively high duties on them is decidedly injurious, inasmuch as it provokes retaliatory measures on the part of other states, obstructs the resort of foreigners to our markets, and, consequently, checks the growth of commerce. We object, also, to the charging of light duties on foreign ships driven into our ports or roads by stress of weather, or coming within sight of our light-houses in the prosecution of their voyage to some foreign place. In the erection of light-houses, we had no object in view other than the safety and accommodation of British shipping, and of the foreign ships entering our harbours for mercantile purposes. It is not, at all events, very hospitable to force a foreign vessel, compelled by the violence of the tempest to seek an asylum in our harbours, to contribute to the maintenance of lights kept up only for our own advantage; and it appears to be both unjust and oppressive to stop and levy a duty on a foreign vessel, that, in the prosecution of her voyage, may have accidentally, perhaps, passed near one of our light-houses.

This system was very properly condemned in a report by a committee of the House of Commons, in 1822. There is, in the evidence annexed to that report, some well-authenticated instances of foreign ships having been totally lost, from the disinclination of the captains to enter a British port, while it was in their power, on account of the heavy charges to which they would have been exposed for lights, &c.! Such a system was alike disgraceful to the humanity, and injurious to the trade of the country. Happily, however, it is now materially improved. The discriminating duties are still, no doubt, kept up; but, in consequence of the general establishment of reciprocity treaties, the grievance has become rather nominal than real, and affects comparatively few of the ships using our seas.

We are glad, also, to have to announce, that very large deductions have been, in most instances, made from the light-house duties. It is, indeed, quite essential to their utility, that these should be moderate. They have the same influence upon the intercourse carried on by sea, that tolls have upon that carried on by land; and it is needless to add, that oppressive tolls are amongst the most effectual of all the engines by which rapacious ignorance has contrived to injure a country. *

Charges on Account of Collection, &c. — The charges under this head amounted, in 1831, to 6,164*l.* 1*s.* 7¾*d.* the *expenses of maintenance* for the same year being 29,232*l.* 16*s.* 1½*d.*, leaving a balance of 43,548*l.* 9*s.* 2*d.* *nett surplus.* It is plain, therefore, that the light-house revenue is, at this moment, more than twice as great as is necessary for keeping the establishment in the most perfect state of efficiency. The surplus revenue is, we believe, very judiciously expended in maintaining decayed seamen, and other useful purposes. But considering the vast importance of low shipping charges, we agree with the committee of 1822, in thinking that such persons might be provided for in some less onerous way, and that the light duties ought to be still further reduced. Perhaps, the best plan would be to abolish the charge altogether on account of some of the most generally useful lights, as by this means the expense of collection would be wholly avoided, and business very materially facilitated.

References.

The duties on account of the light-houses on the east coast (with the exception of those for the Spurn floating light) are payable by all vessels once only for the whole voyage out and home; but a single passage subjects them to the payment of the full duties.

Spurn Floating Light. — The duties for this light are to be collected only from such foreign and British oversea traders as actually enter the river Humber, and are payable in those cases for each time of passing. Coasters and colliers are subject thereto for each time of passing coastwise, if laden; but not otherwise.

The duties for the Channel lights are payable for each time of passing.

The duties for the lights in the Bristol and St. George's Channels are payable for each time of passing, with the exception of the Bardsey light, as hereunder stated; but the following directions must be attended to, viz. —

Flatholm Light. — Coasters between the Land's End and St. David's Head (market boats and fishing vessels excepted) are to pay 1*s.* per vessel.

Caldy Light. — The duties for this light are payable by such vessels only as may put into any port, place, or roadstead, between the Worm's Head and St. Gowen's Head.

Lundy Light.—Duties payable only by vessels on their voyage to or from ports in the Bristol Channel, or to or from any ports to the eastward of a line drawn from Hartland Point to St. Gowen's Head.

Bardsey Light. — Duties for foreign vessels and British oversea traders are payable once only for the whole voyage out and home; for coasters and colliers coastwise, each time of passing, if laden, but not otherwise.

South Stack Light. — British or Irish ships and vessels to or from Liverpool, Chester, and ports to the northward thereof, to any other ports to the northward of the Calf of Man (at the south part of the Isle of Man), or to the eastward of Holyhead, with all other vessels bound to or from Liverpool and ports adjacent, to any other ports whatsoever, sailing in or out of the North Channel, viz. "by Fairhead on the coast of Ireland, and the Mull of Cantire, on the coast of Scotland," are not subject to pay the duties to the said light. This exemption, however, is confined and restricted to ships and vessels of the United Kingdom, navigating within the limits above described.

N. B. — By the term "each time of passing" is to be understood once for the outward, and once for the inward passage.

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is precisely the same as the foregoing order in respect of Oldenburgh vessels, and is dated the 14th of June, 1825.

French Vessels. — Extract from a convention of commerce and navigation between his Majesty and the King of France, dated 26th of January, 1826: — "That from and after the 5th day of April, 1826, French vessels coming from or departing for the ports of France, or, if in ballast, coming from or departing for any place, shall not be subject, in the ports of the United Kingdom, either on entering into or departing from the same, to any higher duties of tonnage, harbour, light-house pilotage, quarantine, or other similar or corresponding duties, of whatever nature or under whatever denomination, than those to which British vessels, in respect of the same voyages, are or may be subject on entering into or departing from such ports."

Colliers are to be charged by the number of tons expressed in their registers, and not by the chaldron; and colliers bound to or from foreign parts are to pay the same as other British ships bound foreign.

* There is nothing new in this statement :—"*Avara manus portus claudit; et cum digitos contrahit, navium simul vela concludit; meritò enim illa mercatores cuncti refugiunt quæ sibi dispendia esse cognoscunt*" — (*Cassiodorus*, lib. vii. cap. varia, 9.)

Account specifying the various Light-houses and Floating Lights under the Management of the Corporation of the Trinity House of Deptford Strond; the Rates of Charge on the British and Foreign Ships passing such Lights; with the Amount of Duties collected on Account of each Light, during each of the Three Years ending with 1832. — (*Parl. Paper*, No. 315. Sess. 1833.)

Names of Lights.	Rates of Charge.			Amounts collected.		
	Coasters.	British and Foreign privileged Vessels Oversea, per Ton.	Foreign Vessels not privileged Oversea, per Ton.	1830.	1831.	1832.
				L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
Scilly - - 1 light-house -	1 shilling per vessel	1 farthing - -	1 halfpenny - -	2,148 1 4½	2,400 16 9¾	2,262 1 6¾
Eddystone - 1 light-house -	2 shillings - -	1 halfpenny - -	1 penny - -	3,428 10 8	3,658 6 2	3,522 5 4½
Milford - - 2 light-houses -	1 shilling - -	1 halfpenny -	1 penny - -	4,149 17 10¾	4,564 4 2½	4,293 2 5¾
Portland - 2 light-houses -	1 shilling - -	1 halfpenny - -	1 penny - -	3,045 15 9½	3,263 4 3½	3,105 8 11½
St. Bees - - 1 light-house -	(Vessels entering the harbours of Whitehaven, Parton, and Workington, and none other, 2 pence per ton, yearly.)			468 13 0	427 13 10	452 9 10
Foulness - 1 light-house -	1 farthing per ton -	1 farthing - -	1 farthing - -	3,491 4 11	3,623 11 4½	3,474 2 10¾
Caskets - - 3 light-houses -	6 pence per vessel -	1 halfpenny -	1 penny - -	2,888 19 0	3,099 7 11¾	2,928 4 9
Nore - - 1 floating light -	1 shilling per 100 tons; but not chargeable on any excess of tonnage above 500.	1 shilling per 100 tons;	2 shillings per 100 tons;	2,535 14 0	2,645 9 6	2,553 13 0
Well - - 1 floating light -	1 farthing per ton -	1 farthing - -	1 halfpenny - -	3,568 18 2¼	3,691 11 0¾	3,546 19 1½
Flatholm - 1 light-house -	1824, 1 shilling per vessel within the Bristol Channel. Other coasters, 1 halfpenny per ton	1 penny - -	2 pence - -	2,457 6 9¾	2,401 4 10¾	1,620 10 7¼
	1831, 1 shilling per vessel, 1 farthing per ton	3 farthings - -	3 halfpence -			
Lizard - - 2 light-houses -	2 shillings per vessel	1 halfpenny -	1 penny - -	3,347 10 2½	3,617 18 8	3,541 17 2
Needles and Hurst 3 light-houses -	1 shilling - -	1 halfpenny - -	1 penny - -	3,079 19 11½	3,305 17 6¼	3,157 1 0
Owers - - 1 floating light -	1 shilling per vessel	1 halfpenny -	1 penny - -	2,992 14 5¼	3,202 16 9¾	3,040 6 4½
Haisbro' - 2 light-houses & 1 floating light	1 farthing per ton -	1 farthing - -	1 halfpenny - -	3,521 2 4½	3,651 5 6½	3,496 12 9½
Goodwin - 1 floating light -	1 shilling per vessel; colliers, 1 farthing per ton	1 halfpenny -	1 penny - -	3,490 1 6½	3,729 9 4	3,577 15 7
Sunk - - 1 floating light -	1 farthing per ton -	1 halfpenny - -	1 penny - -	4,836 8 3	5,043 2 5½	4,724 2 9½
Flambro' - 1 light-house -	1 farthing per ton -	1 farthing - -	1 halfpenny -	3,719 5 7¾	3,875 3 3	3,660 12 7½
South Stack 1 light-house -	1 farthing per ton -	1 farthing - -	1 halfpenny - -	2,500 12 6½	2,654 14 6½	2,620 12 8½
Fern - - 2 light-houses -	3 farthings per ton -	3 farthings -	3 halfpence -	2,733 5 4¾	2,865 17 7¾	2,652 16 2
Burnham - 1 light-house until 1832, then 2 light-houses	at Bridgewater, 3 shillings per vessel at Bristol, 6 pence per vessel to and from Ireland, 1 shilling per vessel	at Bridgewater, 5 shillings per vessel at Bristol, under 100 tons, 3 shillings per vessel; 100 and under 250 tons, 5 shillings per vessel; 250 tons and upwards, 7 shillings and 6 pence per vessel.	at Bridgewater, 10 shillings per vessel at Bristol, double the amount chargeable on British vessels.	627 6 0	649 13 0	578 15 0
Lowestoft - 3 light-houses & 1 floating light -	1 farthing per ton -	1 farthing - -	1 farthing - -	3,595 18 4¾	3,714 19 8¾	3,561 7 0¼
Air - - 1 light-house & buoys in the Dee	2 pence per ton - -	4 pence - - -	8 pence - -	784 12 6	715 15 8½	864 19 1
	(On vessels entering the port of Chester.)					
Lundy - - 1 light-house -	1 farthing per ton -	1 farthing - -	1 halfpenny - -	1,589 15 1½	1,634 10 6½	1,786 2 0¾
Spurn - - 1 floating light -	1 farthing per ton -	1 farthing - -	1 halfpenny -	4,047 8 2½	4,194 18 9½	4,197 6 4
Bideford Bar 2 light-houses -	1 shilling per voyage on limestone vessels	3 halfpence - -	3 pence - -	356 5 0½	385 3 5½	414 16 0½
Bardsey - - 1 light-house -	1 farthing per ton -	1 farthing - -	1 farthing - -	1,494 8 10½	1,597 14 9	1,567 2 6½
Usk - - 1 light-house -	1 farthing per ton -	1 farthing - -	1 farthing - -	604 8 3½	559 1 0	583 4 7½
	(Payable at Newport only.)					
Lynn Well - 1 floating light -	1 penny per ton - -	1 penny - -	2 pence - -	1,355 4 10	1,279 12 0	1,455 7 6
BeachyHead 1 light-house -	1 shilling per vessel	1 farthing - -	1 halfpenny -	1,715 15 7	1,832 16 3½	1,774 2 1¾
Caldy - - 1 light-house -	1 penny per ton - -	1 penny - -	2 pence - -	719 19 4	659 5 10	800 19 2
(Vessels in the limestone trade pay either 1*s.* per voyage or an annual commutation of 20*s.* 15*s.* or 10*s.* each, according to their respective tonnages.)						
Nash - - 2 light-houses -	1 farthing per ton -	1 halfpenny - -	1 penny - -	- - -	- - -	551 6 1¾
Haisbro', North-end 1 floating light -	1 farthing per ton -	1 farthing - -	1 halfpenny -	- - -	- - -	3,489 19 11¼
South Sand Head 1 floating light -	1 eighth of a penny per ton	1 farthing - -	1 halfpenny - -	- - -	- - -	1,676 6 4
Forelands - 3 light-houses *	1 farthing per ton	1 farthing - -	1 halfpenny -	- - -	- - -	1,437 9 3½
			Totals - - *L.*	75,295 4 1¼	78,945 6 11¼	82,969 18 11

*** All British vessels, and all foreign vessels privileged as British in respect of charges, are exempted from all rates and duties payable to the Trinity Corporation when navigated wholly in ballast.

Private Light-houses. — Private individuals erecting light-houses have generally obtained a lease of the same from the Crown for a definite number of years, with authority to charge certain fees on shipping. Owing to the great increase of navigation, some of these light-houses have become very valuable properties. — We extract from the *Parl. Paper*, No. 170. Sess. 1833, the following

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* These lights were, on the expiration of the Crown lease of the same to Greenwich Hospital, on the 30th of June, 1832, transferred to the Trinity House, that Corporation paying to the commissioners of the Hospital the sum of 8,399*l.* 16*s.* for the purchase of the buildings, the ground on which they are erected, stores, &c. On this transfer being made, the tolls were reduced from 1*d.* to ¼*d.* per ton.

Account of the Gross and Nett Revenue of the private Light-houses of Harwich, Dungeness, Winterton-ness and Orfordness, and Hunstanton Cliff, during the Four Years ending with 1831, stating how the same was divided: —

Names of Light-houses.		Gross Receipts.	Expense of Collection and Maintenance.	Nett Proceeds.	Appropriation of the Nett Revenue.	
					Amount paid to the Crown.	Amount paid to the Lessees.
		L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
Harwich light-houses - -	1828	8,745 18 5	1,717 17 8	6,628 0 9	4,037 18 7	2,590 2 2
	1829	9,607 4 5	1,896 17 1	7,710 7 4	4,626 4 5	3,084 2 11
	1830	9,591 16 9	1,703 19 7	7,887 17 2	4,732 14 4	3,155 2 10
	1831	9,898 7 5	1,830 17 3	8,067 10 2	4,840 10 0	3,227 0 2
Dungeness light-houses - -	1828	9,941 6 8	2,046 12 8	7,894 14 0	2,033 8 1	5,861 5 11
	1829	7,700 16 6	1,640 14 0	6,060 2 6	3,030 1 3	3,030 1 3
	1830	5,171 7 5	1,345 8 11	3,825 18 6	1,912 19 3	1,912 19 3
	1831	5,510 0 5	1,367 4 7	4,142 15 10	2,071 7 11	2,071 7 11
Wintertonness and Orfordness]	1828	14,548 7 3	2,634 9 7	11,913 17 8	5,956 18 10	5,956 18 10
	1829	9,194 0 9	2,037 6 3	7,156 14 6	3,578 7 3	3,578 7 3
	1830	9,154 19 10	1,966 7 11	7,188 11 11	3,594 6 0	3,594 5 11
	1831	9,544 14 10	2,017 12 8	7,527 2 2	3,763 11 1	3,763 11 1
Hunstanton Cliff - -	1828	654 4 11	155 3 5	499 1 6	- -	499 1 6
	1829	591 3 8	131 18 5	459 5 3	- -	459 5 3
	1830	581 9 1	186 11 2	394 17 11	- -	394 17 11
	1831	602 19 5	157 19 6	444 19 11	- -	444 19 11

Harwich Lights, held by General Rebow, under lease from the Crown, for 22 years from the 5th of January, 1827, paying to the Crown 3-5ths of the nett duty collected.

Dungeness Lights, held under lease from the Crown, by Thomas William Coke, Esq. for 20 years from Midsummer, 1829. Nett produce of the duties equally divided between the Crown and the lessee. The duties were reduced at the renewal of the lease from 1*d.* to ½*d.* per ton; and it is provided, that at its termination, the light-houses and buildings connected therewith, and the ground on which they are erected, shall become the property of the Crown.

Wintertonness and Orfordness Lights, held by Lord Braybrooke under a lease from the Crown, which expires on the 29th of July, 1849. Nett produce of the duties equally divided between the Crown and his Lordship. The duties were reduced, at the last renewal of the lease in 1828, from 1*d.* to ½*d.* per ton. At the expiration of the lease, the light-houses, grounds, &c. become the property of the Crown.

Hunstanton Cliff Light, held by S. Lane, Esq., under a lease from the Crown, which expires in 1849. From the 16th of October, 1837, 4-15th parts of the nett produce are to go to the Crown; and the light-houses, &c. become, at the expiration of the lease, the property of the Crown, as in the case of the Dungeness and Winterton lights. The duties are to be reduced a half in 1837.

There are several other private lights, such as the Longships, off the Land's End; the Mumbles, near Swansea; the Skerries, in St. George's Channel; the Smalls, in ditto, &c.; of the revenue of which we have seen no late account.

The charges for the undermentioned lights are as follow: —

	Foreign Ships.	British Ships.
Harwich - - - -	1*d.* per ton.	0½*d.* per ton.
Hunstanton - - - -	1*d.* —	0½*d.* —
Longships (off Land's End) -	1*d.* —	0½*d.* —
Mumbles (near Swansea) - -	0½*d.* —	0½*d.* —
Skerries (St. George's Channel) -	2*d.* —	1*d.* —
Dungeness - - - -	1*d.* —	0½*d.* —
Winterton and Orford - -	1*d.* per ton.	0½*d.* per ton.
Smalls (St. George's Channel) -	2*d.* —	1*d.* —
Ditto (ditto) (coasting) - -	2*d.* —	0½*d.* —
Spurn (shore) mouth of Humber -	1*d.* —	0½*d.* —
Tynemouth - - - -	3*s.* per ves.	1*s.* per ves.
Ditto (additional) - - -	0½*d.* per ton.	⅛*d.* per ton.

The *nett* revenue of the Smalls light-house amounted, at an average of the 5 years ending with 1822, to 6,746*l.* 17*s.* a year. The lease had then 54 years to run; and the Trinity Corporation having proposed to purchase the reversion, the lessees demanded for it 148,430*l.* This fact affords a striking illustration of the extreme inexpediency of the practice of leasing light-houses to private parties. Wherever they are necessary, they ought to be raised at the public expense, and the fees kept as low as possible. There cannot, in fact, be any greater improvidence or abuse, than to make over to a private individual or association a power to levy, for a long series of years, a certain amount of toll on the ships passing particular lights. The renewals mentioned above are, we hope, the last transactions of the sort that will ever be attempted.

Scotch or Northern Lights, are under the management of a set of parliamentary commissioners. — The charges are,—

	Foreign Ships.	British Ships.
Vessels sailing on the coast of Scotland, within a line drawn from Dunottar Castle on the north to St. Abb's Head on the south -	5*d.* per ton.	2½*d.* per ton.
Without the above limits - -	4*d.* per ton.	2*d.* per ton.
Isle of Man light - - -	0½*d.* —	0½*d.* —

Irish Lights. — It appears from the *Parliamentary Paper*, No. 170. Sess. 1833, p. 50., that the gross sum collected for light duties in Ireland, during 1831, amounted to 43,970*l.* 18*s.* 2*d.* The rates of charge are as follow: —

Foreign vessels, ½*d.* per ton for each light passed; except harbour lights, which are only chargeable to vessels entering the ports within which they are situated.

British and Irish, ½*d.* per ton (⅛*d.* if in ballast) for each light, except as above.

With a duty of 2*s.* on every entry, cocket, or warrant, when from foreign ports, but not otherwise.

Compensation to Private Parties. — The authority acquired by certain individuals and public bodies, under letters patent, acts of parliament, and otherwise, of levying certain duties on account of lights, beacons, pilotage, harbour dues, &c. entitles them, for the most part, to demand higher fees from foreign than from British shipping. When, therefore, we entered into reciprocity treaties with foreign powers, government had to compensate the parties in question for the diminution that consequently took place in their charges on foreign ships. The total sum paid on this account, in 1832, amounted to 35,182*l.* Of this sum, 1,566*l.* was paid to the lessees of the Smalls light-house already alluded to, and 2,985*l.* to the proprietors of the Spurn and Skerries lights. The Trinity Corporation have relinquished their claim to compensation. — (For some account of the Trinity Corporation, the reader is referred to that article; and for accounts of the charges on account of Beaconage, Ballastage, Pilotage, &c. see these titles.)

LIMA, the capital of Peru, on the west coast of South America, in lat. 12° 2′ 45″ S., lon. 77° 7′ 15″ W. Population variously estimated; but may probably amount to from 50,000 to 60,000.

Callao, the port of Lima, is about 6 miles W. from the latter. The harbour lies to the north of a projecting point of land, in the angle formed by the small uninhabited island of San Lorenzo. Previously to the emancipation of Peru, and the other *ci-devant* Spanish provinces in the New World, Lima was the grand *entrepôt* for the trade of all the west coast of South America; but a considerable portion of the foreign trade of Peru is now carried on through Buenos Ayres, and the former is also in the habit of import-

ing European goods at second hand from Valparaiso and other ports in Chili. The exports from Lima consist principally of copper and tin, silver, cordovan leather, and soap, vicunna wool, quinquina, &c. The imports consist principally of woollen and cotton stuffs, and hardware, from England; silks, brandy, and wine, from Spain and France; stock-fish from the United States, indigo from Mexico, Paraguay herb from Paraguay, spices, quicksilver, &c. Timber for the construction of ships and houses is brought from Guayaquil. The official value of the different articles of British produce and manufacture exported to Peru in 1831, amounted to 624,639*l.*, besides 21,392*l.* of foreign and colonial merchandise. The official value of the imports into Great Britain from Peru during the same year was 42,377*l.*

Monies, Weights, and *Measures,* same as those of Spain; for which, see CADIZ.

LIME (Ger. *Kalk;* Fr. *Chaux;* It. *Calcina, Calce;* Sp. *Cal;* Rus. *Iswest*), an earthy substance of a white colour, moderately hard, but which is easily reduced to powder, either by sprinkling it with water or by trituration. It has a hot burning taste, and in some measure corrodes and destroys the texture of those animal bodies to which it is applied. Specific gravity, 2·3. Calcium, the metallic basis of lime, was discovered by Sir H. Davy.

There are few parts of the world in which lime does not exist. It is found purest in limestone, marble, and chalk. None of these substances is, however, strictly speaking, lime; but they are all easily converted into it by a well-known process; that is, by placing them in kilns or furnaces constructed for the purpose, and keeping them for some time in a white heat, — a process called the burning of lime.—(*Thomson's Chemistry.*)

The use of lime, as mortar in building, has prevailed from the earliest antiquity, and is nearly universal. It is also very extensively used in this country, and in an inferior degree in some parts of the Continent and of North America, as a manure to fertilise land. But it is a curious fact that the use of lime as a manure is entirely a European practice; and that its employment in that way has never been so much as dreamed of in any part of Asia or Africa. Lime is of much importance in the arts, as a flux in the smelting of metals, in the shape of chlorate in bleaching, in tanning, &c. Lime and limestones may be carried and landed coastwise without any customs document whatever. Its consumption in this country is very great.

LIME (Fr. *Citronier;* Ger. *Citrone;* Hind. *Neemboo*), a species of lemon (*Citrus medica,* var. δ C.), which grows in abundance in most of the West India islands, and is also to be met with in some parts of France, in Spain, Portugal, and throughout India, &c. The lime is smaller than the lemon, its rind is usually thinner, and its colour, when the fruit arrives at a perfect state of maturity, is a fine bright yellow. It is uncommonly juicy, and its flavour is esteemed superior to that of the lemon; it is, besides, more acid than the latter, and to a certain degree acrid.

LINEN (Ger. *Linnen, Leinwand;* Du. *Lynwaat;* Fr. *Toile;* It. *Tela, Panno lino;* Sp. *Lienza, Tela de lino;* Rus. *Polotno*), a species of cloth made of thread of flax or hemp. The linen manufacture has been prosecuted in England for a very long period; but though its progress has been considerable, particularly of late years, it has not been so great as might have been anticipated. This is partly, perhaps, to be ascribed to the efforts that have been made to bolster up and encourage the manufacture in Ireland and Scotland, and partly to the rapid growth of the cotton manufacture — fabrics of cotton having to a considerable extent supplanted those of linen.

In 1698, both houses of parliament addressed his Majesty (William III.), representing that the progress of the woollen manufacture of Ireland was such as to prejudice that of this country; and that it would be for the public advantage, were the former discouraged, and the linen manufacture established in its stead. His Majesty replied,—"I shall do all that in me lies to *discourage the woollen manufacture in Ireland,* and encourage the linen manufacture, and to promote the trade of England!" We may remark, by the way, that nothing can be more strikingly characteristic of the illiberal and erroneous notions that were then entertained with respect to the plainest principles of public economy, than this address and the answer to it. But whatever the people of Ireland might think of their sovereign deliberately avowing his determination to exert himself to crush a manufacture in which they had begun to make some progress, government had no difficulty in prevailing upon the legislature of that country to second their views, by prohibiting the exportation of all woollen goods from Ireland, except to England, where prohibitory duties were already laid on their importation! It is but justice, however, to the parliament and government of England, to state that they have never discovered any backwardness to promote the linen trade of Ireland; which, from the reign of William III. downwards, has been the object of regulation and encouragement. It may, indeed, be doubted whether the regulations have been always the most judicious that might have been devised, and whether Ireland has really gained any thing by the forced extension of the manufacture. Mr. Young and Mr. Wakefield, two of the highest authorities as to all matters connected with Ireland, contend that the spread of the linen manufacture has not really been advantageous. And it seems to be sufficiently established, that though the manufacture might not have been so widely diffused, it would have been in a sounder and healthier state had it been less interfered with.

Bounties. — Besides premiums and encouragements of various kinds, bounties were

granted on the exportation of linen for a very long period down to 1830. In 1829, for example, notwithstanding it had then been very much reduced, the bounty amounted to about 300,000*l.*, or to nearly *one seventh* part of the entire real or declared value of the linen exported that year! It is not easy to imagine a greater abuse. A bounty of this sort, instead of promoting the manufacture, rendered those engaged in it comparatively indifferent to improvements; and though it had been otherwise, what is to be thought of the policy of persisting for more than a century in supplying the foreigner with linens for less than they cost? We have not the least doubt, that were the various sums expended in well-meant but useless attempts to force this manufacture, added together, with their accumulations at simple interest, they would be found sufficient to yield an annual revenue, little, if at all, inferior to the entire value of the linens we now send abroad. And after all, the business never began to do any real good, or to take firm root, till the manufacture ceased to be a domestic one, and was carried on principally in mills, and by the aid of machinery, — a change which the old forcing system tended to counteract. The only real and effectual legislative encouragement the manufacture has ever met with, has been the reduction of the duties on flax and hemp, and the relinquishing of the absurd attempts to force their growth at home.

Exports of Linen from Ireland, &c. — The following Table, which we regret the parliamentary accounts do not furnish the means of continuing to the present day, gives

An Account of the Quantity and Value of the Linens exported from Ireland, from 1800 to 1829, both inclusive.

Years.	To Great Britain.	To Foreign Parts.	Total.	Amount of Bounty paid in Ireland, on Linen exported to Foreign Parts.
	Yards.	*Yards.*	*Yards.*	£ s. d.
1800	31,978,039	2,585,829	34,563,868	
1802	33,246,943	2,368,911	35,615,854	
1804	39,837,101	3,303,528	43,140,629	10,545 2 2
1806	35,245,280	3,880,961	39,126,241	15,668 4 6
1808	41,958,719	2,033,367	43,992,086	6,740 16 0
1810	32,584,545	4,313,725	36,898,270	16,448 19 9
1812	33,320,767	2,524,686	35,845,453	11,548 3 4
1814	39,539,443	3,463,783	43,003,226	17,231 14 11
1815	37,986,359	5,496,206	43,482,565	17,430 17 3
1816	42,330,118	3,399,511	45,729,629	12,082 6 4
1817	50,288,842	5,941,733	56,230,575	21,524 15 4¼
1818	44,746,354	6,178,954	50,925,308	28,848 6 2
1819	34,957,396	2,683,855	37,641,251	16,177 8 3¼
1820	40,318,270	3,294,948	43,613,218	11,928 9 11
1821	45,519,509	4,011,630	49,531,139	18,218 19 2¾
1822	43,226,710	3,374,993	46,601,703	17,112 9 2
1823	48,066,591	3,169,006	51,235,597	17,765 5 10
1824	46,466,950	3,026,427	49,493,377	17,114 13 10½
1825	52,559,678	2,553,587	55,113,265	12,015 9 6½
1826	The exportations to Great Britain cannot be ascertained for these years, the cross-channel trade having been assimilated by law to a coasting traffic.	2,726,297	- - -	10,249 17 9
1827		4,284,566	- - -	12,114 0 8
1828		3,214,911	- - -	9,494 7 5
1829		2,386,223	- - -	6,886 1 11

Of these exports, more than 12-13ths have been to Great Britain. The total average export, during the 3 years ending with 1825, was 51,947,413 yards, of which 49,031,073 came to this country; the exports to *all* other parts being only 2,916,340. Since 1825, the trade between Ireland and Great Britain has been placed on the footing of a coasting trade, so that linens are exported and imported without any specific entry at the Custom-house.

Scotch Linen Manufacture. — In 1727, a Board of Trustees was established in Scotland for the superintendence and improvement of the linen manufacture. It is not easy to suppose that the institution of this Board could of itself have been of any material service; but considerable bounties and premiums being at the same time given on the production and exportation of linen, the manufacture went on increasing. Still, however, it did not increase so fast as cotton and some others, which have not received any adventitious support, until machinery began to be extensively employed in the manufacture; so that it is very doubtful whether the influence of the bounty has been so great as it would at first sight appear to have been. The regulations as to the manufacture, after having been long objected to by those concerned, were abolished in 1822; and the bounties have now ceased. We subjoin

An Account of the Quantity and Value of the Linen Cloth manufactured and stamped for Sale in Scotland during the Ten Years ending with 1822, being the latest Period to which it can be made up.

Years.	Yards.	Value.	Average Price per Yard.	Years.	Yards.	Value.	Average Price per Yard.
		L. *s.* *d.*	*d.*			*L.* *s.* *d.*	*d.*
1813	19,799,146½	977,382 1 7½	11·8	1818	31,283,100½	1,253,528 8 0½	9·6
1814	26,126,620¼	1,253,574 16 10½	11·5	1819	29,334,428¼	1,157,923 4 11	9·4
1815	32,056,015½	1,403,766 15 2	10·5	1820	26,259,011½	1,038,708 18 5½	9·4
1816	26,112,045½	1,026,674 1 11¾	9·4	1821	30,473,461½	1,232,038 15 4¾	9·7
1817	28,784,967½	1,092,689 2 8¾	9·1	1822	36,268,530½	1,396,295 19 11½	9·2

This account is not, however, of much use. The stamp was only affixed to linen on which a bounty was paid, that is, on linen intended for exportation. Linen manufactured for home use, or intended for private sale, was not stamped. — (*Headrick's Survey of Forfar*, p. 506.)

Dundee is the grand seat of the Scotch linen manufacture; and its progress there during the last few years has been so extraordinary, that the following details in respect to it may not be unacceptable.

The manufacture appears to have been introduced into Dundee some time towards the beginning of last century; but, for a lengthened period, its progress was comparatively slow. In 1745, only 74 tons of flax were imported, without any hemp; the shipments of linen cloth during the same year being estimated at about 1,000,000 yards, no mention being made either of sail-cloth or bagging. In 1791, the imports of flax amounted to 2,444 tons, and those of hemp to 299 tons; the exports that year being 7,842,000 yards linen, 280,000 yards sail-cloth, and 65,000 do. bagging. From this period the trade began to extend itself gradually, though not rapidly. Previously to the peace of 1815, no great quantity of machinery was employed in spinning; but about this period, in consequence, partly and principally of the improvement of machinery, and its extensive introduction into the manufacture, and partly of the greater regularity with which supplies of the raw material were obtained from the Northern powers, the trade began rapidly to increase. Its progress has, indeed, been quite astonishing; the imports of flax having increased from about 3,000 tons in 1814, to 15,000 tons in 1830! The exports of manufactured goods have increased in a corresponding proportion. During the year ended the 31st of May, 1831, there were imported into Dundee 15,010 tons of flax, and 3,082 do. hemp; and there were shipped off 366,817 pieces, being about 50,000,000 yards, of linen; 85,522 pieces, or about 3,500,000 yards, of sail-cloth; and about 4,000,000 yards of bagging — in all, about 57,500,000 yards! — (See an excellent article on this subject in the *Dundee Chronicle*, 16th of October, 1832.) In the year ending the 31st of May, 1833, the imports of flax amounted to 18,777 tons, besides 3,380 tons of hemp. The shipments of linen, sail-cloth, &c. have increased in a corresponding ratio; and were valued, in the year now mentioned, at about 1,600,000*l.*!

It appears, therefore, that the shipments of linen from this single port are quite as great as those from all Ireland; and while the manufacture has been very slowly progressive in the latter, it has increased at Dundee even more rapidly than the cotton manufacture has increased at Manchester. It is not easy to give any satisfactory explanation of this wonderful progress. Something must be ascribed to the convenient situation of the port for obtaining supplies of the raw material; and more, perhaps, to the manufacture having been long established in the towns and villages of Strathmore, the Carse of Gowrie, and the northern parts of Fife, of which Dundee is the emporium. But these circumstances do not seem adequate to explain the superiority to which she has recently attained in this department; and, however unphilosophical it may seem, we do not really know that we can ascribe it to any thing else than a concurrence of fortunate accidents. Nothing, in fact, is so difficult to explain as the superiority to which certain towns frequently attain in particular departments of industry, without apparently possessing any peculiar facilities for carrying them on. But from whatever causes their pre-eminence may arise in the first instance, it is very difficult, when once they have attained it, for others to come into competition with them. They have, on their side, established connections, workmen of superior skill and dexterity in manipulation, improved machinery, &c. Recently, indeed, the advantages in favour of old establishments have been, to a considerable extent, neutralised by the prevalence of combinations amongst their workmen; but it is to be hoped that means may speedily be devised for obviating this formidable evil.

Value of the Manufacture. Number of Persons employed. — There are no means by which to form an accurate estimate of the entire value of the linen manufacture of Great Britain and Ireland. Dr. Colquhoun estimated it at 15,000,000*l.*; but there cannot be the shadow of a doubt that this is an absurd exaggeration. In the former edition of this work we expressed our conviction that it could not be valued at more than 10,000,000*l.*; but further investigation has satisfied us that even this estimate is very decidedly beyond the mark, and that the entire produce of the manufacture in the United Kingdom does not exceed 7,500,000*l.** Some very intelligent individuals, largely engaged in the trade, do not estimate it at so much; and we feel fully confident that this sum, if not much beyond, is at all events not within the mark. Now, if we set aside a third part of this sum for the value of the raw material, and 25 per cent. for profits, wages of superintendence, wear and tear of capital, coal, &c., we shall have 3,125,000*l.* to be divided as wages among those employed in the manufacture. And supposing each individual to earn, at an average, 18*l.* a year, the total number employed would be about 172,000. It may be thought, perhaps, that 18*l.* is too low an estimate for wages; and such, no doubt, would be the case, were not Ireland taken into the average. But as a great many persons are there employed in the manufacture at very low wages, we believe that 18*l.* is not very far from the mean rate.†

* Sir F. M. Eden estimated the entire value of the linen manufacture of Great Britain, in 1800, at 2,000,000*l.* — (*Treatise on Insurance*, p. 76.)

† A vast number of persons in Ireland are only partly employed in the manufacture; but the above estimate supposes that the 172,000 individuals are wholly employed in it.

Linen Trade of the United Kingdom. — The following official statements show, in detail, the state of the import and export trade of the country in this department, in 1830, with the results for the subsequent years.

Account of the Quantities of Hemp and Flax, dressed and undressed, Hemp Tow, Flax Tow, and Linen Yarns, imported into Great Britain and Ireland, from Foreign Parts, in the Year ended the 5th of January, 1831; distinguishing the Ports of Importation, and the Countries whence imported, together with the Real and Official Values thereof. — (*Parl. Paper*, No. 534. Sess. 1832, *&c.*)

Ports of Importation.	Imports into Great Britain and Ireland from Foreign Parts, in the Year ended 5th of January, 1831.		
	Hemp undressed.	Flax, and Tow or Codilla of Hemp and Flax, dressed or undressed.	Linen Yarn.
ENGLAND.	*Cwt.*	*Cwt.*	*Cwt.*
London	181,315	112,550	671
Rye	3		
Chichester	100		
Portsmouth	5,395		
Southampton	-	282	
Poole	1,607		
Lyme	5,387	21,419	
Exeter	5,457		
Plymouth	12,369	1,635	
Falmouth	2,705		
Truro	212		
Penzance	790		
Bridgewater	421		
Bristol	12,034	661	
Gloucester	539	41	
Newport	59		
Chester	471	123	
Liverpool	53,392	28,714	639
Lancaster	703	24,691	
Whitehaven	4,846	121	
Berwick	676	229	
Newcastle	13,412	13,393	106
Sunderland	12,587	21	
Stockton	-	11,450	
Hull	67,550	118,198	11,199
Goole	-	15,662	2
Grimsby	1,305		
Lynn	1,540		
Blackney and Clay	101		
Yarmouth	7,085		
SCOTLAND.			
Leith	19,377	18,632	4,083
Borrowstoness	-	2,069	
Grangemouth	1,063		
Kirkaldy	316	43,737	404
Dundee	41,119	368,962	209
Montrose	1,071	92,588	
Aberdeen	7,019	53,657	
Banff	-	654	
Inverness	6,891		
Thurso	758		
Stornoway	66		
Greenock	946	200	
Port Glasgow	4,507	2,378	
Glasgow	8,740	383	
Irvine	497		
Campbeltown	98		
IRELAND.			
Dublin	3,816	6,259	
Waterford	3,851	966	
Cork	4,776	175	
Limerick	786		
Galway	610		
Londonderry	502		
Coleraine	147		
Belfast	7,303	4,160	1,898
Newry	451	60	
Dundalk	20	20	
Aggregate of the importations from foreign countries into the various ports of the United Kingdom	506,771	944,096	19,211
Exports from the U. K. during the same year	9,587	3,633	
Left for home consumption	497,184	940,463	19,211
Retained for home consumption in 1831	504,308	918,883	17,352
Ditto in 1832	708,646	984,869	13,594
Ditto in 1833	537,890	1,127,736	

Countries from which imported.	Hemp, undressed.	Flax, and Tow or Codilla of Hemp and Flax, dressed or undressed.	Linen Yarn.
GREAT BRITAIN.	*Cwt.*	*Cwt.*	*Cwt.*
Russia	441,219	695,593	5,642
Denmark	-	77	
Prussia	5,409	84,891	6,402
Germany	-	326	5,211
The Netherlands	32	113,909	58
France	-	30,175	
Italy	22,132	294	
Malta	5		
Sierra Leone and River Gambia	16		
Cape of Good Hope	514		
East India Company's territories	14,080		
Philippine Islands	50		
New South Wales	-	6,246	
United States of America	595	865	
Chili	9		
Guernsey and Jersey (foreign)	448	80	
Total	484,509	932,456	17,313
IRELAND.			
Russia	19,880	7,989	
Prussia	1,218	706	1,816
Germany	-	-	68
The Netherlands	-	2,945	14
Italy	1,151		
Hayti	13		
Total	22,262	11,640	1,898
Aggregate of the importations into the United Kingdom from the various countries	506,771	944,096	19,211
Official value thereof, viz.	*L.*	*L.*	*L.*
Great Britain	411,832	1,923,428	104,559
Ireland	15,926	18,803	19,623
Total	427,758	1,942,231	124,182
Official value of exports	11,798	7,720	
Total official value of hemp and flax left for consumption in the United Kingdom, in 1830	415,960	1,934,511	124,182

Account of the Quantity of Foreign Linens retained for Home Consumption in Great Britain, in the Year ended 5th of January, 1831.

Species of Linen.	Quantity retained for Home Consumption in Great Britain.	Species of Linen.	Quantity retained for Home Consumption in Great Britain.
Lawns, not French - square yards	203½	Damask and damask diaper - square yards	8,285½
Plain linens and diaper unenumerated —		Drillings, ticks, and twilled linens —	236
Lawns, not French, plain linens and diaper, unenumerated, and manufactures of linen, entered at value declared value	11,187*l.* 17*s.* 1*d.*	Sail-cloth —	213·4
		Cambrics and French lawns, plain pieces	27,979⅓
		ditto bord. handkerchiefs —	25,807¾
		Sails - declared value	460*l.* 16*s.* 10*d.*

Account exhibiting the Quantity of British and Irish Linen Cloth of all Sorts, separately exported from England, Scotland, and Ireland, during 1830; specifying the Quantities sent from each to the different Foreign Countries importing the same, with their Real or Declared Values, and the Bounty paid on Exportation.

Countries to which exported.	England.		Scotland.		Ireland.*	United Kingdom.	
	British Linen.	Irish Linen.	British Linen.	Irish Linen.	Irish Linen.	Total Exports. British and Irish Linen.	Total Declared Value of Exports.
EUROPE.	*Yards.*	*Yards.*	*Yards.*	*Yards.*	*Yards.*	*Yards.*	*L. s. d.*
Russia	5,646	- -	806	- -	- -	6,452	330 4 3
Sweden	140	- -	- -	- -	- -	140	8 15 0
Norway	11,023	- -	6,408	- -	402	17,833	813 15 1
Denmark	2,184	160	- -	- -	- -	2,344	139 0 0
Germany	70,254	78	8,123	- -	- -	78,455	3,928 12 1
The Netherlands	71,218	618	3,378	- -	- -	75,214	4,064 2 3
France	102,793	200	- -	- -	- -	102,993	11,138 14 0
Portugal, Azores and Madeira	772,472	102,645	234,702	- -	30,687	1,140,506	56,003 11 10
Spain and the Canaries	4,710,059	217,762	37,977	13,300	- -	4,979,098	143,444 9 10
Gibraltar	1,212,133	57,229	102,049	554	- -	1,371,965	42,181 6 5
Italy	277,904	15,919	- -	- -	1,500	295,323	24,241 6 10
Malta	80,155	14,014	3,360	- -	- -	97,529	4,289 19 2
Ionian Islands	14,828	680	- -	- -	- -	15,508	1,024 2 9
Turkey	40,550	5,112	- -	- -	- -	45,662	2,858 6 0
Isles Guernsey, Jersey, Alderney, and Man	234,995	11,994	2,715	- -	3,322	253,024	14,663 12 0
	7,606,352	426,411	399,518	13,854	35,911	8,482,046	289,097 17 6
ASIA.	474,794	20,810	124,713	239	950	621,506	29,240 8 1
AFRICA.	653,419	7,120	2,430	- -	- -	662,970	24,534 11 3
AMERICA.							
British Northern colonies	574,783	95,365	1,366,153	43,215	135,613	2,215,099	81,959 11 1
British West Indies	5,068,741	815,953	3,295,327	180,850	1,076,038	10,436,909	322,837 9 7
Foreign West Indies	2,711,749	631,746	2,632,825	56,349	- -	6,032,669	152,930 8 10
United States	4,160,052	4,463,685	10,668,224	28,406	1,314,409	20,634,776	698,787 18 5
Brazil	3,722,604	1,059,816	1,221,418	11,128	79,346	6,094,312	178,317 11 8
Mexico	1,527,753	1,946,110	- -	- -	- -	3,473,863	134,814 2 0
Colombia	843,052	2,230	513,209	2,031	- -	1,366,522	33,525 5 10
Peru	293,247	467,998	- -	- -	- -	761,245	31,865 0 0
Chili	85,744	78,653	- -	- -	- -	164,397	7,970 4 6
States of the Rio de la Plata	407,361	233,100	275,559	57,620	- -	973,640	31,893 0 1
Total	28,129,651	10,248,997	20,505,356	393,692	2,642,267	61,919,963	2,017,775 11 10†
Number of yards of linen upon which bounty was paid in the year ending 5th of Jan. 1831	25,133,749	7,849,987	20,392,010	315,992	1,921,870	55,613,608	
	L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	
Amount of bounty paid thereon	69,878 1 5¼	23,146 7 11½	53,503 18 8	952 14 3	5,628 19 2	153,110 1 5¾	

* No British linen sent from Ireland.
† The declared value of the linens exported in 1831 was 2,461,704*l.*

Consumption of Foreign Linens.—It appears from the second of the foregoing accounts, that the consumption of foreign linens in this country is quite inconsiderable; the real or declared value of those entered for home consumption, in 1830, could hardly amount to 20,000*l.*

Regulations as to the Linen Manufacture. — Any person, native or foreigner, may, without paying any thing, set up in any place, privileged or not, corporate or not, any branch of the linen manufacture; and foreigners practising the same shall, on taking the oath of allegiance, &c., be entitled to all the privileges of natural born subjects. — (15 *Cha.* 2. c. 15.)

Persons affixing stamps to foreign linens in imitation of the stamps affixed to those of Scotland or Ireland, shall forfeit 5*l.* for each offence; and persons exposing to sale or packing up any foreign linens as the manufacture of Great Britain or Ireland, shall forfeit the same, and 5*l.* for each piece of linen so exposed to sale or packed up. — (17 *Geo.* 2. c. 30.)

Any person stealing to the value of 10*l.* any linen, woollen, silk, or cotton goods, whilst exposed during any stage of the manufacture in any building, field, or other place, shall, upon conviction, be liable at the discretion of the court to be transported beyond seas for life, or for any term not less than 7 years, or to be imprisoned for any term not exceeding 4 years, and, if a male, to be once, twice, or thrice publicly or privately whipped, as the court shall think fit. — (7 & 8 *Geo.* 4. c. 29. § 14.)

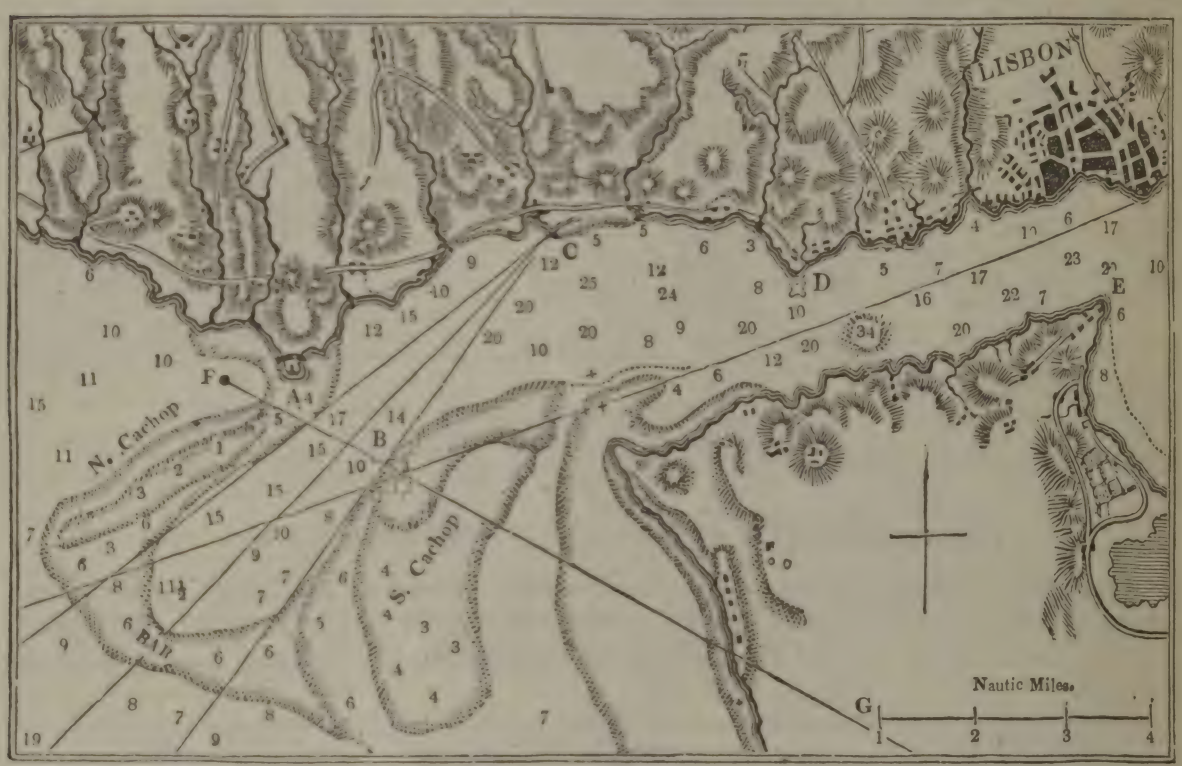
LIQUORICE (Ger. *Sussholz;* Fr. *Réglisse, Racine douce;* It. *Regolizia, Logorizia, Liquirizia;* Sp. *Regaliz Orozuz*), a perennial plant (*Glycirrhiza glabra*), a native of the south of Europe, but cultivated to some extent in England, particularly at Mitcham in Surrey. Its root, which is its only valuable part, is long, slender, fibrous, of a yellow colour, and when fresh very juicy. The liquorice grown in England is fit for use at the end of 3 years; the roots, when taken up, are either immediately sold to the brewers druggists, or to common druggists, by whom they are applied to different purposes, or they are packed in sand, like carrots or potatoes, till wanted.

LIQUORICE JUICE (*Succus Liquoritiæ*), popularly *black sugar*, the inspissated juice of the roots just mentioned. Very little of this extract is prepared in Britain, by far the larger part of our supply being imported from Spain and Sicily. The juice obtained by crushing the roots in a mill, and subjecting them to the press, is slowly boiled till it becomes of a proper consistency, when it is formed into rolls of a considerable thickness, which are usually covered with bay leaves. This is the state in which we import it. Most part of it is afterwards redissolved, purified, and cast into small cylindrical rolls of about the thickness of a goose quill, when it is called *refined liquorice.* It is then of a glossy black colour, brittle, having a sweet mucilaginous taste. It is used in the *materia medica*, particularly in coughs, colds, &c.—(*Thomson's Chemistry; Thomson's Dispensatory.*)

The imports in 1831 and 1832 amounted, at an average, to 7,321 cwt. a year. It is loaded with the oppressive duty of 3*l.* 15*s.* a cwt., producing rather more than 22,000*l.* a year of revenue.

LISBON, the capital of Portugal, situated on the north bank of the river Tagus, the observatory of the fort being in lat. 38° 42′ 24″ N., lon. 9° 5′ 50″ W. Population about 200,000, but formerly greater.

Port.—The harbour or rather road of Lisbon is one of the finest in the world, and the quays are at once convenient and beautiful. Fort St. Julian marks the northern entrance of the Tagus. It is built on a steep projecting rock. There is a light-house in the centre, 120 feet above the level of the sea. At the mouth of the Tagus are two large banks, called the North and South *Cachops*. There are two channels for entering the river; the north or little, and the south or great channel, exhibited in the subjoined plan. On the middle of the South Cachop, about 1¼ mile from Fort St. Julian, is the Bugio fort and light-house, the latter being 60 feet in height. The least depth of water in the north channel on the bar is 4 fathoms, and in the south 6. The only danger in entering the port arises from the strength of the tide; the ebb running down at the rate of 7 miles an hour; and after heavy rains, when there is a great deal of fresh water in the river, the difficulty of entering is considerably augmented. When, at such periods, there is a strong wind from the sea, there is a complete break all over the bar; vessels moor up and down the river with open hawse to the southward. In some parts they may come within 200 yards of the shore, being guided by the depth of water, which, from nearly 20 fathoms in mid-channel, shoals gradually to the edge.



References to Plan.—A, Fort St. Julian and light-house. B, Bugio fort and light-house. C, Barcarena look-out house. D, Belem Castle. E, Point Cassilhas. F G, Bugio fort and Sugar Loaf Hill in one, mark the north channel.

Trade, &c.—Lisbon is one of the best situated commercial cities of Europe. But, notwithstanding this circumstance, the excellence of the port, and the command of the navigation of the Tagus, her commerce is comparatively trifling. The despotism, intolerance, and imbecility of the government have weighed down all the energies of the nation. The law and the police being alike bad, there is no adequate security. Assassination is very frequent. Industry of all sorts is, in consequence, paralysed; and since the emancipation of Brazil, commerce has rapidly declined. Formerly Lisbon had about 400 ships, of from 300 to 600 tons burden, employed in the trade with South America. But at present there are not above 50 ships belonging to the port engaged in foreign trade; and, of these, the average burden does not exceed 150 tons! The produce of Portugal sent to foreign countries, is almost entirely conveyed to its destination in foreign ships. The trade between Lisbon and Cork is, we believe, the only exception to this; it being principally carried on in Portuguese vessels, which take salt from St. Ubes, and bring back butter in return. About 200 small craft belong to the city, which are exclusively employed in the coasting trade.

There are neither price currents, shipping lists, nor official returns of any kind, published in Lisbon. The principal exports are lemons and oranges — which, however, are very inferior to those of Spain; wine, particularly Lisbon and Calcavella; wool, oil, tanned hides, woollen caps, vinegar, salt, cork, &c. Besides colonial produce, the principal imports consist of cotton, woollen, and linen goods; hardware, earthenware, dried fish, butter, corn, cheese, timber and deals, hemp, &c. The declared or real value of all articles exported from Great Britain to Portugal in 1831 amounted to 975,991*l.*, of which cotton stuffs and yarn made nearly a half; but of these exports a large proportion went to Oporto.

Money. — Accounts are kept in rees, 1,000 of which = 1 milree. In the notation of accounts the milrees are separated from the rees by a crossed cypher (⊕), and the milrees from the millions by a colon: thus, Rs. 2:700 ⊕ 500 = 2,700 milrees and 500 rees.

The crusado of exchange, or old crusado, = 400 rees; the new crusado = 480 rees; the testoon = 100 rees; and the vinten or vintem = 20 rees.

The gold piece of 6,400 rees = 35*s.* 11*d.* sterling; the gold crusado = 2*s.* 3*d.*; and the milree, valued in gold, = 67½*d.* sterling. It appears, however, from assays made at the London mint, in 1812, on modern silver crusados, that the average value of the milree in *silver* may be estimated at 60*d.* or 5*s.* sterling.

Weights and Measures. — The commercial weights are, 8 ounces = 1 marc; 2 marcs = 1 pound or arratel; 22 pounds = 1 arroba; 4 arrobas = 1 quintal; 100 lbs. or arratels of Portugal = 101·19 lbs. avoirdupois = 45·895 kilog. = 94·761 lbs. of Hamburgh = 92·918 lbs. of Amsterdam.

The principal measure for corn, salt, &c. is the moyo, divided into 15 fanegas, 30 alquiéres, 240 quartos, 480 selemis, &c. The moyo = 23·03 Winchester bushels.

The principal liquid measure is the almude, divided into 2 potes, 12 canadas, or 48 quartellos; 18 almudes = 1 baril; 26 almudes = 1 pipe; 52 almudes = 1 tonelada. The almude = 4·37 English wine gallons; and the tonelada = 227¼ ditto.

A pipe of Lisbon is estimated by the Custom-house (British) at 140 gallons; and this pipe is supposed to be 31 almudes. A pipe of port is 168 gallons, divided into 21 almudes of Oporto.

Of measures of length, 2 pes = 3 palmos = 1 covado, or cubit; 1⅔ covados = 1 vara; 2 varas = 1 branca. The pe or foot = 12·944 English inches; 100 feet of Portugal = 107·8 English feet; the vara = 43·2 English inches.

For freight a last is reckoned at 4 pipes of oil or wine, 4 chests of sugar, 4,000 lbs. of tobacco, 3,600 lbs. of shumac.

But from one place in Portugal to another, a tonelada is reckoned at 52 almudes of liquids, or 54 almudes of dry goods.

Coffee is sold per arroba; cotton, indigo, and pepper, per lb.; oil, per almude; wine, per pipe; corn, per alquiére; salt, per moyo.

Grain, seed, fish, wool, and timber, are sold on board.

Weights and long measures are the same throughout Portugal; but there is a great discrepancy in the measures of capacity. The almude and alquiére, at the principal places, are in English measures as follows: —

Lisbon	Almude = 5·37 gall.	Eng. wine meas.		Faro	Alquiére = 3¾ gall.	Winch. meas.
—	Alquiére = 3·07 —	Winch. meas.		Figuiera	Almude = 5¾ —	wine meas.
Oporto	Almude = 6⅝ —	wine meas.		—	Alquiére = 3¼ —	Winch. meas.
—	Alquiére = 3⅞ —	Winch. meas.		Vianna	Almude = 6½ —	wine meas.
Faro	Almude = 4½ —	wine meas.		—	Alquiére = 3⅞ —	Winch. meas.

(*Kelly's Cambist*, vol. i. art. *Lisbon.*)

Bank of Lisbon. — This establishment was founded in 1822. Its capital consisted, in 1833, of about 691,100*l.* sterling, divided into 6,911 shares of about 100*l.* each. The shareholders are not liable beyond the amount of their shares. The bank discounts bills not having more than 3 months to run, at 5 per cent. Its dividends, at an average of the 3 years ending with 1831, were about 6 per cent. It enjoys the singular but valuable privilege of having its claims on all estates paid off in full, provided the estate amounts to so much; other creditors being obliged to content themselves with a division of the residue, if there be any.

Duties. — These are moderate. British goods pay a duty of 15 per cent. on a valuation fixed in 1782; but this on some articles is a good deal more, and on others less. The importation of tobacco, snuff, and soap is prohibited, except for the use of the contractors to whom the manufacture and sale of these articles is assigned. All exported articles pay a duty (*consulado*) of 4 per cent. *ad valorem*. The duties collected at the different Custom-houses in Lisbon, — for of these there are no fewer than *seven*, — amounted, in 1831, to about 215,000*l.*

Arrivals.	1829.		1830.		1831.	
	Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*
British -	322	34,203	294	30,334	230	24,749
Portuguese	320	-	242	-	131	
Foreign -	560	-	692	-	308	

There is no return of the tonnage of the Portuguese and foreign ships.

Port Regulations. — All vessels entering the Tagus are obliged to come to anchor off Belem Castle, where there is an office at which they must be entered, their cargoes declared, from whence they come, and whether the cargo be intended to be landed in Lisbon or not; if not, the master applies for "*franquia*," that is, for leave to remain 8 days in the port for the purpose of disposing of the cargo or of departing with it. Two Custom-house officers are then sent on board, and if the cargo is to be discharged at Lisbon, the vessel proceeds to the Custom-house, when the master makes entry, delivering the manifest and bills of lading attached to the certificate of the Portuguese consul, at the port of lading, in order to identify the cargo. The officers put on board at Belem are then relieved by 2 others, who remain until the vessel be discharged and visited by the Custom-house searcher. The port dues have to be paid in different offices; but the vessel is not subject to any other charges.

All goods sent on board for exportation must be accompanied by a permit from the Custom-house. When the clearances are obtained, the papers are presented by the master, or the ship's agent, to the authorities at Belem, who deliver the signal the vessel is to hoist when going to sea.

There is no regular warehousing and bonding system at Lisbon. All imported dry goods are allowed to remain in the Custom-house stores 2 years, and liquids 6 months, without being charged warehouse rent, provided they are intended for consumption, and pay the duties accordingly. But if, after that period, they are taken out to be exported, they are charged 2 per cent. duty.

Port Charges — on a foreign ship of 300 tons entering the port of Lisbon, with a general or mixed cargo, and clearing out with the same: —

	Rees.
Royal passport - - -	7,200
Petty expenses on entering at the Custom-house, about - -	700
Anchorage - -	500
Ballast clearance - - -	400
Tonnage, 100 rees per ton	30,000
Lights, 50 rees per ton -	15,000
Contribution to Board of Trade -	1,500
Petty charges - -	720
Bill of health - - -	240
	R. 56,260 = 11*l.* 6*s.* 0*d.* sterl.

Vessels coming with a cargo, or in ballast, and departing in ballast, pay 200 rees per ton lights, or 4 times as much as if they sailed with cargoes. Vessels coming with a cargo, and sailing with the same cargo, pay no tonnage duty.

Commission. — The ordinary rates of commission are, on the sale of goods, 2½ per cent.; *del credere*, 2½ per cent.; on the value of goods landed from a vessel putting in to effect repairs, 1 per cent.; on ships' disbursements, 5 per cent.

Insurances are effected to a trifling amount. There is 1 national company for effecting insurances; but it enjoys little credit.

Tares are not regulated by any certain rule. Those allowed are generally those invoiced or marked on the package. — (See *Annuaire du Commerce Maritime*, p. 290.; *Kelly's Cambist*; Consul's *Answers* to *Circular Queries*, &c.)

LITERARY PROPERTY. See Books.

LITHARGE (Ger. *Glötte, Glätte;* Du. *Gelit;* Fr. *Litharge;* It. *Litargirio;* Sp. *Almartaga, Litarjirio;* Rus. *Glet;* Lat. *Lithargyrium*), an oxide of lead in an imperfect state of vitrification. Most of the lead met with in commerce contains silver, from a few grains to 20 ounces or more in the fodder: when the quantity is sufficient to pay the expense of separation, it is *refined;* that is, the metal is exposed to a high heat, passing at the same time a current of air over the surface: the lead is thus oxidised and converted into *litharge*, while the silver, remaining unchanged, is collected at the end of the process. — (*Thomson's Chemistry, &c.*) Litharge is used for various purposes in the arts, by potters, glass makers, painters, &c.

LOADSTONE (Ger. *Magnet;* Du. *Magneet;* Fr. *Aimant;* It. *Calamita;* Sp. *Iman;* Rus. *Magnit;* Lat. *Magnes*). M. Haüy observes, that the ores in which the iron contains the least oxygen without being engaged in other combinations, form natural magnets; and he calls the *loadstones* of commerce, which are found in considerable masses in Germany, Sweden, Norway, Spain, Italy, China, Siam, the Philippine Isles, Corsica, and Ethiopia, *oxidulated iron*. The loadstone is characterised by the following properties: — A very strong action on the magnetic needle. Specific gravity 4·2457. Not ductile. Of a dark grey colour, with a metallic lustre. — Primitive form, the regular octahedron. Insoluble in nitric acid. This singular substance was known to the ancients; and they had remarked its peculiar property of attracting iron; but it does not appear that they were acquainted with the wonderful property which it also has, of turning to the pole when suspended, and left at liberty to move freely. Upon this remarkable circumstance the mariner's compass depends, — an instrument which gives us such infinite advantages over the ancients. It is this which enables the mariner to conduct his vessel through vast oceans out of the sight of land, in any given direction; and this directive property also guides the miner in subterranean excavations, and the traveller through deserts otherwise impassable. The natural loadstone has also the quality of communicating its properties to iron and steel; and when pieces of steel properly prepared are touched, as it is called, by the loadstone, they are denominated artificial magnets. — (See Compass.)

LOBSTER (Fr. *Ecrevisse;* Lat. *Cancer*), a fish of the crab species, of which vast quantities are consumed in London.

The minimum size of lobsters offered for sale is fixed by 10 & 11 Will. 3. c. 24., at *eight* inches from the tip of the nose to the end of the middle fin of the tail. No lobsters are to be taken on the coasts of Scotland between the 1st of June and the 1st of September, under a penalty of 5*l*. The Scilly Islands and the Land's End abound in lobsters, as well as several places on the Scotch shores, particularly about Montrose. But the principal lobster fishery is on the coast of Norway; whence it is believed upwards of 1,200,000 lobsters are annually imported into London. Those of Heligoland are, however, esteemed the best; they are of a deeper black colour, and their flesh is firmer than those brought from Norway. Foreign-caught turbots and lobsters may be imported either in British or foreign vessels free of duty.

LOCK, LOCKS (Ger. *Schlösser;* Du. *Sloten;* Fr. *Serrures;* It. *Serrature;* Sp. *Cerraduras, Cerrajos;* Rus. *Samki*), a well known instrument, of which there are infinite varieties. A great deal of art and delicacy is sometimes displayed in contriving and varying the wards, springs, bolts, &c., and adjusting them to the places where they are to be used, and to the occasions of using them. From the various structure of locks, accommodated to their different intentions, they acquire various names, as stock locks, spring locks, padlocks, &c. Wolverhampton was, at a very early period, famous for the superior skill and ingenuity of its locksmiths; but the best locks are now made in London and Birmingham. The grand difficulty to be overcome in making a lock is to construct it so that it may not be opened by any key except its own, nor admit of being picked; it should also be possessed of sufficient strength and durability, and not be too complex. Many ingenious contrivances have been proposed for the attainment of the desired security, — several of which are possessed of considerable merit. We believe, however, that there is none that combines all the principal requisites of a lock in so eminent a degree as "Chubb's Detector Lock," so called from the inventor, Mr. Chubb, of Portsea. Common door-locks are now usually inserted in the wood, instead of being, as formerly, screwed to it; and when so placed are called *mortise* locks.

LOGWOOD (Fr. *Bois de Campèche;* Ger. *Kampescholz;* Du. *Campecheout;* Sp. *Palo de Campeche*), the wood of a tree (*Hæmatoxylon Campechianum* Lin.), a native of America, and which attains the greatest perfection at Campeachy, and in the West Indies. It thrives best in a wet soil, with a large proportion of clay. The logwood tree is like the whitethorn, but a great deal larger. The wood is hard, compact, heavy, and of a deep red colour internally, which it gives out both to water and alcohol. It is an article of great commercial importance, being extensively used as a dye wood. It is imported in logs, that are afterwards chipped. — (The logwood tree, and the adventures of those that were formerly engaged in cutting it, are described by Dampier; see his *Voyages*, vol. ii. part 2. p. 56. ed. 1729.)

The entries for home consumption, at an average of the 3 years ending with 1832, amounted to 10,973 tons a year. The duty of 4*s*. 6*d*. a ton on foreign logwood, and of 3*s*. on that from a British plantation, produced, during the same 3 years, an annual revenue of 2,210*l*. Of 14,853 tons of logwood imported in 1831, 8,666 were from the British West Indies, 4,885 from Mexico, and the remainder principally from Hayti and Cuba. Its price in the London market in December, 1833, was; — Jamaica, 5*l*. 15*s*. per ton; Honduras, 5*l*. 10*s*. to 5*l*. 15*s*.; St. Domingo, 6*l*. to 6*l*. 6*s*.; Campeachy, 7*l*. 15*s*. to 8*l*. 8*s*.

We borrow from the learned and able work of Dr. Bancroft, the following curious details with respect to the use of logwood in this country: — "Logwood seems to have been first brought to England soon after the accession of Queen Elizabeth: but the various and beautiful colours dyed from it proved so fugacious, that a general outcry against its use was soon raised; and an act of parliament was passed in the 23d year of her reign, which prohibited its use as a dye under severe penalties, and not only au-

thorised but directed the *burning* of it, in whatever hands it might be found within the realm; and though this wood was afterwards sometimes clandestinely used (under the feigned name of black wood), it continued subject to this prohibition for nearly 100 years, or until the passing of the act 13 & 14 Chas. 2.; the preamble of which declares, that the ingenious industry of modern times hath taught the dyers of England the art of fixing colours made of logwood, *alias* blackwood, so as that, by experience, they are found as lasting as the colours made with *any other sort of dyeing wood whatever*; and on this ground it repeals so much of the statute of Elizabeth as related to logwood, and gives permission to import and use it for dyeing. Probably the solicitude of the dyers to obtain this permission, induced them to pretend that their industry had done much more than it really had, in fixing the colours of logwood; most of which, even at this time, are notoriously deficient in regard to their durability."—(*On Permanent Colours*, vol. ii. p. 340.)

LOUIS D'OR, a French gold coin, first struck in 1640. It was subsequently made by the French mint regulations equal to 24 livres, or 1*l.* sterling. This, however, was under-rating it in respect of silver; and hence, as every one preferred paying his debts in the over-valued coin, silver became the principal currency of France, the gold coins being either sent to the melting-pot or exported. In Britain, the process was reversed. Gold having been, for a lengthened period, over-valued by our mint in respect to silver, it became the principal currency of the country.—(See *antè*, p. 315.)

M.

MACAO, a sea-port and settlement belonging to the Portuguese, on the island of the same name, at the mouth of the Canton river in China, in lat. 22° 12′ 45″ N., lon. 113° 35′ E. The situation of Macao strikingly resembles that of Cadiz. It is built near the extremity of a peninsula projecting from the south-west corner of the island of Macao, to which it is joined by a long narrow neck. Across this isthmus, which is not more than 100 yards wide, a wall is erected, with a gate and guard-house in the middle for the Chinese soldiers. The greatest length of the peninsula belonging to the Portuguese, from N.E. to S.W., is under 3 miles, and its breadth under $\frac{1}{2}$ mile. The broadest part, to the north of the town, is flat, and of a light sandy soil; but is well cultivated, principally by Chinese, and produces all sorts of Asiatic and European culinary vegetables. Provisions are obtained from the Chinese part of the island or from the main land; and whenever the Portuguese do any thing to offend the Chinese authorities, the provisions are cut off till they are obliged quietly to submit. They are seldom allowed to pass beyond the narrow precincts of the territory assigned to them. The population of the peninsula may amount to from 12,000 to 13,000, of whom considerably more than half are Chinese. The functionaries belonging to the East India Company's factory at Canton resided here during the whole of the dead season.

The Portuguese obtained possession of Macao in 1586. It was for a considerable period the seat of a great trade, carried on not only with China, but with Japan, Siam, Cochin-China, the Philippine Islands, &c.; but for these many years past it has been of comparatively little importance, though it is probable, that if it belonged to a more enterprising and active people, it might still recover most of its former prosperity. The public administration is vested in a senate composed of the bishop, the judge, and a few of the principal inhabitants; but all real authority is in the hands of the Chinese mandarin resident in the town.

The Harbour is on the west side of the town, between it and Priest's Island; but the water in it not being sufficiently deep to admit large ships, they generally anchor in the roads on the other side of the peninsula, from 5 to 10 miles E.S.E. from the town. All vessels coming into the roads send their boats to the Portuguese Custom-house on the south side of the town.

When a ship arrives among the islands, she is generally boarded by a pilot, who carries her into Macao roads. As soon as she is anchored, the pilot proceeds to Macao to inform the mandarin of the nation she belongs to. If there be any women on board, application must be made to the bishop and senate, for leave to send them on shore, as they will not be permitted to proceed to Whampoa in the ship. As soon as the mandarin has made the necessary enquiries, he orders off a river pilot, who brings with him a *chop* or licence to pass the Bocca Tigris, or mouth of the Canton river, and carries the ship to Whampoa.

Trade of Macao.—The Chinese regulations do not permit any vessels, except such as belong to Portuguese or Spaniards, of which there are very few, to trade at Macao. But the Portuguese inhabitants lend their names, for a trifling consideration, to such foreigners as wish to be associated with them for the purpose of trading from the port. Independently, however, of this, vessels of other nations usually experience no difficulty in obtaining the connivance of the Chinese officers to the landing or receiving of goods in the roads, by means of Portuguese boats. At intervals, indeed, the prohibitory regulation is strictly enforced; but we believe that there has been no instance of this for the last 3 years.

Vessels of other nations, if in distress, and not engaged in the contraband trade, are admitted into the harbour for repairs, on application to the senate.

Port Charges. — The measurement duty paid by Spanish and Portuguese vessels is moderate. When a vessel has once paid the full amount, and is admitted on the list of registered ships belonging to the port (limited by the Chinese to 25), she is liable only to a third of the original charges, on every subsequent occasion of her entering, so long as she continues on the register. Portuguese vessels from Europe do not possess this privilege, unless they be registered as belonging to a morador of Macao.

The rates of measurement duty, which vary, as at Canton, (which see), on three classes of vessels, are the following: —

			Taels.	
1st.	On vessels of 154 covids and upwards,		6·223	per covid.
2d.	—	from 120 to 154 covids	5.72	—
3d.	—	from 90 to 120 covids	4	—

These rates are nearly the same as those levied on Canton junks, trading with foreign countries, and ought, in fact, to be entirely so. The dimensions are taken and calculated in the same manner as at Canton(see *antè*, p. 234.); but the Chinese, at both places, speak not of the covid, but of the chang of 10 covids. However, as this is only a decimal increase, it makes no difference in the method of calculation.

The following additional charges, to be calculated on the amount of measurement duty, are the same on every class of vessels, viz.

2 per cent. for inspectors.
8 — for difference in weight by the treasury scales.
10 — for loss in melting.
17 — for making sycee.

Also the sum of 70 taels for the "public purse," or hoppo's treasury.

In addition to these, the following are the charges levied by the hoppo (collector of customs), or his deputy: —

On a 1st class vessel from Europe, 250 taels; if belonging to Macao or Manilla, 50 taels.

On a 2d class vessel from Europe, 240 taels; if belonging to Macao or Manilla, 40 taels.

On a 3d class vessel from Europe, 170 taels; if belonging to Macao or Manilla, 30 taels.

Ships importing rice are exempt from the measurement duty, and pay only 50 dollars, as fees to the procurador of Macao and the officers of his department.

Portuguese vessels from Europe, in addition to the measurement duty, have to pay to the Canton hong merchants a charge, termed by the Portuguese, Hanistagem, or Consoo charge, which is usually a matter of specific bargain, varying from about 200 dollars on a vessel of 200 tons, to 3,500 dollars and upwards on those of 500 tons, and of larger sizes.

The charges on goods carried by the inner passage, between Canton and Macao, being generally less than those paid on goods to and from Whampoa; and the duties levied by the Portuguese, on articles of merchandise imported by vessels belonging to Macao, being very moderate; the Chinese are often led to engage in speculations on board the Macao vessels, the risk being so much less than in native junks. If the ship owners could manage their expenses so as to be satisfied with only the same freight as is charged by English vessels, it would probably induce many more Chinese to make remittances in this way.

Opium. — The trade in opium is prohibited at Macao by the Chinese government, as well as throughout the rest of the empire. It was, nevertheless, formerly carried on to a great extent by the Portuguese moradores, or citizens, to the exclusion of all others, even Portuguese who were not citizens. But this restriction having occasioned the decline of the trade, it was abolished in 1823, when the senate passed a regulation throwing open the trade to all, without distinction, whether Portuguese or foreigners; securing to the latter "hospitality and the utmost freedom in their speculations." At present, however, very little opium is imported, in consequence, it is said, of the heavy bribes demanded by the Chinese officers, to insure their connivance. The trade, as already observed (*antè*, p. 236.), is now principally carried on at Lintin, about 30 miles from Macao.

Imports. — Goods imported pay at the Portuguese Custom-house a duty of 6 per cent. on a fixed valuation, besides some fees, and coolie hire. The following are a few articles extracted from the tariff; —

		Valuation. *Taels.*	Duty. *Taels.*
Cotton	per picul	4	0·240
Broad cloth, middling	covid	1·600	0·096
better than ordinary	—	0·800	0·048
ordinary or coarse	—	0·480	0·028
Camlets	—	1·280	0·016
Betel nut	picul	1·200	0·072
Tin	—	8	0·480
Birds' nests, 1st sort	catty	22·400	1·344
Rattans	picul	1·200	0·072
Saltpetre, Bengal	—	4	2·240
coast of Goa	—	1·600	0·096
Pepper	—	4	0·240

Opium imported in Portuguese ships, pays per chest, drs. 10½.
Do. foreign do. — 15½.
Gold and silver, whether in coin, in bullion, or manufactured, pay on importation, 2 per cent.; except in Spanish vessels from Manilla, when the charge is 1½ per cent.

Exports. — No duty is levied by the Portuguese on goods exported from Macao; nor does the Custom-house take any cognizance of them

Duties and Charges on Goods landed at Macao. — Macao is a place without any manufactures or commerce of its own. Prices are, in consequence, generally dependent on those of Canton. Money is usually paid at 72 taels per 100 dollars.

It is a point of some interest to ascertain the internal duties and expenses to which goods landed at Macao are liable, before coming into the Chinese purchaser's hands at Canton. But the subject is so involved in mystery and uncertainty, the charges varying according to the quantity of goods laden in one boat, &c., that it is scarcely possible to arrive at any accurate information respecting it. We believe, however, that the following may be considered as a pretty close approximation to the real amount of charges incurred on cotton landed at Macao: —

Portuguese duty, fees, &c.	mace, 2–6	per picul.
Duties and charges on conveyance to Canton	6–3	—
Canton charges, difference of weight, brokerage on sale, &c.	8–0	—
Total, about taels,	2–6–9	—

The duties and charges on conveyance from Macao to Canton are, for pepper, per picul — mace, 9–0
Rattans — 4–5
Betel nut — 4–5

The hoppo's examiner charges 90 taels per boat of 1,000 piculs, the largest quantity allowed to be conveyed by a single boat; but the same charge of 90 taels is levied, although the boat should only contain 100 piculs.

The duty on exporting goods from Canton to Macao is in some cases less, in other cases greater, than the Whampoa duty. Thus, nankeens to Macao pay 2 dollars per 100 less than to Whampoa. Most descriptions of silk piece goods also pay less duty. On the other hand, tea, paper, China ware, &c. pay a higher duty to Macao than to Whampoa.

For details as to the *Weights, Measures, &c.* used at Macao, see CANTON.

For further particulars, see *Hamilton's East India Gazetteer*, art. *Macao*; *Milburn's Orient. Com.*; and the *Anglo-Chinese Kalendar and Compani·n to the Almanac*, Macao, 1832.

MACE (Ger. *Macis, Muskatenblüthe;* Du. *Foelie, Foely, Muscuatbloom;* Fr. *Macis, Fleur de muscade;* It. *Mace;* Sp. *Macio;* Port. *Maxcis, Flor de noz moscada;* Lat. *Macis*), a thin, flat, membranous substance, enveloping the nutmeg; of a lively, reddish yellow colour, a pleasant aromatic smell, and a warm, bitterish, pungent taste. Mace should be chosen fresh, tough, oleaginous, of an extremely fragrant smell, and a bright colour — the brighter the better. The smaller pieces are esteemed the best. The preferable mode of packing is in bales, pressed down close and firm, which preserves its fragrance and consistence.

Account of the Quantity of Mace retained for Home Consumption, the Rates of Duty on it, and the total Revenue derived therefrom, since 1810.

Years.	Quantities retained for Home Consumption in the United Kingdom.	Nett Amount of Duty received thereon.	Rates of Duty charged thereon.
	Lbs.	£ *s. d.*	Of the East Indies.
1810	5,136	2,707 4 0	7*s.* 8*d.* per lb. and 2*l.* 13*s.* 4*d.* per centum ad valorem.
1811	7,949	4,057 1 10	ditto.
1812	11,907	5,433 2 2	ditto.
1813	Records destroyed	-	(From 15 April) 9*s.* 1¼*d.* per lb. and 3*l.* 3*s.* 4*d.* per centum ad valorem.
1814	5,490	3,259 14 11	(From 10 April) 9*s.* 2*d.* per lb.
1815	7,834	3,592 14 7	ditto.
1816	6,499	2,984 4 5	ditto.
1817	8,642	3,960 15 9	ditto.
1818	10,856	4,966 10 3	ditto.
1819	15,352⅓	3,526 14 5	(From 5 July) 3*s.* 6*d.* per lb.
1820	12,193	2,174 7 0	ditto.
1821	11,572¼	1,805 6 5	ditto.
1822	13,498	2,361 0 10	ditto.
1823	14,318¾	2,484 10 4	ditto.
1824	16,878¾	2,967 3 1	ditto.
1825	14,851¾	2,601 15 1	ditto.
1826	15,600¼	2,719 17 6	ditto.
1827	16,760½	2,962 18 9	ditto.
1828	16,094½	2,829 10 4	ditto.
1829	14,254¼	2,548 15 4	ditto.
1830	12,600	2,205 0 0	ditto.
1831	18,894	3,266 0 0	ditto.
1832	15,938	2,762 0 0	ditto.

A production is met with on the coast of Malabar, so like mace, that at first it is not easy to be distinguished; but it has not the least flavour of spiciness, and when chewed has a kind of resiny taste. Eight cwt. of mace are allowed to a ton. — (*Milburn's Orient. Com.*)

MADDER (Ger. *Färberöthe;* Du. *Mee;* Fr. *Alizari, Garance;* It. *Robbia;* Sp. *Granza, Rubia;* Rus. *Mariona, Krap;* Hind. *Munjith*), the roots of a plant (*Rubia tinctorum*), of which there are several varieties. They are long and slender, varying from the thickness of a goose-quill to that of the little finger. They are semi-transparent, of a reddish colour, have a strong smell, and a smooth bark. Madder is very extensively used in dyeing red; and though the colour which it imparts be less bright and beautiful than that of cochineal, it has the advantage of being cheaper and more durable. It is a native of the south of Europe, Asia Minor, and India; but has been long since introduced into and successfully cultivated in Holland, Alsace, Provence, &c. Its cultivation has been attempted in England, but without any beneficial result. Our supplies of madder were, for a lengthened period, almost entirely derived from Holland (Zealand); but large quantities are now imported from France and Turkey.

Dutch or Zealand madder is never exported except in a prepared or manufactured state. It is divided by commercial men into four qualities, distinguishd by the terms *mull, gamene, ombro,* and *crops.* The roots being dried in stoves, the first species, or mull, consists of a powder formed by pounding the very small roots, and the husk or bark of the larger ones. It is comparatively low priced, and is employed for dyeing cheap dark colours. A second pounding separates about a third part of the larger roots; and this, being sifted and packed separately, is sold here under the name of gamene, or gemeens. The third and last pounding comprehends the interior, pure, and bright part of the roots, and is sold in Holland under the name of *kor kraps*, but is here simply denominated crops. Sometimes, however, after the mull has been separated, the entire residue is ground, sifted, and packed together under the name of *onberoofde*, or ombro. It consists of about one third of gamene, and two thirds of crops. Prepared madder should be kept dry. It attracts the moisture of the atmosphere, and is injured by it.

The Smyrna or Levant madder (*Rubia peregrina*), the alizari or lizary of the modern Greeks, is cultivated in Bœotia, along the border of lake Copais, and in the plain of Thebes. It also grows in large quantities at Kurdar near Smyrna, and in Cyprus. The madder of Provence has been raised from seeds carried from the latter in 1761. Turkey madder affords, when properly prepared, a brighter colour than that of Zealand. It is, however, imported in its natural state, or as roots: the natives, by whom it is chiefly produced, not having industry or skill sufficient to prepare it like the Zealanders, by pounding and separating the skins and inferior roots; so that the finer colouring matter of the larger roots being degraded by the presence of that derived from the former, a peculiar process is required to evolve that beautiful Turkey red which is so highly and deservedly esteemed. — (*Thomson's Chemistry; Bancroft on Colours,* vol. ii. pp. 221—278.: see also *Beckmann, Hist. of Invent.* vol. iii. art. *Madder.*)

In France, madder is prepared nearly in the same manner as in Zealand. The following instructive details as to its cultivation, price, &c. in Provence, were obligingly furnished to us by an English gentleman intimately acquainted with such subjects, who visited Avignon in the autumn of 1829: —

"This town (Avignon) is the centre of the madder country, the cultivation of which was introduced here about the middle of the 18th century, and, with the exception of Alsace, is still confined (in France) to this department (Vaucluse). The soil appears to be better adapted for its cultivation here than any where else, and it has long been the source of great wealth to the cultivators. Of late years, however, the prices have fluctuated so much, that many proprietors have abandoned, or only occasionally cultivated this root, so that the crop, which was formerly estimated to average 500,000 quintals, is now supposed not to exceed from 300,000 to 400,000.

"The root is called *alizari*, and the powder (made from it) *garance*. The plant is raised from seed, and requires 3 years to come to maturity. It is, however, often pulled in 18 months without injury to the quality; the quantity only is smaller. A rich soil is necessary for its successful cultivation; and when the soil is impregnated with alkaline matter, the root acquires a red colour — in other cases it is yellow. The latter is preferred in England, from the long habit of using Dutch madder, which is of this colour; but in France the red sells at 2 fr. per quintal higher, being used for the Turkey red dye.

"It is calculated that when wheat sells at 20 fr. per hectolitre, *alizari* should bring 35 fr. per quintal (poids de table), to give the same remuneration to the cultivator. That is, wheat 65*s.* per Eng. quarter, and *alizari* 34*s.* per Eng. cwt. The price has, however, been frequently as low as 22 fr. per quintal.

"Prices undergo a revolution every 7 or 8 years, touching the minimum of 22, and rising as high as 100 fr. As in every similar case, the high price induces extensive cultivation, and this generally produces its full effect 4 or 5 years after. The produce of Alsace, which is inferior both in quantity and quality to that of Vaucluse, is generally sold in Strasburgh market.

"England employs both the root and the powder, according to the purpose for which they are intended. The Dutch madder is more employed by the woollen dyers, and the French by the cotton dyers and printers.

"In making purchases of *garance*, it is essential to employ a house of confidence, because the quality depends entirely upon the care and honesty of the agent. The *finest* is produced from the roots after being cleaned and stripped of their bark. The *second* by grinding the roots without cleaning. A *third* by mixing the bark of the *first* while grinding; and so on to any degree of adulteration.

"The price of *alizari* in the country, which was only 25 fr. in July, is now (November, 1829) at 36 fr., and is expected to be at 40 fr. very shortly. The crop being deficient both here and in Holland, and the certainty of its being also deficient next year, added to the small quantity existing in England, give reason to believe that the price will reach 60 fr. before many months, and will continue to advance for a year or two more.

"The *quintals* above mentioned are of 100 lbs. *poids de table* — the weight in general use over the south of France, and even in *Marseilles*. This weight is different in the different provinces, varying from 22 to 25 per cent. lighter than the *poids métrique*. At Avignon, 124 lbs. p. de table = 50 kilog., consequently 126 lbs. are equal to 1 cwt. Eng. At the exchange of 25·50, the cwt. costs (including 11*s.* for freight, duty, and all charges till delivered in London or Liverpool) 61*s.* or 60*s.*

"It is considered that only one sixth or one seventh of the present crop remains for sale.

"Madder does not deteriorate by keeping, provided it be kept dry.

"*Compte simulé.* —

	Fr.
Cost of 1 quintal of roots in the country	35
Expenses in do.	2
	37
The root gives 85 per cent. powder, consequently 1 quintal powder =	43·50
Grinding and cask	3
Transport	2·50
	F. 49·0
	Fr.
The English cwt. costs therefore	58·85
All expenses till on board at Marseilles	3
Besides commission	F. 61·85"

For an account of East Indian madder, or munjeet, see MUNJEET.

Account of the Quantity of Madder and Madder Roots respectively entered for Home Consumption each Year since 1820; with the Rates of Duty, and the Produce of the Duty on each. — (From *Papers published by Board of Trade.*)

Years.	Madder.			Madder Roots.		
	Quantity entered for Consumption.	Rate of Duty, Mull manufactured.	Nett Revenue.	Quantity entered for Consumption.	Rate of Duty, all Sorts.	Nett Revenue.
	Cwt.	*Per cwt.*	*L.*	*Cwt.*	*Per cwt.*	*L.*
1820	60,375	2*s.* to 15*s.*	33,909	19,737	5*s.*	4,909
1821	48,166	- -	27,328	44,309	- -	10,960
1822	84,252	- -	46,479	48,584	- -	12,119
		All sorts.				
1823	76,456	12*s.*	38,577	40,500	- -	10,102
1824	60,064	- -	33,954	69,285	- -	17,205
1825	73,255	6*s.*	29,750	36,830	1*s.* 6*d.*	5,620
1826	49,457	- -	14,988	40,376	- -	3,000
1827	86,739	- -	26,137	49,777	- -	3,680
1828	95,652	- -	28,979	67,243	- -	5,049
1829	69,658	- -	21,223	39,805	- -	2,982
1830	49,205	- -	14,903	35,886	- -	2,710
1831	48,756	- -	14,615	53,862	- -	4,044
1832	60,346	- -	18,113	51,767	- -	3,882

Of the imports of prepared madder in 1831, amounting to 43,935 cwt., 22,637 were brought from France, and 18,726 from Holland. Of the madder root imported the same year, amounting to 52,449 cwt., 23,627 were from France, 25,835 from Turkey, 2,570 from the East Indies (munjeet), and 2,377 from Italy.

The duty on madder is now reduced to 2*s.* a cwt., and on roots to 6*d.* a cwt.; and their price, duty included, in the London market, in December, 1833, was as follows: —

		L.	*s.*	*d.*	*L.*	*s.*	*d.*	
Madder, Dutch mull	-	0	16	0 to 1	5	0	per cwt.	
gamene	-	1	10	0 — 2	5	0	—	
Madder, Dutch ombro	-	2	18	0 to 3	8	0	per cwt.	
crop	-	3	10	0 — 3	18	0	—	
French SFFF	-	0*s.*	0*s.*	SFF	0	0	0	—
Spanish	-	2	8	0 — 2	16	0	—	
roots, Turkey	-	2	15	0 — 2	16	0	—	
East India, or munjeet		1	14	0 — 1	16	0	bond.	

Madder, the produce of Europe, is not to be imported for home consumption except in British ships, or in ships of the country of which it is the produce, or from which it is imported, under forfeiture of the same, and 100*l.* by the master of the vessel. — (3 & 4 *Will.* 4. c. 52. sect. 58.)

MADEIRA. See Wine.

MADRAS, the principal emporium on the coast of Coromandel, or western shore of the Bay of Bengal, in lat. 13° 5′ N., lon. 80° 21′ E. It is the seat of government of the second presidency of the British possessions in India, having under it a territory of 154,000 square miles, with a population, according to a recent census, of 15,000,000, paying a gross annual revenue of above 5,000,000*l.* sterling. The town is situated in the Carnatic province — a low, sandy, and rather sterile country. It is without port or harbour, lying close upon the margin of an open roadstead, the shores of which are constantly beat by a heavy surf. Besides these disadvantages, a rapid current runs along the coast; and it is within the sphere of the hurricanes or typhoons, by which it is occasionally visited. In every respect, indeed, it is a very inconvenient place for trade, and its commerce is consequently greatly inferior to that of either Calcutta or Bombay. It has been in possession of the English 192 years, being founded by them in 1639. In 1823, the number of houses was ascertained to be 26,786; which, allowing 6 inhabitants to each, makes the total population about 160,000. Fort Saint George is a strong and handsome fortification, lying close to the shore. The Black Town of Madras, as it is called, stands to the north and eastward of the fort, from which it is separated by a spacious esplanade. Here reside the native, Armenian, and Portuguese merchants, with many Europeans unconnected with the government. Like most other Indian towns, it is irregular and confused, being a mixture of brick and bamboo houses. Madras, like Calcutta and Bombay, is subject to English law; having a Supreme Court of Judicature, the judges of which are named by the Crown, and are altogether independent of the local government, and the East India Company.

In Madras roads, large ships moor in from 7 to 9 fathoms, with the flagstaff of the fort bearing W.N.W., 2 miles from shore. From October to January is generally considered the most unsafe season of the year, in consequence of the prevalence, during that interval, of storms and typhoons. On the 15th of October the flagstaff is struck, and not erected again until the 15th of December; during which period, a ship coming into the roads, or, indeed, any where within soundings on the coast of Coromandel (reckoned from Point Palmyras to Ceylon), vitiates her insurance, according to the conditions of the policies of all the insurance offices in India. In the fort there is a light-house, 90 feet above the level of the sea, and which may be seen from the deck of a large ship, at 17 miles' distance, or from the mast-head at a distance of 26 miles. The cargo boats used for crossing the surf, called *Massula* boats, are large and light; made of very thin planks sewed together, with straw in the seams, instead of caulking, which it is supposed might render them too stiff. When within the influence of the surf, the coxswain stands up, and beats time in great agitation with his voice and feet, while the rowers work their oars backwards, until overtaken by a strong surf curling up, which sweeps the boat along with frightful violence. Every oar is then plied forward with the utmost vigour to prevent the wave from taking the boat back as it recedes; until at length, by a few successive surfs, the boat is thrown high and dry upon the beach. The boats belonging to ships in the roads sometimes proceed to the back of the surf, and wait for the country boats from the beach to come to them. When it is dangerous to have communication with the shore, a flag is displayed at the beach-house, which stands near the landing-place, as a caution.

The fishermen and lower classes employed on the water, use a species of floating machine of a very simple construction, named a catamaran. It is formed of 2 or 3 logs of light wood, 8 or 10 feet in length, lashed together, with a small piece of wood inserted between them to serve as a stem-piece. When ready for the water, they hold generally 2 men, who with their paddles impel themselves through the surf, to carry letters, or refreshments in small quantities, to ships, when no boat can venture out. They wear a pointed cap made of matting, where they secure the letters, which take no damage. The men are often washed off the catamaran, which they regain by swimming, unless interrupted by a shark. Medals are given to such catamaran men as distinguish themselves by saving persons in danger.

The following are the established rates of port charges at Madras : —

Light-house Dues.

	Rs.	a.	p.
All British and foreign ships	25	0	0
Country ships	14	0	0
Snow, brig, ketch, and schooner	7	0	0
Sloop and cutter	5	0	0
Large dhonies	5	0	0
Small dhonies	2	0	0

Anchorage Dues.

	S. Roads. Rs.	a.	p.	N. Roads. Rs.	a.	p.
British ships, and ships under foreign, European, or American colours	38	0	0	0	0	0
Country ships, from 900 to 500 tons	35	0	0	0	0	0
— 500 — 300 —	28	0	0	0	0	0
— 300 — 200 —	21	0	0	0	0	0
— 200 — 100 —	17	0	0	0	0	0
— 100 — 50 —	14	0	0	0	0	0
— 50 — 10 —	10	0	0	0	0	0
Native craft, from 400 — 300 —	0	0	0	21	0	0
— 300 — 200 —	0	0	0	17	0	0
— 200 — 100 —	0	0	0	14	0	0
— 100 — 50 —	0	0	0	10	0	0
— 50 — 20 —	0	0	0	3	0	0
— 20 — 10 —	0	0	0	1	0	0

Boat Hire.

	Rs.	a.	p.
Ordinary trips	1	3	0
Do. do. for an accommodation boat	5	0	0
Transhipments	0	12	6
Return trips	0	10	0
Monsoon trips	2	3	0
Do. do. for an accommodation boat	10	0	0
Do. transhipments	1	8	0
Do. return trips	1	3	0
Deep water trips	2	3	0
Extra hire on Sundays	0	9	0
A boat load of water	3	0	0
Sand ballast, exclusive of boat hire	0	5	0
Tarpaulin hire	0	4	0

Catamaran Hire.

	Rs.	a.	p.
Small catamarans, to all ships on anchoring	1	0	0
— snow, brig, and ketch, do.	0	12	0
— sloop and cutter, do.	0	10	0
— dhonies and large boats, do.	0	8	0
— carrying letters to ships	0	4	0
— carrying provisions or parcels	1	0	0
Large catamarans, for landing or shipping a European cable of 13 to 16 inches	25	0	0
for do. do. 17 to 22 —	38	0	0
for do. an anchor of 16 to 29 cwt.	25	0	0
for do. — 30 to 50 —	38	0	0

Port Regulations. — A notification shall be sent by the collector of the customs, through the master attendant, to the commanders of all ships coming into the roads, requiring them to transmit a true and full manifest of all goods and merchandises laden on board, according to a printed form; which manifest being delivered to the collector, he shall, if he so thinks fit, require it to be verified by an affidavit on oath; which forms being observed, permits are granted for the landing of the goods, under an official signature.

No articles are to be shipped or landed without a permit, or after 6 o'clock P. M. Any merchandise attempted to be landed without the prescribed forms, or that were not inserted in the manifest, are liable to double duty; and, where a fraudulent intention shall appear, to confiscation. All goods (except on account of the East India Company) shall be shipped or landed at the ghaut opposite to the Custom-house, or pay double duty. All goods (except belonging to the Company), on being landed, shall be brought to the Custom-house; and when required to be passed, a written application, in the following form, must be made to the collector. No other form will be attended to. — "To the Collector of the Customs. Please to permit the undermentioned goods to pass the Custom-house, on account of, Sir, your obedient servant, ————."

Date.	No. and Nature of Packages.	Name of Ship.	Under what Colours.	Whence imported.	Sort of Goods.	Quantity of Goods.	Rates.	Total Value.

N. B. — These are to be left blank, and filled up from the tariff, by which the duties are regulated.

Goods exported in British vessels, or in those belonging to the native inhabitants of India, are exempt from duty, but must nevertheless pass through the customs' books, and their value be computed at the tariff prices.

If any goods are shipped, or attempted to be shipped, without permission obtained from the Customs, which must be applied for according to the following form, they are liable to a duty of 6 per cent. or 8 per cent., according to the country of the ship. — "To the Collector of the Customs. Please to permit the undermentioned goods to pass the Custom-house, on account of, Sir, your obedient servant, ————."

Date.	No. and Nature of Packages.	Name of Ship.	Under what Colours.	Whither bound.	Sorts of Goods.	Rates of Manufactures and Produce.	Quantity of Goods.	Rates.

These are to be filled up from the tariff.

The collector of customs is allowed a commission of 5 per cent. on the amount of the duty collected on goods imported or exported, and upon the amount of the duty computed on goods imported or exported free of duty; and where goods become liable to be charged with the additional duty, 5 per cent. is also due to the collector on such duty.

Port clearances cannot be granted to ships clearing outwards, until true and complete manifests of the cargoes have been lodged with the collector of customs, and a certificate produced from the boat paymaster (the chief officer over the boats regularly kept for hire) that he has no demand.

The port charges for clearance on every vessel, except paddy boats, is 1 pagoda 24 fanams. For every paddy boat, 20 fanams. For every bale imported or exported in foreign vessels (except Americans), 1 pagoda.

You cannot employ your own boat to unload your vessel without the permission of the master attendant; and you can, in no case, let out your boat for hire to another vessel, under any pretence whatever. The rates of boat hire are according to your distance from the shore; double charge being made, if employed on a Sunday. A load of ballast consists of 120 baskets of sand, according to a fixed size, at the average price of 3½ fanams. A boat load of water is 4 butts; the price 55 fanams 40 cash.

Customs. — The export and import duties at Madras are the same as at Calcutta; which see.

Monies. — There is a considerable variety of coins in circulation in Madras and its vicinity. Of the gold coins, the principal are star or current pagodas = 7*s.* 5¼*d.*; commonly, however, valued at 8*s.* The gold rupee, new coinage, is worth, according to the mint price of gold in England, 1*l.* 9*s.* 2·42*d.* The Arcot rupee (silver) and the new silver rupee are very nearly of the same value, being respectively worth 1*s.* 11¼*d.* and 1*s.* 11⅓*d.* The East India Company and the European merchants keep their accounts at 12 fanams the rupee; 80 cash = 1 fanam, and 42 fanams = 1 pagoda. Copper pieces of 20 cash, called pice, and of 10 and 5 cash, called dodees and half dodees, are also current; these are coined in England, and the value is marked on each.

Commercial Weights. — Goods are weighed by the candy of 20 maunds; the maund is divided into 8 vis, 320 pollams, or 3,200 pagodas; the vis is divided into 5 seers. The candy of Madras is 500 lbs. avoirdupois. Hence the pagoda weighs 2 oz. 3 grs.; and the other weights are in proportion. These weights have been adopted by the English; but those used in the Jaghire (the territory round Madras belonging to the Company), as also in most other parts of the Coromandel coast, are called the Malabar weights, and are as follows: — The gursay (called by the English garce) contains 20 baruays or candies; the baruay, 20 manungus or maunds; the maund, 8 visay or vis, 320 pollams, or 3,200 varahuns. The varahun weighs 52¾ English grains: therefore, the visay is 3 lbs. 3 dr.; the maund, 24 lbs. 2 oz.; the baruay, 482¼ lbs.; and the gursay, 9,645½ lbs. avoirdupois, or 4 tons 6 cwt. nearly.

Measures of Capacity. — The garce, corn measure, contains 80 parahs, or 400 marcals; and the marcal, 8 puddies, or 64 ollucks. The marcal should measure 750 cubic inches, and weigh 27 lbs. 2 oz. 2 dr. avoirdupois of fresh spring water: hence, 43 marcals = 15 Winch. bushels; and therefore the garce = 17⅛ English quarters nearly. When grain is sold by weight, 9,256⅔ lbs. are reckoned for 1 garce, being 18 candies 12·8 maunds.

Banking. — There is but a single banking establishment at Madras, which is entirely a government concern, as the directors consist of the superior officers of government; and the ministerial officers are on fixed salaries. The bank issues notes, receivable as cash at the public treasuries, within the town of Madras; it receives deposits and grants discounts. The accumulated profits of the bank, from its first institution in 1806, amounted to 620,227*l.*, being at the rate of about 31,000*l.* a year; but as the Indian money is here reckoned at the rate of 8*s.* the pagoda, which is much above both the mint price and the value in exchange, the real profits are considerably smaller.

Mercantile Establishments. — At Madras there are but 3 principal European mercantile establishments, or houses of agency, with 7 of an inferior class. There are 2 American houses, and 1 considerable native house of business. The daubashes, or native brokers of Madras, are expert, intelligent, and sometimes knavish. Among the native merchants there are few men of wealth; and the contrast, in this respect, with Calcutta and Bombay, is striking. The degree of liberality exercised by the respective governments, and the prosperity of the different portions of the British territory in India, may safely be implied by the proportion of British settlers to be found in them. Tried by this test, the Madras provinces will be found eminently wanting, as will be seen by the following brief Table: —

1813	- Bengal	-	1,225	Madras	-	187	Bombay	- 469
1830	- —	-	1,707	—	-	134	—	- 308

Insurance. — There is but one insurance company, called the India Insurance Society; but there are agents of the Calcutta companies, who effect insurance on shipping.

Agency and Commission. — The general rates of agency, commission, and warehouse rent, are as follow: —

1. On the total sum of a debit or credit side of an account, at the option of the agent, excepting items on which a commission of 5 per cent. is chargeable, 1 per cent.
2. On effecting remittances, or purchasing, selling, or negotiating bills of exchange, 1 per cent.
3. On subscriptions to government loans, purchasing, selling, transferring, or exchanging public securities, ½ per cent.
4. On delivering up public securities, or lodging them in any of the public offices, ½ per cent.
5. On receiving and delivering private commissions of wines, cattle, and merchandise, 2½ per cent.
6. On collecting rents, 2½ per cent.
7. On purchase of lottery tickets and amount of prizes, 1 per cent.
8. On the sale of lottery tickets from the other settlements, 2½ per cent.
9. On letters of credit granted, 2½ per cent.
10. On the management of estates, as executors, administrators, or attorneys, 5 per cent.
11. On debts, when a process at law or arbitration is necessary, 2½ per cent.
    And if recovered by such means, 5 per cent.
12. On bills of exchange, notes, &c. dishonoured, 1 per cent.
13. On overdue debts collected for absentees, 2½ per cent.
14. On becoming security for individuals to government, 1 per cent.
15. On all sales or purchases of goods, 5 per cent.
    With the following exceptions: —
    On houses, lands, and ships, 2½ per cent.
    On diamonds, pearls, and jewellery, 2½ per cent.
    On treasure and bullion, 1 per cent.
    On all goods and merchandise withdrawn, shipped, or delivered to order, ½ commission.
    On all other descriptions of property for sale, if withdrawn or otherwise disposed of by the owners, ½ commission.
    On goods transferred to auction or commission salesmen, ½ commission.
16. On retail sales, 10 per cent.
17. On guaranteeing sales, bills, bonds, contracts for goods, or other engagements, 2½ per cent.
18. On ships' disbursements, 2½ per cent.
19. On advertising as the agents of owners or commanders of ships for freight or passengers; on the amount of freight and passage money, whether the same shall pass through the agent's hands or not, 5 per cent.
20. On effecting insurance, or writing orders for insurance, ½ per cent.
21. On settling losses, partial or general, and returns of premium, 1 per cent.
22. On procuring money on respondentia, wherever payable, 2 per cent.
23. On making up goods to order, and taking risk of advances, 10 per cent.
24. On giving orders for the provision of goods, where a commission is not chargeable on sale or shipment, 2½ per cent.
25. On attending the delivery of contract goods, 2 per cent.

Exports and Imports. — Madras trades with Great Britain and other European countries, the United States, the South American States, China, the Eastern islands, the Burman empire, Calcutta, and Ceylon. In speaking of the trade of Madras, it is to be observed that it comprehends, for the most part, the trade of the whole coast of Coromandel. The principal articles of import are rice and other grain, chiefly from Bengal; cotton piece goods, iron, copper, spelter, and other British manufactures; raw silk from Bengal and China, with betel or areca nut, gold dust, tin, and pepper, from the Malay countries; and rice and pepper from the coast of Malabar, with teak timber from Pegu. The exports consist of plain and printed cottons, cotton wool, indigo, salt, pearls of Ceylon, chank shells, tobacco, soap, natron, some dyeing drugs, and a little coffee produced on the table land of Mysore, and of which the quantity is increasing. The great staples of sugar, rice, opium, saltpetre, and lac dye, of such importance in Bengal, are unknown as exports at Madras.

The following is a statement of the value of the trade of Madras, and its subordinate ports, with Europe and America, in the years 1813-14 and 1828-29.

Countries.	1813-1814.						1828-1829.					
	Imports.			Exports.			Imports.			Exports.		
	Merchandise.	Bullion.	Total.	Merchandise.	Bullion.	Total.	Merchandise.	Bullion.	Total.	Merchandise.	Bullion.	Total.
	Ma. rs.	*Ma. rs.*	*Ma. rs.*	*Ma. rs.*	*Ma. rs.*	*Ma. rs.*	*Ma. rs.*	*Ma. rs.*	*Ma. rs.*	*Ma. rs.*	*Ma. rs.*	*Ma. rs.*
Great Britain	2,717,492	-	2,717,492	4,208,946	156,187	4,365,133	3,354,825	25,156	3,379,981	3,507,741	732,663	4,240,404
United States of America -	-	-	-	-	-	-	3,819	7,055	10,874	20,953	-	20,953
Portugal -	71,128	2,625	73,753	98,462	-	98,462						
France -	-	-	-	-	-	-	388,593	1,000	389,493	128,006	-	128,006
Brazils -	1,228	-	1,228									
South American States	-	-	-	-	-	-	-	-	-	62,906	-	62,906
Total -	2,789,848	2,625	2,792,475	4,307,408	156,187	4,463,595	3,747,137	32,211	3,780,348	3,719,606	732,663	4,452,269

Taking the Madras rupee at its British mint value of 1*s.* 11*d.* nearly, the joint exports and imports of 1813-14 were 695,373*l.*; and those of 1828-29, 788,959*l.*; showing an increase, in 15 years, of no more than 93,586*l.*, or about 13 per cent. — a striking contrast with the great augmentation which has taken place in the same period in the trade of Calcutta and Bombay. The exports, it will be seen by the Table, have even fallen off. The causes which have led to this state of things deserve some explanation. The raw silks, nankeens, camphor, and cassia of China, which, on account of the monopoly, could not be directly sent from Canton to Europe, were formerly brought by the country ships to Madras, and there reshipped. They are now more conveniently, and in much larger quantity, brought for the same purpose to Singapore. But the chief causes which contribute to retard the external commerce of Madras, are the vexatious restraints on industry, and the taxation so much heavier in that presidency than in Bengal or Bombay. The land tax, instead of being fixed in perpetuity, as in the former, is temporary and fluctuating; and hence, neither British nor native industry is applied with any vigour in the improvement of the productions of the soil. Inland duties prevail every where, and fresh ones are not only exacted when goods pass from one province to another, but often when passing from town to town, or even from village to village. These imposts are, at the same time, farmed to a very corrupt class of persons. Of the value of the trade between Madras and China we have no statement; but the tonnage employed in the export trade, at an average of the 5 years ending with 1817-18, was 3,677 tons;

and at an average of the 5 years ending with 1826-27, 3,078 tons. The import tonnage in the same periods amounted respectively to 683 tons and 2,989 tons; the disparity in this case being accounted for, from its having lately become usual for country ships returning in ballast from China, to touch at Madras for cargoes of salt to be conveyed to Bengal on behalf of the monopoly. For many ages, a commercial intercourse of considerable extent appears to have prevailed between Madras and other ports of the Coromandel coast, and the Malay countries, chiefly those situated within the straits of Malacca, with the west coast of Sumatra and the island of Java. This is still carried on in native vessels, to the extent of 50 or 60 annually, mostly brigs or ketches, clumsily constructed, but equipped and navigated on the European model. A few British-owned vessels also occasionally engage in it. In this trade, the exports from Madras and its subordinate ports consist chiefly of piece goods and salt. British fabrics have of late years interfered with the former, and the salt of Siam with the latter, so that the trade is on the decline. The principal foreign trade of Pegu, at one time, was carried on with Madras; but within the last 30 years it has been, in a great measure, transferred to Calcutta. There is still, however, a trade of some amount carried on in vessels owned both by Europeans and natives. The exports from Madras to Pegu consist chiefly of piece goods, tobacco, and cocoa nuts; the returns being made in teak timber, horses, orpiment, stick lac, bullion, sapphires, and rubies. The largest branch of the trade of Madras is with Calcutta. In 1813–14, the imports from Madras, and other parts of the Coromandel coast, into Calcutta, amounted to sicca rupees 18,74,941, and the exports to sicca rupees 22,77,934, or jointly to about 425,287*l.* sterling. In 1821–22, the imports amounted to sicca rupees 8,87,221, and the exports to sicca rupees 12,35,015, or jointly to about 212,223*l.*; showing a falling off to the extent of half the whole amount. The disproportion, in this case, between the imports and exports, is to be accounted for by the omission, in the public accounts, of all salt imported on account of the monopoly, and which has amounted yearly to about 10,000 tons. The great impediment to the intercourse between the Bengal and Madras provinces is the salt monopoly, the quantity of salt taken annually being restricted by the government of Bengal. This limits the consumption of salt in Bengal, where it is naturally dear, and, by compelling the inhabitants of Madras to grow corn on poor lands, precludes the export of the cheap rice of Bengal. The Indian governments, instead of having improved of late years in liberality, have really drawn tighter the cords of monopoly. The effect of this upon the export of corn from Bengal to Madras has been remarkable. In 1806–7, when the salt of Madras was admitted into Calcutta with some liberality, the export of grain to the Coromandel coast amounted to 2,635,658 maunds, or about 470,000 quarters; whereas, in 1823-24, a year of scarcity in the Madras provinces, it amounted to only 1,591,326 maunds, or about 284,000 quarters. The trade between Calcutta and the Coromandel coast is carried on both in European and native vessels. The latter are of the same description, but not so well equipped, as those that trade between the Coromandel coast and the Malay islands. In 1810, the number which cleared out from Calcutta for Madras and its subordinate ports, was no less than 367, their burden being estimated at 46,073 tons. Since then, their numbers have declined; being, in 1821, only 103 vessels, of the burden of 11,991 tons. The European tonnage employed in this trade is extremely fluctuating. In 1807, a year of extraordinary scarcity in the Madras provinces, the registered tonnage which cleared out from Calcutta for the Coromandel coast amounted to 93,236 tons, which conveyed 6,000,000 quarters of rice. Next year the tonnage amounted to only 6,261 tons. In 1812, another year of scarcity, it was 15,068 tons; and in 1821, a year of plenty, it was but 2,642 tons. These striking facts show the vast importance of a free trade in corn to the countries in question.—(In compiling this article, we have made use of *Hamilton's Description of Hindostan*; *Hamilton's East India Gazetteer*, 2d ed. 1828; *Phipp's Guide to the Commerce of Bengal*; *Papers relative to the Trade with India and China*, printed by order of the House of Commons, and *Evidence taken before the Parliamentary Committee*, in 1829, 1830, and 1831; *Madras Almanack* for 1831; *Kelly's Cambist*, 2d ed.; and *Horsburgh's Directory*,—an accurate and useful work.)

MAGNESIA (Fr. *Magnésie*; Ger. *Gebraunte Magnesia*; It. *Magnesia*), one of the primitive earths, having a metallic basis. It is not found native in a state of purity, but is easily prepared. It is inodorous and insipid, in the form of a very light, white, soft powder, having a specific gravity of 2·3. It turns to green the more delicate vegetable blues, is infusible, and requires for its solution 2,000 parts of water at 60°.

MAHOGANY, the wood of a tree (*Swietenia Mahogani*) growing in the West Indies and Central America. There are two other species of Swietenia found in the East Indies, but they are not much known in this country.

Mahogany is one of the most majestic and beautiful of trees: its trunk is often 40 feet in length, and 6 feet in diameter; and it divides into so many massy arms, and throws the shade of its shining green leaves over so vast an extent of surface, that few more magnificent objects are to be met with in the vegetable world. It is abundant in Cuba and Hayti, and it used to be plentiful in Jamaica; but in the latter island, most of the larger trees, at least in accessible situations, have been cut down. The principal importations into Great Britain are made from Honduras and Campeachy. That which is imported from the islands is called Spanish mahogany; it is not so large as that from Honduras, being generally in logs from 20 to 26 inches square and 10 feet long, while the latter is usually from 2 to 4 feet square and 12 or 14 feet long, but some logs are much larger. Mahogany is a very beautiful and valuable species of wood: its colour is a red brown, of different shades, and various degrees of brightness; sometimes yellowish brown; often very much veined and mottled, with darker shades of the same colour. The texture is uniform, and the annual rings not very distinct. It has no larger septa; but the smaller septa are often very visible, with pores between them, which in the Honduras wood are generally empty, but in the Spanish wood are mostly filled with a whitish substance. It has neither taste nor smell, shrinks very little, and warps or twists less than any other species of timber. Is is very durable when kept dry, but does not last long when exposed to the weather. It is not attacked by worms. Like the pine tribe, the timber is best on dry rocky soils, or in exposed situations. That which is most accessible at Honduras grows upon moist low land, and is, generally speaking, decidedly inferior to that brought from Cuba and Hayti; being soft, coarse, and spongy; while the other is close-grained and hard, of a darker colour, and sometimes strongly figured. Honduras mahogany has, however, the advantage of holding glue admirably well; and is, for this reason, frequently used as a ground on which to lay veneers of the finer sorts. The best qualities of mahogany bring a very high price. Not long since, Messrs. Broadwood, the distinguished pianoforte manufacturers, gave the enormous sum of 3,000*l.* for three logs of mahogany! These logs, the produce of a *single tree*, were each about 15 feet long and 38 inches square: they were cut into veneers of 8 to an inch. The wood was particularly beautiful, capable of receiving the highest polish; and when polished, reflecting the light in the most varied manner, like the surface of a crystal; and, from the wavy form of the pores, offering a different figure in whatever direction it was viewed. Dealers in mahogany generally introduce an auger before buying a log; but, notwithstanding, they are seldom able to decide with much precision as to the quality of the wood, so that there is a good deal of lottery in the trade. The logs for which Messrs. Broadwood gave so high a price were brought to this country with a full knowledge of their superior worth. Mahogany was used in repairing some of Sir Walter Raleigh's ships at Trinidad, in 1597; but it was not introduced into use in England till 1724.

The cutting of mahogany at Honduras takes place at two different seasons; after Christmas, and towards midsummer. The negroes employed in felling the trees are divided into groups of from 10 to 50. The trees are cut about 12 feet from the ground, and are floated down the rivers.

Of 11,542 tons of mahogany imported in 1831, 8,214 came from the British West Indies (including Honduras), and 2,623 from Hayti. The duty on foreign mahogany is 7*l.* 10*s.* a ton, whereas Honduras mahogany pays only 1*l.* 10*s.*, and Jamaica mahogany 4*l.* The effect of such a duty must obviously be to force the consumption of the inferior in preference to the superior article. In 1832, the duty produced 45,405*l.* — (See *Tredgold's Principles of Carpentry*, p. 204.; *Library of Entertaining Knowledge*, volume on *Timber Trees and Fruits*; and *Edwards's West Indies*, vol. iv. p. 258. ed. 1819, *&c.*)

Mahogany from Honduras, imported into any free warehousing port in the British possessions in the West Indies or America, in a ship cleared out from Balize, and then warehoused as having been so imported and cleared, may be exported from the warehouse and imported into the United Kingdom, as if it had been imported direct in a British ship, provided it be stated in the ship's clearance that the mahogany had been so warehoused and exported. — (9 *Geo.* 4. c. 76. § 13.)

Mahogany not to be entered as being the produce of any British possession, unless the master of the ship importing the same deliver to the collector or comptroller a *certificate*, and declare that the goods are the produce of such place. — (See *antè*, p. 660.)

MAIZE, OR INDIAN CORN (Fr. *Bled de Turquie*; Ger. *Türkisch korn, Mays*; It. *Grano Turco o Siciliano*; Sp. *Trigo de Indias, Trigo de Turquia*), one of the cereal grasses (*Zea Mays*), supposed to be indigenous to South America, being the only species of corn cultivated in the New World previously to its discovery. It was introduced into the Continent about the beginning, and into England a little after the middle, of the 16th century. Its culture has spread with astonishing rapidity; being now extensively grown in most Asiatic countries, and in all the southern parts of Europe. It has the widest geographical range of all the ceralia, growing luxuriantly at the equator, and as far as the 50th degree of north, and the 40th of south latitude. It has been raised in England, in nursery gardens near the metropolis, for more than a century; and recently it has been attempted to raise it in the fields, but with indifferent success. Like other plants that have been long in cultivation, it has an immense number of varieties. The ear consists of about 600 grains, set close together in rows, to the number of 8, 10, or 12. The grains are usually yellow; but they are sometimes red, bluish, greenish, or olive-coloured, and sometimes striped and variegated. The maize of Virginia is tall and robust, growing 7 or 8 feet high; that of New England is shorter and lower; and the Indians further up the country have a still smaller sort in common use. The stalk is jointed like the sugar cane. The straw makes excellent fodder; and the grain, as a bread corn, is liked by some; but though it abounds in mucilage, it contains little or no gluten, and is not likely to be much used by those who can procure wheaten or even rye bread. — (*Loudon's Encyclopædia of Agriculture, &c.*) For the imports of maize, duties, &c., see CORN LAWS AND TRADE.

MALAGA, a city and sea-port of Spain, in the kingdom of Granada, in lat. 36° 43½′ N., lon. 4° 25′ 7″ W. Population, perhaps, 55,000.*

Harbour.—Malaga has an excellent harbour. It is protected on its eastern side by a fine mole, full 700 yards in length. At its extremity a light-house has been constructed, furnished with a powerful light, revolving once every minute. At a distance it appears obscured for 45 seconds, when a brilliant flash succeeds for the other 15 seconds. A shoal has grown up round the mole head, and the depth of water throughout the harbour is said to be diminishing. Latterly, however, a dredging machine has been employed to deepen it, by clearing out the mud and accumulating sand. The depth of water, at the entrance to the harbour and within the mole, is from 26 to 30 feet; and close to the city, from 8 to 10 feet. The harbour could easily accommodate more than 450 merchant ships: it may be entered with all winds, and affords perfect shelter.

Trade, &c.— Owing to the want of official returns, and to the prevalence of smuggling, which may be said to have annihilated all fair trade, it is not possible to obtain any accurate accounts of the trade of Malaga, or, indeed, of any Spanish port. The great articles of export are wine and fruits, particularly raisins and almonds, grapes, figs, and lemons; there is also a considerable exportation of olive oil, with quantities of brandy, anchovies, cummin seed, aniseed, barilla, soap, &c. The lead exported from Malaga is brought from Adra. — (See LEAD.) The imports are salt fish, iron hoops, bar iron, and nails; cotton stuffs, hides, earthenware, &c., with dye stuffs, all sorts of colonial produce, butter and cheese from Holland and Ireland, linens from Germany, &c. The trade with England seems to be diminishing, and that with the United States to be increasing. This is a consequence, no doubt, of Malaga wine being very little in demand in the former, while it is pretty largely consumed in the latter. The Americans are also the largest consumers of Malaga fruit.

The following details, abstracted from Mr. Ingliss's valuable work, entitled "Spain in 1830," contain the fullest and by far the best account that we have met with of the trade of Malaga. Their authenticity may, we believe, be depended upon.

"*Wine.* — The wines of Malaga are of two sorts, sweet and dry; and of the former of these there are four kinds: first, the common "Malaga," known and exported under that name. In this there is a certain proportion of boiled wine, which is allowed to burn, and which communicates a slightly burnt taste to the "Malaga." The grape from which this wine is made is a white grape, and every pipe of "Malaga" contains no less than *eleven* gallons of brandy. Secondly, "Mountain." This wine is made from the same grape as the other, and like it contains colouring matter and brandy; the only difference is that, for "Mountain," the grape is allowed to become riper. Thirdly, "Lagrimas," the richest and

* The consul says 75,000; but we have little doubt that this is very much beyond the mark. In the *Weimar Almanack* the population is set down at 52,376.

finest of the sweet wines of Malaga; the name of which almost explains the manner in which it is made. It is the droppings of the ripe grape hung up, and is obtained without the application of pressure.

"The dry wine of Malaga is produced from the same grape as the sweet wine, but pressed when greener; in this wine there is an eighth part more of brandy than in the sweet wine; no less than 1-12th part of the dry Malaga being brandy.

"The whole produce of the Malaga vineyards is estimated at from 35,000 to 40,000 pipes; but owing to the increasing stock of old wine in the cellars, it is impossible to be precise in this calculation. The export of all sorts of Malaga wine may be stated at about 27,000 pipes. The principal market is the United States and South America; and to these the export is upon the increase. The average price of the wines shipped from Malaga does not exceed 35 dollars per pipe; but wines are occasionally exported at the price of 170 dollars. Many attempts have been made at Malaga to produce sherry, but not with perfect success. The sherry grape has been reared at Malaga upon a soil very similar to that of Xeres; but the merchants of Malaga have not ventured to enter the wine for export. One reason of the very low price of the wines of Malaga is to be found in the cheapness of labour; field labour is only 2½ reals a day (4½*d.*). In the fruit and vintage time it is about double.

"*Fruit.* — Next to its wines, the chief export of Malaga is fruit, consisting of raisins, almonds, grapes, figs, and lemons; but of these, raisins are principally exported. I have before me a note of the exports of Malaga for the months of September and October, 1830 — the chief, though not the sole, exporting months — and I find that during that time the export of raisins amounted to 268,845 boxes, and 31,916 smaller packages. Of this quantity, 125,334 boxes were entered for the United States; 45,513 for England; the remaining quantity being for France, the West Indies, the Spanish ports, South America, and Holland.

"The raisins exported from Malaga are of three kinds, *muscatel*, *bloom*, or *sun raisin*, and *lexias*. — The muscatel is the finest raisin in the world. In its preparation no art is used; the grape is merely placed in the sun, and frequently turned. The bloom, or sun raisin, is a different grape from the muscatel; but its preparation is the same. The lexias acquire this name from the liquor, or ley, in which they are dipped, and which is composed of water, ashes, and oil; these, after being dipped, are also dried in the sun. All muscatel raisins are exported in boxes, and also a part of the bloom raisins. In 1829, the exports of muscatel and bloom raisins were 325,000 boxes of 25 lbs. each; in all, 8,125,000 lbs. This quantity is independent of the export of bloom raisins in casks, and of lexias; the latter amounting to about 30,000 arrobas. The export of raisins to England has fallen off, while that to America has considerably increased. In 1824, 75 ships cleared from Malaga, for England, with fruit: in 1830, down to the 1st of November, 34 vessels had cleared out.

"Of the other fruits raised near Malaga, grapes, almonds, and lemons are the most extensively exported. In the months of September and October, 1830, 11,612 jars of grapes were shipped for England; 6,429 for America; and 1,650 for Russia. During the same months, 5,335 arrobas of almonds (133,375 lbs.) were shipped for England, this being nearly the whole export; there were also exported, during the same period, 3,749 boxes of lemons for England; 4,201 ditto for Germany; and 840 ditto for Russia.

"*Oil.* — There is also a large export of oil from Malaga; but the exportation, during the latter part of 1830, would be no criterion of the average; because, the Greenland whale fishery having failed, extensive orders had been received from England.

"*Shipping.* — The trade between England and Malaga is on the decline: that with both the Americas is increasing, especially in wines. The number of British vessels entered at the port of Malaga, in 1827, I find from an official note furnished by the British consul to have been 104; in 1828, 126; in 1829, 105; and in 1830, to the 1st of November, 83, exclusive of small Gibraltar vessels. The number of American vessels entering in 1829, was 55; but the average burden of the Americans being 175 tons, and that of the English vessels not exceeding 100, the whole American is nearly equal to the whole English trade." — (Vol. ii. pp. 190—196.)

Money. — Accounts are kept in reals of 34 maravedis vellon. — (For the coins, and their value, used at Malaga, see CADIZ.)

Weights and Measures. — The weights are the same as those of Cadiz. The arroba, or cantara = 4·19 English wine gallons; the regular pipe of Malaga wine contains 35 arrobas, but is reckoned only at 34; a bota of Pedro Ximenes wine = 53½ arrobas; a bota of oil is 43, and a pipe 35 arrobas; the latter weighs about 860 lbs. avoirdupois: a carga of raisins is 2 baskets, or 7 arrobas; a cask contains as much, though only called 4 arrobas: as a last for freight are reckoned — 4 botas or 5 pipes of wine or oil; 4 bales of orange peel; 5 pipes of Pedro Ximenes wine or oil; 10 casks of almonds (each about 380 lbs. English); 20 chests of lemons and oranges; 22 casks of almonds (of 8 arrobas each); 44 casks of raisins (of 4 arrobas each); 88 half casks of raisins; 50 baskets or 160 jars of raisins.

Port Charges. — The port and harbour dues amount, on an English vessel of 300 tons, to about 21*l.*; on a Spanish vessel, of the same burden, they would be about 11*l.* 10*s.*

Warehousing. — Goods may be warehoused for 12 months, paying 2 per cent. *ad valorem* in lieu of all charges; but, at the end of the year, they must be either entered for consumption or reshipped. The 2 per cent. is charged, whether they lie a day or the whole year.

There is an excellent account of Malaga in *Townsend's Travels in Spain*, vol. iii. pp. 10—42. The *Answers* by the consul at Malaga to the *Circular Queries* contain little or no information.

MALMSEY. See WINE.

MALT (Ger. *Maly;* Du. *Mout;* Fr. *Mal, Blédgermé;* It. *Malto;* Sp. *Cebada retonada ó entallecida;* Rus. *Solod;* Lat. *Maltum*). The term malt is applied to designate grain which, being steeped in water, is made to germinate to a certain extent, after which the process is checked by the application of heat. This evolves the saccharine principle of the grain, which is the essence of malt. The process followed in the manufacture is very simple. Few changes have been made in it; and it is carried on at this moment very much in the same manner that it was carried on by our ancestors centuries ago. Rice, and almost every species of grain has been used in malting; but in Europe, and especially in England, malt is prepared almost wholly from barley. It is the principal ingredient in the manufacture of beer, and is not used for any other purpose.

Duties on, and Consumption of, Malt. Influence of the Reduction of the Duty and the Opening of the Trade. — Owing to malt liquor having early become the favourite beverage of the people of England, the manufacture of malt has been carried on amongst us, for a lengthened period, on a very large scale. Instead, however, of increasing with the increasing wealth and population of the country, it has been nearly stationary for the last hundred years. This apparently anomalous result is probably in some measure to be accounted for by the increased consumption of tea and coffee, which are now in

almost universal use; but there cannot be a question that it is mainly owing to the exorbitant duties with which malt, and the ale or beer manufactured from it, have been loaded, and to the oppressive regulations imposed on the manufacture of malt and the sale of beer. The effect of these duties and regulations was to impose a tax of about 7*s.* on the malt and beer made from a bushel of barley; which, taking the average price of barley at from 4*s.* to 5*s.* a bushel, was equivalent to an *ad valorem* duty of from 140 to 175 per cent! The exorbitancy of the duty was not, however, its most objectionable feature. It was about equally divided — one half being assessed directly on malt, and the other on beer: but the beer duty affected only beer brewed by public brewers, or for sale, and did not affect that which was brewed for private use; and as rich families brewed all the beer they made use of, the consequence of this distinction was, that the beer duty fell wholly on the lower and middle classes, who did not brew any beer; or, in other words, the poor man was compelled to pay twice the duty on the malt he made use of that was paid by the rich man! That such a distinction should ever have been made, or submitted to for any considerable period, is certainly not a little astonishing. Originally, however, the distinction was not so great as it afterwards became; and being increased by slow degrees, the force of habit reconciled the parliament and the country to the gross inequality and oppressiveness of the tax. But the public attention being at length forcibly attracted to the subject, and the effect of the exorbitant duties on malt and beer in increasing the consumption of ardent spirits having been clearly pointed out — (see *Edinburgh Review*, No. 98. art. 4.), the beer duty was repealed in 1830. This measure of substantial justice and sound policy reflects the greatest credit on the administration of the Duke of Wellington; which is also entitled to the public gratitude for having put an end to the licensing system, and established, for the first time, a really free trade in beer.

The repeal of the duty has materially increased the consumption of malt; and the anticipations of those who contended that its abolition, if combined with a free trade in beer, would be no great loss to the revenue, are in a fair way of being realised. The clamour that has been raised against the measure, on account of its supposed influence in increasing drunkenness, is, we firmly believe, wholly without foundation. If the measure has increased, as it certainly has done, the consumption of beer, it has at the same time equally diminished the consumption of gin; and it is surely superfluous to add, that this is a most beneficial change. It is true that a number of new public houses have been opened for the sale of beer; but it has not hitherto been proved that this circumstance, though it seems to have occasioned no common alarm among the clergy and magistrates in different parts of the country, has been productive of any public inconvenience. Like all newly opened lines of business, the trade of beer selling has been overdone; and a considerable number of beer shops have been shut up. "It is not," as Dr. Smith sagaciously remarked, "the multiplication of alehouses that occasions a general disposition to drunkenness among the common people; but that disposition, arising from other causes, necessarily gives employment to a multitude of alehouses." — (*Wealth of Nations*, vol. ii. p. 146.) The way to eradicate this disposition is by giving a better education to the poor, and inspiring them with a taste for less grovelling enjoyments. All that the fiscal regulations and police enactments intended to promote sobriety have ever done, is to make bad worse, to irritate and disgust, to make the lower classes more enamoured of that which they conceive is unjustly withheld from them, and to stimulate them to elude and defeat the law. — (See *antè*, p. 14.)

The following Tables show the consumption of malt in England and Wales from 1787 down to 1833, and in the whole kingdom from 1821. They show that the consumption of malt had been about stationary for nearly half a century, notwithstanding the population had been more than doubled in that period, and that the wealth of all classes had been materially increased. In point of fact, however, the consumption had been stationary for a much longer period — for *more than an entire century!* For it appears from the accounts given by the very well-informed Mr. Charles Smith, in his tracts on the *Corn Trade* (2d ed. p. 199.), that the quantity of malt that paid duty in England and Wales, at an average of the 10 years ending with 1723, was 3,542,000 quarters a year; and that the annual average during the next 10 years was 3,358,071 quarters. The beer duties being, in effect, as much a part of the malt duty as if they had been laid directly on malt, it is indispensable that they should always be taken into account, before drawing any conclusions as to the influence of the duty. Ample information with respect to them will be found in the article Ale and Beer; but, to save the trouble of reference, the whole is brought, as far as respects the 10 years previous to their repeal, into one point of view in the subjoined Table, No. I.

I. An Account of the Number of Quarters of Malt charged with Duty, the Amount of the said Duty, the Rate per Quarter in each Year; also, the Number of Quarters of Malt used by Brewers and Victuallers; the Number of Barrels of Strong, Intermediate, and Table Beer, separately; the Amount of Duty on Beer, and the Rate of Duty per Barrel for each sort of Beer, in each Year, from the 5th of January, 1821, to the 5th of January, 1833; in Imperial Measure.

Years ended 5th of January.	Malt.						Beer.					
	Quarters charged with Duty.	Rate per Quarter.	Amount of Duty.			Quarters used by Brewers and Victuallers.	Strong, at 9s. 10d. per Barrel.*	Table, at 1s. 11½d. per Barrel.*	Intermediate, at 4s. 11d. perBarrel.	Amount of Duty.		
England.			£	s.	d.		Barrels.	Barrels.	Barrels.	£	s.	d.
1821	2,985,530	28s. 10½ 6/21 d.	4,311,446	2	6	No account has been kept of the quantities used during these years.	5,666,817	1,518,695	- -	2,838,149	1	1
1822	3,267,304	- - -	4,718,360	10	0		5,969,891	1,528,575	- -	2,987,366	8	6
1823	3,336,064	From 25 Feb. 1822, 20s. 8d.	3,624,242	8	0		6,306,981	1,570,043	- -	3,153,661	5	7
1824	3,105,644	- - -	3,203,502	17	6		6,395,835	1,483,045	7,018	3,190,908	12	8
1825	3,451,922	- - -	3,560,693	0	0	2,704,514	6,660,968	1,544,048	15,660	3,326,277	14	2
1826	3,696,592	- - -	3,813,072	7	6	2,820,946	7,014,395	1,606,899	6,160	3,495,597	9	1
1827	3,416,996	- - -	3,586,084	19	8	2,629,626	6,697,133	1,603,653	7,707	3,268,655	9	9
1828	3,137,042	- - -	3,241,610	6	6	2,571,879	6,403,302	1,532,308	17,158	3,131,662	6	0
1829	3,814,727	- - -	3,941,884	19	1	2,640,621	6,570,310	1,530,419	62,617	3,222,807	2	11
1830	2,928,509	- - -	3,026,126	6	9	2,406,991	5,961,048	1,380,469	55,498	2,923,118	1	5
1831	3,362,613	- - -	3,474,699	16	10	2,364,939	3,570,332	1,066,262	41.834†	-	-	
1832	4,120,434	- - -	4,257,781	10	10	2,284,949	- -	- -	- -	-	-	
1833	3,958,721	- - -	4,090,678	9	11	3,235,519	- -	- -	- -	-	-	

		Scotland.										
		From Barley.	From Bear or Bigg.									
1821	147,776	28s. 10½ 6/21 d.	28s. 10½ 6/21 d. From 5 July, 1820, 24s. 9 4/21 d.	212,282	6	6	No account as above.	123,114	207,983	- -	80,972	6 0
1822	163,207	- -	From 5 July, 1821, 22s. 8¼ 3/21 d.	231,605	9	3	78,406	128,939	219,546	- -	85,060	4 0
1823	175,396	From 25 Feb. 1822, 20s. 8d.	From 5 July, 1822, 14s. 5 20/21 d. From 5 July, 1822, 15s. 9¾ 5/21 d.	183,071	16	7	78,607	128,107	227,478	- -	85,117	12 0
1824	203,073	- -	- -	198,695	15	10	75,100	119,292	226,332	- -	80,532	8 0
1825	348,576	- -	- -	335,505	8	1	74,979	118,813	239,956	- -	81,894	10 0
1826	490,730	- -	- -	462,144	6	6	85,430	133,903	264,035	- -	91,731	2 2
1827	340,819	- -	16s.	339,104	8	10	72,956	122,158	271,335	- -	79,940	0 1
1828	339,259	- -	- -	335,488	18	11	79,481	112,067	241,293	- -	72,877	0 10
1829	483,394	- -	- -	478,507	15	2	82,577	118,943	247,443	- -	76,984	16 8
1830	464,120	- -	- -	457,587	12	4	75,305	111,071	229,384	- -	71,786	19 5
1831	502,743	- -	- -	505,651	4	6	92,416	75,262	178,011†	- -	-	-
1832	523,369	- -	- -	515,578	8	1	118,033	- -	- -	- -	-	-
1833	438,096	- -	- -	458,096	5	7	123,800	- -	- -	- -	-	-

		Ireland.					
1821	224,208	28s. 10½ 6/21 d.	319,683	14	0	165,130	
1822	243,664	From 5 April, 1822, 20s. 8d.	347,424	0	0	150,640	
1823	219,548	- - -	275,612	14	0	174,466	
1824	213,364	- - -	216,725	2	6	187,268	
1825	271,249	- - -	268,330	0	0	170,695	
1826	349,656	- - -	344,600	10	0	167,124	
1827	300,821	- - -	315,029	15	2	176,349	
1828	225,849	- - -	232,899	12	10	189,076	
1829	301,192	- - -	311,191	19	0	175,331	
1830	251,579	- - -	259,869	17	2	167,175	
1831	244,951	- - -	251,646	1	11	141,401	
1832	262,730	- - -	263,307	8	7	186,674	
1833	250,794	- - -	250,277	9	8	192,867	

Note. — No return can be made of the quantity of beer brewed in Ireland, the same not being subject to excise duty.

II. Prices of Malt, per Winchester Quarter, at Greenwich Hospital, from 1730 to 1832.

Years.	Prices.	Years.	Prices.	Years.	Prices.
1730	20s. 6d.	1805	85s. 7d.	1825	71s. 10½d.
1740	27s. 3½d.	1810	84s. 5d.	1826	65s. 1d.
1750	24s.	1815	69s. 7¼d.	1827	64s. 10d.
1760	24s. 9d.	1820	68s. 8⅓d.	1828	61s. 7d.
1770	28s. 3d.	1821	61s. 11d.	1829	61s. 10½d.
1780	31s. 1d.	1822	52s. 8⅓d.	1830	56s. 1¼d.
1790	35s. 6d.	1823	59s. 11d.	1831	70s. 5¼d.
1800	84s.	1824	62s. 1d.	1832	58s. 8d.

* From the year 1827, the rate of duty per barrel for strong beer was — common brewers, 9s.; victuallers, 9s. 10d.; table beer, common brewers, 1s. 9½d.; victuallers, 1s. 11½d.; the same also for Scotland.

† Beer duty ceased the 10th of October, 1830.

III. An Account of the Total Quantity of Malt made in England and Wales in each Year, from 1787 to 1820, both inclusive, the Rates of Duty, and the Amount of the Duty.

Years ended 5th July.	Malt.		Rate of Duty.	Amount of Duty.			Years ended 5th July.	Malt.		Rate of Duty.	Amount of Duty.		
	Qrs.	*bls.*	*s. d.*	£	*s.*	*d.*		*Qrs.*	*bls.*	*s. d.*	£	*s.*	*d.*
1787	3,409,104	7	10 6	1,789,780	1	2	1804	2,602,724	7	34 8	5,772,412	9	0
1788	3,358,580	1	- -	1,764,304	11	3	1805	2,792,923	1	- -	4,841,066	15	0
1789	3,031,314	2	- -	1,591,439	19	7	1806	3,435,990	0	- -	5,955,716	0	0
1790	2,833,697	3	- -	1,487,691	2	5	1807	3,114,020	3	- -	5,397,635	6	4
1791	3,489,876	2	12 6	2,138,908	14	1	1808	2,800,787	3	- -	4,854,698	2	4
1792	3,582,671	6	{12 6 / 10 6}	2,142,950	12	10	1809	2,851,598	7	- -	4,942,771	7	8
							1810	3,035,401	4	- -	5,261,362	12	0
1793	3,056,604	5	- -	1,604,717	8	6	1811	3,349,760	5	- -	5,806,251	15	0
1794	3,194,768	7	- -	1,677,253	13	2	1812	2,332,336	5	- -	4,042,716	16	4
1795	3,086,695	7	- -	1,620,515	6	8	1813	2,797,741	7	- -	4,849,419	5	0
1796	3,517,758	4	- -	1,846,823	4	3	1814	3,263,785	5	- -	5,657,228	8	4
1797	3,865,427	3	- -	2,029,349	7	5	1815	3,384,004	0	- -	5,865,606	18	8
1798	3,370,431	6	- -	1,769,476	13	4	1816	3,281,929	3	- -	5,688,677	11	8
1799	3,698,955	5	- -	2,083,701	14	0	1817	2,142,002	4	18 8	1,999,202	6	8
1800	1,810,089	3	- -	950,296	18	5	1818	3,307,866	5	- -	3,087,342	3	8
1801	2,320,868	2	- -	1,218,455	16	7	1819	2,793,282	3	- -	2,607,063	11	0
1802	3,792,297	6	18 8	2,642,040	6	11	1820	3,066,894	3	28 0	4,675,506	8	10
1803	3,809,900	2	- -	3,555,906	18	0							

IV. An Account of the Number of Bushels of Malt made, and the Amount of Duties thereon, in each Collection of Excise in the United Kingdom, in the Year ended 5th of January, 1833.

Collections.	Number of Bushels of Malt.	Amount of Duty.		
		£	*s.*	*d.*
England.				
Barnstaple - -	310,459	40,100	19	1
Bath - -	754,165	97,412	19	7
Bedford - -	1,455,984	188,064	12	0
Bristol - - -	495,012	63,939	1	0
Cambridge - -	1,290,437	166,681	8	11
Canterbury - -	413,964	53,470	7	0
Chester - -	506,874	65,471	4	6
Cornwall - -	293,233	37,875	18	7
Coventry - -	785,611	101,474	15	1
Cumberland - -	353,427	45,650	19	9
Derby - -	749,670	96,832	7	6
Dorset - -	346,461	44,751	4	3
Durham - -	207,382	26,786	16	10
Essex - - -	1,030,268	133,076	5	8
Exeter - -	311,640	40,253	10	0
Gloucester - -	461,014	59,547	12	10
Grantham - -	1,049,762	135,594	5	2
Halifax - -	449,199	58,021	10	9
Hants - -	370,997	47,920	8	11
Hereford - -	324,522	41,917	8	4
Hertford - -	1,156,255	149,349	12	1
Hull - - -	252,619	32,629	19	1
Isle of Wight -	379,397	49,005	8	11
Lancaster - -	293,663	37,931	9	5
Leeds - - -	1,543,035	199,308	13	9
Lichfield - -	850,838	109,899	18	2
Lincoln - -	1,023,679	132,225	4	1
Liverpool - -	38,537	4,977	13	11
Lynn - - -	570,070	73,634	0	10
Manchester - -	9,340	1,206	8	4
Marlborough -	208,988	26,994	5	8
Newcastle - -	323,417	41,774	13	11
Northampton - -	584,987	75,560	16	5
Northumberland -	55,179	7,127	5	9
Northwich - -	99,137	12,805	3	11
Norwich - -	1,046,085	135,119	6	3
Oxford - -	486,869	62,887	4	11
Plymouth - -	421,719	54,472	0	9
Reading - -	721,640	93,211	16	10
Rochester - -	342,269	44,209	14	11
Sarum - -	638,403	82,460	7	9
Salop - - -	573,261	74,046	4	3
Sheffield - -	623,034	80,475	4	6
Somerset - -	137,266	17,730	3	10
Stafford - - -	470,010	60,709	12	6
Stourbridge - -	638,614	82,487	12	10
Suffolk - -	1,534,968	198,266	14	0
Surrey - -	1,057,030	136,533	0	10
Sussex - - -	474,385	61,274	14	7
Uxbridge - -	490,435	63,347	17	1
Wales, East - -	385,733	49,823	16	11
Middle -	268,841	34,725	5	11
North -	242,589	31,334	8	3
West - -	196,120	25,332	3	4
Wellington - -	349,515	45,145	13	9
Whitby - - -	170,872	22,070	19	4
Wigan - -	95,941	12,392	7	7
Worcester - -	380,156	49,103	9	8
York - - -	528,445	68,257	9	7
Country collections -	31,623,422	4,084,692	0	2
London - -	46,347	5,986	9	9
Total - -	31,669,769	4,090,678	9	11

Collections.	Number of Bushels of Malt.	Amount of Duty.		
		£	*s.*	*d.*
Scotland.				
Aberdeen - -	196,302	19,885	4	1
Ayr - -	177,853	22,088	6	4
Argyle, North -	34,776	3,493	19	4
South -	309,652	31,233	14	9
Caithness - -	67,350	6,861	1	1
Dumfries - -	64,802	8,287	11	5
Elgin - - -	158,516	18,334	18	9
Fife - -	201,989	26,090	4	11
Glasgow - -	494,821	63,545	0	10
Haddington - -	203,252	26,253	7	8
Inverness - -	99,724	12,747	13	4
Linlithgow - -	186,387	23,673	6	8
Montrose - -	115,524	14,810	19	9
Perth - - -	226,478	29,146	17	3
Stirling - -	561,309	72,266	17	10
Edinburgh - -	615,599	79,377	1	9
Total - -	3,714,334	458,096	5	9
Ireland.				
Armagh - -	70,685	7,103	2	5
Athlone - -	33,397	4,292	19	1
Clonmel - -	78,997	10,132	3	6
Coleraine - -	46,547	4,691	3	9
Cork - -	372,981	48,176	14	3
Drogheda - -	66,522	8,471	16	5
Dundalk - -	111,800	14,440	16	8
Foxford - -	34,111	3,834	18	5
Galway - -	37,385	4,828	8	7
Kilkenny - -	208,503	26,931	12	9
Limerick - -	49,876	6,442	6	4
Lisburn - -	101,301	11,184	9	6
Londonderry - -	49,209	4,920	18	0
Mallow - -	87,298	11,275	19	10
Maryborough -	87,005	11,215	17	3
Naas - - -	63,339	7,940	7	6
Sligo - - -	30,797	3,260	10	8
Tralee - -	14,393	1,859	1	11
Waterford - -	106,180	13,714	18	4
Wexford - -	286,983	37,068	12	9
Dublin - - -	68,987	8,490	11	9
Total - -	2,006,350	250,277	9	8

Totals.			
England - -	31,669,769	4,090,678	9 11
Scotland - -	3,714,334	458,096	5 9
Ireland - -	2,006,350	250,277	9 8
United Kingdom -	37,390,453	4,799,052	5 4

Regulations as to the Manufacture of Malt. — These are embodied in the acts 7 & 8 Geo. 4. c. 52., and 11 Geo. 4. c. 17. The former act is exceedingly complex: it has no fewer than *eighty-three* clauses; and the regulations embodied in it, though frequently repugnant to common sense, are enforced by 106 penalties, amounting in all to the enormous sum of 13,500*l.*! Under such a statute, it was hardly possible for the most honest and cautious maltster to avoid incurring penalties. Such, indeed, is the nature of this act, that one is almost tempted to believe, in looking into it, that if its framers had any object more than another at heart, it was to condense into it whatever was most contradictory and absurd in the *forty* statutes that had previously been passed for the collection of the malt duty and the oppression of the trade! But it was not in the nature of things that such a law could be allowed to exist for any considerable period. It was not only loudly and universally condemned by the maltsters, but by all the more intelligent officers of excise. In consequence, the 11 Geo. 4. c. 17. was passed. This latter statute is entitled to very considerable praise; it repeals a good many of the penalties, and some of the most vexatious and useless regulations, in the former; so that the business may now be carried on with equal security to the revenue, and with infinitely less risk and annoyance on the part of the manufacturer. The existing regulations principally refer to the gauging of the cisterns, the wetting of the malt, the emptying of the cisterns, the gauging of the malt when in the couch frames, the payment of the duties, &c. But as no one would think of undertaking the business of a maltster without having a copy of both acts in his possession, it would be quite unnecessary for us, even if our limits permitted, to give any abstract of these acts. The licence duty on maltsters, and the number of maltsters who took out licences in 1829, distributed into classes according to the extent of their business, will be found specified in the article Licences (Excise).

Malt may not be imported into the United Kingdom for home use under pain of forfeiture; but it may be warehoused for exportation. — (6 *Geo.* 4. c. 107. § 52.)

MALTA, an island in the Mediterranean, nearly opposite to the southern extremity of Sicily, from which it is about 54 miles distant. Valetta, the capital, is situated on the north coast of the island, the light-house in the castle of St. Elmo being in lat. 35° 54′ 6″ N., lon. 14° 31′ 10″ E. Malta is about 20 miles long, and 10 or 12 broad. The island of Gozo, about a fourth part of the size of Malta, lies to the north-west of the latter, at about 4 miles' distance; and in the strait between them is the small island of Cumino. In 1825, the resident population of Malta amounted to 99,623; and including troops and strangers, the total population amounted to 102,853. The population of Gozo, at the same period, was 16,883. In 1831, the total population of both islands amounted to 120,839. The entire revenue collected in Malta amounts to about 100,000*l.* a year; and the expenditure, exclusive of that incurred in England on account of the island, amounts to about 88,000*l.*

After the capture of Rhodes by the Turks, the Emperor Charles V. made a present of Malta to the Knights of St. John of Jerusalem, in whose possession it remained till 1798, when it was taken by the French. It was taken from the latter by the English in 1800; and was definitely ceded to us in 1814.

The island consists mostly of a rock, very thinly covered with soil, a good deal of which has been brought, at an immense expense, from Sicily; but being cultivated with the utmost care, it produces excellent fruits, particularly the celebrated Maltese oranges, corn, cotton, with small quantities of indigo, saffron, and sugar. The principal dependence of the inhabitants is on their cotton, which they manufacture into a great variety of stuffs, some of which are highly esteemed. The corn raised in the island is not sufficient to feed the inhabitants for more than 5 or 6 months. The trade in corn used to be monopolised by government; but though the monopoly has been abandoned, duties on importation, varying, like those in this country, indirectly as the price, have been imposed, partly for the sake of revenue, and partly for the protection of agriculture! — (See *post.*) There are some good springs of fresh water. Valetta is partly supplied by water brought by an aqueduct a distance of about 6 miles, and partly by the rain water collected in cisterns.

Valetta, the capital of the island, is defended by almost impregnable fortifications. "These," says Mr. Brydone, "are, indeed, most stupendous works. All the boasted catacombs of Rome and Naples are a trifle to the immense excavations that have been made in this little island. The ditches of a vast size are all cut out of the solid rock: these extend for a great many miles; and raise our astonishment to think that so small a state has ever been able to make them." — (*Tour through Sicily and Malta*, Letter 15.) Since the island came into our possession, the fortifications have been considerably improved; so that at present it is a place of very great strength.

Harbour. — The harbour of Valetta is double, and is one of the finest in the world. The city is built on a narrow tongue of land, having the castle and light of St. Elmo at its extremity, and an admirable port on each side. That on the south-eastern side, denominated the grand port, is the most frequented. The entrance to it, about 250 fathoms wide, has the formidable batteries of St. Elmo on the one hand, and those of Fort Ricasoli on the other. In entering, it is necessary not to come within 50 or 60 fathoms of the former, on account of a spit which projects from it; but in the rest of the channel there is from 10 to 12 fathoms water. The port, which runs about 1¾ mile inwards, has deep water and excellent anchorage throughout; the largest men-of-war coming close to the quays. Port Marsamusceit, on the north-western side of the city, is also a noble harbour. The entrance to it, which is about the same breadth as that of the grand port, is between St. Elmo and Fort Tique. In the centre of the basin is an island, on which are built a castle and a lazaretto, for the convenience of the ships performing quarantine, by which the port is principally used. Owing to the narrowness of the entrance, and the usual variableness of the wind, it is customary for most vessels bound for Valetta to take a pilot on board before entering the harbour.

Tonnage Dues on Ships clearing Outwards.

	Dues payable. L.	s.	d.
When under the British flag: —			
Vessels not exceeding 40 tons, for each vessel	0	0	6
Vessels above 40 tons, for every ton or any part thereof	0	0	4
When under a foreign flag: —			
Vessels not exceeding 40 tons, for each vessel	1	0	0
Vessels above 40 tons: —			
For every ton, or any part thereof, as far as 240 tons	0	0	6
For every additional ton, or any part thereof	0	0	4

Exceptions.

1. Vessels entering either harbour may remain in port any length of time, and land or take on board passengers and their personal baggage, without becoming subject to the tonnage dues; provided they neither discharge nor take on board any goods otherwise than by receiving on board articles the produce or manufacture of these islands, provisions for the voyage, or ships' stores required for the safety or navigation of the vessel.

2. Vessels liable to the dues, having taken on board for exportation a quantity of Malta wrought stone, not less than 10 per cent. on their respective registered tonnage, are allowed an abatement of 1*d.* per ton from the dues of their full tonnage.

3. Vessels built in Malta are exempted from the payment of the tonnage dues for 2 years from the day of their sailing on their first voyage.

PORT CHARGES.

	Vessels under the British and Ionian Flag.			Foreign Flag.		
	L.	*s.*	*d.*	*L.*	*s.*	*d.*
Anchorage and light-house. — For every 5 tons, or any part thereof, as far as 300 tons	0	1	0	0	1	6
For every additional 5 tons, or any part thereof	0	0	6	0	0	9
Water. — For every passenger and individual of the crew	0	0	5	0	0	5
Pilotage. — For every vessel exceeding 60 tons burden	0	2	1	0	2	1
Hospital. — For each individual composing the crew	0	4	2			
Ballast. — For every 5 tons, or any part thereof	0	0	4	0	0	4
Bill of health. — For the master of a speronara	0	0	8	0	0	8
For every other person of the crew of ditto	0	0	5	0	0	5
For the master of any other vessel	0	0	10	0	0	10
For every other person of the crew of ditto	0	0	7	0	0	7
Powder magazine. — On powder belonging to the vessel, for each barrel for a month	0	0	10	0	0	10
On ditto imported or lodged on transit, for each of the first 3 months *ad valorem* per 100*l.*	1	0	0	1	0	0
For every succeeding month	0	5	0	0	5	0

Exceptions.

1. Merchant vessels entering either of the harbours may remain therein 5 days, without being subject to the payment of any port charges, water (if required) excepted; provided they neither discharge nor take on board goods, passengers or their baggage, during such period of their stay.
2. Vessels clearing out, having taken on board for exportation a quantity of Malta wrought stone, not less than 10 per cent. on their respective registered tonnage, are exempted from the payment of ballast dues.
3. Pilotage not to be paid oftener than once in 6 weeks, nor hospital dues more frequently than once in 6 months, in cases where vessels make more than 1 voyage during such spaces of time respectively.
4. Maltese and Ionian vessels are not subject to the hospital dues.

Quarantine Charges. — Vessels entered upon a quarantine to pay, for each day of their continuance in port, as follows: —

	s.	*d.*
1. Vessels not exceeding 10 tons	2	0
— from 11 tons to 50 tons	3	0
— from 51 — 100 —	4	0
— from 101 — 150 —	5	0
— from 151 — 200 —	6	0
— from 201 — 250 —	7	0
— from 251 — 300 —	8	0
— from 301 — 350 —	9	0
— of 351 tons and upwards	10	0

(Fractions of a ton not to be noticed.

2. Vessels, of whatever size, sailing in quarantine, having entered upon the performance thereof, to pay for the remainder of the term of quarantine only 2*s.* 6*d.* a day.
3. Vessels liable to quarantine, not having entered upon the performance thereof, to pay 3*s.* for each day of their continuance in port.
4. Vessels compelled by stress of weather to enter the great harbour, to be subject, while they remain there, to the additional charge of 5*s.* a day for every guard boat which the superintendent of quarantine may deem it necessary to place over them.

*** Any vessel in quarantine entering the great harbour without a justifiable cause, incurs the penalty of 200 dollars imposed by the second article of the proclamation, dated 12th of October, 1820.

5. Vessels having any contagious disease on board to pay an extra rate in proportion to the expense that may be incurred; but in no case to exceed 20*s.* a day, in addition to the usual rate.

DUTIES ON CORN.

Duties on Corn for Consumption.	On Foreign Wheat, per Salma, or, if manufactured, per Cantaro.			On Foreign Indian Corn, Barley, Rye, or other inferior Grains, per Salma, or, if manufactured, per Cantaro.		
	L.	*s.*	*d.*	*L.*	*s.*	*d.*
When the average price per salm of all foreign wheat shall be as follows; viz. —						
At or under - - 25*s.*	0	12	0	0	7	0
Above 25*s.* and not exceeding 30*s.*	0	11	0	0	6	6
30*s.* — 35*s.*	0	10	0	0	6	0
35*s.* — 40*s.*	0	9	0	0	5	6
40*s.* — 45*s.*	0	8	0	0	5	0
45*s.* — 50*s.*	0	7	0	0	4	6
50*s.* — 55*s.*	0	6	0	0	4	0
55*s.* — 60*s.*	0	5	0	0	3	0
60*s.* — 65*s.*	0	3	0	0	1	6
65*s.* - -	0	1	0	0	0	6

Additional Rates on Importations by Foreign Vessels.	On Wheat, Indian Corn, Barley, Rye, or other inferior Grain, per Salma, or, if manufactured, per Cantaro, when imported from					
	within the Mediterranean (from Gibraltar to the Dardanelles).			without the Mediterranean.		
When the average price of all foreign wheat shall be as follows:—	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
Under 45*s.* per salm -	0	2	0	0	2	6
45*s.* and not exceeding 50*s.* per salm - - -	0	1	0	0	1	3

Note. — The average price is to be struck on the 18th of every month, at noon, upon the broker's notes of sales of all foreign wheat without distinction; the declared average prices of the 2 immediately preceding months are to be added thereto; the total is then to be divided by 3, and the quotient, or aggregate average price resulting therefrom, is the average price to be published on the 18th, as that which is to govern the duties of consumption from the 25th of the current to the 24th of the next ensuing month, both days inclusive.

No second sale of the same parcel of wheat is to be introduced into the average returns for one and the same month.

Sales to 1 or more buyers, under 20 salms, sales in barter and sales by contract, of wheat, not in the island, are to be excluded from the average returns. — (*Proclamation of 8th of December*, 1832.)

The central position, excellent port, and great strength of Malta, make it an admirable naval station for the repair and accommodation of the men-of-war and merchant ships frequenting the Mediterranean, and render its possession of material importance to the British empire. It is also of considerable consequence, particularly during war, as a commercial *depôt*, where goods may be safely warehoused, and from which they may be sent, when opportunity offers, to any of the ports of the surrounding countries. Its facilities are greater in this respect than those enjoyed by Gibraltar. The duties on importation are very moderate; with the exception of those on corn, they amount to 1 per cent. *ad valorem* on British manufactured goods; and 2 per cent. on those imported by foreigners. On raw sugar imported in British ships direct from Britain, they are only 6*d.* the cantaro, and so in proportion on other things. Goods warehoused pay no duty; but a store rent fixed by the tariff issued in 1832, is charged on all goods for the first 3 months; half as much being paid for each succeeding 3 months. The real value of the British produce and manufactures exported to Malta in 1831 was 134,519*l.*; the official value of the exports of foreign and colonial produce to it during the same year being 20,485*l.* The imports amounted to 63,350*l.*

Money.— In 1825, British silver money was introduced into Malta; the Spanish dollar being made legal tender at the rate of 4*s.* 4*d.*; the Sicilian dollar at 4*s.* 2*d.*; and the scudo of Malta at 1*s.* 8*d.*

Weights and Measures.—The pound or rottolo, commercial weight = 30 oncie = 12,216 English grains. Hence 100 rottoli (the cantaro) = 174$\frac{1}{2}$ lbs. avoirdupois, or 79·14 kilog. Merchants usually reckon the cantaro at 175 lbs.

The salma of corn, stricken measure = 8·221 Winchester bushels: heaped measure is reckoned 16 per cent. more. The caffiso, or measure for oil, contains 5$\frac{1}{2}$ English gallons = 20·818 litres. The barrel is double the caffiso. The Maltese foot = 11$\frac{1}{6}$ English inches = ·2836 mètres. The canna = 8 palmi = 81·9 English inches = 2·079 mètres. Merchants usually convert Malta measure into English in the proportion of 3$\frac{1}{2}$ palmi to a yard, or 2$\frac{2}{7}$ yards to 1 canna.

Bills on London are usually drawn at 30 and 60 days' sight. The deputy commissary general is obliged to grant, at all times, bills on the treasury here for British silver tendered to him, at the rate of 100*l.* bill for every 103*l.* silver, receiving at the same time Spanish dollars at a fluctuating rate of exchange.

His Majesty is authorised, by the act 6 Geo. 4. c. 114. § 73., to make such regulations touching the trade and commerce to and from any of the British possessions within the Mediterranean Sea, as may seem most expedient; and any goods imported or exported contrary to such regulations shall be forfeited, together with the ship importing or exporting the same.—(See *Brydone's Tour in Sicily and Malta*, *Papers laid before the Finance Committee*, *Kelly's Cambist*, *Government Proclamations*, *&c.*)

MAN (ISLE OF) is, as every one knows, situated in the Irish sea, at about an equal distance from England, Scotland, and Ireland. It is about 30 miles long, and 10 or 12 broad. The interior is mountainous, and the soil no where very productive. Population, in 1831, 40,985. This island used to be one of the principal stations of the herring fishery; but for a considerable period it has been comparatively deserted by the herring shoals, — a circumstance which is not to be regretted; for the fishery, by withdrawing the attention of the inhabitants from agriculture and manufactures, and leading them to engage in what has usually been a gambling and unproductive business, has been, on the whole, injurious to the island. The steam packets from Glasgow to Liverpool touch at the Isle of Man; which has, in consequence, begun to be largely frequented by visiters from these cities, and other parts of the empire, whose influx has materially contributed to the improvement of Douglas and other towns.

The feudal sovereignty of Man was formerly vested in the Earls of Derby, and more recently in the Dukes of Athol, — a circumstance which accounts for the fact of the duties on most commodities consumed in the island having been, for a lengthened period, much lower than those on the same commodities when consumed in Great Britain. This distinction, which still subsists, has produced a great deal of smuggling, and been in no ordinary degree injurious to the revenue and trade of the empire. During the present century, indeed, the clandestine trade of Man has been confined within comparatively narrow limits; but to accomplish this, a considerable extra force of Custom-house officers and revenue cruisers is required, and the intercourse with the island has to be subjected to various restraints. Nothing, as it appears to us, can be more impolitic than the continuance of such a system. The public has, at a very heavy expense, purchased all the feudal rights of the Athol family; and having done so, it is certainly high time that an end were put to the anomalous absurdity of having a considerable island, lying, as it were, in the very centre of the empire, and in the direct line between some of the principal trading towns, with different duties on many important articles! It might be necessary, perhaps, to make some compensation to the inhabitants for such a change; and this might be done, with advantage to them and without expense to the public, by modifying and improving the internal regulations and policy of the island, which are very much in need of amendment. We do not, indeed, imagine that the island would lose any thing by the proposed alteration; for the temptation which the present system holds out to engage in smuggling enterprises diverts the population from the regular pursuits of industry, and, along with the herring lottery, is the principal cause of that idleness for which the Manx are so notorious. We subjoin an

Abstract of 3 & 4 Will. IV., c. 60., for regulating the Trade of the Isle of Man.

Commencement. — To commence the 1st of September, 1833. — § 1.

Duties payable on the Importation of Goods into the Isle of Man. — There shall be raised, levied, collected, and paid unto his Majesty, his heirs and successors, the several duties of customs respectively set forth in the table herein-after contained, denominated "Table of Duties," upon importation into the Isle of Man of the several goods, wares, and merchandise, according to the quantity or value thereof specified in such table, and so in proportion for any greater or less quantity or value of the same; (that is to say,)

Table of Duties.

A Table of the Duties of Customs payable on Goods, Wares, and Merchandise, imported into the Isle of Man.

	L.	s.	d.
Coals, from the United Kingdom	Free.		
Coffee, the duties of consumption in the United Kingdom not having been then paid thereon, the lb.	0	0	4
Hemp, the cwt.	0	0	1
Hops, from the United Kingdom, the lb.	0	0	1¼
Iron, from foreign parts, for every 100*l.* of the value thereof	10	0	0
Spirits; viz. —			
Foreign spirits, the gallon	0	4	6
Rum of the British plantations, not exceeding the strength of proof by Sikes's hydrometer, and so in proportion for any greater strength, the gallon	0	3	0
Sugar, muscovado, the cwt.	0	1	0
Tea; viz. —			
Bohea, the lb.	0	0	6
Green, the lb.	0	1	0
Tobacco, the lb.	0	1	6
Wine; viz.—			
French, the tun of 252 gallons	16	0	0
any other sort, the tun of 252 gallons	12	0	0
Wood, from foreign parts; viz.			
Deal boards, for every 100*l.* of the value thereof	10	0	0
Timber, for every 100*l.* of the value thereof	10	0	0
Goods, wares, and merchandise imported from the United Kingdom, and entitled to any bounty or drawback of excise on exportation from thence, and not herein-before enumerated or charged with duty, for every 100*l.* of the value thereof	5	0	0
Goods, wares, and merchandise imported from the United Kingdom, and not herein-before charged with duty, for every 100*l.* of the value thereof	2	10	0
Goods, wares, or merchandise imported from any place from whence such goods may be lawfully imported into the Isle of Man, and not herein-before charged with duty, for every 100*l.* of the value thereof	15	0	0

Except the several goods, wares, and merchandise following, and which are to be imported into the Isle of Man duty free; (that is to say,)

Flax, flax seed, raw or brown linen yarn, wood ashes, weed ashes, flesh of all sorts; also corn, grain, or meal of all sorts, when importable; any of which goods, wares, or merchandise may be imported into the said isle from any place in any ship or vessel.

Any sort of white or brown linen cloth, hemp, hemp seed, horses, black cattle, sheep; all utensils and instruments fit and necessary to be employed in manufactures, in fisheries, or in agriculture; bricks, tiles, all sorts of young trees, sea shells, lime, soapers' waste, packthread, small cordage for nets, salt, boards, timber, wood hoops, being the growth, production, or manufacture of the United Kingdom, and imported from thence in British ships.

Iron in rods or bars, cotton, indigo, naval stores, and any sort of wood commonly called lumber, (viz. deals of all sorts, timber, balks of all sizes, barrel boards, clap boards, pipe boards, or pipe hold, white boards for shoemakers, broom and cant spars, bow staves, capravan, clap holt, ebony wood, headings for pipes and for hogsheads, and for barrels, hoops for coopers, oars, pipe and hogshead staves, barrel staves, firkin staves, trunnels, speckled wood, sweet wood, small spars, oak plank, and wainscot,) being of the growth, production, or manufacture of any British colony or plantation in America or the West Indies, and imported from the United Kingdom in British ships. — Sect. 2.

British Goods from United Kingdom to appear upon the Cockets. — No goods shall be entered in the Isle of Man as being the growth, produce, or manufacture of the United Kingdom, or as being imported from thence, except such goods as shall appear upon the cocket or cockets of the ship or vessel importing the same to have been duly cleared at some port in the United Kingdom, to be exported to the said Isle. — § 3.

Goods enumerated in the following Schedule importable only under Licence. — The several sorts of goods enumerated or described in the schedule herein-after contained, denominated "Schedule of Licence Goods," shall not be imported into the Isle of Man, nor exported from any place to be carried to the Isle of Man, without the licence of the commissioners of customs first obtained, nor in greater quantities in the whole, in any one year, than the respective quantities of such goods specified in the said schedule; and such goods shall not be so exported nor so imported, except from the respective places set forth in the said schedule, and according to the rules subjoined thereto; (that is to say,)

Schedule of Licence Goods.

Wine, 110 tuns.
Spirits; viz.—
Foreign brandy, 10,000 gallons.
Foreign geneva, 10,000 gallons.
From the United Kingdom, or from any place from which the same might be imported into the United Kingdom, for consumption therein.
Rum, of the British plantations, 60,000 gallons.
From Great Britain.

Bohea tea, 70,000 lbs.
Green tea, 5,000 lbs.
Coffee (unless the duties of consumption in the United Kingdom shall have been then paid thereon), 8,000 lbs.
Tobacco, 60,000 lbs.
Muscovado sugar, of the British possessions, 10,000 cwt.
Playing cards, 4,000 packs.
From England.

Refined sugar, 800 cwt.
From the port of Liverpool.

And such additional quantities of any of such several sorts of goods as the commissioners of his Majesty's treasury shall from time to time, under any special circumstances of necessity, direct, from such ports respectively; subject to the rules following; (that is to say,)

1. All such goods to be imported into the port of Douglas, and by his Majesty's subjects, and in British ships or vessels of the burden of 50 tons or upwards:
2. Such tobacco to be shipped only in ports in England, where tobacco is allowed to be imported and warehoused without payment of duty:
3. Such wine to be so imported only in casks or packages containing not less than a hogshead each, or in cases containing not less than 3 dozen reputed quart bottles, or 6 dozen reputed pint bottles each:
4. Such brandy and geneva to be imported only in casks containing 100 gallons each, at least:
5. Such brandy and geneva not to be of greater or higher degree of strength than that of 1 to 9 over hydrometer proof:
6. Such goods, when exported from Great Britain, may be so exported from the warehouse in which they may have been secured without payment of duty:
7. If the duties of importation have been paid in the United Kingdom on such goods, a full drawback of such duties shall be allowed on the exportation:
8. Upon the exportation from Liverpool of such refined sugar, the same bounty shall be allowed as would be allowable on exportation to foreign parts:
9. Upon exportation from the United Kingdom of any such goods from the warehouse, or for drawback, or for bounty, so much of the form of the bond, or of the declaration, or of any other document, required in the case of exportation of such goods generally to foreign parts, as is intended to prevent the landing of the same in the Isle of Man, shall be omitted:
10. No drawback or bounty to be allowed, nor export bond cancelled, until a certificate of the due landing of the goods at the port of Douglas be produced from the collector and comptroller of the customs of that port.
11. If any goods be laden at any foreign port or place, the species and quantity of such goods, with the marks, numbers, and denominations of the casks or packages containing the same, shall be indorsed on the licence, and signed by the British consul at the port of lading, or, if there be no British consul, by 2 known British merchants:
12. Upon importation into the port of Douglas of any such goods, the licence for the same shall be delivered up to the collector or comptroller of that port. — Sect. 4.

Application for Licence to be delivered to Officers between May and July. — Every application for licence to import any of the goods aforesaid into the Isle of Man shall be made in writing, and delivered, between the 5th day of May and the 5th day of July in each year, to the collector or comptroller of the port of Douglas in the said isle; and such application shall specify the date thereof, and the name, residence, and occupation of the person applying, and the description and quantity of each article for which such licence is required; and all such applications, with such particulars, shall be entered in a book to be kept at the Custom-house at the port of Douglas, and to be there open for public inspection during the hours of business; and on the 5th day of July in each year such book shall be closed; and within 14 days thereafter the collector and comptroller shall make out and sign a true copy of such entries, specifying the applicants resident, and the applicants not resident in the said isle, and deliver or transmit such copy to the governor or lieutenant-governor of the said isle for the time being. — § 5.

Governor to allot Quantities. — Within 14 days after the receipt of such copy, the governor or lieutenant-governor of the said isle shall allot the whole quantity of each article, in the first place, among the applicants resident in the said island, in case the whole quantity of any article shall not have been applied for by residents; then shall allot the quantity not so applied for among the non-resident applicants, in such proportions in all cases as he shall judge most fair and equitable; and shall cause a report thereon to be drawn up in writing, and sign and transmit the same to the Lords Commissioners of his Majesty's Treasury of the United Kingdom of Great Britain and Ireland, and shall cause a duplicate of such report so signed, to be transmitted to the commissioners of customs. — § 6.

Commissioners of Customs to grant Licences. — Upon receipt of such duplicate report the commissioners of customs shall grant licences, to continue in force for any period until the 5th of July then next ensuing, for the importation into the Isle of Man of the quantities of such goods as are allowed by law to be so imported, with their licence, according to the allotments in such report, and dividing the whole portion allotted to any one applicant into several licences, as they shall be desired and see fit; and such licences shall be transmitted without delay to the collector and comptroller of Douglas, to be by them delivered to the different applicants, after taking bond for the same under the provisions of this act. — § 7.

Before Delivery of Licences, Bond to be given. — Previous to the delivery of any such licences to the persons to whom they are granted, the collector and comptroller of Douglas shall take the bond of such persons to his Majesty, his heirs and successors, with sufficient security, for the importation of the articles for which the said licences are respectively granted, on or before the 5th day of July succeeding the delivery of such licences, with such conditions, and for the forfeiture of such sums, not exceeding the whole amount of duties payable in Great Britain on articles similar to those specified in such licences, as the commissioners of customs shall think fit: provided always, that if any person to whom such licence shall be granted shall not have given such bond prior to the 5th day of January next after the granting such licence, it shall be lawful for the governor or lieutenant-governor of the said isle, if he shall see fit, to transfer any such licence to any other person who shall be desirous to take up the same, and willing and able to give such bond; and such transfer shall be notified by indorsement on the licence, signed by such governor or lieutenant-governor. — § 8.

Counterfeiting or falsifying Licence, Penalty 500*l.* — If any person or persons shall counterfeit or falsify any licence or other document required for the importation into the Isle of Man of any goods which would otherwise be prohibited to be imported into the said isle, or shall knowingly or wilfully make use of any such licence, or other document so counterfeited or falsified, such person or persons shall, for every such offence, forfeit the sum of 500*l.* — § 9.

Licence Goods not to be re-exported, &c. — It shall not be lawful to re-export from the Isle of Man any goods which have been imported into the said isle with licence of the commissioners of customs as aforesaid; and it shall not be lawful to carry any such goods coastwise from one part of the said isle to another, except in vessels of 50 tons burden at the least, and in the same packages in which such goods were imported into the said isle; and it shall not be lawful to remove any wine from one part of the said isle to another, by and except in such packages or in bottles. — § 10.

Foreign Goods not to be exported to United Kingdom. — It shall not be lawful to export from the Isle of Man to any part of the United Kingdom any goods which are of the growth, produce, or manufacture of any foreign country. — § 11.

Goods imported or exported, &c. contrary to Law forfeited, &c. — If any goods shall be imported into or exported from the isle of Man, or carried coastwise from one part of the said isle to another part of the same, or shall be waterborne, or brought to any wharf or other place with intent to be waterborne, to be so exported or carried, or shall be removed by land within the said isle, contrary to any of the directions

or provisions of this act, the same, and the packages containing the same, shall be forfeited, together with all ships, vessels, or boats, and all cattle and carriages used or employed therein; and every person offending therein shall forfeit, for every such offence, the sum of 100*l.*, or the full amount of all duties which would be payable in respect of such or similar goods, for home consumption of the same, in the United Kingdom, at the election of the commissioners of customs. — § 12.

Goods prohibited to be imported into the Isle of Man. — The several sorts of goods enumerated or described in the schedule herein-after contained, denominated "Schedule of Prohibitions," shall not be imported into the Isle of Man; (that is to say,)

Schedule of Prohibitions.

Goods, the produce or manufacture of places within the limits of the United East India Company's charter; except from the United Kingdom:
Cotton yarn, cotton cloth, linen cloth, glass manufactures, woollen manufactures, unless *bond fide* laden in and imported directly from the United Kingdom:
Spirits of greater strength than 1 to 9 over hydrometer proof, except spirits the produce of the British possessions in America, or of the Cape of Good Hope:
British distilled spirits:
All goods prohibited to be imported into the United Kingdom to be used or consumed therein, on account of the sort or description of the same. — Sect. 13.

Limiting the Quantity of Spirits, Tea, and Tobacco for Uses of Seamen. — If any decked vessel, bound from the Isle of Man to any port of Great Britain or Ireland, shall have on board for the use of the seamen, any spirits exceeding the quantity of ½ gallon for each seaman, or any tobacco exceeding 1 lb. weight for each seaman, or any tea exceeding 2 lbs. weight for the whole of the seamen on board such vessel, or if any open boat, bound from the Isle of Man to any port of Great Britain or Ireland, shall have on board, for the use of the seamen, any spirits exceeding 1 quart for each seaman, or any tobacco exceeding ½ lb. weight for each seaman, or any tea exceeding 1 lb. weight for the whole of the seamen on board such boat, all such foreign spirits, tobacco, and tea respectively, together with the casks or packages containing the same, and also every such vessel or boat, together with all the guns, furniture, ammunition, tackle, and apparel thereof, shall be forfeited. — § 14.

Certificate for Goods the Produce of the Isle of Man. — Before any goods shall be shipped in the Isle of Man for exportation to the United Kingdom, as being the produce or manufacture of that island, proof shall be made by the written declaration of some competent person, to the satisfaction of the collector and comptroller of the customs at the port of shipment, that such goods, describing and identifying the same, are the produce or the manufacture, as the case may be, of the said island, and in such declaration shall be stated the name of the person by whom such goods are intended to be entered and shipped; and such person, at the time of entry (not being more than 1 month after the date of such declaration) shall make and subscribe a declaration before such collector or comptroller, that the goods to be shipped in virtue of the entry are the same as are mentioned in such declaration; and thereupon the collector and comptroller shall, on demand, give to the master of the ship in which the goods are to be exported a certificate of such proof of produce, or of manufacture, having been made in respect of such goods, describing the same, and setting forth the name of the exporter, and of the exporting ship, and of the master thereof, and the destination of the goods; and such certificate shall be received at the port of importation in the United Kingdom, instead of the certificate of the governor, lieutenant-governor, or commander-in-chief of the said island, heretofore required. — § 15.

Management of Duties. — Section 16. relates to the appropriation of the duties, and is of no commercial importance.

MANGANESE (Ger. *Braunstein, Glasseise;* Du. *Bruinsteen;* Fr. *Manganèse, Magalese, Savon du verre;* It. *Manganesia;* Sp. *Manganesia;* Lat. *Magnesia nigra, Manganesium*), a metal which, when pure, is of a greyish white colour, like cast iron, and has a good deal of brilliancy. Its texture is granular; it has neither taste nor smell; it is softer than cast iron, and may be filed; its specific gravity is 8. It is very brittle, and can neither be hammered nor drawn out into wire. Its tenacity is unknown. When exposed to the air, it attracts oxygen with considerable rapidity. It soon loses its lustre, and becomes grey, violet, brown, and at last black. These changes take place still more rapidly if the metal be heated in an open vessel. Ores of manganese are common in Devonshire, Somersetshire, &c. The ore of manganese, known in Derbyshire by the name of *black wadd*, is remarkable for its spontaneous inflammation with oil. Oxide of manganese is of considerable use; it is employed in making oxymuriatic acid, for forming bleaching liquor. It is also used in glazing black earthenware, for giving colours to enamels, and in the manufacture of porcelain. It is the substance generally used by chemists for obtaining oxygen gas. — (*Thomson's Chemistry, &c.*)

MANGEL WURZEL, OR FIELD BEET (Fr. *Betteraves;* Ger. *Mangold Wurzel;* It. *Biettola*), a mongrel between the red and white beet. It has been a good deal cultivated in France, Germany, and Switzerland, partly as food for cattle, and partly to be used in distillation, and in the extraction of sugar. Its culture in Great Britain is very recent; and Mr. Loudon questions whether it has any advantages over the turnip for general agricultural purposes. The preparation of the soil is exactly the same as for turnips, and immense crops are raised on strong clays. The produce per acre is about the same as that of the Swedish turnip: it is applied almost entirely to the fattening of stock, and the feeding of milch cows. — (*Loudon's Ency. of Agriculture.*)

MANNA (Fr. *Manne;* Ger. *Mannaesche;* It. *Manna*), the concrete juice of the *Fraxinus ornus*, a species of ash growing in the south of Europe. The juice exudes spontaneously in warm dry weather, and concretes into whitish tears; but the greater part of the manna of commerce is obtained by making incisions in the tree, and gathering the juice in baskets, where it forms irregular masses of a reddish or brownish colour, often full of impurities. Manna is imported in chests, principally from Sicily and Calabria. The best is in oblong pieces or flakes, moderately dry, friable, light, of a whitish or pale yellow colour, and in some degree transparent: the inferior kinds are moist, unctuous, and brown. It has a slight peculiar odour, and a sweet taste, with some degree of bitterness not very pleasant, and leaving a nauseous impression on the tongue. — (*Thomson's Dispensatory.*)

MANIFEST, in commercial navigation, is a document signed by the master, containing the name or names of the places where the goods on board have been laden, and the place or places for which they are respectively destined; the name and tonnage of the vessel, the name of the master, and the name of the place to which the vessel belongs; a particular account and description of all the packages on board, with the marks and numbers thereon, the goods contained in such packages, the names of the respective shippers and consignees, as far as such particulars are known to the master, &c. A separate manifest is required for tobacco. The manifest must be made out, dated, and signed by the captain, at the place or places where the goods, or any part of the goods, are taken on board.—(See IMPORTATION AND EXPORTATION.)

MANILLA, the capital of Luconia, the largest of the Philippine Islands, and the principal settlement of the Spaniards in the East, in lat. 14° 36′ 8″ N., lon. 120° 53½′ E. Population about 40,000, of whom from 1,200 to 1,500 may be Europeans. Manilla is built on the shore of a spacious bay of the same name, at the mouth of a river navigable for small vessels a considerable way into the interior. The smaller class of ships anchor in Manilla roads, in 5 fathoms, the north bastion bearing N. 37° E., the fishery stakes at the river's mouth N. 18° E., distant about a mile; but large ships anchor at Cavita, about 3 leagues to the southward, where there is a good harbour, well sheltered from the W. and S. W. winds. The arsenal is at Cavita, which is defended by Fort St. Philip, the strongest fortress on the islands. The city is surrounded by a wall and towers, and some of the bastions are well furnished with artillery.

Though situated within the tropics, the climate of the Philippines is sufficiently temperate; the only considerable disadvantage under which they labour in this respect being that the principal part of the group comes within the range of the typhoons. The soil is of very different qualities; but for the most part singularly fertile. They are rich in mineral, vegetable, and animal productions. It is stated in a statistical account of the Philippines, published at Manilla in 1818 and 1819, that the entire population of the islands amounted to 2,249,852, of which 1,376,222 belonged to Luconia. There were, at the period referred to, only 2,837 Europeans in the islands, and little more than 6,000 Chinese. The natives are said to be the most active, bold, and energetic, of any belonging to the Eastern Archipelago. "These people," says a most intelligent navigator, "appear in no respect inferior to those of Europe. They cultivate the earth like men of understanding; are carpenters, joiners, smiths, goldsmiths, weavers, masons, &c. I have walked through their villages, and found them kind, hospitable, and communicative; and though the Spaniards speak of and treat them with contempt, I perceived that the vices they attributed to the Indians, ought rather to be imputed to the government they have themselves established."—(*Voyage de M. De la Perouse*, c. 15.)

The principal articles of export consist of indigo, sugar, rice, sapan wood, birds' nests, tripang or *biche de mer*, dried beef, hides, ebony, gold dust, &c. The principal articles of import are stuffs for clothing, iron, hardware, furniture, fire-arms and ammunition, &c.

Account of the Trade of Manilla for the Year 1831, from the Official Report.

Shipping.—Arrivals and Departures in 1831.

American	25	arrived,	29	sailed.	English	19	arrived,	19	sailed.	Prussian	1 arrived, 1 sailed.
Chinese junks	5	—	5	—	French	1	—	2	—	Spanish	43 — 42 —
Danish	7	—	6	—	Hamburgh	2	—	2	—		
Dutch	4	—	4	—	Portuguese	5	—	4	—		115 116

Statement of the principal Articles of Export from Manilla in 1831.

	Arrobas.	*Arrobas.*	*Arrobas.*
Indigo, 1st	2,722		
2d	3,102		
3d	319½		
		6,143½	
liquid		24,975½	
			31,119
Sugar			617,737½
Rice			1,074,170
Hemp			154,917
Oil, cocoa nut			6,964
Tortoise shell, 1st		33	
2d		245	
3d		60½	
falzo		13½	
			352

	Arrobas.	*Arrobas.*
Coffee, clean		14,624
Wax, raw	32	
manufactured	964	
		996
Hides		29,958
Horns		303
Mother-o'-pearl shells		1,262
Rum	gallons 8,716	
Sapan wood		50,671
Tobacco		4,279

Exclusive of birds' nests, pepper, mats, sharks' fins, biche de mer, &c.

Total value of imports in 1831, including specie	1,459,776 dollars.
— of exports	1,303,621 —
Amount of duties	244,066 —

In 1832, 136 ships arrived at Manilla, of which 35 were American, 34 English, and 53 Spanish. The imports during the same year were, goods 1,204,894 dollars, and treasure 464,300 do., being together 1,669,194 dollars. The exports were, goods 1,531,540 dollars, treasure 317,990 do., together 1,849,530 dollars.

It was believed that the crop of sugar in Luconia in 1833, would amount to about 28,000,000 lbs.

At this moment, the imports of British goods into the Philippines are estimated to amount to from 80,000*l.* to 100,000*l* a year; but we have no doubt that the opening the trade to China will very materially increase our intercourse with Manilla.

Considering the great fertility and varied productions of the Philippines, and their peculiarly favourable situation for carrying on commerce, the limited extent of their trade, even with its late increase, may excite surprise. This, however, is entirely a consequence of the wretched policy of the Spanish government, which persevered until very recently in excluding all foreign ships from the ports of the Philippines—confining the trade between them and Mexico and South America to a single ship! Even ships and settlers from China were excluded. "Provisions," says La Perouse, "of all kinds are in the greatest abundance here, and extremely cheap; but clothing, European hardware, and furniture, bear an excessively high price. The want of competition, together with prohibitions and restraints of every kind laid on commerce, *render the productions and merchandise of India and China at least as dear as in Europe!*" Happily, however, this miserable policy, the effects of which have been admirably depicted by M. De la Perouse, has been materially modified during the last few years. The events of the late war destroyed for ever the old colonial system of Spain; and the ships of all nations are now freely admitted into Manilla and the other ports in the Philippines. An unprecedented stimulus has, in consequence, been given to all sorts of industry; and its progress will no doubt become more rapid, according as a wider experience and acquaintance with foreigners makes the natives better aware of the advantages of commerce and industry, and disabuses them of the prejudices of which they have been so long the slaves.

The *Monies*, *Weights*, and *Measures*, used at Manilla, are nearly the same as in Spain.—(See Cadiz.) They have, however, this difference,—that they estimate weight by piastres: 16 piastres are supposed to = 1 lb. Spanish weight, though they are not quite so much; 11 ounces or piastres = 1 tale of silk; 22 ounces = 1 catty; 8 ounces = 1 marc of silver; and 10 ounces = 1 tale of gold. 16 piastres or ounces = 15¼ ounces avoirdupois; 100 catties = 1 picul = 133⅓ lbs. avoirdupois.

MARBLE (Ger. Rus. and Lat. *Marmor*; Du. *Marmer*; Fr. *Marbre*; It. *Marmo*; Sp. *Marmol*), a genus of fossils, composed chiefly of lime; being a bright and beautiful stone, moderately hard, not giving fire with steel, fermenting with and soluble in acid menstrua, and calcining in a slight fire.

The colours by which marbles are distinguished are almost innumerable. Some are quite black; others, again, are of a snowy white; some are greenish; others greyish, reddish, bluish, yellowish, &c.; while some are variegated and spotted with many different colours and shades of colour. The finest solid modern marbles are those of Italy, Blankenburg, France, and Flanders. Great quantities of very beautiful marble have been lately discovered at Portsoy in Banffshire, and at Tiree and other places in the Western Isles. Kilkenny, in Ireland, has abundance of beautiful black marble intermixed with white spots, called *Kilkenny marble*. Derbyshire abounds in this mineral. Near Kemlyn-bay, in Anglesea there is a quarry of beautiful marble, called *verde di Corsica*, from its also being found in Corsica. Its colours are green, black, white, and dull purple, irregularly disposed. Italy produces the most valuable marble, and its exportation makes a considerable branch of her foreign commerce. The black and the milk-white marble of Carara, in the duchy of Massa, are particularly esteemed.

The marbles of Germany, Norway, and Sweden are very inferior, being mixed with a sort of scaly limestone.

Marble is of so hard, compact, and fine a texture, as readily to take a beautiful polish. That most esteemed by statuaries is brought from the island of Paros, in the Archipelago: it was employed by Praxiteles and Phidias, both of whom were natives of that island; whence also the famous Arundelian marbles were brought. The marble of Carara is likewise in high repute among sculptors.

The specific gravity of marble is from 2,700 to 2,800. Black marble owes its colour to a slight mixture of iron.

MARITIME LAW. By maritime law is meant the law relating to harbours, ships, and seamen. It forms an important branch of the commercial law of all maritime nations. It is divided into a variety of different departments; such as those with respect to harbours, to the property of ships, the duties and rights of masters and seamen, contracts of affreightment, average, salvage, &c. The reader will find those subjects treated of under their respective heads.

Sketch of the Progress of Maritime Law.—The earliest system of maritime law was compiled by the Rhodians, several centuries before the Christian era. The most celebrated authors of antiquity have spoken in high terms of the wisdom of the Rhodian laws: luckily, however, we are not wholly left, in forming our opinion upon them, to the vague though commendatory statements of Cicero and Strabo.—(*Cicero pro Lege Manilia*; *Strab.* lib. xiv.) The laws of Rhodes were adopted by Augustus into the legislation of Rome; and such was the estimation in which they were held, that the Emperor Antoninus, being solicited to decide a contested point with respect to shipping, is reported to have answered, that it ought to be decided by the Rhodian laws, which were of paramount authority in such cases, unless they happened to be directly at variance with some regulation of the Roman law.—("*Ego quidem mundi dominus, lex autem maris legis id Rhodia, qua de rebus nauticis præscripta est, judicetur, quatenus nulla nostrarum legum adversatur. Hoc idem Divus quoque Augustus judicavit.*") The rule of the Rhodian law with respect to average contributions in the event of a sacrifice being made at sea for the safety of the ship and cargo, is expressly laid down in the Digest (lib. xiv. tit. 2.); and the most probable conclusion seems to be, that most of the regulations as to maritime affairs embodied in the compilations of Justinian have been derived from the same source.

The regulations as to average adopted by all modern nations, are borrowed, with hardly any alteration, from the Roman, or rather, as we have seen, from the Rhodian law!—a conclusive proof of the sagacity of those by whom they had been originally framed. The only authentic fragments of the Rhodian laws are those in the Digest. The collection entitled *Jus Navale Rhodiorum*, published at Bâle in 1561, is now admitted by all critics to be spurious.

The first modern code of maritime law is said to have been compiled at Amalphi, in Italy,—a city at present in ruins; but which, besides being early distinguished for its commerce, will be for ever famous for the discovery of the Pandects, and the supposed invention of the mariner's compass. The Amalphitan code is said to have been denominated *Tabula Amalphitana*. But if such a body of law really existed, it is singular that it should never have been published, nor even any extracts from it. M. Pardessus has shown that all the authors who have referred to the Amalphitan code and asserted its existence, have copied the statement of Freccia, in his book *De Subfeudis*.—(*Collection des Loix Maritimes*, tome i. p. 145.) And as Freccia assures us that the Almalphitan code continued to be followed in Naples at the time when he wrote (1570), it is difficult to suppose that it could have entirely disappeared; and it seems most probable, as nothing peculiar to it has ever transpired, that it consisted principally of the regulations laid down in the Roman law, which, it is known, preserved their ascendancy for a longer period in the south of Italy than any where else.

But, besides Amalphi, Venice, Marseilles, Pisa, Genoa, Barcelona, Valencia, and other towns of the Mediterranean, were early distinguished for the extent to which they carried commerce and navigation. In the absence of any positive information on the subject, it seems reasonable to suppose that their maritime laws would be principally borrowed from those of Rome, but with such alterations and modifications as might be deemed requisite to accommodate them to the particular views of each state. But whether in this or in some other way, it is certain that various conflicting regulations were established, which led to much confusion and uncertainty; and the experience of the inconveniences thence arising, doubtless contributed to the universal adoption of the *Consolato del Mare* as a code of maritime law. Nothing certain is known as to the origin of this code. Azuni (*Droit Maritime de l'Europe*, tome i. pp. 414—439., or rather Jorio, *Codice Ferdinando*, from whose work a large proportion of Azuni's is literally translated) contends, in a very able dissertation, that the Pisans are entitled to the glory of having compiled the whole, or at least the greater part, of the *Consolato del Mare*. On the other hand, Don Antonio de Capmany, in his learned and excellent work on the commerce of Barcelona—(*Antiguo Comercio de Barcelona*, tomo i. pp. 170—183.), has endeavoured to show that the *Consulato* was compiled at Barcelona; and that it contains the rules according to which the consuls, which the Barcelonese had established in foreign places so early as 1268, were to render their decisions. It is certain that the *Consolato* was printed for the first time at Barcelona, in 1502; and that the early Italian and French editions are translations from the Catalan. Azuni has, indeed, sufficiently proved, that the Pisans had a code of maritime laws at a very early period, and that several of the regulations in it are substantially the same as those in the *Consolato*. But it does not appear that the Barcelonese were aware of the regulations of the Pisans, or that the resemblance between them and those in the *Consolato* is more than accidental; or may not fairly be ascribed to the concurrence that can hardly fail to obtain among well-informed persons legislating upon the same topics, and influenced by principles and practices derived from the civil law.

M. Pardessus, in the second volume of his excellent work already referred to, appears to have been sufficiently disposed, had there been any grounds to go upon, to set up a claim in favour of Marseilles to the honour of being the birthplace of the *Consolato*; but he candidly admits that such a pretension could not be supported, and unwillingly adheres to Capmany's opinion.—"Quoique François," says he, "quoique portée par des sentimens de reconnoissance, qu'aucun évènement ne sauroit affoiblir, à faire valoir tout ce qui est en faveur de Marseilles, je dois reconnoître franchement que les probabilités l'emportent en faveur de Barcelone."—(Tome ii. p. 24.)

But to whichever city the honour of compiling the *Consolato* may be due, there can be no doubt that its antiquity has been greatly exaggerated. It is affirmed, in a preface to the different editions, that it was solemnly accepted, subscribed and promulgated, as a body of maritime law, by the Holy See in 1075, and by the Kings of France and other potentates at different periods between 1075 and 1270. But Capmany, Azuni, and Pardessus, have shown in the clearest and most satisfactory manner that the circumstances alluded to in this preface could not possibly have taken place, and that it is wholly unworthy of the least attention. The most probable opinion seems to be, that it was compiled, and began to be introduced, about the end of the 13th or the beginning of the 14th century. And notwithstanding its prolixity, and the want of precision and clearness, the correspondence of the greater number of its rules with the ascertained principles

of justice and public utility, gradually led, without the intervention of any agreement, to its adoption as a system of maritime jurisprudence by all the nations contiguous to the Mediterranean. It is still of high authority. Casaregis says of it, though, perhaps, too strongly, "*Consulatus maris, in materiis maritimis, tanquam universalis consuetudo habens vim legis inviolabiliter attenda est apud omnes provincias et nationes.*"—(Disc. 213. n. 12.)

The collection of sea laws next in celebrity, but anterior, perhaps, in point of time, is that denominated the *Roole des Jugements d'Oleron*. There is as much diversity of opinion as to the origin of these laws, as there is with respect to the origin of the *Consolato*. The prevailing opinion in Great Britain has been, that they were compiled by direction of Queen Eleanor, the wife of Henry II., in her quality of Duchess of Guienne; and that they were afterwards enlarged and improved by her son Richard I., at his return from the Holy Land: but this statement is now admitted to rest on no good foundation. The most probable theory seems to be, that they are a collection of the rules or practices followed at the principal French ports on the Atlantic, as Bordeaux, Rochelle, St. Malo, &c. They contain, indeed, rules that are essential to all maritime transactions, wherever they may be carried on; but the references in the code sufficiently prove that it is of French origin. The circumstance of our monarch's having large possessions in France at the period when the Rules of Oleron were collected, naturally facilitated their introduction into England; and they have long enjoyed a very high degree of authority in this country. "I call them the Laws of Oleron," said a great civilian—(*Sir Leoline Jenkins, Charge to the Cinque Ports*), "not but that they are peculiarly enough English, being long since incorporated into the customs and statutes of our admiralties; but the equity of them is so great, and the use and reason of them so general, that they are known and received all the world over by that rather than by any other name." Molloy, however, has more correctly, perhaps, said of the laws of Oleron, that "they never obtained any other or greater force than those of Rhodes formerly did; that is, they were esteemed for the reason and equity found in them, and applied to the case emergent."—(*De Jure Maritimo et Navali*, Introd.)

A code of maritime law issued at Wisby, in the island of Gothland, in the Baltic, has long enjoyed a high reputation in the North. The date of its compilation is uncertain; but it is comparatively modern. It is true that some of the northern jurists contend that the Laws of Wisby are older than the Rules of Oleron, and that the latter are chiefly copied from the former! But it has been repeatedly shown that there is not so much as the shadow of a foundation for this statement.—(See *Pardessus, Collection, &c.* tome i. pp. 425—462.; *Foreign Quarterly Review*, No. 13. art. *Hanseatic League.*) The Laws of Wisby are not certainly older than the latter part of the 14th or beginning of the 15th century; and have obviously been compiled from the *Consolato del Mare*, the Rules of Oleron, and other codes that were then in use. Grotius has spoken of these laws in the most laudatory manner:—"*Quæ de maritimis negotiis,*" says he, "*insulæ Gothlandiæ habitatoribus placuerunt, tantum in se habent, tum equitatis, tum prudentiæ, ut omnes oceani accolæ eo, non tanquam proprio, sed velut gentium jure, utantur.*"—(*Prolegomena ad Procopium*, p. 64.)

Besides the codes now mentioned, the ordinances of the Hanse towns, issued in 1597 and 1614, contain a system of laws relating to navigation that is of great authority. The judgments of Damme, the customs of Amsterdam, &c. are also often quoted.*

But by far the most complete and well digested system of maritime jurisprudence that has ever appeared, is that comprised in the famous *Ordonnance de la Marine* issued by Louis XIV. in 1681. This excellent code was compiled under the direction of M. Colbert, by individuals of great talent and learning, after a careful revision of all the ancient sea laws of France and other countries, and upon consultation with the different parliaments, the courts of admiralty, and the chambers of commerce, of the different towns. It combines whatever experience and the wisdom of ages had shown to be best in the Roman laws, and in the institutions of the modern maritime states of Europe. In the preface to his treatise on the *Law of Shipping*, Lord Tenterden says,—"If the reader should be offended at the frequent references to this ordinance, I must request him to recollect that those references are made to the maritime code of a great commercial nation, which has attributed much of its national prosperity to that code: a code composed in the reign of a politic prince; under the auspices of a wise and enlightened minister; by laborious and learned persons, who selected the most valuable principles of all the maritime laws then existing; and which, in matter, method, and style, is one of the most finished acts of legislation that ever was promulgated."

The ordinance of 1681 was published in 1760, with a detailed and most elaborate commentary by M. Valin, in 2 volumes, 4to. It is impossible which to admire most

* A translation of the Law of Oleron, Wisby, and the Hanse towns, is given in the 3d edition of Malyne's *Lex Mercatoria*; but the edition of them in the work of M. Pardessus, referred to in the text, is infinitely superior to every other.

in this commentary, the learning or the sound good sense of the writer. Lord Mansfield was indebted for no inconsiderable portion of his superior knowledge of the principles of maritime jurisprudence to a careful study of M. Valin's work.

That part of the *Code de Commerce* which treats of maritime affairs, insurance, &c. is copied, with very little alteration, from the ordinance of 1681. The few changes that have been made are not always improvements.

No system or code of maritime law has ever been issued by authority in Great Britain. The laws and practices that now obtain amongst us in reference to maritime affairs, have been founded principally on the practices of merchants, the principles laid down in the civil law, the Laws of Oleron and Wisby, the works of distinguished jurisconsults, the judicial decisions of our own and foreign countries, &c. A law so constructed has necessarily been in a progressive state of improvement; and, though still susceptible of material amendment, it corresponds, at this moment, more nearly, perhaps, than any other system of maritime law, with those universally recognised principles of justice and general convenience by which the transactions of merchants and navigators ought to be regulated.

The decisions of Lord Mansfield did much to fix the principles, and to improve and perfect the maritime law of England. It is also under great obligations to Lord Stowell. The decisions of the latter chiefly, indeed, respect questions of neutrality, growing out of the conflicting pretensions of belligerents and neutrals during the late war; but the principles and doctrines which he unfolds in treating those questions, throw a strong and steady light on most branches of maritime law. It has occasionally, indeed, been alleged, — and the allegation is probably, in some degree, well founded, — that his Lordship has conceded too much to the claims of belligerents. Still, however, his judgments must be regarded, allowing for this excusable bias, as among the noblest monuments of judicial wisdom of which any country can boast. "They will be contemplated," says Mr. Serjeant Marshall, "with applause and veneration, as long as depth of learning, soundness of argument, enlightened wisdom, and the chaste beauties of eloquence, hold any place in the estimation of mankind." — (*On Insurance*, Prelim. Disc.)

The "Treatise of the Law relative to Merchant Ships and Seamen," by the late Chief Justice of the Court of King's Bench, does credit to the talents, erudition, and liberality of its noble and learned author. It gives, within a brief compass, a clear and admirable exposition of the most important branches of our maritime law; and may be consulted with equal facility and advantage by the merchant or general scholar, as by the lawyer. Mr. Serjeant Marshall has entered very fully into some, and has touched upon most points of maritime law, in his work on *Insurance;* and has discussed them with great learning and sagacity. The works of Mr. Justice Park, Mr. Holt, and a few others, are also valuable. Of the earlier treatises, the *Lex Mercatoria* of Malynes is by far the best; and, considering the period of its publication (1622), is a very extraordinary performance.

Statutes with respect to Importation and Exportation, Navigation, &c. — The preceding remarks refer merely to the principles, or leading doctrines, of our maritime law. These, however, have often been very much modified by statutory enactments; and the excessive multiplication of acts of parliament suspending, repealing, or altering parts of other acts, has often involved our commercial and maritime law in almost inextricable confusion; and been most injurious to the public interests. No one, indeed, who is not pretty conversant with the subject, would readily imagine to what an extent this abuse has sometimes been carried. From the Revolution down to 1786, some hundreds of acts were passed, each enacting some addition, diminution, or change, in the duties, drawbacks, bounties, and regulations previously existing in the customs. In consequence, the customs laws became so intricate and unintelligible, that hardly one merchant in fifty could tell the exact amount of duty affecting any article; or the course to be followed either in entering or clearing out vessels; being obliged to leave it entirely to the clerks of the Custom-house to calculate the amount of duties, and to direct him how to proceed so as to avoid forfeiting the goods and the ship! and yet, so powerful is the influence of habit in procuring toleration for the most pernicious absurdities, that this monstrous abuse was allowed to go on increasing for 50 years after it had been denounced as intolerable. Mr. Pitt has the merit of having introduced something like order into this chaos. Under his auspices, all the separate customs duties existing in 1787 were repealed, and new ones substituted in their stead; consisting, in most instances, of the equivalents, so far at least as they could be ascertained, of the old duties. In carrying this measure into effect, the House of Commons passed no fewer than 3,000 resolutions. The regulations as to entries and clearances were also simplified.

The advantages resulting from this measure were very great; but during the war, so many new duties and regulations were passed, that the necessity for a fresh consolidation became again very urgent, and was effected in 1819. It was not, however, in the customs department only, or in the mere article of duties, that the merchant and ship owners

were bewildered by the multiplicity of statutory regulations. There was not a single branch of the law regulating their transactions that escaped the rage for legislation. Previously to 1822, no fewer than 113 statutes had been passed relating to the fisheries; and the makers and buyers of sails and cordage were supposed to be familiar with the various obscure and contradictory regulations embodied in the *twenty-three* acts of parliament relating to these articles! But the enormity of the abuse will be rendered more apparent, by laying before the reader the following extract from the *Report of the Lords' Committee on Foreign Trades in* 1820.

"Before," say their Lordships, "your committee proceed to advert to the points which have been the principal objects of their inquiry, they are anxious to call the attention of the House to the excessive accumulation and complexity of the laws under which the commerce of the country is regulated, with which they were forcibly impressed in the very earliest stage of their proceedings. These laws, passed at different periods, and many of them arising out of temporary circumstances, amount, as stated in a recent computation of them, to upwards of *two thousand*, of which no less than 1,100 were in force in 1815; and many additions have been since made. After such a statement, it will not appear extraordinary that it should be matter of complaint by the British merchant, that, so far from the course in which he is to guide his transactions being plain and simple — so far from being able to undertake his operations, and to avail himself of favourable openings, as they arise, with promptitude and confidence — he is frequently reduced to the necessity of resorting to the services of professional advisers, to ascertain what he may venture to do, and what he must avoid, before he is able to embark in his commercial adventures with the assurance of being secure from the consequences of an infringement of the law. If this be the case (as is stated to your committee) with the most experienced among the merchants, even in England, in how much greater a degree must the same perplexity and apprehension of danger operate in foreign countries and on foreign merchants, whose acquaintance with our statute book must be supposed to be comparatively limited, and who are destitute of the professional authority which the merchant at home may at all times consult for his direction? When it is recollected, besides, that a trivial unintentional deviation from the strict letter of the acts of parliament may expose a ship and cargo to the inconvenience of seizure, which (whether sustained or abandoned) is attended always with delay and expense, and frequently followed by litigation, it cannot be doubted that such a state of the law must have the most prejudicial influence both upon commercial enterprise in the country, and upon our mercantile relations and intercourse with foreign nations; and perhaps no service more valuable could be rendered to the trade of the empire, nor any measure more effectually contribute to promote the objects contemplated by the House, in the appointment of this committee, than an accurate revision of this vast and confused mass of legislation; and the establishment of some certain, simple, and consistent principles, to which all the regulations of commerce might be referred, and under which the transactions of merchants engaged in the trade of the United Kingdom might be conducted with facility, safety, and confidence." — (p. 4.)

Since this Report was printed, a very considerable progress has been made in simplifying and clearing up the statute law, on the principles laid down in it. The law as to shipping and navigation has been particularly improved. The principles laid down in the famous navigation acts of 1650 and 1660 were, indeed, sufficiently distinct and obvious; but when these acts were passed, there were above 200 statutes in existence, many of them antiquated and contradictory, which they did not repeal, except in so far as the regulations in them might be inconsistent with those in the new acts. But besides these, a number of statutes were passed almost in every session since 1660, explaining, limiting, extending, or modifying in one way or other, some of the provisions of the navigation acts; so that ultimately there were questions perpetually arising, as to which it was very difficult to discover the precise law. On such occasions, recourse was often had to the courts; and the good sense and equity which generally characterised their decisions mitigated the mischievous consequences resulting from the uncertainty of the statute law, and even gave it the appearance of consistency. Latterly, however, this uncertainty has been well nigh removed. One of the bills introduced by Mr. Wallace for the improvement of the navigation laws repealed above *two hundred* statutes! and the new acts substituted in the place of those that were repealed, were drawn up with laudable brevity and clearness. But various alterations having been subsequently made in these acts, new statutes embodying the changes were passed last session. The principal are — the 3 & 4 Will. 4. c. 54., for the encouragement of British shipping and navigation, which may be called the present navigation law — (see NAVIGATION LAWS); the 3 & 4 Will. 4. c. 55., for the registry of British vessels — (see REGISTRY); the 3 & 4 Will. 4. c. 52., containing the regulations with respect to importation and exportation — (see IMPORTATION AND EXPORTATION); and the act 3 & 4 Will. 4. c. 59., for regulating the trade with the British possessions abroad — (see COLONIES AND COLONY TRADE). Mr.

Hume, formerly of the customs, now of the Board of Trade, had the principal share in the compilation of these acts, which do honour to his sagacity, industry, and talents for arrangement.

It may be worth while observing, that hardly a session passes without giving birth to more or fewer acts, making certain changes or modifications in those referred to above. Where these changes apply only to some particular emergency, without affecting the general principles or rules laid down in the statutes, there can be no doubt that they should be embodied in separate acts; but where any modification or alteration is to be made in the principles of the law, the better way, as it appears to us, would be to introduce it directly into the leading act on the subject — re-enacting it in an amended or altered form. In no other way is it possible to preserve that unity and clearness which are so very desirable. The multiplication of statutes is a very great evil, not only from the difficulty of ascertaining the exact degree in which one modifies another, but from its invariably leading to the enactment of contradictory clauses. The property and transactions of merchants ought not to depend upon the subtleties and niceties of forced constructions, but upon plain and obvious rules, about which there can be no mistake. It would, however, be idle to expect that such rules can ever be deduced from the conflicting provisions of a number of statutes: those in the same statute are not always in harmony with each other.

MARK, OR MARC, a weight used in several parts of Europe, for various commodities, especially gold and silver. In France, the mark was divided into 8 oz. = 64 drachms = 192 deniers or pennyweights = 4,608 grains. In Holland, the mark weight was also called Troy weight, and was equal to that of France. When gold and silver are sold by the mark, it is divided into 24 carats.

The pound, or *livre*, *poids de marc*, the weight most commonly used in retail dealings throughout France previously to the Revolution, was equal to 2 marcs, and consequently contained 16 oz. = 128 drs. = 384 den. = 9,216 grs. One kilogramme is nearly equal to 2 livres.— Subjoined is a Table of livres, *poids de marc*, from 1 to 10, converted into kilogrammes. Any greater number may be learned by a simple multiplication and addition.

Livres.		*Kilog.*	*Livres.*		*Kilog.*	*Livres.*		*Kilog.*	*Livres.*		*Kilog.*
1	=	0·4895	4	=	1·9580	7	=	3·4265	9	=	4·4056
2	=	0·9790	5	=	2·4475	8	=	3·9160	10	=	4·8951
3	=	1·4685	6	=	2·9370						

MARK, a term sometimes used among us for a money of account, and in some other countries for a coin. The English mark is $\frac{2}{3}$ds of a pound sterling, or 13*s.* 4*d.*; and the Scotch mark is $\frac{2}{3}$ds of a pound Scotch. The mark Lubs, or Lubeck mark, used at Hamburgh, is a money of account, equal to 14$\frac{2}{3}$*d.* sterling.

MARKET, a public place in a city or town, where provisions are sold. No market is to be kept within 7 miles of the city of London; but all butchers, victuallers, &c. may hire stalls and standings in the flesh-markets there, and sell meat and other provisions. Every person who has a market is entitled to receive toll for the things sold in it; and, by ancient custom, for things standing in the market, though not sold; but those who keep a market in any other manner than it is granted, or extort tolls or fees where none are due, forfeit the same. — (See FAIRS.)

MARSEILLES, a large commercial city and sea-port of France, on the Mediterranean, in lat. 43° 17′ 49″ N., lon. 5° 22$\frac{1}{3}$′ E. Population 125,000.

Harbour. — The harbour, the access to which is defended by several strong fortifications, is in the centre of the city, forming a basin 525 fathoms in length, by about 150 do. in breadth. The tide is hardly sensible; but the depth of water at the entrance to the harbour varies from 16 to 18 feet, being lowest when the wind is N.W., and highest when it is S.W. Within the basin the depth of water varies from 12 to 24 feet, being shallowest on the north, and deepest on the south side. Dredging machines are constantly at work to clear out the mud, and to prevent the harbour from filling up. Though not accessible to the largest class of ships, Marseilles is one of the best and safest ports in the world for moderate-sized merchantmen, of which it will accommodate above 1,000. Ships in the basin lie close alongside the quays; and there is every facility for getting them speedily loaded and unloaded. The Isle de Rattoneau, Pomegues, and the strongly fortified islet or rock of If, lie W.S.W. from the port; the latter, which is the nearest to it, being only 1$\frac{3}{4}$ mile distant, and not more than $\frac{3}{4}$ of a mile from the projecting point of land to the south of the city. There is good anchorage ground for men-of-war and other large ships between the Isles de Rattoneau and Pomegues, to the west of the Isle d'If. When coming from the south, it is usual to make the Isle de Planier, in lat. 43° 11′ 54″ N., lon. 5° 13′ 59″ E. A light-house erected on this island is 131 feet high; the flashes of the light, which is a revolving one, succeed each other every $\frac{1}{2}$ minute, and in clear weather it may be seen 7 leagues off. Ships that have made the Isle de Planier, or that of Le Maire, lying east from it about 4$\frac{1}{2}$ miles, steer northerly for the Isle d'If, distant about 7 miles from each, and having got within $\frac{1}{4}$ or $\frac{1}{3}$ mile of it, heave to for a pilot, who carries them into harbour: it is not, however, obligatory on ships to take a pilot on board; but being obliged to pay for one whether they avail themselves of his services or not, they seldom dispense with them. The charge is 4 sous per ton in, and 2 sous per do. out, for French vessels, and the vessels of countries having reciprocity treaties with France. There is a light-house in the fort St. Jean, on the north side of the entrance to the port. The *lazaretto*, which is one of the best in Europe, lies a little to the north of the city; and there is an hospital on Rattoneau Island, for individuals whose health is dubious. With the exception of the above charge for pilotage, and the charges for such vessels as perform quarantine, there are no port charges on ships entering at, or clearing out from, Marseilles.

Trade, &c. — Marseilles is a city of great antiquity, and has long enjoyed a very extensive commerce. Havre, partly, no doubt, from its being, as it were, the port of Paris, used to enjoy a greater share of the trade of France; but, notwithstanding the increased importance of the former, it has recently been surpassed by Marseilles. The

customs duties collected at Havre, in 1831, were 22,410,689 fr., whereas those collected at Marseilles during the same year, amounted to 25,813,063 fr.; and, in 1832, the difference was still more decided in favour of the latter. The following is a statement of the customs duties collected at Marseilles during each of the 5 years ending with 1832: —

	Francs.		Francs.
1828	24,315,130	1831	25,813,063
1829	23,914,247	1832	30,678,584
1830	25,899,394		

This statement shows conclusively, that the trade of Marseilles is not only increasing rapidly, but that it is already very extensive. She is the grand emporium of the commerce between France and the countries bordering on the Mediterranean. To the Levant she exports colonial products, light woollens, silks, &c. To Italy, the exports consist of all kinds of colonial produce, woollens, linens, liqueurs, oil, hardware, and lead. The exports to England consist of silks, brandy, madder, wines, verdigris, brimstone, soap, oil, preserved fruits, gloves, ribands, shawls, capers, anchovies, syrups, essences, perfumery, &c. The principal imports are, wheat from the Black Sea and the coast of Africa, sugar and coffee, cotton, indigo, fish, pepper, iron, lead, dye woods, hides, &c. Regulations as to warehousing similar to those of Bordeaux; which see.

Arrivals. — In 1831 there arrived at Marseilles: —

Arrivals.	Ships.	Tons
French ships from foreign countries	866	82,612
—— from French colonies	86	20,469
—— coasters	3,329	176,353
—— from the fishery	43	1,851
Foreign vessels	1,407	185,941
Totals	5,731	472,236

The arrivals in 1832 were considerably greater, and among them were 77 British ships, of the burden of 12,831 tons. — (For further particulars see *Annuaire du Commerce Maritime* for 1833, p. 247.; *Archives du Commerce*, tom. i. p. 183.; *Administration des Douanes* for 1831, p. 342. &c. The answers sent by the consul to the *Circular Queries* did not afford us any information of any sort whatever.)

The *Monies*, *Weights*, and *Measures* of Marseilles are the same as those of the rest of France. — (See BORDEAUX.)

MASTER, in commercial navigation, the person intrusted with the care and navigation of the ship.

The situation of master of a ship is so very important, that in some countries no one can be appointed to it, who has not submitted to an examination by competent persons, to ascertain his fitness for properly discharging its duties. — (See the famous French Ordonnance of 1681, tit. ii. art. 1.; and the Ordonnance of the 7th of August, 1825. The latter specifies the various subjects on which candidates shall be examined, and the mode of conducting the examination.) But in this country the owners are left to their own discretion as to the skill and honesty of the master; and although he is bound to make good any damage that may happen to the ship and cargo by his negligence or unskilfulness, he cannot be punished as a criminal for mere incompetence.

No one is qualified to be the master of a British ship, unless he be a natural-born British subject, or naturalised by act of parliament, or a denizen by letters of denization; or have become a subject of his Majesty by conquest, cession, &c., and have taken the oaths of allegiance; or a foreign seaman who has served 3 years, in time of war, on board of his Majesty's ships.

"The master is the confidential servant or agent of the owners; and in conformity to the rules and maxims of the law of England, *the owners are bound to the performance of every lawful contract made by him relative to the usual employment of the ship.*" — (*Abbott* (late Lord Tenterden) *on the Law of Shipping*, part ii. c. 2.)

From this rule of law, it follows that the owners are bound to answer for a breach of contract, though committed by the master or mariners against their will, and without their fault. — (*Id.*) Nor can the expediency of this rule be doubted. The owners, by selecting a person as master, hold him forth to the public as worthy of trust and confidence. And in order that this selection may be made with due care, and that all opportunities of fraud and collusion may be obviated, it is indispensable that they should be made responsible for his acts.

The master has power to hypothecate, or pledge, both ship and cargo for *necessary repairs executed in foreign ports* during the course of the voyage; but neither the ship nor cargo can be hypothecated for repairs *executed at home*.

The master has no lien upon the ship for his wages, nor for money advanced by him for stores or repairs. In delivering judgment upon a case of this sort, Lord Mansfield said — "As to wages, there is no particular contract that the ship should be a pledge; there is no usage in trade to that purpose; nor any implication from the nature of the dealing. On the contrary, the law has always considered the captain as contracting personally with the owner; and the case of the captain has, in that respect, been distinguished

from that of all other persons belonging to the ship. This rule of law may have its foundation in policy, for the benefit of navigation; for, as ships may be making profit and earning every day, it might be attended with great inconvenience, if, on the change of a captain for misbehaviour, or any other reason, he should be entitled to keep the ship till he is paid. Work done for a ship in England is supposed to be done on the personal credit of the employer: in foreign parts the captain may hypothecate the ship. The defendant might have told the tradesman, that he only acted as an agent, and that they must look to the owner for payment."

The master is bound to employ his whole time and attention in the service of his employers, and is not at liberty to enter into any engagement for his own benefit that may occupy any portion of his time in other concerns; and therefore, if he do so, and the price of such engagement happen to be paid into the hands of his owners, they may retain the money, and he cannot recover from them. — (*Abbott*, part ii. c. 4.)

During war, a master should be particularly attentive to the regulations as to sailing under convoy; for, besides his responsibility to his owners or freighters, he may be prosecuted by the Court of Admiralty, and fined in any sum not exceeding 500*l.*, and imprisoned for any term not exceeding 1 year, if he wilfully disobey the signals, instructions, or lawful commands of the commander of the convoy; or desert it without leave. — (43 *Geo.* 3. c. 160.)

Wilfully destroying or casting away the ship, or procuring the same to be done by the master or mariners, to the prejudice of the owners, freighters, or insurers; running away with the cargo; and turning pirates; are capital offences punishable by death. — (7 & 8 *Geo.* 4. c. 29., and antecedent statutes.)

After the voyage has been commenced, the master must proceed direct to the place of his destination, without unnecessarily stopping at any intermediate port, or deviating from the shortest course. No such deviation will be sanctioned, unless it has been occasioned by stress of weather, the want of necessary repair, avoiding enemies or pirates, succouring of ships in distress, sickness of the master or mariners, or the mutiny of the crew. — (*Marshall on Insurance*, book i. c. 6. § 3.) To justify a deviation, the necessity must be real, inevitable, and imperious; and it must not be prolonged one moment after the necessity has ceased. A deviation without such necessity vitiates all insurances upon the ship and cargo, and exposes the owners to an action on the part of the freighters. If a ship be captured in consequence of deviation, the merchant is entitled to recover from the owners the prime cost of the goods, with shipping charges; but he is not entitled to more, unless he can show that the goods were enhanced in value beyond the sum above mentioned.

If a merchant ship has the misfortune to be attacked by pirates or enemies, the master is bound to do his duty as a man of courage and capacity, and to make the best resistance that the comparative strength of his ship and crew will allow.

By the common law, the master has authority over all the mariners on board the ship,— it being their duty to obey his commands in all lawful matters relating to the navigation of the ship, and the preservation of good order. But the master should, in all cases, use his authority with moderation, so as to be the father, not the tyrant, of his crew. On his return home he may be called upon, by action at law, to answer to a mariner he has either beat or imprisoned during the course of the voyage; and unless he show sufficient cause for chastising the mariner, and also that the chastisement was reasonable and moderate, he will be found liable in damages. Should the master strike a mariner without cause, or use a deadly weapon as an instrument of correction, and death ensue, he will be found guilty, according to the circumstances of the case, either of manslaughter or murder. — (*Abbott*, part ii. c. 4.)

The master may by force restrain the commission of great crimes; but he has no jurisdiction over the criminal. His business is to secure his person, and to deliver him over to the proper tribunals on his coming to his own country. — (See art. Seamen.)

If by shipwreck, capture, or other unavoidable accident, seamen, subjects of Great Britain, be found in foreign parts, his Majesty's governors, ministers, consuls, or two or more British merchants, residing in such parts, may send such seamen home in ships of war, or in merchant ships homeward bound in want of men; and if such ships cannot be found, they may send them home in merchant ships that are fully manned, but no such merchant ship shall be obliged to take on board more than *four* such persons for every 100 tons burthen: and the master, upon arrival, and producing to the Navy Board a certificate from the governor, minister, consul, &c. where he shipped the men, and his own affidavit of the time he maintained them, shall receive 1*s.* 6*d.* *per diem* for all such seamen above his own complement of men. — (53 *Geo.* 3. c. 85.) A subsequent statute (58 Geo. 3. c. 38.) inflicts a penalty of 100*l.* on any master of a merchant vessel who shall refuse to take on board or bring home any seafaring man, a subject of Great Britain, left behind in any foreign country, upon being required to do so by the competent authorities.

The master of a ship forcing any man on shore when abroad, or refusing to bring back such of the men he carried out with him as are in a condition to return, shall, upon conviction of such offence, be imprisoned for such term as the court shall award. — (9 *Geo.* 4. c. 31.)

A penalty of 20*l.* is imposed on every master of a vessel, who, having, on account of sickness, left any seafaring man at any foreign port or place, shall neglect or refuse to deliver an account of the wages due, and to pay the same. — (58 *Geo.* 3. c. 58.)

The law makes no distinction between carriers by land and carriers by water. The master of a merchant ship is, in the eye of the law, a carrier; and is, as such, bound to take reasonable and proper care of the goods committed to his charge, and to convey them to the place of their destination, *barring only the acts of God and the king's enemies.* Every act which may be provided against by ordinary care, renders the master responsible. He would not, for example, be liable for damage done to goods on board in consequence of a leak in the ship occasioned by the violence of the tempest, or other accident; but if the leak were occasioned by rats, he would be liable, for these might have been exterminated by ordinary care, as by putting cats on board, &c. On the same principle, if the master run the ship in fair weather against a rock or shallow known to expert mariners, he is responsible. If any injury be done to the cargo by improper or careless stowage, the master will be liable.

The master must not take on board any contraband goods, by which the ship and other parts of the cargo may be rendered liable to forfeiture or seizure. Neither must he take on board any false or colourable papers, as these might subject the ship to the risk of capture or detention. But it is his duty to procure and keep on board all the papers and documents required for the manifestation of the ship and cargo, by the law of the countries from and to which the ship is bound, as well as by the law of nations in general, or by treaties between particular states. These papers and documents cannot be dispensed with at any time, and are quite essential to the safe navigation of neutral ships during war. — (See Ships' Papers.)

It is customary in bills of lading to insert a clause limiting the responsibility of the master and owners, as follows: — "*The act of God, the king's enemies, fire, and every other dangers and accidents of the seas, rivers, and navigation, of whatever nature and kind soever, save risk of boats, as far as ships are liable thereto, excepted.*" When no bill of lading is signed, the master and owners are bound according to the common law.

The most difficult part of the master's duty is when, through the perils of the sea, the attacks of enemies or pirates, or other unforeseen accidents, he is prevented from completing his voyage. If his own ship have suffered from storms, and cannot be repaired within a reasonable time, and if the cargo be of a *perishable nature*, he is *at liberty* to employ another ship to convey it to the place of destination. He may do the same if the ship have been wrecked and the cargo saved, or if his own ship be in danger of sinking, and he can get the cargo transferred to another*; and in *extreme cases* he is at liberty to dispose of the cargo for the benefit of its owners. But, to use the words of Lord Chief Justice Tenterden, "the disposal of the cargo by the master is a matter that requires the utmost caution on his part. He should always bear in mind that it is his *duty to convey it to the place of destination.* This is the purpose for which he has been intrusted with it, and this purpose he is bound to accomplish by every reasonable and practical method. What, then, is the master to do, if, by any disaster happening in the course of his voyage, he is unable to carry the goods to the place of destination, or to deliver them there? To this, as a general question, I apprehend no answer can be given. Every case must depend upon its own peculiar circumstances. The conduct proper to be adopted with respect to perishable goods, will be improper with respect to a cargo not perishable: one thing may be fit to be done with fish or fruit, and another with timber or iron: one method may be proper in distant regions, another in the vicinity of the merchant; one in a frequented navigation, another on unfrequented shores. The wreck of the ship is not necessarily followed by an impossibility of sending forward the goods, and does not of itself make their sale a measure of necessity or expedience: much

* The most celebrated maritime codes, and the opinions of the ablest writers, have differed considerably as to these points. According to the Rhodian law (Pand. l. 10. § 1.) the captain is released from all his engagements, if the ship, by the perils of the sea, and without any fault on his part, become incapable of proceeding on her voyage. The laws of Oleron (art. 4.), and those of Wisby (arts. 16. 37. 55.), say that the captain *may hire another ship;* harmonising in this respect with the present law of England. The famous French ordinance of 1681 (tit. *Du Frêt*, art. 11.), and the *Code du Commerce* (art. 296.), *order the captain to hire another ship;* and if he cannot procure one, freight is to be due only for that part of the voyage which has been performed (*pro ratâ itineris peracti*). Valin has objected to this article, and states that practically it meant only that the captain must hire another ship if he would earn the whole freight. Emerigon (tom. i. p. 428.) holds that the captain, being the agent not only of the owners of the ship, but also of the shippers of the goods on board, is bound, in the absence of both, to use his best endeavours to preserve the goods, and to do whatever, in the circumstances, he thinks will most conduce to the interest of all concerned; or what it may be presumed the shippers would do, were they present. This, which seems to be the best and wisest rule, has been laid down by Lords Mansfield and Tenterden, as stated above, and may be regarded as the law of England on this point.

less can the loss of the season, or of the proper course of the voyage, have this effect. An unexpected interdiction of commerce, or a sudden war, may defeat the adventure, and oblige the ship to stop in her course; but neither of these events doth of itself alone make it necessary to sell the cargo at the place to which it may be proper for the ship to resort. In these and many other cases, the master may be discharged of his obligation to deliver the cargo at the place of destination; but it does not therefore follow that he is authorised to sell it, or ought to do so. What, then, is he to do? In general, it may be said, *he is to do that which a wise and prudent man will think most conducive to the benefit of all concerned.* In so doing, he may expect to be safe, because the merchant will not have reason to be dissatisfied; but what this thing will be, no general rules can teach. Some regard may be allowed to the interest of the ship, and of its owners; but the interest of the cargo must not be sacrificed to it. Trans-shipment for the place of destination, if it be practicable, is the first object, because that is in furtherance of the original purpose: if that be impracticable, return, or a safe deposit, may be expedient. A disadvantageous sale (and almost every sale by the master will be disadvantageous) is the last thing he should think of, because it can only be justified by that necessity which supersedes all human laws." — (*Law of Shipping*, part iii. c. 3.)

The master of a ship is liable for goods of which she is robbed in part; and the reason, as Lord Mansfield stated, is, lest room should be given for collusion, and the master should get himself robbed on purpose, in order that he might share in the spoil. The master is, however, entitled to indemnify himself out of the seamen's wages for losses occasioned by their neglect.

If any passenger die on board, the master is obliged to take an inventory of his effects; and if no claim be made for them within a year, the master becomes proprietor of the goods, but answerable for them to the deceased's legal representatives. Bedding and furniture become the property of the master and mate; but the clothing must be brought to the mast head, and there appraised and distributed among the crew.

If a master die, leaving money on board, and the mate, becoming master, improve the money, he shall, on allowance being made to him for his trouble, account both for interest and profits.

No master is to proceed on any voyage for parts beyond the seas without previously coming to an agreement, *in writing*, with his mariners, for their wages. If he do so, he shall forfeit, for every mariner so taken without a written agreement, *5l.* — (2 *Geo.* 2. c. 36. § 1.)

The master of every vessel is required by the 2 Geo. 2. c. 36. to keep a regular account of the penalties and forfeitures due to Greenwich Hospital in consequence of the mariners' disobedience, to deduct the same from their wages, and to pay the amount thereof to the collector of the Greenwich Hospital duty, within 3 months after such deduction, upon pain of forfeiting treble the value thereof to the use of the said hospital.

Masters of vessels laden with coals are directed by 6 Geo. 4. c. 107. § 120. to produce to any officer of customs demanding its production, a copy of the certificate originally delivered to them by the fitters or vendors, and to deliver the certificate to the collector or comptroller of the port to which the coals are carried.

For the duty of the master, as respects Custom-house regulations, see the articles Importation and Exportation, Quarantine, Smuggling, &c.; and for a further discussion of this important subject, see the excellent work of *Lord Tenterden on the Law of Shipping*, part iii. c. 3. &c.; *Chitty on Commercial Law*, vol. iii. c. 8. &c.; and the articles Charterparty, Freight, &c. in this Dictionary.

MASTICH, or MASTIC (Ger. *Mastix*; Du. *Mastik*; Fr. *Mastic*; It. *Mastice*; Sp. *Almastica*, *Almaciga*; Arab. *Arāh*). This resinous substance is the produce of the *Pistacia lentiscus*, a native of the Levant, and particularly abundant in the island of Chios. It is obtained by making transverse incisions in the trunks and branches of the trees, whence the mastic slowly exudes. About 1,500 cwt. are annually exported from Chios, part of which is brought to this country, packed in chests. The best is in the form of dry, brittle, yellowish, transparent tears; it is nearly inodorous, except when heated, and then it has an agreeable odour; chewed, it is almost insipid, feeling at first gritty, and ultimately soft; its virtues are trifling.—(*Ainslie's Materia Indica*; *Thomson's Dispensatory.*)

MATE, in a merchant ship, the deputy of the master, taking in his absence the command. There are sometimes only 1, and sometimes 2, 3, or 4 mates in a merchantman, according to her size; denominated 1st, 2d, 3d, &c. mates. The law, however, recognises only 2 descriptions of persons in a merchantman — the master and mariners; the mates being included in the latter, and the captain being responsible for their proceedings.

In men-of-war, the officers immediately subordinate to the captain are called lieutenants. But the *master*, or officer whose peculiar duty it is to take charge of the navigation of the ship, has certain mates under him, selected from the midshipmen. The

boatswain, gunner, carpenter, &c. have each their mates or deputies, taken from the crew.

The officers subordinate to the commander in the ships belonging to the East India Company, were called 1st, 2d, 3d, &c. officers. East Indiamen had no sailing masters, the commanders performing that duty. — (*Falconer's Marine Dictionary, &c.*)

MATS (Du. *Matten;* Fr. *Nattes;* Ger. *Matten;* It. *Stuoje, Stoje;* Port. *Esteiras;* Rus. *Progoshki;* Sp. *Esteras*), textures composed, for the most part, of flags, reeds, the bark of trees, rushes, grass, rattans, old ropes, &c. In this country mats are used for a great variety of purposes. The coarser sort are very largely employed in the packing of furniture and goods; in the stowage of corn and various other articles on board ship; in horticultural operations; in covering the floors of churches and other public buildings, &c.: the finer sorts are principally employed in covering the floors of private houses.

In Europe mats are principally manufactured for sale in Russia, where they are produced in immense quantities, forming an article of very considerable value and importance. They are partly formed of flags; but principally of the inner bark of the lime or linden tree, the latter being known in this country by the name of *bast* mats. The Russian peasants manufacture this sort of material into shoes; and in consequence of the vast quantity of matting made use of in this way, and in shipments abroad, the destruction of the linden tree is immense; though, as it grows rapidly, there is probably less risk of its exhaustion than Mr. Tooke seems to have supposed. — (*View of Russia*, vol. iii. p. 262.) In 1832 above 840,000 pieces of mat were exported from Archangel only; and in addition to this there is a very considerable exportation from Petersburgh, Riga, and other ports. Russian mats fetch at present (January, 1834), in the London market, 4*l.* 10*s.* per 100, duty (1*l.* 3*s.* 9*d.* the 100) included. Mats not otherwise enumerated or described are subject to a duty of 20 per cent. *ad valorem.*

Various descriptions of reed mats are extensively manufactured in Spain and Portugal; some of them being very beautifully varied. In Spain large quantities of matting are made of the esparto rush. — (See Esparto.)

Rush floor mats, and rattan table mats of a very superior description are brought from China. They should be chosen clean, of a bright clear colour, and should, when packed, be thoroughly dry.

The mats of the Japanese are soft and elastic, serving them both for carpets and beds; they are made of a peculiar species of rush cultivated for the purpose.

The bags in which sugar is imported from the Mauritius consist of matting formed of the leaves of a tree growing in the island, interwoven in broad strips. They are very strong and durable, and may be washed and cleaned without sustaining any injury. Being imported in large quantities, they are sold very cheap. — (Besides *Tooke's Russia*, already referred to, see *Milburn's Oriental Commerce*, and the valuable little work entitled *Vegetable Substances, Materials of Manufactures*, published by the Society for the Diffusion of Useful Knowledge, pp. 116—123.)

It is probable that mats formed the first sort of wove fabrics produced by man; and it is worthy of remark that but few savage tribes have been discovered that have not attained to considerable eminence in their manufacture. On the coast of Guinea and other places on the west of Africa, pieces of fine mat, about a yard long, and of a pretty uniform texture, were denominated *makkutes*, and formed a sort of money; the value of commodities being rated and estimated in them! — (*Morellet, Prospectus d'un Dictionnaire de Commerce*, p. 122.) They enjoyed this distinction, no doubt, from their utility, and the great care and labour bestowed on their preparation. There is hardly an island in the South Seas in which the natives have not acquired great skill and dexterity in the making of mats. The finer sorts consist, generally, of dyed reeds or grass; and have a very brilliant appearance.

MAURITIUS. See Port Louis.

MEAD, or METHEGLIN (Ger. *Meht, Meth;* Du. *Meede, Meedrank;* Fr. *Hydromel;* It. *Idromele;* Rus. *Lipez*), the ancient, and for a long time, the favourite drink of the northern nations. It is a preparation of honey and water. Manufacturers of mead for sale must take out an annual licence.

MEAL (Ger. *Mehl;* Du. *Meel;* Fr. and It. *Farine;* Sp. *Farina;* Rus. *Muka;* Lat. *Farina*), the edible part of wheat, oats, rye, barley, and pulse of different kinds, ground into a species of coarse flour.

MEDALS, are pieces of metal, generally in the form of a coin, and impressed with some peculiar stamp, intended to commemorate some individual or action. Medals are of very different prices — varying according to their rarity and preservation, the fineness of the metal, the beauty of the workmanship, &c.

MEDITERRANEAN PASS. The nature of this sort of instrument has been described by Mr. Reeves, in his *Treatise on the Law of Shipping*, as follows: —

"In the treaties that have been made with the Barbary states, it has been agreed, that

the subjects of the King of Great Britain should pass the seas unmolested by the cruisers of those states; and for better ascertaining what ships and vessels belong to British subjects, it is provided that they shall produce *a pass*, under the hand and seal of the Lord High Admiral, or the Lords Commissioners of the Admiralty. In pursuance of these treaties, passes are made out at the Admiralty, containing a very few words, written on parchment, with ornaments at the top, through which a scolloped indenture is made: the *scolloped tops* are sent to Barbary; and being put in possession of their cruisers, the commanders are instructed to suffer all persons to pass who have passes that will fit these scolloped tops. The protection afforded by these passes is such, that no ships, which traverse the seas frequented by these rovers, ever fail to furnish themselves with them, whether in the trade to the East Indies, the Levant, Spain, Italy, or any part of the Mediterranean; and from the more particular need of them in the latter, they, no doubt, obtained the name of *Mediterranean passes*. For the accommodation of merchants in distant parts, blank passes, signed by the Lords of the Admiralty, are lodged with the governors abroad, and with the British consuls, to be granted to those who comply with the requisites necessary for obtaining them. As this piece of security is derived wholly from the stipulations made by the crown with a foreign power, the entire regulation and management of it has been under the direction of his Majesty, who, with the advice of his privy council, has prescribed the terms and conditions on which these passes shall be granted. Among others are the following: — They are to be granted for none but British-built ships, or ships made free, navigated with a master and $\frac{3}{4}$ths of the mariners British subjects, or foreign protestants made denizens. Bond is to be given in the sum of 300*l.* if the vessel is under 100 tons, and in 500*l.* if it is of that or more, for delivering up the pass within 12 months, unless in the case of ships trading from one foreign port to another; and such passes need not be returned in less than 3 years.

"It has been found expedient, at the conclusion of a war, and sometimes during a peace, to recal and cancel all passes that have been issued, and to issue others in a new form. This has been done for 2 reasons. 1st, That these useful instruments, by various means, either accidental or fraudulent, came into the hands of foreigners, who, under cover of them, carried on in security a trade which otherwise would belong to British subjects, and which had been purchased by the crown, at the expense of keeping up this sort of alliance. 2dly, That the Barbary states complained, that, adhering to the rule of fitting the other part of the indenture to the passes, they were obliged to suffer ships to pass that did not belong to British subjects."

The act 52 Geo. 3. c. 143. makes the forging of a Mediterranean pass felony without benefit of clergy. The 9 Geo. 4. c. 76. enacts, that no Mediterranean pass shall be issued for the benefit of any person as being an inhabitant of Malta or of Gibraltar, but not being a person entitled to be an owner of a British registered ship, unless such person shall have resided at Malta or Gibraltar, respectively, upwards of 15 years previously to the 10th of October, 1827.

Mediterranean passes are either granted for 1 voyage, or are attached to the ship's certificate of registry, and are in force so long as the said certificate. A stamp duty of 2*l.* is charged on each pass so issued. When issued in the colonies, they continue in force for 12 months to colonial ships, and for 1 voyage to British ships supplied with them. The duty on such passes is 5*s.* — We subjoin

An Account of the Amount paid by Ships for the Mediterranean Pass; stating the Number of Passes granted, the aggregate Amount received in the Years 1828–9, and to what Purpose the same was applied. — (*Parl. Paper*, No. 132. Sess. 1830.)

No. of Passes.	For what Time in Force.	Stamp Duty on each.	Aggregate Charge on each.	Total.
	1828.	*L. s. d.*	*L. s. d.*	*L. s. d.*
220	One voyage	2 0 0	2 10 0	550 0 0
342	Attached to the ship's certificate of registry, and in force so long as the said certificate	2 0 0	5 5 0	1,795 10 0
200	Issued in the colonies, and in force for 12 months to colonial ships, and for 1 voyage to British ships supplied with them	0 5 0	2 0 0	400 0 0
				2,745 10 0
	Deduct stamp duties			1,174 0 0
			L.	1,571 10 0
	1829.			
200	One voyage	2 0 0	2 10 0	510 0 0
330	Attached to the ship's certificate of registry, and in force so long as the said certificate	2 0 0	5 5 0	1,732 10 0
250	Issued in the colonies, and in force for 12 months to colonial ships, and for 1 voyage to British ships supplied with them	0 5 0	2 0 0	500 0 0
				2,742 10 0
	Deduct stamp duties			1,062 10 0
			L.	1,680 0 0

The foregoing fees for Mediterranean passes, after deducting the sums paid for stamps, have been applied, as all other fees are, in aid of the sum voted on the navy estimate for the contingent expenses of the Admiralty Office.

MEMEL, a commercial town of East Prussia, in lat. 55° 41′ 42″ N., lon. 21° 8′ 14″ E. Population 8,500. Memel is situated on the north-east side of the great bay, denominated the *Currische Haf*, near its junction with the Baltic. It is, consequently, the principal *entrepôt* of the country traversed by the Niemen, and as such enjoys a pretty extensive commerce.

Harbour.—The harbour of Memel is large and safe; but the bar at the mouth of the Currische Haf has seldom more than 17 feet water, and sometimes not more than 13 or 14 feet; so that ships drawing more than 16 feet water are frequently obliged to load and unload a part of their cargoes in the roads, where the anchorage is but indifferent, particularly when the wind is N. or N.W. A light-house, originally 75, but now 100 feet in height, has been erected on the N.E. side of the entrance to the harbour. The light, which is fixed and powerful, may be distinguished in clear weather at more than 20 miles distance. The outer buoy lies in 6 fathoms water, about a mile without the light-house, which bears from it S.E. by E. ¾ E. The channel thence to the harbour is marked by white buoys on the north, and red on the south side. Three beacons to the north of the town, when brought into a line, lead directly into the harbour. Inasmuch, however, as the channel is subject to frequent changes, both in depth and direction, it is always prudent, on arriving at the outer buoy, to heave to for a pilot; but this is not obligatory; and the Prussian authorities have issued directions for ships entering without a pilot, which may be found in Mr. Norie's *Sailing Directions for the Cattegat and Baltic*, p. 36.

Trade.—Timber forms the principal article of export; for though that of Dantzic be considered better, it is generally cheaper, and almost always more abundant, at Memel. It comes principally from the estates of Prince Radzivil, and is floated down the river in rafts. Here, as at Dantzic, the best quality of all sorts of wood articles is called *krohn*, or crown, the 2d *brack*, and the 3d *bracks brack*. Large quantities of hemp and flax are also exported, as are bristles, hides, linseed (the finest for crushing brought to England), wax, pitch and tar, &c. The exports of grain are sometimes very considerable. The wheat of Lithuania is reckoned the best. All flax and hemp shipped from Memel must be *bracked*, or assorted by sworn selectors.—(See FLAX, and HEMP.) The imports consist principally of coffee, sugar, spices, dye woods, tobacco, rum, cotton stuffs and yarn, cutlery, wine, &c. Merchants at Memel generally send their bills to Königsberg to be sold, charging their correspondents with 1 per cent. for bank commission, postages, &c. The navigation generally closes about the latter end of December, and opens about the middle of March.

Notwithstanding the difficulties which our corn laws and timber duties throw in the way of our commerce with Prussia, we have a very extensive intercourse with Memel. Our imports consist principally of fir timber, and the ships that go out are mostly only partially loaded, or in ballast. We subjoin an

Account of the Ships entering and clearing out from Memel in 1830, distinguishing those belonging to each Country, and those that entered and cleared out in Ballast.

Flags.		Ships.	Lasts.	Loaded.		In Ballast.	
				Ships.	Lasts.	Ships.	Lasts.
Danish	inward	22	1,744	7	541	15	1,203
	outward	21	1,722	21	1,722		
Mecklenburgh	inward	3	331	2	215	1	116
	outward	3	331	3	331		
Russian	inward	5	172	4	131	1	41
	outward	5	172	5	172		
Swedish	inward	5	544	2	150	3	394
	outward	5	544	3	394	2	150
Norwegian	inward	39	1,991	24	1,016	15	975
	outward	39	1,991	39	1,991		
British	inward	330	43,292	28	3,841	302	39,451
	outward	333	43,236	333	43,236		
Hanoverian	inward	35	2,314	10	416	25	1,898
	outward	35	2,314	35	2,314		
Oldenburgh	inward	14	517	3	100	11	417
	outward	14	517	14	517		
Netherlands	inward	32	2,286	5	251	27	2,035
	outward	32	2,286	32	2,286		
Prussian	inward	212	28,254	59	7,549	153	20,705
	outward	213	28,264	212	28,227	1	37
Total		1,397	162,822	841	95,400	556	67,422

The *Monies*, *Weights*, and *Measures* of Memel are the same as those of Dantzic; which see.

For further particulars see *Oddy's European Commerce*, pp. 220—224.; *Coulier sur les Phares*; *Ferber's New Contributions to a Knowledge of the Commercial State of the Prussian Monarchy* (Germ.), Berlin, 1832; *Jacob's First Report on the Agriculture of the North of Europe*, &c.

MERCURY, OR QUICKSILVER (Fr. *Vif argent*; Ger. *Quicksilber*; It. *Argento vivo*; Sp. *Azogue*; Rus. *Rtut*; Lat. *Hydrargyrum*; Arab. *Zibākh*; Hind. *Parah*; Sans. *Pārada*). This metal was known in the remotest ages, and seems to have been employed by the ancients in gilding, and separating gold from other bodies, just as it is by the moderns. Its colour is white, and similar to that of silver; hence the names of *hydrargyrum*, *argentum vivum*, *quicksilver*, by which it has been known in all ages. It has no taste or smell. It possesses a good deal of brilliancy; and when its surface is not tarnished, it makes a very good mirror. Its specific gravity is 13·568. It differs from all other metals in being always fluid, unless when subjected to a degree of cold equal to —39°, when it becomes solid. The congelation of mercury was first observed in 1759.—(*Thomson's Chemistry.*)

Mercury is found in various parts of the world. Among the principal mines are those of Almaden, near Cordova, in Spain; Idria, in Carnolia; Wolfstein and Morsfield, in the Palatinate; Guancavelica, in Peru, &c. "Most of the ores of mercury are readily distinguished from those of any other metal; in the 1st variety, globules of the metal are seen attached to or just starting on the surface, which is at once a sufficient criterion, mercury being unlike every other metal; in the 2d, by the fine white colour, and the action of the blow-pipe, which sublimes the mercury and leaves the silver behind; the 3d, by its beautiful deep red tint, varying from cochineal to scarlet red, excepting in those termed hepatic cinnabars, which are generally of a lead grey; the 4th, by its grey colour, its partial solubility in water, and its complete volatilisation by heat, emitting at the same time an arsenical odour. Before the blow-pipe, these varieties burn with a blue flame and sulphurous odour, leaving more or less residue behind them, and which may consist of earthy matter, as silex and alumina, together with the oxides of iron and copper."—(*Joyce's Chem. Min.*)

Mercury is often adulterated by the admixture of lead, bismuth, zinc, and tin. When the metal quickly loses its lustre, is covered with a film, or is less fluid and mobile than usual, or does not readily divide into round globules, there is reason to suspect its purity.

It is stated by Dr. A. T. Thomson, in his *Dispensatory*—a work generally distinguished for its accuracy—that most of the mercury used in this country is brought from Germany. But whatever may have been the case formerly, this is not certainly true at present. On the contrary, of 314,286 lbs. of quicksilver

imported in 1831, none was brought from Germany; 269,558 lbs. were brought direct from Spain, and 13,714 lbs. from Gibraltar; of the latter, a part was derived from Carniola, and a part from Spain: 31,014 lbs. were brought from Italy. Only 192,310 lbs. were retained for home consumption in 1831. — (*Parl. Paper*, No. 550. Sess. 1833.)

Quicksilver is produced in several of the provinces of China. During the war, when the intercourse between Europe and America was interrupted, the price of quicksilver rose to such a height in the latter, that it answered to import it from China. But since the peace it has been regularly exported to the latter. At an average of the 14 years ending with 1828, the imports of quicksilver by the English and Americans into Canton amounted to 648,085 lbs. a year, worth 340,262 dollars. — (*Lords' Report of* 1831, p. 657.)

There are 2 sulphurets of mercury; the black or *ethiops mineral*, and the red or *cinnabar*. When mercury and sulphur are triturated together in a mortar, the former gradually disappears, and the whole assumes the form of a black powder, denominated ethiops mineral. If this powder be heated red-hot, it sublimes; and on a proper vessel being placed to receive it, a cake is obtained, of a fine red colour, which is called cinnabar. This cake, when reduced to powder, is well known in commerce by the name of *vermilion*. Cinnabar may be prepared in various other ways.

Calomel, or protochloride of mercury (*mercurius dulcis*), is the most useful of all the preparations obtained from it. It is in the form of a dull white, semi-transparent mass, having a specific gravity of 7·176. It is more generally employed, and with better effect, than almost any other remedy in the whole range of the materia medica.

Besides its uses in medicine, mercury is extensively employed in the amalgamation of the noble metals, in water-gilding, the making of vermilion, the silvering of looking-glasses, the making of barometers and thermometers, &c.

MILE, the usual measure of roads in England, being 8 furlongs, or 1,760 yards.

MILK (Fr. *Lait*; It. *Latte*; Lat. *Lac*), a fluid secreted by the female of all those animals denominated *mammalia*, and evidently intended for the nourishment of her offspring. The milk of every animal has certain peculiarities which distinguish it from all other milk. But the animal whose milk is most used by man, and with which, consequently, we are best acquainted, is the cow. The external character of all milk is that of a white opaque fluid, having a sweetish taste, and a specific gravity somewhat greater than that of water. When allowed to remain at rest, it separates into 2 parts; a thick whitish fluid called *cream*, collecting in a thin stratum over its surface, and a more dense watery body, remaining below. Milk which has stood for some time after the separation of the cream, becomes acescent, and then coagulates. When the coagulum is pressed gently, a serous fluid is forced out, and there remains the caseous part of the milk, or pure cheese.

Butter, one of the most valuable animal products, is solidified cream, and is obtained artificially by churning. — (See Butter.)

Milk has always been a favourite food of most European nations, and especially of the British. *Lacte et carne vivunt*, says Cæsar of our ancestors; and the same articles still continue to form a large part of our subsistence. Mr. Middleton estimates (*Agricultural Survey of Middlesex*, 2d ed. p. 419.), that, in 1806, no fewer than 8,500 milch cows were kept for the supply of London and its environs with milk and cream; and he estimates the average quantity of milk obtained from each cow at *nine quarts* a day, or 3,285 quarts a year, leaving, every deduction being taken into account, 3,200 quarts of marketable produce.

If Mr. Middleton be well founded in these estimates, we may reasonably calculate the number of cows that are at present kept in London and its environs at 9,000, and their annual produce at 28,800,000 quarts of milk. Now, as milk is sold by the retailers at 4*d.* a quart after the cream is separated from it, and as the cream is usually sold at 3*s.* a quart, and there is reason to suspect that a good deal of water is intermixed with the milk, we believe we should not be warranted in estimating that the milk, as obtained from the cow, is sold at less than 6*d.* a quart, which gives 720,000*l.* as the total price of the milk consumed in the city and its immediate vicinity. If to this sum were added the further sums paid for cheese and butter, the magnitude of the entire sum paid in the metropolis for milk, and the various products derived from it, would appear astonishing.

MILLET (Ger. *Hirse*; Fr. *Millet*, *Mil*; It. *Miglio*, *Panicastrello*; Sp. *Mijo*; Lat. *Milium*, *Panicum miliaceum*). There are 3 distinct species of millet; the Polish millet, the common or German millet, and the Indian millet. It is cultivated as a species of grain; and is sometimes employed to feed poultry, and as a substitute for rice. The Indian millet grows to a large size; but the autumns in England are seldom dry and warm enough to allow of its being cultivated here. — (*Loudon's Ency. of Agriculture.*)

MILL-STONES (Ger. *Mühlsteine*; Fr. *Pierres meulières*; It. *Mole macine*; Sp. *Muelas de molino*; Rus. *Schernowoi kamen*), the large circular stones, which, when put in motion by machinery, grind corn and other articles. The diameter of common mill-stones is from 5 to 7 feet, and their thickness varies from 12 to 18 inches. These stones have been principally imported from Rouen and other parts of France; the burr-stones of that country being supposed more durable than our own. Mill-stones are, however, found at Conway, in North Wales, and in some parts of Scotland, which are said to equal any imported from foreign countries. Good mill-stones usually last 35 or 40 years.

"Milo," says Mr. Urquhart, "abounds in admirable mill-stones, which I believe answer better than the French burr for the hard wheat of the Black Sea, so much preferred in the Levant to the soft, though not so in England, for want of proper stones. These stones, of full dimensions, might be shipped at Milo

for 5*l.* or 6*l.* the pair. But were they brought here, they would be met with a duty of 11*l.* 8*s.* the pair, whereas French burrs, a pair of which cost 55*l.*, pay but 10*s.* the 100."— (*Turkey and its Resources*, p. 146.) This extraordinary difference in the duty depends on the stones being under or over 4 feet diameter. Surely, however, if a duty must be laid on such an article as mill-stones, common sense would suggest that it should be charged according to their weight or cubical contents. Were it not for the absurd way in which it is imposed, it is probable that stones from Milo might be brought home as ballast in some of the Turkey ships, all of which, except those loaded with currants and grain, are light.

MINING COMPANIES. By this designation is commonly meant the associations formed in London, a few years ago, for working mines in Mexico and South America.

The *mania* for mining concerns, which raged in London and the empire generally in 1824 and 1825, after the opening of Mexico and other parts of Spanish America to our intercourse, forms a remarkable, and, we are sorry to add, disgraceful era in our commercial history. Now that the madness is past, we have difficulty in conceiving how men in the habit of sober calculation could be led to entertain such romantic expectations, and to pay such high premiums for shares in distant and uncertain undertakings. We may, therefore, be excused for appropriating a page or two to the history of an infatuation hardly second to that which led to the South Sea and Mississippi schemes.

The mining companies formed at the outset had some sort of basis for favourable expectations, their directors having made contracts for a number of mines in Mexico, described by Humboldt as having enriched many hundred families. This particularly applies to the Real del Monte Company, whose mines are situated in the mountainous district of that name; to the Anglo-Mexican Company, whose mines are at Guanaxuato, the principal mining quarter in Mexico; and to the United Mexican Company, whose contracts, though far too widely spread, comprise several valuable mines at Zacatecas, Sombrerete, Guanaxuato, and other parts.

These associations were formed in London early in 1824, and during the spring and summer of that year their stock or shares bore only a small premium; but towards the winter it began progressively to rise, to the surprise of several of the directors; seeing that it arose less from any favourable intelligence of the mines (for the accounts from Mexico merely reported the arrival of the English agents) than from a blind ardour and spirit of speculation in the public, — a spirit which, seeing nothing tempting in our own funds, or in those of continental Europe, directed itself to distant objects, and particularly to Spanish America. It appeared as if our countrymen were about to reap an immediate harvest; to lay their hands on a treasure hid for ages. America, it was said, had been discovered, in one sense, above 3 centuries; but this was the true discovery, — the effectual access to its resources. Every new contract for a Mexican mine produced a rise in the shares of the companies, as if this fresh undertaking must necessarily be a source of profit to the others! And the result was, that in January, 1825, the premium on the shares of each of the companies mentioned above exceeded cent. per cent., although no substantial reason could be given for any advance whatever. It must not, however, be imagined that this rise of price was occasioned solely by the competition of individuals who intended to continue to hold stock, and to trust to the dividends made by the companies for a return. That this was the case in the first instance, is, speaking generally, true. But others, actuated by very different views, speedily entered the field. A peculiar combination of circumstances, at the head of which must be placed an almost incredible degree of ignorance and folly on the part of a considerable portion of the public, spread a spirit of gambling among all classes. Many who were most eager in the pursuit of shares, intended only to hold them for a few days or weeks, to profit by the rise which they anticipated would take place, by selling them to others more credulous or bold than themselves. The confidence of one set of speculators confirmed that of others. Meanwhile the public gullibility, or rather its indiscriminating rapacity, was liberally administered to. Company after company was formed without any previous contract; in other words, without any foundation whatever! The plan was to fix on a district in America understood to contain mines; to form a company bearing the name of such district; to obtain a first payment from the shareholders, and to send out agents, or commissioners, as they were termed, to survey the district and engage mines. Such was the case of most of those having the names of districts in South America, subjoined to the present statement: it was the case also of the Hispaniola or St. Domingo Company, formed on the basis of accounts given by Dr. Robertson of mines wrought in that island some 3 centuries ago! And yet lawyers, clergymen, and even the nobles of the land, were candidates for shares in these miserable bubbles, in the hope of finding (in which, luckily, most of them were disappointed) some dupe to buy their shares at a premium.*

* Those who may be desirous of seeing the extent to which the public credulity was practised upon in 1824 and 1825, may consult a pamphlet published by H. English, broker, in 1827, which contains an account of all the joint stock companies formed and projected in those memorable years. It presents a

As the year 1825 proceeded, the mining mania gradually declined, not from any falling off in the prospects of the companies, but in the supply of money in London. Speculative merchants had made immense importations of cotton, silk, wool, timber, and other articles; money was, of course, wanted to pay for these; the banks were drained; discounts became difficult; mining shares and South American stock were brought to sale; and the holders found, to their cost, that the public had recovered its senses. The panic in December, 1825, took place; the shares of the 3 principal companies, some of which had been at a premium of 500 per cent., fell to par: that is, 100*l.* in money, and no more, could be got for 100*l.* of the company's stock! This price they maintained a considerable time, because most of the parties interested continued to have a favourable impression of the issue of their undertakings. Demands, however, were made for additional sums to meet the expenditure abroad: the shareholders felt all the pressure of these demands, after their incomes at home had been reduced by the change of times; and in 1826 and 1827 mining shares progressively declined, so that 100*l.* stock fetched only 20*l.* or 25*l.* in money. The bubble companies were entirely destroyed, and the few only remained who had some foundation to stand upon.

Even these would have been relinquished, or have shrunk into very small dimensions, had not the directors been able to enforce further payments, by forfeiting, in default of such, whatever had been previously paid by the subscribers. The usage was, that on becoming a shareholder each person subscribed the deed of the company, engaging to pay, when called on, such instalments or sums to account (generally 10*l.* on each share) as should be required by the directors, until he had completed payment of the 100*l.* Now, a shareholder who had advanced 50*l.* or 60*l.* naturally consented to pay 10*l.* from time to time, rather than incur the forfeiture of all that he had paid. Those who held only a few shares felt this in a less degree; but to the holders of a number of shares, the grievance was most serious. They raised the money with great difficulty; often selling at a heavy loss their family property, or prevailing on relations to make them advances, to their great inconvenience, and, as far as can yet be seen, with very little prospect of a return from the mines; — a memorable lesson of the caution that should be exercised before signing any engagement in the nature of a company deed. Resentment would be excited against the directors, had they not been, in general, the heaviest sufferers: their regulations required them to hold a certain number of shares (perhaps 20 or 30); but in their blind confidence they frequently held 200 or 300, and drew on themselves a proportionate sacrifice; in several cases, the loss of their whole property.

The managers of the companies formed in the outset are chargeable with ignorance only: they trespassed not knowingly, but from want of information. There had till then been little communication between this country and Spanish America; the monopoly enforced by Old Spain having prevented it. Of the Spaniards settled in Mexico, and driven from it by the civil wars and consequent emancipation of the country, none, or almost none, found their way to this country; they repaired to Cuba, to the south of France, or to Spain. Nor were the published accounts of the country entitled to much confidence: Humboldt's Travels formed the chief authority; but their illustrious author, though generally cautious, seems, in this instance, to have placed too much confidence in vague exaggerated statements. Our merchants knew generally that silver mines formed a main branch of the productive industry of Mexico, and had enriched very many families originally in humble circumstances; but they had no idea of the extent of injury sustained by the mines during the civil war, nor of the amount of expenditure required to bring them into a working state: nor were they aware how little useful information could be expected from the natives; the working of the mines, like every operation requiring skill and intelligence, having been superintended by natives of Old Spain, who had either fallen in the civil war, or been expelled after the Mexicans succeeded in the contest. Hence, the agents of our companies found on the spot only native Mexicans, — men without education or experience in business, and, it must be added, without any due sense of the importance of candour or probity. They urged our countrymen to drain the mines, not by machinery, of which they had no idea, but by animal power, the use of which was of advantage to the Mexican landholders, by employing their horses, and creating a great consumption of maize, the principal grain of the country. Then, as to the last and most important stage in the business of mining, — the mode of extracting the silver from the ore, — the Mexicans, wholly unacquainted with the improvements made in Germany during the last half century, recommended amalgamation, — a process conducted by them in a very rude manner, and which, in most qualities of silver ore, fails to extract the whole, or any thing like the whole, of the

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most extraordinary picture. There were in all 74 mining companies formed and projected! The number and quality of the other schemes were similar. It is due to Mr. Baring to say that he denounced the evil when in progress; and warned the unthinking multitude of the ruin they were bringing upon themselves; but to no purpose.

metal. The object of the Mexicans, in short, was merely to cause English capital to be circulated among them; thus giving employment to their people for a time, and bringing the mines into an improved state, — in which state they (the Mexicans) might hope to resume them after our countrymen had exhausted their resources, or had become weary of their contracts.

Actuated by these views, the Mexicans pressed one undertaking after another on the agents of the companies, who were but too eager to enter on them without such incitement. All the companies fell into errors of the same kind, viz. engaging too many mines, and conducting them, for a time, as if their funds were unlimited. They reckoned on finding, as they proceeded, supplies in the produce of the mines; but that produce, though considerable in quantity, seldom yielded the expected result, owing to the very imperfect method of extracting the silver from the ore, as well as to the various disadvantages attendant on the vast distance of the undertakings from this country. These disadvantages were ill supplied by the agents of the companies. Mining in England is not conducted on a scale sufficient to afford any great choice of superintendents for mines abroad: it was necessary, in such appointments, to waive the qualification of mining knowledge, and to be satisfied with men of fair character and reputed ability in their respective professions, however different from mining. Hence the appointment, as agents, of several officers, *naval and military, on the half-pay list;* whose habits, whatever might be their personal merits, were very different from those required for such concerns. Mercantile men might have been more suitable; but a merchant fully employed in business was not likely to relinquish or suspend it; and those who in middle age are not fully employed, frequently are indebted for their leisure to vacillation, want of exertion, or deficient judgment. This suffices to account for the disappointments of the companies in a very material point — the conduct of their commissioners or agents abroad; for, of the whole number, it would be difficult to point out more than 2 or 3 entitled to the praise of judicious management. The same applied to most of the inferior *employés*, — to the practical miners, clerks, and mechanics.

The expense of conveying the requisite machinery from the coast of Mexico to the mining districts, generally at a great distance in the interior, absorbed much capital. The country has few practicable roads, draught carriages are almost unknown, and burdens are carried on the backs of mules and horses: add to this, that Mexico being under-peopled, labour is nearly as high in it as in the United States of North America; and the mechanical arts being in a manner unknown, all skilled workmen, such as carpenters, blacksmiths, and working engineers, had to be sent from England at a heavy expense.

Such were the chief causes of the failure of the Mexican mining companies; and several of these may be referred to one radical disadvantage — the non-existence of silver-mines in England. We have, in Cornwall and in North Wales, considerable mines of tin and copper, while in the northern counties we have mines of lead; but of silver we have none that deserve the name. How much better had it been had our countrymen set out with a consciousness that Germany is the only country in Europe, or, indeed, in the world, in which the treatment of silver ore is conducted on scientific principles! The Saxons at Freyberg succeed in extracting a profit from ore of very inferior quality, often worth only a fourth or fifth part of the ore raised in abundance by the Mexicans on account of our companies, but which, wrought by their crude, inefficient, and expensive process, fails to afford any thing like a satisfactory return. There seems no reason to doubt that the German process may be applied to silver ore in Mexico as in Europe: the difficulties arise, not from difference in the quality of the ore, but from the want of experienced smelters, and the general backwardness of the Mexicans in mechanics. A German mining company established in Mexico has not as yet succeeded; but they have had to contend with the same difficulties as the English companies, with the additional disadvantage of insufficient capital; so that their methods have not had a fair trial.

But though the companies were in all other respects successful, they have a serious drawback to contend with in the unsettled state of the country. No government has as yet been established in Mexico, or in any other of the newly constituted American states, with power sufficient to put down disturbances, or to enforce the observance of contracts. So long as the companies were struggling to put their mines into order, they seem to have sustained little inconvenience from the circumstances now mentioned; but the moment they had succeeded in bringing them once more into a productive state, and were beginning to have a reasonable prospect of obtaining some return for their enormous outlays, they were annoyed by questions as to title, and by the setting up of claims on the mines, of which they had never heard before. Recently, we understand, the claimants have occasionally had recourse to violence, and, in some instances, the companies' servants have been forcibly ejected from their works! We hope, though we can hardly say we believe, that these outrages may be repressed and punished. If they

be permitted to continue, it is difficult to see how the companies, how well soever they may be otherwise established, can escape ruin.

Without, however, pretending to anticipate the result of these remote speculations, we shall conclude with a brief notice of the considerations on both sides of the question. The circumstances adverse to the success of mining companies in America, conducted for account of parties in England or in any part of Europe, are—

1. The various disadvantages of distant management. These are so many and so serious, as to admit of only one corrective,—selling the ore as soon as raised, and transferring to individuals, for their own account, the extraction of the metal, as is done in Cornwall, and, in a somewhat different manner, in Saxony. The ores also ought to be raised by paying the workmen, not fixed wages, but a tribute or portion of the proceeds.

2. The half-civilised state of the inhabitants, their unsettled political condition, and the want of power or disposition on the part of the parties in power to make contracts be observed; and to hinder the former proprietors of the mines, or those connected with them, from setting up fictitious claims, and enforcing them by violence.

3. The high price of labour; the ignorance of the natives as to mechanics, and still more as to science. Hence the necessity of having artisans and confidential superintendents from Europe at a heavy expense.

On the other hand, the circumstances in favour of such undertakings are—

1. The abundance of silver ore, which is far greater than in any part of Europe.

2. The former success of mining in Mexico, under a system extremely rude and expensive, compared to that which is now followed in Germany.

3. The probability of continued peace in Europe, and of an abundance of monied capital; so that the failure of the present companies would not involve a relinquishment of their enterprises, any more than the failure of the first New River Company, about two centuries ago, implied an abandonment of their project. Succeeding adventurers might come forward, and pursue the same object on a more judicious plan, and with more ample funds.

4. The probability of Old Spain recognising the independence of Mexico and the other new States; and of the governments becoming more powerful and disposed to do justice.

English Mining Companies connected with America, which are still carried on.

United Mexican.
Real del Monte.
Bolanos. Anglo-Mexican.
Mexican.
Brazilian (two companies.)
Colombian.

The amount of capital invested by these companies is about 5,000,000*l.* sterling.

Mining Companies connected with America, formed in 1825, *but long since dissolved.*

Anglo-Chilian.
Anglo-Peruvian.
Bolivar. Chilian.
Chilian and Peruvian.
Castello. Famatina.
General South American.
Gold Coast (Africa).
Haytian. Pasco Peruvian.
Peruvian. Potosi La Par.
Rio de la Plata.
Tlalpuxahua.
United Pacific.

The sums raised by these companies were not large; in general only 5 per cent. on their proposed capital.

There were also various companies formed in 1825, for mining in England: they were to the number of 30 and upwards; but they proved in general abortions, with the exception of the British Iron Company (with works chiefly in Staffordshire), which has drawn a large sum from its shareholders.

The following extract from the *Share List* for the 12th of October, 1833, published by Mr. Edmonds, broker, gives an account of the existing mining companies; the number of shares in each; the sums paid on account of such shares; and their selling price, &c. It is an instructive commentary on the prospectuses and prices of 1825.

No. of Shares.	Mining Companies.	Amount of Share.	Average Cost.	Price per Share.	Dividend per Annum.	Dividend payable.
		L.	*L. s. d.*	*L. s. d.*	*L. s. d.*	
14,000	Anglo-Mexican	100	100 0 0 paid	12 0 0		
2,000	Bolanos	150	150 0 0 —	132 10 0	11 0 0	Oct. Jan.
10,000	Bolivar	50	20 0 0 —	13 0 0	- -	October.
10,000	Brazilian (issued at 5*l.* premium)	35	25 0 0 —	58 0 0	7 10 0	May, Nov.
7,058	Do.	15	1 10 0 —	5 0 0		
6,000	Do. (National)	25	20 0 0 —	23 10 0		
20,000	British Iron	50	50 0 0 —	27 10 0		
10,000	Colombian (issued at 5*l.* premium)	55	51 10 0 —	12 15 0		
20,000	General Mining	20	11 0 0 —	9 0 0		
9,204	Hibernian	50	10 0 0 —	3 10 0		
11,582	Real del Monte mines, Mexican	64	64 0 0 —	55 0 0		
30,000	United Mexican	40	40 0 0 —	13 0 0		
	Do. Scrip	-	2 0 0 —	2 0 0		
	United Mexican do. (New)	-	5 0 0 —	16 0 0		
20,000	Mining Company, Ireland	25	5 10 0 —	1 5 0		
5,000	Brazilian, St. John Del Rey	20	10 0 0 —	6 0 0		
2,850	English Mining Company	25	12 10 0 —	28 0 0	2 0 0	April, Oct.
6,155	Mexican Company	100	48 0 0 —	12 0 0		

MINIUM, OR RED OXIDE OF LEAD, a tasteless powder of an intense red colour, often inclining to orange, and very heavy; its specific gravity being 8·94. It is extensively used in the arts.

MOCHA, the principal port in the Red Sea frequented by Europeans, in that part of Arabia called Yemen, about 40 miles to the north of the Strait of Bab-el-mandeb, lat. 13° 19′ 30″ N., lon. 43° 20′ E. Population variously estimated; but may, perhaps, amount to from 5,000 to 7,000. It is encircled with walls, and indifferently fortified. Its appearance from the sea is imposing.

Mocha is situated on the margin of a dry sandy plain. It is built close to the shore, between 2 points of land which project and form a bay. Vessels drawing from 10 to 12 feet water may anchor within this bay at about a mile from the town; but large ships anchor without the bay in the roads, in 5 or 7 fathoms water—the grand mosque bearing E.S.E., and the fort to the south of the town S. by E., distant about two miles from the shore. The great article of export from Mocha is coffee, which is universally admitted to be of the finest quality. It is not possible to form any very accurate estimate of the quantity exported; but we believe it may be taken at 10,000 tons, or perhaps more. The greater portion is sent to Djidda and Suez; but there is a pretty large export to Bombay, and other parts of India, whence some is sent to Europe: occasionally, however, the exports from Mocha and Hodeida, direct for Europe, are very considerable. Besides coffee, the principal articles of export are, dates, adjoue, or paste made of dates, myrrh, gum Arabic, olibanum, senna (*cassia senna*), sharks' fins, tragacanth,

horns and hides of the rhinoceros, balm of Gilead, ivory, gold dust, civet, aloes, sagapenum, &c. The principal articles of import are, rice, piece goods, iron and hardware, &c. The ivory, gold dust, and civet, met with at Mocha, are brought from the opposite coast of Abyssinia; whence are also brought slaves, ghee, &c.

The greater part of the foreign trade of Mocha is transacted by the Banians; and it is much safer to deal with them than with either Turks or Arabs. Europeans pay a duty of 3 per cent. *ad valorem* on all goods imported by them from Europe, India, or China; the duty being levied on the amount of the sales. The buyer pays brokerage, cooley and boat hire. All kinds of foreign goods are sold on credit, and the payment is made in 3 instalments, or at a certain day, according as may have been agreed on. Coffee is always paid for in ready money. On the sale of other goods, the produce of the country, a credit is given; or if ready money be paid, a discount is allowed at the rate of 9 per cent. When goods are discharging, the master must furnish the Custom-house officer with a manifest, or account of the marks, numbers, and contents of each package. He then opens two or three bales, taken at random; and if they correspond with the account delivered, no further examination is made; but if they do not correspond, the whole bales are opened, and double duty is charged upon the excess. The quantities being thus ascertained, their value is learned from the account of sales rendered by the seller, and the duty charged accordingly. In this respect there is nothing to object to at Mocha; but a good deal of extortion is practised in the exaction of port charges, presents, &c., which may, however, be defeated by proper firmness. The port charges on ships, or *three-mast* vessels, may amount to about 400 Mocha dollars, and those on brigs to about half as much. Provisions are plentiful and cheap; but water is dear: that in the vicinity being brackish and unwholesome, whatever is used for drinking, by all but the poorest persons, is brought from Mosa, about 20 miles off. Fish are abundant and cheap, but not very good.

Money.—The current coins of the country are carats and commassees: 7 carats = 1 commassee; 60 commassees = 1 Spanish dollar; 100 Spanish dollars = 12⅔ Mocha dollars.

Weights and Measures.—The commercial weights are—

15 Vakias = 1 Rottolo = 1 lb. 2 oz. avoird.	10 Maunds = 1 Frazel = 30 lbs. avoird.
40 Vakias = 1 Maund = 3 lbs. avoird.	15 Frazels = 1 Bahar = 450 lbs. avoird.

There is also a small maund of only 30 vakias: 1 Mocha bahar = 16½ Bombay maunds; 1 Mocha bahar = 13 Surat maunds = 15·123 seers. Grain is measured by the kellah, 40 of which = 1 tomand, about 170 lbs. avoirdupois. The liquid measures are 16 vakias = 1 nusseah; 8 nusseahs = 1 cuda, about 2 English wine gallons. The long measures are the guz = 25 English inches; the hand covid = 18 inches, and the long iron covid = 27 inches.

In compiling this article, we made use of *Milburn's Oriental Commerce*, and *Elmore's Directory*. Niebuhr has given a plan of the port of Mocha in his *Voyage en Arabie*, tome i. p. 348. ed. Amst. 1776. He has also given some details as to its trade in his *Description de l'Arabie*, p. 191. But the best account we have seen of Mocha is in *Hamilton's Account of the East Indies* (vol. i. pp. 40—52.), an accurate and valuable work. Burckhardt did not visit Mocha; which is much to be regretted.

MOGADORE, a sea-port town on the west coast of Morocco, lat. 31° 50′ N., lon. 9° 20′ W. Population about 10,000. It is indifferently fortified; the country in the immediate vicinity is low, flat, sandy, and unproductive. Water is scarce and rather dear; being either rain water collected and preserved in cisterns, or brought from a river about 1½ mile distant. The port is formed by a small island lying to the southward of the town; but as there is not more than 10 or 12 feet water in it at ebb tide, large ships anchor without, the long battery bearing E. distant 1½ mile. The city of Morocco derives its most considerable supplies of European articles from Mogadore, from which it is distant about 4 days' journey (caravan travelling). The principal imports are, English woollen and cotton stuffs and hardware, German linens, tin, copper, earthenware, mirrors, glass, sugar, pepper, paper, and a variety of other articles. The exports principally consist of sweet and bitter almonds, gum Arabic, and other gums, bees' wax, cow and calf skins, ivory, ostrich feathers, gold dust, olive oil, dates, &c.

Money.—Accounts are kept in nutkeels of 10 ounces; the ounce being divided into 4 blankeels, and the blankeel into 24 fluce. From their proportion to the Spanish dollar, the blankeel may be valued at 1*d.*, the ounce at 4*d.*, and the nutkeel or ducat at 3*s.* 4*d.*

Weights and Measures.—The commercial pound is generally regulated by the weight of 20 Spanish dollars; and, therefore, 100 lbs. Mogadore weight, or the quintal, = 119 lbs. avoirdupois. The market pound for provisions is 50 per cent. heavier, or 1 lb. 12⅔ oz. avoirdupois.

The corn measures are for the most part similar to those of Spain, but there are considerable discrepancies.

The cubit, or canna, = 21 English inches, is the principal long measure.

The most ample details with respect to the trade of Mogadore, and the trade and productions of Morocco in general, may be found in *Jackson's Account of Morocco*, c. 6, 7. and 13.; see also *Kelly's Cambist.*

MOHAIR (Ger. *Mohr;* Fr. *Moire;* It. *Moerro;* Sp. *Mue, Muer*), the hair of a variety of the common goat, famous for being soft and fine as silk, and of a silvery whiteness. It is not produced any where but in the vicinity of Angora, in Asia Minor. The exportation of this valuable and beautiful article, unless in the shape of yarn, was formerly prohibited; but it may now be exported unspun. The production, preparation, and sale of mohair have long engrossed the principal attention of the inhabitants of Angora; and it used to form an important article of Venetian commerce. It is manufactured into camlets and other expensive stuffs. Hitherto but little has been imported into England.—(See, for further particulars, *Tournefort, Voyage du Levant*, tome ii. p. 463., where there is a figure of the goat; and *Urquhart on Turkey and its Resources*, p. 184.)

MOLASSES, OR MELASSES (Fr. *Sirop de Sucre, Melasses;* Ger. *Syrup;* It. *Mielazzo di zucchero;* Sp. *Miel de azucar, Chancaca;* Port. *Melasso, Assucar liquido;* Rus. *Patoka sacharnaja*), the uncrystallisable part of the juice of the sugar cane, separated from the sugar during its manufacture. It is of a brown or black colour, thick, and viscid; has a peculiar odour, and a sweet empyreumatic taste. Molasses imported from the West India colonies and the Mauritius is charged, on being entered for home consumption, with a duty of 9*s.* a cwt. It is not, however, used in its original state,

but is purchased by the sugar-bakers, who, when it is of an ordinary degree of strength, extract from it a coarse, soft species of sugar called bastards, and treacle. But it is obvious, inasmuch as the duty on molasses is fixed, that the duty on the sugar extracted from it will vary indirectly according to the quantity of saccharine matter which it contains; and we understand that, in consequence, molasses is frequently imported so rich as to yield excellent crystallised sugar. We do not know whether the practice has been carried to such an extent as materially to injure the revenue; but it seems pretty clear that the duty ought to be made to depend, in part at least, on the quality of the molasses, or on the quantity of saccharine matter which it contains, as well as on the weight. It is difficult, — unless advantage has been taken of the way in which the duty is assessed, to elude the sugar duties, — to account for the increased importation of molasses.

About 8 gallons of proof spirit may, it is said, be obtained from a cwt. of molasses, such as has recently been imported; but this depends, of course, wholly on the richness of the molasses.

Part of the refuse that remains after refining muscovado sugar, is a sweet syrup, which, as well as the syrup that remains after boiling molasses to obtain bastards, is called treacle. But the treacle obtained from the former is always preferred to that obtained from the latter, and fetches 2*s.* per cwt. more.

Molasses is sometimes used in preparing the coarser sort of preserves; and on the Continent it is extensively used in the manufacture of tobacco.

Account of the Quantities of Molasses imported, exported, and entered for Home Consumption since 1820, with the Rates of Duty thereon, and the Produce of the Duty. — (*Papers published by Board of Trade.*)

Years.	Quantity imported.	Quantity exported.	Quantity cleared for Consumption.	Duty on, from Foreign Parts.	Duty on, from British Possessions.	Nett Revenue.
	Cwt.	*Cwt.*	*Cwt.*	*Per Cwt.* L. *s.* *d.*	*Per Cwt.* *s.*	*L.*
1820	39,991	39,991	6,314	1 3 9	10	13,908
1821	58,185	1,795	57,141	—	—	28,519
1822	76,298	749	78,367	—	—	39,279
1823	189,968	868	161,243	—	—	80,622
1824	239,088	1,750	239,540	—	—	119,740
1825	355,592	883	332,454	—	—	166,255
1826	290,504	5,488	279,749	—	—	139,959
1827	392,444	928	412,665	—	—	206,332
1828	516,708	441	381,761	—	—	190,852
1829	394,432	2,312	386,142	—	—	193,072
1830	250,648	4,824	337,588	—	9	159,683
1831	332,876	656	348,626	—	—	156,883
1832	565,685	1,120	566,689	—	—	254,651

In 1833, the consumption was, we understand, considerably larger. The imports of foreign molasses are quite inconsiderable.

MONEY. When the division of labour was first introduced, commodities were directly bartered for each other. Those, for example, who had a surplus of corn, and were in want of wine, endeavoured to find out those who were in the opposite circumstances, or who had a surplus of wine and wanted corn, and then exchanged the one for the other. It is obvious, however, that the power of changing, and, consequently, of dividing employments, must have been subjected to perpetual interruptions, so long as it was restricted to mere barter. A. carries produce to market, and B. is desirous to purchase it; but the produce belonging to B. is not suitable for A. C., again, would like to buy B.'s produce, but B. is already fully supplied with the equivalent C. has to offer. In such cases — and they must be of constant occurrence wherever money is not introduced — no direct exchange could take place between the parties; and it might be very difficult to bring it about indirectly.*

The extreme inconvenience attending such situations must early have forced themselves on the attention of every one. Efforts would, in consequence, be made to avoid them; and it would speedily appear that the best or rather the only way in which this could be effected, was to exchange either the whole or a part of one's surplus produce for some commodity of known value, and in general demand; and which, consequently, few persons would be inclined to refuse to accept as an equivalent for whatever they had to dispose of. After this commodity had begun to be employed as a means of exchanging other commodities, individuals would become willing to purchase a greater quantity of it than might be required to pay for the products they were desirous of immediately obtaining; knowing that should they, at any future period, want a further supply either of these or other articles, they would be able readily to procure them in exchange for this universally desired commodity. Though at first circulating slowly and with difficulty, it would, as the advantages arising from its use were better appreciated, begin to pass freely

* The difficulties that would arise on such occasions, and the devices that would be adopted to overcome them, have been very well illustrated by Colonel Torrens, in his work on the "Production of Wealth," p. 291.

from hand to hand. Its value, as compared with other things, would thus come to be universally known; and it would at last be used, not only as the common medium of exchange, but as a standard by which to measure the value of other things.

Now this commodity, whatever it may be, is *money*.

An infinite variety of commodities have been used as money in different countries and periods. But none can be advantageously used as such, unless it possess several very peculiar qualities. The slightest reflection on the purposes to which it is applied, must, indeed, be sufficient to convince every one that it is indispensable, or, at least, exceedingly desirable, that the commodity selected to serve as money should, (1) be divisible into the smallest portions; (2) that it should admit of being kept for an indefinite period without deteriorating; (3) that it should, by possessing great value in small bulk, be capable of being easily transported from place to place; (4) that one piece of money, of a certain denomination, should always be equal, in magnitude and quality, to every other piece of money of the same denomination; and (5) that its value should be comparatively steady, or as little subject to variation as possible. Without the *first* of these qualities, or the capacity of being divided into portions of every different magnitude and value, money, it is evident, would be of almost no use, and could only be exchanged for the few commodities that might happen to be of the same value as its indivisible portions, or as whole multiples of them: without the *second*, or the capacity of being kept or hoarded without deteriorating, no one would choose to exchange commodities for money, except only when he expected to be able speedily to re-exchange that money for something else: without the *third*, or facility of transportation, money could not be conveniently used in transactions between places at any considerable distance: without the *fourth*, or perfect sameness, it would be extremely difficult to appreciate the value of different pieces of money: and without the *fifth* quality, or comparative steadiness of value, money could not serve as a standard by which to measure the value of other commodities; and no one would be disposed to exchange the produce of his industry for an article that might shortly decline considerably in its power of purchasing.

The union of the different qualities of comparative steadiness of value, divisibility, durability, facility of transportation, and perfect sameness, in the precious metals, doubtless, formed the irresistible reason that has induced every civilised community to employ them as money. The value of gold and silver is certainly not invariable, but, generally speaking, it changes only by slow degrees; they are divisible into any number of parts, and have the singular property of being easily reunited, by means of fusion, without loss; they do not deteriorate by being kept; and, from their firm and compact texture, they are very difficult to wear. Their cost of production, especially that of gold, is so considerable, that they possess great value in small bulk, and can, of course, be transported with comparative facility; and an ounce of pure gold or silver, taken from the mines in any quarter of the world, is precisely equal, in point of quality, to an ounce of pure gold or silver dug from the mines in any other quarter. No wonder, therefore, when all the qualities necessary to constitute money are possessed in so eminent a degree by the precious metals, that they have been used as such, in civilised societies, from a very remote era. "They became universal money," as M. Turgot has observed, "not in consequence of any arbitrary agreement among men, or of the intervention of any law, but by the nature and force of things."

When first used as money, the precious metals were in an unfashioned state, in bars or ingots. The parties having agreed about the quantity of metal to be given for a commodity, that quantity was then weighed off. But this, it is plain, must have been a tedious and troublesome process. Undoubtedly, however, the greatest obstacle that would be experienced in early ages to the use of gold and silver as money, would be found to consist in the difficulty of determining the degree of their purity with sufficient precision; and the discovery of some means by which their weight and fineness might be readily and correctly ascertained, would be felt to be indispensable to their extensive use as money. Fortunately, these means were not long in being discovered. The fabrication of coins, or the practice of impressing pieces of the precious metals with a stamp indicating their weight and purity, belongs to the remotest antiquity.—(*Goguet, De l'Origine des Loix, &c.* tome i. p. 269.) And it may safely be affirmed, that there have been very few inventions of greater utility, or that have done more to accelerate the progress of improvement.

It is material, however, to observe, that the introduction and use of coined money make no change whatever in the *principle* on which exchanges were previously conducted. The coinage saves the trouble of weighing and assaying gold and silver, but it does nothing more. It declares the weight and purity of the metal in a coin; but the *value* of that metal or coin is in all cases determined by precisely the same principles which determine the value of other commodities, and would be as little affected by being recoined with a new denomination, as the burden of a ship by a change of her name.

Inaccurate notions with respect to the influence of coinage seem to have given rise to the opinion, so long entertained, that coins were merely the *signs* of values! But it is clear they have no more claim to this designation than bars of iron or copper, sacks of wheat, or any other commodity. They exchange for other things, because they are desirable articles, and are possessed of real intrinsic value. A draft, check, or bill, may not improperly, perhaps, be regarded as the sign of the money to be given for it. But that money is nothing but a commodity; it is not a sign — it is the thing signified.

Money, however, is not merely the universal equivalent, or *marchandise banale*, used by society: it is also the *standard* used to compare the values of all sorts of products; and the stipulations in the great bulk of contracts and deeds, as to the delivery and disposal of property, have all reference to, and are commonly expressed in, quantities of money. It is plainly, therefore, of the utmost importance that its value should be preserved as invariable as possible. Owing, however, to improvements in the arts, the exhaustion of old mines and the discovery of new ones, the value of the precious metals is necessarily inconstant: though, if we except the effects produced in the 16th century by the discovery of the American mines, it does not appear to have varied so much at other times as might have been anticipated. Great mischief has, however, been repeatedly occasioned by the changes that have been made in most countries in the weight, and sometimes also in the purity, of coins; and since the impolicy of these changes has been recognised, similar, and perhaps still more extensive, disorders have sprung from the improper use of substitutes for coins. It is, indeed, quite obvious, that no change can take place in the value of money, without proportionally affecting the pecuniary conditions in all contracts and agreements. Much, however, of the influence of a change depends on its direction. An increase in the value of money is uniformly more prejudicial in a public point of view than its diminution: the latter, though injurious to individuals, may sometimes be productive of national advantage; but such can never be the case with the former. — (See my *Principles of Political Economy*, 2d ed. pp. 500—504.)

No certain estimate can ever be formed of the quantity of money required to conduct the business of any country; this quantity being, in all cases, determined by the value of money itself, the services it has to perform, and the devices used for economising its employment. Generally, however, it is very considerable; and when it consists wholly of gold and silver, it occasions a very heavy expense. There can, indeed, be no doubt that the wish to lessen this expense has been one of the chief causes that have led all civilised and commercial nations to fabricate a portion of their money of some less valuable material. Of the various substitutes resorted to for this purpose, paper is, in all respects, the most eligible. Its employment seems to have grown naturally out of the circumstances incident to an advancing society. When government becomes sufficiently powerful and intelligent to enforce the observance of contracts, individuals possessed of written promises from others, that they will pay certain sums at certain specified periods, begin to assign them to those to whom they are indebted; and when the subscribers are persons of fortune, and of whose solvency no doubt can be entertained, their obligations are readily accepted in payment of debts. But when the circulation of promises, or bills, in this way, has continued for a while, individuals begin to perceive that they may derive a profit by issuing them in such a form as to fit them for being readily used as a substitute for money in the ordinary transactions of life. Hence the origin of bank notes. An individual in whose wealth and discretion the public have confidence, being applied to for a loan, say of 5,000*l.*, grants the applicant his bill or note, payable on demand, for that sum. Now, as this note passes, in consequence of the confidence placed in the issuer, currently from hand to hand as cash, it is quite as useful to the borrower as if it had been gold; and supposing that the rate of interest is 5 per cent., it will yield, so long as it continues to circulate, a revenue of 250*l.* a year to the issuer. A banker who issues notes, coins, as it were, his credit. He derives the same revenue from the loan of his written promise to pay a certain sum, that he could derive from the loan of the sum itself, or of an equivalent amount of produce! And while he thus increases his own income, he, at the same time, contributes to increase the wealth of the public. The cheapest species of currency being substituted in the place of that which is most expensive, the superfluous coins are either used in the arts, or are exported in exchange for raw materials or manufactured goods, by the use of which both wealth and enjoyments are increased. Ever since the introduction of bills, almost all great commercial transactions have been carried on by means of paper only. Notes are also used to a very great extent in the ordinary business of society; and while they are readily exchangeable at the pleasure of the holder for coins, or for the precise quantities of gold or silver they profess to represent, their value is maintained on a par with the value of these metals; and all injurious fluctuations in the value of money are as effectually avoided as if it consisted wholly of the precious metals.

In common mercantile language, the party who exchanges money for a commodity

is said to buy; the party who exchanges a commodity for money being said to sell. Price, unless where the contrary is distinctly mentioned, always means the value of a commodity estimated or rated in money.—(For a further account of metallic money, see the article Coin; and for an account of paper money, see the article Banks.)

MONOPOLY. By this term is usually meant a grant from the Crown, or other competent authority, conveying to some one individual, or number of individuals, the sole right of buying, selling, making, importing, exporting, &c. some one commodity, or set of commodities. Such grants were very common previously to the accession of the House of Stuart, and were carried to a very oppressive and injurious extent during the reign of Queen Elizabeth. The grievance became at length so insupportable, that notwithstanding the opposition of government, which looked upon the power of granting monopolies as a very valuable part of the prerogative, they were abolished by the famous act of 1624, the 21 Jac. 1. c. 3. This act declares that all monopolies, grants, letters patent for the sole buying, selling, and making of goods and manufactures, shall be null and void. It excepts patents for *fourteen* years for the sole working or making of any new manufactures within the realm, to the true and first inventors of such manufactures, provided they be not contrary to law, nor mischievous to the state. It also excepts grants by act of parliament to any corporation, company, or society, for the enlargement of trade, and letters patent concerning the making of gunpowder, &c. This act effectually secured the freedom of industry in Great Britain; and has done more, perhaps, to excite the spirit of invention and industry, and to accelerate the progress of wealth, than any other in the statute book.

MOROCCO, or MAROQUIN (Ger. *Saffiam*; Fr. *Maroquin*; It. *Marrocchino*; Sp. *Marroqui*; Rus. *Safian*), a fine kind of leather prepared of the skins of goats, imported from the Levant, Barbary, Spain, Flanders, &c. It is red, black, green, yellow, &c. It is extensively used in the binding of books.

MUNJEET, a species of *Rubia tinctorum*, or madder, produced in Nepaul and in various districts of India. That which is brought to England is imported from Calcutta, and is cultivated in the high lands about Natpore in Purneah. The roots are long and slender, and when broken appear of a red colour. It is used in dyeing; the red which it produces being, though somewhat peculiar, nearly the same as that produced by European madder. Dr. Bancroft says, that the colour which it imparts to cotton and linen is not so durable as that of madder; but that upon wool or woollen cloth its colour is brighter and livelier; and, when proper mordants are used, nearly, perhaps quite, as permanent.—(*Permanent Colours*, vol. ii. p. 279.) The best munjeet is in pieces about the bigness of a small quill, clean and firm, breaking short, and not pipy or chaffy. Its smell somewhat resembles liquorice root.

Being a very bulky article, as compared with its value, the freight adds greatly to its cost. This seems to be the principal reason of its being so very little used in Great Britain, that the entire imports, during the 3 years ending with 1832, amounted to only 3,897 cwt. In 1824, 4,023 cwt. were imported; this increased importation being accounted for by the then comparatively low rate of freight.—(*Parl. Papers*, No. 22. Sess. 1830, and No. 425. Sess. 1833.) The brokers estimate that 4*l.* per ton of freight is equal to 11*s.* 1*d.* per cwt. on the value of the article; 5*l.* per ton being equal to 13*s.* 10*d.*; 6*l.* to 16*s.* 7*d.*; and 7*l.* to 19*s.* 4*d.*; and as the price of munjeet in bond varies from 20*s.* to 25*s.* a cwt., it is plain it cannot be imported in any considerable quantity, except when freights are very much depressed. It is mostly imported in small packets or bundles of 600 or 800 to the ton; but sometimes it is packed in bales like cotton.

MUSCAT, a city and sea-port situated on the east coast of Arabia, about 96 miles N. W. of Cape Rasselgate (Ras-el-had), in lat. 23° 38′ N., lon. 58° 37½′ E. Population uncertain; but estimated by Mr. Fraser at from 10,000 to 12,000; of these 1,000 may be Hindoos from Sinde, Cutch, and Guzerat, the rest being Arabs and negro slaves. The latter are numerous, and are generally stout, well made, and active.

The harbour, which is the best on this part of the Arabic coast, opens to the north, and is shaped like a horse-shoe. It is bounded on the W. and S. by the lofty projecting shores of the mainland, and on the E. by Muscat Island, a ridge of rocks from 200 to 300 feet high. The town stands on a sandy beach at the south end or bottom of the cove or harbour, about 1¼ mile from its mouth. The depth of water near the town varies from 3 to 4 and 5 fathoms. Ships at anchor are exposed to the north and north-west winds; but as the anchorage is every where good, accidents are of very rare occurrence. The harbour is protected by some pretty strong forts. Vessels are not allowed to enter after dusk, nor to leave before sunrise. If the usual signal be made for a pilot, one will come off, but not otherwise. It is best to make them attend till the vessel be secured, as they have excellent boats for carrying out warp anchors.

Muscat is a place of considerable importance, being at once the key to, and commanding the trade of, the Persian Gulf. The dominions of the imaum, or prince, are extensive, and his government is more liberal and intelligent than any other in Arabia or Persia. The town, situated at the bottom of a high hill, is ill-built and filthy; and, during the months of July and August, is one of the hottest inhabited places in the world. The country in the immediate vicinity of the town is extremely barren; but it improves as it recedes from the shore. Dates and wheat, particularly the first, are the principal articles of produce. The dates of this part of Arabia are held in high estimation, and are largely exported, those of Bushire and Bussorah being imported in their stead. A date tree is valued at from 7 to 10 dollars, and its annual produce at from 1 to 1½ dollar. An estate is said to be worth 2,000, 3,000, or 4,000 date trees, according to the number it possesses.

But the place derives its whole importance from the commerce and navigation of which it is the centre. The imaum has some large ships of war, and his subjects possess some of the finest trading vessels to be met with in the Indian seas. The part of Arabia adjoining to Muscat is too poor to have any very considerable direct trade; but owing to its favourable situation, the backward state of the country round the Persian Gulf, and the superiority of its ships and seamen, Muscat has become an important *entrepôt*, and

has an extensive transit and carrying trade. Most European ships bound for Bussorah and Bushire touch at it; and more than half the trade of the Persian Gulf is carried on in ships belonging to its merchants. — (See Bushire.) But, exclusive of the ports on the gulf, and the south and west coasts of Arabia, ships under the flag of the imaum trade to all the ports of British India, to Singapore, Java, the Mauritius, the east coast of Africa, &c. The pearl trade of the Persian Gulf is now, also, wholly centered at Muscat. All merchandise passing up the gulf on Arab bottoms, pays a duty of ½ per cent to the imaum. He also rents the islands of Ormuz and Kishmee, the port of Gombroon, and some sulphur mines from the Persian government.

In the magazines of Muscat may be found every species of produce imported into, or exported from the Persian Gulf. Various articles are also imported for the use of the surrounding country, and for the internal consumption of Arabia. Among these, the principal are rice, sugar, coffee from Mocha, cotton and cotton cloth, cocoa nuts, wood for building, slaves from Zanguebar, dates from Bushire and Bussorah, &c. Payment for these is chiefly made in specie and pearls; but they also export drugs of various descriptions, ivory, gums, hides, ostrich feathers, horses, a sort of earthen jars, called martuban, to Tranquebar, dried fish, an esteemed sweetmeat called *halwah*, and a few other articles.

The markets of Muscat are abundantly supplied with all sorts of provision. Beef, mutton, and vegetables of good quality may be had at all times, and reasonably cheap. The bay literally swarms with the greatest variety of most excellent fish. Water is excellent, and is conveyed to the beach in such a manner that the casks of a vessel may be filled in her boats while afloat. Fire-wood is also abundant, and it cheaper than at Bombay.

Mohammedans pay a duty of 2½ per cent. on imports and exports; and all other nations pay 5 per cent.

Money, Weights, and *Measures*.—Accounts here are kept in goz and mamoodies: 20 goz = 1 mamoody; and 20 mamoodies = 1 dollar. All Persian, Turkish, and Indian coins, as well as French and German crowns, and Spanish dollars, are met with; their value fluctuating with the demand; and they are generally sold by weight.

The weights are, the cucha and maund; 24 cuchas = 1 maund = 8 lbs. 12 oz. avoirdupois.

Niebuhr thinks, that Muscat occupies the site of the Mosca of Arrian and other Greek writers—(*Voyage en Arabie*, vol. ii. p. 71. ed. Amst. 1780.); a conjecture which seems to be confirmed, not merely by the resemblance of the name, but also by the terms applied by Arrian to Mosca being sufficiently descriptive of Muscat; and as the port is bounded on all sides by rocks, it must now present almost the same appearance as in antiquity. Dr. Vincent, however, though he speaks doubtfully on the subject, is inclined to place Mosca to the west of Cape Rasselgate.—(*Commerce and Navigation of the Ancients*, vol. ii. pp. 344—347. For further particulars, besides the authorities above referred to, see *Hamilton's New Account of the East Indies*, vol. i. p. 63.; *Frazer's Journey to Khorasan*, pp. 5—19.; *Milburn's Orient. Com., &c.* The longitude given above is that of *Arrowsmith's Chart of the Persian Gulf*.)

MUSK (Fr. *Musc*; Ger. *Bisam*; Du. *Muskus*; It. *Muschio*; Sp. *Almizele*; Rus. *Muscus*; Arab. and Pers. *Mishk*) is obtained from a species of deer (*Moschus moschiferus*) inhabiting the Alpine mountains of the east of Asia. The musk is found in a small bag under the belly. Musk is in grains concreted together, dry, yet slightly unctuous, and free from grittiness when rubbed between the fingers or chewed. It has a peculiar, aromatic, and extremely powerful and durable odour; the taste is bitterish and heavy; and the colour deep drown, with a shade of red. It is imported into England from China, in caddies containing from 60 to 100 oz. each; but an inferior kind is brought from Bengal, and a still baser sort from Russia. The best is that which is in the natural follicle or pod. Being a very high-priced article, it is often adulterated. That which is mixed with the animal's blood may be discovered by the largeness of the lumps or clots. It is sometimes mixed with a dark, highly coloured, friable earth; but this appears to the touch to be of a more crumbling texture, and is harder as well as heavier than genuine musk. 20 cwt. of musk are allowed to a ton. It is not permitted to be brought home in the China ships belonging to the East India Company, but may be imported in others. — (*Thomson's Dispensatory*; *Milburn's Orient. Com.*) At an average of the 3 years ending with 1832, the imports of musk, from all places eastward of the Cape of Good Hope, with the exception of China, amounted to 4,965 oz. a year. — (*Parl. Paper*, No. 425. Sess. 1833.)

MUSLIN (Ger. *Musselin, Nesseltuch*; Du. *Neteldoek*; Fr. *Mousseline*; It. *Mussolina*; Sp. *Moselina*; Rus. *Kissea*), is derived from the word *mousale* or *mouseln*, a name given to it in India, where large quantities are made. It is a fine thin sort of cotton cloth, with a downy nap on the surface. Formerly all muslins were imported from the East; but now they are manufactured in immense quantities at Manchester, Glasgow, &c., of a fineness and durability which rival those of India, at the same time that they are very considerably cheaper. — (See Cotton.)

MUSTARD (Ger. *Mustert, Senf*; Fr. *Moutarde*; It. *Mostarda*; Sp. *Mostaza*; Rus. *Gortschiza*; Lat. *Sinapis*; Arab. *Khîrdal*; Hind. *Rāi*), a plant (*Sinapis*) of which there are several species, some of them indigenous to Great Britain. It was formerly extensively cultivated in Durham, but it is now seldom seen in that county. At present it is principally raised in the neighbourhood of York, and throughout other parts of the North Riding; and being manufactured in the city of York, is afterwards sold under the name of Durham mustard. Two quarters an acre are reckoned a good crop. Mustard is of considerable importance in the materia medica, and is extensively used as a condiment. It was not, however, known, in its present form, at our tables, till 1720. The seed had previously been merely pounded in a mortar, and in that rude state separated from the integuments and prepared for use. But, at the period referred to, it occurred to a woman of the name of Clements, residing in Durham, to grind the seed in a mill, and to treat the meal in the same way that flour is treated. Her mustard was, in consequence, very superior; and, being approved by George I., speedily came into general use. Mrs. Clements kept her secret for a considerable time, and acquired

a competent fortune. In Bengal, and other Eastern countries, mustard is extensively cultivated, as rape is in Europe, for the purpose of yielding oil.—(*Bailey's Survey of Durham*, p. 147.; *Loudon's Ency. of Agric.*)

MYROBALANS, are dried fruits of the plum kind, occasionally brought from Bengal and other parts of India. There are said to be 5 different species. They vary from the size of olives to that of gall nuts; have an unpleasant, bitterish, austere taste; produce, with iron, a strong, durable, black dye and ink; and with alum, a very full, though dark, brownish yellow. They are used in calico printing and medicine by the Hindoos. They have also been employed, though to a comparatively trifling extent, in the arts, and in pharmacy, in Europe; but they are now discarded from our Pharmacopœias.—(*Lewis's Mat. Med.*; *Bancroft on Permanent Colours*, vol. i. p. 351.)

MYRRH (Ger. *Myrrhen*; Du. *Mirrhe*; Fr. *Myrrhe*; Ital. and Sp. *Mirra*; Lat. *Myrrha*; Arab. *Murr*), a resinous substance, the produce of an unknown tree growing in Arabia and Abyssinia. It is imported in chests, each containing from 1 to 2 cwt. Abyssinian myrrh comes to us through the East Indies, while that produced in Arabia is brought by the way of Turkey. It has a peculiar, rather fragrant, odour, and a bitter aromatic taste. It is in small irregularly shaped pieces, which can hardly be called tears. Good myrrh is translucent, of a reddish yellow colour, brittle, breaking with a resinous fracture, and easily pulverised. Its specific gravity is 1·36. When it is opaque, mixed with impurities, and either white, or of a dark colour approaching nearly to black, with a disagreeable odour, it should be rejected.—(*Thomson's Dispensatory.*)

N.

NAILS (Ger. *Nägel, Spiker*; Du. *Spykers*; Fr. *Clous*; It. *Chiodi, Chiovi, Aguti*; Sp. *Clavos*; Rus. *Gwosdi*), are small spikes of iron, brass, &c., which, being driven into wood, serve to bind several pieces together, or to fasten something upon them. There is scarcely a town or village in Great Britain in which nails are not forged; but the principal seats of this useful branch of the iron manufacture are at Birmingham, Bilston, Wolverhampton, Dudley, Sheffield, and a small district in Derbyshire. The consumption of nails is immense; and the aggregate value of those annually produced is very large.

NANGASACKI, a sea-port town on the south-west coast of the island of Ximo, one of the Japanese islands, being, according to Krusenstern, in lat. 32° 43′ 40″ N., lon. 130° 11′ 47″ E. The harbour extends N.E. and S.W. about 2½ leagues, being, in most places, less than a mile in width. Ships lie in 5 or 6 fathoms water, within a gun-shot of the town, near the middle of the bay, where they are protected from all winds.

The Japanese islands are situated within the temperate zone. They are believed to contain 50,000,000 of people, superior in industry and civilisation to every other Eastern nation, with the exception of the Chinese. But, notwithstanding Japan has some thousand miles of sea-coast, all foreigners are rigidly excluded from it, with the exception of the Dutch and Chinese; and they are only allowed to visit Nangasacki, the former with 2 ships, and the latter with 10 junks.

The Japanese themselves are prohibited by the laws of the empire from quitting their own shores; and, notwithstanding they formerly emigrated freely, and traded extensively with the neighbouring nations, they have resolutely adhered to this anti-social regulation since 1637, or for nearly 200 years. Both Dutch and Chinese are subjected to a rigorous *surveillance* during their residence in Japan. "The ships," (Dutch) says Mr. Crawfurd, "no sooner arrive, than their rudders are unshipped, their guns dismounted, their arms and ammunition removed, a military guard put on board, and row boats appointed to watch them. Their cargoes are landed by, and placed in charge of, the officers of the Japanese government, and the Dutch have neither control over, nor access to them, except through *solicitation*. The island of Desima, to which they are confined, is an artificial structure of stone raised upon the rocks of the harbour, measuring in its greatest length 236 paces, by a breadth of 82. It communicates with the town of Nangasacki by a bridge and gate, and is palisadoed all round, as well as surrounded by a guard. From this imprisonment the Dutch are allowed to peep twice or thrice a year, rather to be exhibited to the great as a curiosity, than out of indulgence. A corps of constables and interpreters are appointed to watch over their minutest actions; and the most degrading servilities are exacted from the highest among them, by the meanest officers of the Japanese government."

The Chinese trade with Japan is understood to be conducted from the port of Ningpo, in the province of Chekiang, which is so conveniently situated, that 2 voyages may be performed in the year, even by the clumsy junks of China. The commodities with which the Chinese furnish the Japanese, consist of raw sugar, cow and buffalo hides, wrought silks, consisting chiefly of satins and damasks, eagle and sandal wood, ginseng, tutenague or zinc, tin, lead, fine teas, and, for more than 100 years back, some European broad cloths and camlets. The exports consist of copper, limited to 15,000 piculs, or about 900 tons; camphor, sabre blades, pearls, some descriptions of paper and porcelain, and some Japan ware, which is either curious or handsome, but not so substantial as that of China.

Japan, could a trade be freely carried on with it, would unquestionably, from its extent, population, and civilisation, afford a great opening for the commerce of Europe. All attempts hitherto made have been baffled by the watchful jealousy of the Japanese government. The only fair prospect of success is to leave the matter entirely to the enterprise and ingenuity of the British merchants, to whom the trade of the neighbouring Chinese empire is now thrown open. After considering Japan, among Eastern nations, as second only in population, extent, and civilisation, to China, and that the whole empire is situated beyond the tropics, and in the same region as Turkey, Italy, Spain, and a part of the south of France, we may easily discover the sort of commodities which Europe or European colonies could furnish in a trade with it. They would consist of broad cloths and other woollens, cotton fabrics, iron,

spelter, tin, lead, glass ware, sugar, drugs, and spiceries. These would be paid for in camphor, raw silk, unwrought copper, gold, and silver. Of the 5 metals now mentioned, there can be no question that Japan contains very rich mines. Down to 1710, when the quantity of copper permitted to be exported was limited, the exports by the Dutch and Chinese amounted to 4,500 tons. With respect to silver, before its exportation was prohibited, the Portuguese brought it away in large quantities, having, in 1626, exported no less than 2,350 chests, equivalent to 2,350,000 taels, or (at 6*s.* the tael) 705,000*l.* sterling. As to gold, it has been always supposed, from its relative abundance in Japan, to bear a smaller proportionate value to silver than in any other country.

The following are the quantities and value of goods exported and imported by the Dutch in their trade with Japan in 1825; the ships employed being one of 600, and one of 700 tons burden. The trade is exclusively carried on with the port of Batavia.

Exports to Nangasacki.		Imports from Nangasacki.	
Articles.	Value.	Articles.	Value.
	Florins.		*Florins.*
Sandal wood, 100 piculs		Camphor, 720 piculs	69,120
Sapan wood, 1,167 do.		Copper*, 10,745 do.	617,862
Buffalo hides, 500 in number		Crape, 426 pieces	17,748
Elephants' teeth, 1,638 lbs.	3,247	Cotton cloth	13,978
Malay camphor, 61 lbs.	3,224	Medicine	2,270
Java mats, 225 in number		Provisions	3,327
Cocoa nut oil, 24 piculs		Sakkie and soy	14,332
Cloves, 113 do.	18,926	Wheat, 207 bags	2,156
Sugar, 6,991 do.	104,865	Silks	31,600
Tin, 338 do.	18,236	Sundries	96,089
Bengal piece goods	20,896		
Hardware and porcelain	2,230		
Jewellery	1,100		
Glass ware	3,748		
Netherlands broad cloths	75,209		
Lead, 147 piculs	2,793		
Netherlands cotton goods	61,332		
Medicine and sundries			
Total value of export cargoes *F.*	373,843	Total value of import cargoes *F.*	868,482
Or, at 12 *F.* per *L.* *L.*	31,154 8 4	Or, at 12 *F.* per *L.* *L.*	72,373 10 0

We may take this opportunity of stating that the last authentic account we have of any British vessel attempting to carry on an intercourse with Japan, was that of a ship commanded by Captain Gordon, which touched at the entrance of the bay of Jeddo, in 1818, in a voyage from Calcutta to Ochotsk. Captain Gordon remained at anchor 8 days, waiting the receipt of instructions from the capital, Jeddo, at the head of the bay, distant about 100 miles. He requested leave to return next year for the purpose of carrying on trade, which in civil but peremptory terms was refused. During the ship's stay, she was closely watched by an immense police force, but liberal offers were made of supplies. The officers would permit no species of trade to be carried on, for which, however, the people evinced the greatest possible desire, admiring the broad cloths, calicoes, and other European articles which were shown them. The ship was visited by some thousand natives, chiefly from curiosity. Captain Gordon thinks that a contraband trade, similar to that conducted by the European nations off the mouth of the Canton river, may be successfully carried on with Japan. — (*Kæmpfer's History of Japan*, vol. i. p. 310—356.; *Krusenstern's Voyage round the World*, vol. i. p. 261. English translation; *Crawfurd's Indian Archipelago*, vol. iii. p. 297.; *Evidence of John Deans, Esq., First Report of the Select Committee on the Affairs of the East India Company*, 1830, p. 242.; *Personal communications from Capt. P. Gordon.*)

Money. — Accounts are kept in taels, mace, and candarines; 10 candarines make 1 mace, and 10 mace 1 tael. The Dutch reckon the Nangasacki tael at 3½ florins, equal to about 6*s.* 2*d.* The gold coins current are the new and old itjib and cobangs, or copangs; the silver coins are, the nandiogin, itaganne, and kodama. They are in general very simple, struck plain and unadorned, the greater part of them without any rim round the margin, and most of them without any determined value. For this reason they are always weighed by the merchants, who put their chop or stamp upon them, to signify that the coin is standard weight and unadulterated.

The new cobangs are oblong, rounded at the ends, and flat, about 2 inches broad, scarcely thicker than an English farthing, of a pale yellow colour; the die on one side consists of several cross lines stamped; and at both ends there is a rectangular figure, with raised letters on it, and, besides, a moonlike figure, with a flower on it in relief. On the other side is a circular stamp, with raised letters on it; and within the margin, towards one end, two smaller sunk stamps with raised letters, which are different on each cobang; they are valued at 60 mace. There are old cobangs occasionally met with, which are of fine gold, somewhat broader than the new.

The old cobangs weigh 371 Dutch asen, or 275 English grains, and the gold is said to be 22 carats fine, which would give 44*s.* 7*d.* for the value of the old cobang. But the Japanese coins are reckoned at Madras only 87 touch, which is 20 22/25 carats; this reduces the old cobang to 41*s.* 10*d.* The new cobangs weigh 180 grains; the gold is about 16 carats fine, and the value 21*s.* 3*d.* The oban is thrice the value of the cobang.

The itjib is called by the Dutch golden bean, and is made of pale gold, of a parallelogramical figure and flat, rather thicker than a farthing, with many raised letters on one side, and two figures or flowers in relief on the other; the value of this is ¼ of a cobang. There are old itjibs also to be met with; these are thicker than the new ones, and in value 22 mace 5 candarines.

Nandiogin is a parallelogramical flat silver coin, of twice the thickness of a halfpenny, 1 inch long and ½ inch broad, and formed of fine silver. The edge is stamped with stars, and within the edges are raised dots. One side is marked all over with raised letters; and the other, on its lower and larger moiety, is filled with raised letters, and at the same time exhibits a double moonlike figure. Its value is 7 mace 5 candarines.

Itaganne and kodama are denominations by which various lumps of silver, without form or fashion, are known, which are neither of the same size, shape, nor value. The former of these, however, are oblong, and the latter roundish, for the most part thick, but sometimes, though seldom, flat. These pass in trade, but are always weighed in payment from one individual to another, and have a dull leaden appearance.

Seni is a denomination applied to pieces of copper, brass, and iron coin, which bear a near resemblance to our old farthings. They differ in size, value, and external appearance, but are always cast, and have a square hole in the middle, by means of which they may be strung together; and likewise have always broad edges. Of these are current sjumon seni, of the value of 4 common seni, made of brass, and almost as broad as a halfpenny, but thin. The common seni are the size of a farthing, and made of red copper; 60 of them = 1 mace. Doosa seni is a cast iron coin, in appearance like the last, of the same size and value, but is so brittle that it is easily broken by the hand, or breaks in pieces when let fall on the ground.

The seni are strung 100 at a time, or, as is most commonly the case, 96 on a rush. The coins in one of these parcels are seldom all of one sort, but generally consist of 2, 3, or more different kinds; in this case, the larger ones are strung on first, and then follow the smaller; the number diminishing in proportion to the number of large pieces in the parcel, which are of greater value than the smaller.

The schuit is a silver piece, of 4 oz. 18 dwts. 16 grs. Troy, and is 11 oz. fine, which gives its value 1*l.* 5*s.* 3*d.* The name is Dutch, referring, probably, to its shape, like a boat.

Weights. — These are the candarine, mace, tael, catty, and picul, thus divided:—

10 candarines = 1 mace.
10 mace = 1 tael.
16 taels = 1 catty.
100 catties = 1 picul.

The picul = 125 Dutch pounds, or 133 1/3 lbs. avoirdupois. It is, however, said to weigh only 130 lbs.

Measures. — The revenues of Japan are estimated by two measures of rice, the man and kolf; the former contains 10,000 kolfs, each 3,000 bales or bags of rice.

The long measure is the inc, which is about 4 Chinese cubits, or 6½ feet English nearly; and 2½ Japanese leagues are computed to be about 1 Dutch league. — (*Milburn's Orient. Com.*)

NANKEEN, OR NANKIN (Ger. *Nanking*; Du. *Nankings linnen*; Fr. *Toile de Nankin*; It. *Nanquino*; Span. *Nanquina*), a species of cotton cloth in extensive use in this country. It takes its name from Nanking, in China, a European corruption of

* The imports of copper, in 1828, amounted to 11,631 piculs, worth 988,635 florins.

Kyang-ning, the capital of the extensive province of Kyang-nan, where it is principally produced, and which also furnishes the greater part of the green teas. In the East, the manufacture is wholly confined to China. * The cloth is usually of a yellowish, though occasionally it is of a blue colour, and of different degrees of fineness; the broad pieces, called "the Company's nankeens," are generally of a better quality than the narrow ones, and are most esteemed. We produce imitation nankeens at Manchester and other places, but it must be admitted that they are inferior to the Chinese; neither lasting so long, nor holding their colour so well. The colour, whether yellow or blue, is given to the cloth by dyeing; for, though yellow cotton wool be raised in the East, the cloth made from it is too glaring. The nankeens brought to England come under the general denomination of piece goods. They are mostly made into trowsers and waistcoats for gentlemen's wear during summer, ladies' pelisses, &c. In some of the more southern parts of Europe, the warmer parts of Asia and America, and the British settlements in Africa, nankeen is worn by both sexes all the year round, and constitutes the principal article of attire. It is worthy of remark, that while the Indian cotton fabrics have ceased to be imported, the imports of nankeen have gone on increasing. The quantities imported into Great Britain in the undermentioned years have been —

Years.	Pieces.	Years.	Pieces.	Years.	Pieces.
1793	77,898	1814	783,253	1830	591,339
1794	374,398	1815	896,797	1831	857,171
1795	146,365	1816	396,453	1832	195,748

— (*Report on Affairs of the East India Company, 2d Finance, Commercial Appendix*, part iii. p. 766., and *Parl. Paper*, No. 425. Sess. 1833.)

Exclusive of the nankeens exported from Canton by the English, amounting in 1830-31 to 922,700 pieces, and in 1831-32 to 315,570 do., the Americans exported, in 1831-32, 122,285 pieces; considerable quantities being also taken by the Spaniards, Dutch, &c. It is probable that, under the new arrangements with respect to the Chinese trade, the exports of nankeen from Canton will be materially increased. — (See *antè*, pp. 238. and 242.)

NANTES, a large commercial city and sea-port of France, on the Loire, about 34 miles from its mouth, in lat. 47° 13′ 6″ N., lon. 1° 32′ 44″ W. Population 78,000. Vessels of 200 tons burden come up to the city; but those of a larger size load and unload in the roads of Paimbœuf, about 24 miles lower down the river.

Entrance to the Loire. — There are 3 entrances to the Loire. The first and most generally frequented is between the bank called *Le Four* and Point *Croisic*: there is a second between Le Four and the bank called *La Banche*; and the third, which in southerly winds is much resorted to, between the latter and the rocks called *La Couronne*. The navigation, which is naturally rather difficult, has been much facilitated by the erection of light-houses and beacons. Of the former, one has been recently constructed on the north part of Le Four, about a league from Croisic, in lat. 47° 17′ 53″ N., lon. 2° 38′ 3″ W. It is 56 feet high. The light is a revolving one; the flash, which continues for 7 seconds, being succeeded by a dark interval of 53 seconds. Two light-houses, called the Aiguillon lights, stand on the north side of the river, near its mouth; the lower light, adjoining *Point de Levi*, being in lat. 47° 14′ 33″ N., lon. 2° 15′ 46″ W. The light is fixed, and is 111 feet above the level of the sea. The upper Aiguillon light, situated about a mile N. 31° E. from the lower, is 127 feet high; it also is a fixed light, varied, however, by a flash every 3 minutes. A beacon tower, called the Turk, is erected on the southermost extremity of La Banche; the course for vessels entering between it and *La Couronne*, is to bring the Aiguillon lights in one. The depth of water on the bar at the mouth of the river varies from 2 to 2¾ fathoms. At springs the rise is 14, and at neaps 7 or 8 feet. High water at full and change 3¾ hours.

Trade, &c. — Her situation renders Nantes the emporium of all the rich and extensive country traversed by the Loire, so that she has a pretty considerable import and export trade, particularly with the West Indies. The exports consist of all sorts of French produce, but principally of brandy, wine and vinegar, silk, woollen and linen goods, refined sugar, wheat, rye, biscuits, &c. The principal imports are sugar, coffee, and other colonial products, cotton, indigo, timber, hemp, &c. Nantes is a considerable *entrepôt* for the commerce of salt, the duty on that article in 1831 having amounted to 4,657,408 fr. During the time that the slave trade was carried on, Nantes was more extensively engaged in it than any other French port.

The customs duties of Nantes produced, inclusive of those on salt, in 1831, 15,100,374 fr.; and in 1832, 13,907,400 fr. The falling-off in the latter year is attributed to the drought having, for a considerable period, rendered the upper parts of the Loire unnavigable; and to the uncertainty caused by the agitation of the question as to the sugar duties.

Arrivals. — In 1831 there entered the port of Nantes: —

	Ships.	Tons.
French ships from foreign countries	68	8,899
— from colonies	88	22,035
— from fishery	865	7,821
— coasting trade	2,257	94,693
Foreign ships	66	12,810
Totals	3,338	146,258

* It was stated in the former edition of this work, on authority that should not have been trusted to, that the manufacture of nankeen was carried to great perfection in the East Indies: but, in point of fact, the manufacture is wholly unknown every where in the East except China.

In 1832, there entered Nantes 17 British vessels, of the burden of 1,782 tons.

Monies, Weights, and *Measures* same as in the rest of France. — (See BORDEAUX.)

Tares. — 2¼ per cent. on coffee in bags; real on ditto in hhds., casks, &c.; 6 per cent. on cottons; real on indigo; 17 per cent. on Brazil muscovado sugar, 19 per cent. on Martinique and Guadeloupe ditto, 13 per cent. on ditto clayed.

NAPLES, a very large city and sea-port in the south of Italy, the capital of the kingdom of the same name, the light-house being in lat. 40° 50′ 12″ N., lon. 14° 14′ 15″ E. Population, on the 1st of January, 1850, 358,550. — (*Annal. di Statistica*, 1830.) Naples is well situated for commerce; but the perverse policy of the government has been most unfavourable to its growth, and has confined it within comparatively narrow limits.

Harbour. — The bay of Naples is spacious, and is celebrated for its picturesque views. The harbour is formed by a mole, built nearly in the form of the letter L, having a light-house on its elbow. Within the mole there is from 3 to 4 fathoms water, the ground being soft. The water in the bay is deep, and there is no bar: it is, however, a good deal exposed to the south-westerly winds; and to guard against their effects, vessels lying in the bay moor with open hawse in that direction. There is no obligation to take a pilot on board, but it is usual to take one the first time that a ship anchors within the mole.

Money. — Accounts are kept at Naples in ducati di regno of 100 grani. According to the new monetary system introduced in 1818, the unit of coins is the silver ducat = 3*s.* 5·2*d.* sterling. The ducat = 10 carlini; and there are coins of 1, 2, 5, and 12 carlini in proportion. Coins of a less value than 1 carlino are in copper. The smallest gold piece is the oncetta = 10*s.* 3½*d.* sterling.

Weights and Measures. — The commercial weights are the cantaro and rottolo. The cantaro *grosso* = 100 rottoli = 196½ lbs. avoirdupois = 89·105 kilog. = 184 lbs. of Hamburgh = 180·4 lbs. of Amsterdam. The cantaro piccolo = 106 lbs. avoirdupois = 48 kilog.

In dry measure, the carro of corn contains 36 tomoli. The tomolo = 1·45 Winch. bush.

In wine measure, the carro is divided into 2 botti, or 24 barili, or 1,440 caraffe. The carro = 264 English wine gallons. The regular pipe of wine or brandy = 132 English gallons.

In oil measure, the salma is divided into 16 staje, 256 quarti, or 1,536 misurette. The salma at Naples = 42¾ English wine gallons; at Gallipoli it is from 3 to 4 per cent. less; at Bari it is a little larger.

In long measure, the canna is divided into 8 palmi, or 96 onzie, and is = 6 feet 11 inches English. Hence the palmo = 10·38 English inches.

Eleven salme are allowed to a ship's last. — (*Nelkenbrecher; Dr. Kelly.*)

Exports and Imports. — The exports principally consist of the products of the adjacent country. Of these olive oil is by far the most important. It is commonly called Gallipoli oil, from Gallipoli, a town in the Terra d' Otranto, whence it is largely exported. The entire exports of oil from the kingdom of Naples have been estimated at about 200,000 salme, or 36,333 tuns a year; which, taking its mean value, when exported, at 21*l.* per tun, is equivalent to the annual sum of 762,993. — (See OLIVE OIL.) The other articles of export are silk, wine, brandy, dried fruits, brimstone, red and white argol, liquorice, oak and chesnut staves, rags, saffron, &c. There is a great variety in the Neapolitan wines. The most esteemed is the *lacrima Christi*, a red luscious wine, better known in England by name than in reality, the first growth being confined to a small quantity only, which is chiefly reserved for the royal cellars. There are, however, large quantities of second-rate wines produced in the vicinity of Naples, such as those of Pozzuoli, Ischia, Nola, &c., which are sold under the name of *lacrima Christi*, and are largely exported. Several parts of Calabria produce sweet wines of superior quality. — (*Henderson's Ancient and Modern Wines*, p. 239.) The price of wine at Naples depends entirely on the abundance of the vintage; only a small quantity comes to England. The imports consist principally of English cottons and cotton twist, hardware, iron and tin, woollens, sugar, coffee, indigo, spicery, &c. Naples is one of the best markets for pilchards, and it requires a large supply of dried and barrelled cod.

The imports from, and exports to, Naples are not given separately in our trade accounts, but are mixed up with those of the rest of Italy; and the accounts of the Neapolitan Custom-house are not made public. We are, consequently, without the means of forming any accurate statement of the amount of our trade with Naples, but there is reason to think that the following estimate is not very wide of the mark.

Statement of the Quantity and Value of the principal Articles annually imported into Naples, in British Bottoms, from Great Britain and her Colonies; and of the Quantity and Value of the principal Articles exported in such Bottoms, from the former to the latter.

Imports into Naples from Britain and her Colonies.			Exports from Naples to Britain and her Colonies.		
Articles.	Quantity.	Value.	Articles.	Quantity.	Value.
		£			£
Cod-fish - - quintals	60,000	30,000	Argol - - cwt.	4,000	5,000
Pilchards - - hhds.	9,000	18,000	Liquorice paste - —	5,000	10,000
Coffee - - cwt.	563	2,000	Silk organzined - —	1,000	60,000
Sugar - - - —	16,523	30,000	Brandy - - pipes	1,000	9,000
Manufactured cottons, yds.	5,478,480	200,000	Oil - - - tons	4,500	90,000
Twist - - lbs.	2,342,494	175,000			
Hardware - - -	- -	15,000			
Iron and tin - tons	3,000	15,000			
Woollens - - yds.	111,111	50,000			
Worsteds - - —	457,453	40,000			
Total value -	- -	£575,000	Total value -	- -	£174,000

We have no means of forming any estimate of the amount of the trade between Naples and other countries; but it is trifling compared to what it might and ought to be.

Shipping, Port Charges, &c. — In 1831, there entered the port of Naples 202 foreign vessels. Of these, 101 were British, 44 French, 35 Sardinian, 6 Spanish, 5 Tuscan, &c. Tonnage not stated.

The charges of a public nature on a *national ship* of 300 tons burden entering and clearing out from the port of Naples, are as under: —

	D.	gr.
On entering. — For expediting	1	60
(Equal to 5*s.* 8*d.* sterling.)		
On clearing out. — Expediting	1	60
Bill of health	1	20
Tonnage duty at 4 grains per ton	12	0
(Equal to about 2*l.* 9*s.* 4*d.* sterling.)	D. 14	80

Charges on a *foreign ship* of 300 tons burden: —

On entering. — Visa	0	55
Expediting	6	60
Stamp	0	14
(Equal to about 1*l.* 4*s.* 4*d.* sterling.)	D. 7	29
On clearing out. — Passport	1	0
Expediting	6	60
Stamp	0	14
Bill of health	2	40
Police	0	20
Port officers	0	60
Registering papers	0	20
Tonnage duty at 40 grains per ton	120	0
(Equal to about 21*l.* 17*s.* 2*d.* sterling.)	D. 131	14

Custom-house Regulations. — Masters of merchantmen are bound, within 24 hours of their arrival, to furnish the Custom-house with a general manifest of their cargoes, provisions, and stores; and the master, when consignee, or the consignees, are bound, within 48 hours after the arrival of the ship, to send in a declaration or manifest in detail, of all goods on board. Should the consignees omit to render the manifest in detail within 48 hours, they are subjected to a fine of 30 per cent. upon the non-specified articles.

This declaration or manifest cannot be corrected after the 48 hours are elapsed; and the master or consignee is liable to a fine of 30 ducats for every package erroneously declared. This, however, is usually remitted, unless there be suspicion of fraud, upon application to the director-general of the customs. Masters should be particularly careful in manifesting their salt and tobacco, as the slightest error with respect to them subjects the vessel to seizure. All goods, provisions, &c. not manifested, are liable to seizure.

Quarantine Regulations, are rigorously and arbitrarily enforced. The free admission, conditional reception, or absolute refusal of a vessel arriving at the port is determined by the wholesome or unwholesome character of the place from which she comes. The place may be, 1. Infected. 2. Suspicious. 3. Endangered. Or, 4. Secure. In the 1st case, the vessel is *refused altogether:* in the 2d, she is admitted on a long quarantine: in the 3d, she is received on a short quarantine: in the 4th, she is allowed free *pratique*. If the vessel be a ship of war, her quarantine is performed in the Bay of Naples; the days of her passage being allowed in the calculation: if a merchantman, quarantine is performed at Nisita, an island about 6 miles from Naples. It commences from the day of her arrival, if in ballast, or loaded with unsusceptible merchandise; if otherwise, from the day of the discharge of her cargo. For vessels from endangered ports, the quarantine is not less than 14, nor more than 28 days. For vessels from suspicious places, not less than 24, nor more than 40 days. For vessels from excepted places, not less than 7, nor more than 21 days. No foul lazaretto exists at Naples; but at Nisita there is a lazaretto of expurgation for vessels from suspicious or endangered districts or territories. Vessels from infected places usually go to Leghorn or Genoa, where they may unload in a *lazaretto sporco*. The fees charged on ships performing quarantine are heavy. No distinction is made between national and foreign bottoms. The conduct of the board of health, in frequently declaring places infected or suspicious on mere unfounded reports, is loudly objected to by the merchants; the more especially since, when such declaration is made, it is not revoked till the report be officially contradicted by the government of the country in question.

Brokers, Commission, &c. — No person can legally act as a broker unless authorised by government. All patented brokers are obliged, by way of security, to hold funded property producing 500 ducats of "rente," or a dividend of 83*l.* 6*s.* 8*d.* sterling. Many persons, however, act as brokers without being *patented*, but no contract made by them is admitted in a court of law. Any person may set up as a merchant, by giving due notice to the *Camera di Commercio*.

The rates of commission generally established at Naples are as under: —

Rates of Commission and Charges established by the Merchants at Naples.

Commission on sales of fish	3	per cent.
Do. on manufactures of all kinds	3	—
Do. on all other goods	2	—
Do. on goods purchased	2	—
Do. on receiving and forwarding	½	—
Do. on attempting sales	1	—
Do. on re-sale of goods for the same account on which a purchasing commission has been charged	1½	—
Do. on chartering vessels, or procuring charters	3	—
Do. on collecting freights on chartered ships	2	—
Do. on ships both inwards and outwards	4	—
Do. on advances on letters of credit	1	—
Do. on effecting insurances	¼	—
Do. on negotiating bills	½	—
Do. on receiving and paying or remitting	½	—
Del credere on sales	2	—
Do. on purchase of oil, not exceeding 3 months	1	—
Do. do. do., not exceeding 6 do.	2	—
Do. per underwriters	½	—

Tares usually allowed by the Custom-house at Naples on the leading articles of importation: —

Sugar, in hogsheads	12 per cent.
Do. in boxes or barrels	14 —
Do. in Brazil chests	18 to 20 —
Do. in bags	6 rotoli
Loaves, in casks	real tare
Do. extra for paper and strings	5 per cent.
Indigo	real tare
Tin, in barrels, each	12 rottoli
Alum, in casks	10 per cent.
Wax, real tare and extra	2 to 3 per cent.
Cod and stock-fish	1 per cent.
Coffee, in casks	real tare
Do. in bags, each	3 rottoli
Pepper — —	— —
Pimento — —	— —
Cocoa — —	3 do. 2 ad. 5 per cent.
Cocoa, in casks	for dust, real tare
Cinnamon, in single bale	18 lbs. of Naples
Do. in double bale	25 lbs. —
Cassia lignea, cochineal, and bark	real tare.

Insurance. — There are 4 or 5 companies for the insurance of ships, and 1 for lives. Their terms are generally higher than those of similar establishments in London. Houses are never insured at Naples, their construction rendering fires very rare. The companies are established by royal authority, the shareholders being only liable for the amount of their shares.

Banking. — The principal merchants of Naples are all, more or less, bankers, inasmuch as they advance money on letters of credit, and deal in foreign exchanges, and other financial operations. But the only banking establishment at present in existence, is the Bank of the Two Sicilies, founded by government, and guaranteed by the possession of landed property. It is not a bank for the issue of notes on credit, like the Bank of England, but for their issue on deposits, somewhat on the principle of the Bank of Hamburgh. Government makes all its payments by means of notes or orders on the bank; and they are issued to individuals for whatever sums they desire, on their paying an equivalent sum of money to the bank. These notes or orders form a considerable part of the circulating medium of Naples; they are paid in cash on demand.

Government has also established a discount office, where bills, indorsed by 2 persons of good credit, and not at more than 3 months' date, are discounted at 4 per cent.

Prices of Provisions. — Naples is a favourable place for obtaining supplies of *fresh*, but not of *salt* provisions. The prices of the principal articles of consumption in 1831 were as follows: —

Articles.	Price per lb. Avoirdupois. In Neapolitan Grains.	In English Pence.
Bread	5	2
Flour	5	2
Beef	10	4
Mutton	7	2½
Pork	8	3
Cheese	12	5
Butter	40	16
Vegetables	5	2
Coffee	35	14
Sugar	18	7

Warehousing System. — The whole policy, if we may so term it, of the Neapolitan government, with respect to commerce, is such as would disgrace a nation of Hottentots. We believe that it is entitled to the not very enviable distinction of being the only government that has suppressed, after having established, the warehousing system, or *scala franca*. This was done in 1824. At present all goods imported into Naples may be deposited, on paying rent, in warehouses under the joint locks of the king and the importer, for 2 years. At the end of the 1st year, half the import duty must be paid, and at the end of the 2d year, the other half. Whether sold or not, the goods must then be removed from the warehouses; and in paying the duties no deduction is made on account of damage in the warehouse, unless certain forms be complied with, the observance of which is invariably reckoned more burdensome than the payment of the duties. *No drawback of the import duty is allowed on the exportation of any sort of foreign produce:* on the contrary, should it happen to be of the same species as native produce subject to a duty on export, it is charged, in addition to the duty it had paid on importation, with an export duty equal to that laid on the corresponding native product!

The influence of this system is most disastrous. So large a city as Naples, and so advantageously situated for the commerce with the Black Sea, the Levant, Greece, Spain, Northern Italy, Northern Africa, &c., would, had it been allowed to avail itself of its natural advantages, have become a most important *entrepôt*. But, in consequence of the regulations now specified, no goods are carried to it except those destined for home consumption, and these are always supplied sparingly; for, however much the price of an article may be depressed at Naples, it is impossible, owing to the oppressive duties charged on its importation not being drawn back on exportation, for the merchant to send it to Leghorn, Genoa, Trieste, or any other place where it is more in demand. It would really seem as if the government had been exerting its ingenuity to find out the means of driving commerce, and with it enterprise and industry, from its shores; and it is not to be denied that it has been, in so far, eminently successful.

Credit, &c. — Goods are universally sold at long credits, mostly from 4 to 8 months; and for manufactured goods sometimes longer. On sales of indigo, from 12 to 18 months' credit is given. Discount for ready money is at the rate of 6 per cent. per annum. Merchants are arranged by the Chamber of Commerce into 5 different classes; and a 6 months' credit is given at the Custom-house for duties, to the extent of 60,000, 40,000, 30,000, 20,000, and 15,000 ducats, to individuals according to the class in which they happen to be enrolled. But this is of little importance. Unless the transactions of a merchant be very limited indeed, the duties he has to pay amount to much more than the credit he is allowed.

Tariff.—The duties on exports and imports are such as might be expected from a government that has suppressed the warehousing system, and allowed no drawbacks. The following are the duties charged on the principal articles of export from Naples:—

Tariff of the principal Articles of Export in force at Naples in 1833.

Articles.	Neapolitan		English	
	Weights.	Money.	Weights.	Money.
		D. gr.		£ s. d.
Cocoons (prohibited)				
Cotton	per cantaro	1 1	per cwt.	0 1 10
Horse hair	—	5 0	—	0 9 8
Wool	—	0 50	—	0 0 11
Oil in native vessels	per salma	3 38	per tun	3 0 0
in foreign vessels	—	4 92	—	4 10 0
Pitch, white	per cantaro	2 40	—	0 4 6
black	—	1 80	—	0 3 4
Liquorice root	—	1 20	—	0 2 3
Soda seed (prohibited)				
Sponges	per cantaro	3 50	—	0 6 8
Rags, white	—	8 0	—	0 15 2
coloured	—	3 0	—	0 5 8
Cork	—	0 50	—	0 0 11
Argol	—	3 0	—	0 5 8
Saffron	per lb.	0 65	per lb.	0 0 2½
Wheat, and all other sorts of grain, when exported in native vessels, *pay no duty.*				
exported in foreign vessels	per cantaro	0 30	per cwt.	0 0 6⅔

Of these duties, that on oil is by far the most objectionable. Even though Naples enjoyed a monopoly of this valuable product, the imposition of such a duty would be wholly indefensible on any sound principle. But when, instead of having a monopoly of the oil trade, the Neapolitans are exposed to the keen competition of the Tuscans, Genoese, Spaniards, &c., the imposition of a heavy export duty is in the last degree destructive. It depresses that branch of industry which is most suitable for the country, and gives a corresponding encouragement to its extension amongst foreigners. The increased duty of 50*s.* a tun on oil exported in foreign ships, is, of course, intended to force the employment of native ships: but it has not had, and could not rationally be expected to have, any such consequence; its only effect being to tempt foreigners to make a corresponding addition to the duties on oil, when imported in Neapolitan ships. Such regulations are never, in fact, productive of any thing except injury to those by whom they are enacted.

The duties on most sorts of imported articles are extremely oppressive, being seldom under 100, and often above 150 per cent. *ad valorem!* On coffee, the duty is no less than 46*s.* 8*d.* per cwt.; on sugar it varies from 41*s.* 10*d.* to 62*s.* 9*d.* per do.; on tea it is 30*s.* per do.; on cotton wool it varies from 19*s.* 8*d.* to 37*s.* 4*d.* per do. The duty on cotton and woollen manufactures is imposed by the piece, and is, in common with all the other duties, most exorbitant. Even the indispensable article, iron, is charged with 8*s.* 4*d.* per cwt.! These duties have been imposed partly for the sake of revenue, and partly in the view of encouraging domestic manufactures; but they have not accomplished either object. The inordinate extent to which they have been carried has made them advantageous only to the smuggler, and ruinous to every one else. How, indeed, could it be otherwise? The coast of Naples, exclusive of Sicily, stretches from 800 to 1,000 miles; in many places it is uninhabited, while, in a great number of others, the people are not more than half civilised. The facilities for smuggling are, therefore, incalculably great; and, combined with the inadequate remuneration of the customs' officers, and the ease with which they are corrupted, our only wonder is, not that smuggling is in a thriving state, but that there should be any legitimate traffic. The latter, indeed, is principally confined to Naples, where a stricter police is established; for it is not uncommon to find the same articles, in country towns at no great distance from the capital, selling for ⅓ or ¼ of their cost in it. In a country subjected to such a commercial code as Naples, the smuggler is a great public benefactor. He is, in fact, the natural enemy of oppressive duties and prohibitions. These bring him into the field, and make him put forth all his enterprise and energy: and it is fortunate for the best interests of society that he is uniformly victorious over penalties, confiscations, racks, and gibbets; and cannot be defeated otherwise than by the adoption of enlarged and liberal principles of commercial policy.

Of the direct taxes, the most productive is the *fondiaria*, or tax on rent, producing about 1,240,000*l.* a year. It was imposed during the French occupation, when it was fixed at 25 per cent. of the sum received by the landlord. It has not been altered since; and as agricultural produce has materially declined in price, while the rents of houses in towns, and particularly in the capital, have very much increased, its unequal pressure is much complained of.

The perverse policy we have thus endeavoured to develope, cannot surely be permitted to exist much longer. The reasonings of Filangieri, and other able native economists, might have forewarned the government of the real nature of that system of prohibition and restriction which it has laboured, ever since its restoration, to protect and defend. But facts have now taken the place of theory; and the results of the system are too obvious and too mischievous, not to arrest the attention of every one, and to impress the necessity of some radical alterations. Considering the great natural fertility, varied productions, and advantageous situation of Naples and Sicily, it is plain that nothing more than freedom and security are required to render them among the richest, most industrious, and flourishing countries of Europe. But, instead of this, the fetters laid upon commerce, by depriving the inhabitants of a market for their productions, and, consequently, of the most powerful stimulus to industry and invention, have paralysed all their energies, and immersed them in poverty, sloth, and barbarism. It is surely high time that a different line of policy were adopted. At Naples, a reform may be undertaken without (which is not always the case elsewhere) endangering any thing either useful or valuable. Its political economy is such that no change, be it what it may, can make matters materially worse than they are at this moment. But it would be the easiest thing in the world to lay the foundations of a great and rapid improvement. To effect this, government has only to abolish all duties and restrictions on exportation, to establish the warehousing system, and to reduce the duties on importation to ⅓ or ¼ part of their present amount. If it do this, it will add prodigiously to its own revenue; at the same time that it will do 10 times more to rouse the dormant energies, and to augment the wealth of its subjects, than it is possible to do by any other means.

In compiling this article, we have been much indebted to the carefully drawn up, and generally judicious *Answers* of the British consul (Mr. Goodwin) to the *Circular Queries*, to *Millenet, Coup d'Œil sur le Royaume de Naples*, and to some valuable *private communications*. We have also looked into the works of a good many English and foreign travellers, but seldom with much advantage. They are filled with accounts, a thousand times repeated, of antiquities, Vesuvius, the churches, theatres, lazzaroni, &c.; but few among them communicate any information from which any just ideas can be formed of the state of industry and commerce, the financial system of the country, &c. The statistical works of the Neapolitans are equally defective. They are overlaid with insignificant details, while they neglect altogether, or pass slightly over, the more important departments. This may arise from the jealousy of government; but the English travellers can make no such apology for their defects.

NAVIGATION LAWS. These laws form an important branch of Maritime Law. In this country they are understood to comprise the various acts that have been passed, defining British ships, the way in which such ships are to be manned, the peculiar privileges enjoyed by them, and the conditions under which foreign ships shall be allowed to engage in the trade of the country, either as importers or exporters of commodities, or as carriers of commodities from one part of the country to another.

Sketch of the History and Principles of the Navigation Laws. — The origin of the Navigation Laws of England may be traced to the reign of Richard II., or perhaps to a still more remote period. But, as no intelligible account of the varying and contradictory enactments framed at so distant an epoch could be compressed within any reasonable space, it is sufficient to observe, that, in the reign of Henry VII., two of the leading principles of the late navigation law were distinctly recognised, in the prohibition of the importation of certain commodities, unless imported in ships belonging to English owners, and manned by English seamen. In the early part of the reign of Elizabeth (5 Eliz. c. 5.), foreign ships were excluded from our fisheries and coasting trade. The republican parliament gave a great extension to the navigation laws, by the act of 1650, which prohibited all ships, of all foreign nations whatever, from trading with the plantations in America, without having previously obtained a licence. These acts were, however, rather intended to regulate the trade between the different ports and dependencies of the empire, than to regulate our intercourse with foreigners. But in the following year (9th of October, 1651) the republican parliament passed the famous *Act of Navigation.* This act had a double object. It was intended not only to promote our own navigation, but also to strike a decisive blow at the naval power of the Dutch, who then engrossed almost the whole *carrying trade* of the world, and against whom various circumstances had conspired to incense the English. The act in question declared, that no goods or commodities whatever, of the growth, production, or manufacture of Asia, Africa, or America, should be imported either into England or Ireland, or any of the plantations, except in ships belonging to English subjects, and of which the master and the greater number of the crew were also English. Having thus secured the import trade of Asia, Africa, and America, to the English ship owners, the act went on to secure to them, as far as that was possible, the import trade of Europe. For this purpose, it further enacted, that no goods of the growth, production, or manufacture of any country in Europe, should be imported into Great Britain, except in British ships, or *in such ships as were the real property of the people of the country or place in which the goods were produced, or from which they could only be, or most usually were, exported.* The latter part of the clause was entirely levelled against the Dutch, who had but little native produce to export, and whose ships were principally employed in carrying the produce of other countries to foreign markets. Such were the leading provisions of this famous act. They were adopted by the regal government which succeeded Cromwell, and form the basis of the act of the 12th Car. 2. c. 18., which continued, to a very recent period, to be the rule by which our naval intercourse with other countries was mainly regulated; and has been pompously designated the *Charta Maritima* of England!

In the statute 12 Car. 2. c. 18., the clause against importing foreign commodities, except in British ships, or in ships belonging to the country or place where the goods were produced, or from which they were exported, was so far modified, that the prohibition was made to apply only to the goods of Russia and Turkey, and to certain articles, since well known in commerce by the name of *enumerated* articles, leave being at the same time given to import all other articles in ships of any description. But this modification was of very little importance; inasmuch as the enumerated articles comprised all those that were of most importance in commerce, as timber, grain, tar, hemp and flax, potashes, wines, spirits, sugar, &c. Parliament seems, however, to have very speedily come round to the opinion that too much had been done in the way of relaxation; and in the 14th of Charles II. a supplemental statute was passed, avowedly with the intention of obviating some evasions of the statute of the preceding year, which, it was affirmed, had been practised by the Hollanders and Germans. This, however, seems to have been a mere pretence, to excuse the desire to follow up the blow aimed, by the former statute, at the carrying trade of Holland. And such was our jealousy of the naval and commercial greatness of the Dutch, that, in order to cripple it, we did not hesitate totally to proscribe all trade with them; and, to prevent the possibility of fraud, or of clandestine or indirect intercourse with Holland, we went so far as to include the commerce with the Netherlands and Germany in the same proscription. The statute of the 14th Car. 2 prohibited all importation from these countries of a long list of enumerated commodities, under any circumstances, or in any vessels, whether British or foreign, under the penalty of seizure and confiscation of the ships and goods. So far as it depended on us, Holland, the Netherlands, and Germany were virtually placed without the pale of the commercial world! And though the extreme rigour of this statute was subsequently modified, its principal provisions remained in full force until the late alterations.

The policy, if not the motives which dictated these statutes, has met with very general eulogy. It has been said, and by no less an authority than Dr. Smith, that national animosity did, in this instance, that which the most deliberate wisdom would have recommended. "When the act of navigation was made," says he, "though England and Holland were not actually at war, the most violent animosity subsisted between the two nations. It had begun during the government of the long parliament, which first framed this act, and it broke out soon after in the Dutch wars during that of the Protector and of Charles II. It is not impossible, therefore, that some of the regulations of this famous act may have proceeded from national animosity. They are as wise, however, as if they had all been dictated by the most deliberate wisdom. National animosity at that particular time aimed at the very same object which the most deliberate wisdom would have recommended, — the diminution of the naval power of Holland, the only naval power which could endanger the security of England. The act of navigation *is not favourable to foreign commerce, or to the growth of that opulence which can arise from it.* The interest of a nation in its commercial relations to foreign nations is, like that of a merchant with regard to the different people with whom he deals, to buy as cheap and to sell as dear as possible. But the act of navigation, by diminishing the number of sellers, must necessarily diminish that of buyers; and we are thus likely not only to buy foreign goods dearer, but to sell our own cheaper, than if there was a more perfect freedom of trade. As defence, however, is of much more importance than opulence, the act of navigation is, perhaps, the wisest of all the commercial regulations of England."—(*Smith's Wealth of Nations*, vol. ii. p. 293.)

It may, however, be very fairly doubted, whether, in point of fact, the navigation law had the effects here ascribed to it, of weakening the naval power of the Dutch, and of increasing that of this kingdom. The Dutch were very powerful at sea for a long period after the passing of this act; and it seems natural to conclude, that the decline of their maritime preponderance was owing rather to the gradual increase of commerce and navigation in other countries, and to the disasters and burdens occasioned by the ruinous contests the Republic had to sustain with Cromwell, Charles II. and Louis XIV., than to the mere exclusion of their merchant vessels from the ports of England. It is not meant to say, that this exclusion was altogether without effect. The efforts of the Dutch to procure a repeal of the English navigation law show that, in their apprehension, it operated injuriously on their commerce.* It is certain, however, that its influence in this respect has been greatly over-rated in this country. *Excessive taxation*, and not our navigation law, was the principal cause of the fall of profits, and of the decline of manufactures, commerce, and navigation, in Holland. "Les guerres," says the well-informed author of the *Commerce de la Hollande*, "terminées par les traités de Nimegue, de Ryswick, d'Utrecht, et enfin la dernière par le traité d'Aix-la-Chapelle, ont successivement obligé la République de faire usage d'un grand crédit, et de faire des emprunts énormes pour en soutenir les fraix. Les dettes ont surchargé l'état d'une somme immense d'intérêts, qui ne pouvoient être payés que par *une augmentation excessive d'impôts*, dont il a fallu faire porter la plus forte partie par les consommations dans un pays qui n'a qu'un territoire extrêmement borné, et par conséquent par l'industrie. Il a donc fallu faire enchérir infiniment la main-d'œuvre. Cette cherté de la main-d'œuvre a non seulement restreint presque toute sorte de fabrique et d'industrie à la consommation intérieure, mais elle a encore porté un coup bien sensible au commerce de frêt, partie accessoire et la plus précieuse du commerce d'économie: car cette cherté a rendu la construction plus chere, et augmenté le prix de tous les ouvrages qui tiennent à la navigation, même de tous les ouvrages des ports et des magasins. Il n'étoit pas possible que l'augmentation du prix de la main-d'œuvre ne donnât, malgré tous les efforts de l'économie Hollandoise, un avantage sensible aux autres nations qui voudroient se livrer au commerce d'économie et à celui de frêt."—(Tome ii. p. 211.)

This extract, which might, were it necessary, be corroborated by others to the same effect from all the best Dutch writers, show that it is not to our navigation law, nor to the restrictive regulations of other foreign powers, but to the abuse of the funding system, and the excess of taxation, that the decline of the commercial greatness and maritime power of Holland was really owing. Neither does it appear that the opinion maintained by Dr. Smith and others, that the navigation law had a powerful influence in augmenting the naval power of this country, rests on any better foundation. The taste of the nation for naval enterprise had been awakened, the navy had become exceedingly formidable, and Blake had achieved his victories, before the enactment of this famous law. So far, indeed, is it from being certain that the navigation act had, in this respect, the effect commonly ascribed to it, that there are good grounds for thinking

* In the treaty of Breda, agreed upon in 1667, between the States General and Charles II., the latter undertook to procure the repeal of the navigation law. But the subject was never agitated in either house of parliament.

it had a precisely opposite effect, and that it operated rather to diminish than to increase our mercantile navy. It is stated in Roger Coke's *Treatise on Trade*, published in 1671 (p. 36.), that this act, by lessening the resort of strangers to our ports, had a most injurious effect on our commerce; and he further states that we had lost, within 2 years of the passing of the act of 1650, the greater part of the Baltic and Greenland trades. — (p. 48.) Sir Josiah Child, whose treatise was published in 1691, corroborates Coke's statement: for while he decidedly approves of the navigation law, he admits that the English shipping employed in the Eastland and Baltic trades had decreased at least *two thirds* since its enactment, and that the foreign shipping employed in these trades had proportionally increased. — (*Treatise on Trade*, p. 89. Glasg. edit.) Exclusive of these contemporary authorities, it may be worth while to mention, that Sir Matthew Decker, an extensive and extremely well-informed merchant, condemns the whole principle of the navigation act; and contends that, instead of increasing our shipping and seamen, it had diminished them both; and that, by rendering the freight of ships higher than it would otherwise have been, it had entailed a heavy burden on the public, and been one of the main causes that had prevented our carrying on the fishery so successfully as the Dutch. — (*Essay on the Causes of the Decline of Foreign Trade*, p. 60. ed. 1756.)

There does not seem to be any very good grounds on which to question these statements; and they are at all events sufficient to show, that the assertions of those who contend that the navigation laws had a prodigious effect in increasing the number of our ships and sailors, must be received with very great modification. But, suppose that all that has been said by the apologists of these laws were true to the letter; suppose it were conceded, that, when first framed, the Act of Navigation was extremely politic and proper; — that would afford but a very slender presumption in favour of the policy of supporting it in the present day. Human institutions are not made for immortality: they must be accommodated to the varying circumstances and exigences of society. But the situation of Great Britain and the other countries of Europe has totally changed since 1650. The envied wealth and commercial greatness of Holland have passed away: we have no longer any thing to fear from her hostility: and "he must be, indeed, strangely influenced by antiquated prejudices and by-gone apprehensions, who can entertain any of that jealousy from which the severity of this law principally originated." London has become, what Amsterdam formerly was, the grand emporium of the commercial world — *universi orbis terrarum emporium:* and the real question which now presents itself for our consideration is, not what are the best means by which we may rise to naval greatness? but — what are the best means of preserving that undisputed preeminence in maritime affairs to which we have attained?

Now, it does not really seem that there can be much difficulty in deciding this question. Navigation and naval power are the children, not the parents — the effect, not the cause — of commerce. If the latter be increased, the increase of the former will follow as a matter of course. More ships and more sailors become necessary, according as the commerce between different and distant countries is extended. A country, circumstanced like Great Britain in the reign of Charles II., when her shipping was comparatively limited, might perhaps be warranted in endeavouring to increase its amount, by excluding foreign ships from her harbours. But it is almost superfluous to add, that it is not by any such regulations, but solely by the aid of a flourishing and widely extended commerce, that the immense mercantile navy we have now accumulated can be supported.

But it is extremely easy to show, that to have continued to enforce the provisions of the old navigation law, in the present state of the world, would have been among the most efficient means that could have been devised for the destruction of our commerce. The wealth and power to which Britain has attained, has inspired other nations with the same envious feelings that the wealth of Holland formerly generated in our minds. Instead of ascribing our commercial and manufacturing superiority to its true causes, — to the comparative freedom of our constitution, the absence of all oppressive feudal privileges, the security of property, and the fairness of our system of taxation, — our foreign rivals contend that it has been entirely owing to our exclusive system; and appeal to our example to stimulate their respective governments to adopt retaliatory measures, and to protect them against British competition. These representations have had the most injurious operation. In 1787, the American legislature passed an act, copied to the very letter from our navigation law, with the avowed intention of its operating as a retaliatory measure against this country. The Northern powers threatened to act on the same principle; and would have carried their threats into effect, but for timely concessions on our part. The same engines by which we laboured to destroy the trade of Holland were thus about to be brought, by what we could not have called an unjust retribution, to operate against ourselves. Nor can there be a doubt that, had we continued to maintain our illiberal and exclusive system, and refused to set a better example

to others, and to teach them the advantage of recurring to sounder principles, we should have run a very great risk of falling a victim to the vindictive spirit which such short-sighted and selfish policy would have generated.

For these reasons, it seems difficult to question the policy of the changes that have recently been effected in the navigation laws, partly by the bills introduced by Mr. (now Lord) Wallace in 1821, and Mr. Huskisson in 1825, and partly by the adoption of what has been called the *Reciprocity System*. Under the existing law (6 Geo. 4. c. 109., see *post.*) the intercourse with all European countries in amity with Great Britain is placed on the same footing. The memorials of our former animosity, and of our jealousy of the prosperity of certain of our neighbours, have thus been abolished; and the same law is henceforth to regulate our commerce with the Continent. This uniformity, besides giving greater scope to mercantile operations, and extending our traffic with some of our most opulent neighbours, removes a great source of embarrassment and litigation; at the same time that it detracts considerably from that selfish character which had been believed on the Continent, and not without considerable reason, to be the animating principle of our commercial system.

The distinction between enumerated and non-enumerated goods is still kept up under the new regulations; but, instead of confining the importation of the former into the United Kingdom, either to British ships, or ships belonging to the country or place where the goods were produced, or from which they originally were exported, the new regulations permit that they may be imported either in British ships, in ships of the country of which the goods are the produce, or in ships of the country or place from which they are imported into England. This is a very important alteration. Under the old law, when a number of articles, the products of different countries, but all of them suitable for importation into England, were found in a foreign port, they could not be imported except in a British ship, or separately in ships belonging to the different countries whose produce they were. This was obviously a very great hardship on the foreigner, without being of any real advantage to our own ship owners. When the foreign merchant had vessels of his own, it was not very probable he would permit them to remain unoccupied, and freight a British vessel; and there were very few ports of any importance in which foreign bottoms might not be found, in which the articles could be legally imported. The real effect of the old law was not, therefore, to cause the employment of British ships, but to oblige foreigners to assort their cargoes less advantageously than they might otherwise have done, and thus to lessen their intercourse with our markets. The new law obviates this inconvenience; while, by restricting the importation of European goods to ships of the built of the country of which the goods are the growth, or to those of the built of the country or port from which the goods are shipped, and which are *wholly owned* by the inhabitants of such country or port, it is rendered very difficult for the people of a particular country to become the carriers of the produce of other countries to our markets.

Another new regulation is of such obvious and unquestionable utility, that it is surprising it was not long ago adopted. By the old law, all articles, the produce of Asia, Africa, or America, could only be imported directly in a British ship from the place of their production. This law had already been repealed in so far as respected the United States, whose ships were allowed to import their produce directly into this country; but it was maintained with respect to Asia, Africa and South America. And hence, although a British ship happened to find, in South American, African, or Asiatic ports, articles, the produce of one or more of the other quarters of the globe, suitable for our markets, and with which it might have been extremely advantageous for her to complete her cargo, she was prohibited from taking them on board, under penalty of forfeiture and confiscation, not only of the goods, but also of the ship. This regulation has been repealed; and it is now lawful for British ships to take on board all articles, the importation of which is not prohibited, on meeting with them in any Asiatic, African, or American port. Lord Wallace originally intended to extend this principle to European ports, or to make it lawful for British ships to import all non-prohibited articles from *wherever they might find them*. But it was supposed by some, that foreign ships might be more cheaply navigated than ours; and that foreigners, taking advantage of this circumstance, would import the Asiatic, African, and American products required for our consumption into the contiguous continental ports, and would consequently restrict the employment of British ships to their carriage thence. We believe that these apprehensions were, in a great measure, visionary. But the law is so contrived as to avoid even the possibility of danger on this head; such of the products of Asia, Africa, and America, as are required for home consumption, being, with a few trifling exceptions, inadmissible from Europe; and only admissible when they are imported in British ships, or in ships of the country or place of which the goods are the produce, and from which they are brought. The only exceptions to this rule are articles from Asiatic and African Turkey imported from the Levant, and bullion.

Besides the restrictive regulations already alluded to, it had been a part of our policy to encourage the employment of our shipping, by imposing higher duties on commodities imported into our harbours in foreign vessels, than were imposed on them when imported in British vessels; and it had also been customary to charge foreign vessels with higher port and light-house duties, &c. This system was always loudly complained of by foreigners; but we had little difficulty in maintaining it, so long as the state of our manufactures enabled us to disregard the retaliatory measures of other powers. But the extraordinary increase that took place, since the commencement of the late war, in our manufactures for foreign consumption, and the necessity under which we were, in consequence, placed, of conciliating our customers abroad, led to the adoption of the *reciprocity system*. This system was first introduced into the trade with the United States. After the North American colonies had succeeded in establishing their independence, they set about framing a code of navigation laws on the model of those of this country. Among other regulations of a restrictive character, it was enacted, that all foreign vessels trading to the United States should pay $\frac{1}{2}$ a dollar, which was afterwards raised to a dollar, per ton duty, beyond what was paid by American ships; and further, that goods imported in foreign vessels should pay a duty of 10 per cent. over and above what was payable on the same description of goods imported in American vessels.

This law was avowedly directed against the navigation of Great Britain; though, as it was bottomed on the very same principles as our navigation laws, we could not openly complain of its operation. Under these circumstances, it would have been sound policy to have at once proposed an accommodation; and instead of attempting to meet retaliation by retaliation, to have offered to modify our navigation law, in so far as American shipping was concerned, on condition of the Americans making reciprocal modifications in our favour. A different course was, however, followed. Various devices were fallen upon to counteract the navigation system of the Americans, without in any degree relaxing our own: but they all failed of their object; and at length it became obvious to every one that we had engaged in an unequal struggle, and that the real effect of our policy was to give a bounty on the importation of the manufactured goods of other countries into the United States, and thus gradually to exclude both our manufactures and ships from the ports of the Republic. In consequence, the conviction of the necessity of making concessions gained ground progressively; and it was ultimately fixed, by the commercial treaty agreed upon between Great Britain and the United States in 1815, that in future *equal charges* should be imposed on the ships of either country in the ports of the other, and that *equal duties* should be laid upon all articles, the produce of the one country, imported into the other, whether such importation were effected in the ships of the one or the other.

The new States of South America were naturally anxious to establish a commercial marine; and, to forward their views in this respect, they contemplated enacting navigation laws. But this intention was frustrated by the interference of the British government, who, without stipulating for any peculiar advantage, wisely offered to admit their ships into our ports on a fair footing of reciprocity, or on their paying the same charges as our own ships, on condition that they admitted British ships into their ports on a similar footing. Commercial treaties framed on this sound and liberal principle have since been entered into with most of these States.

The principle of the reciprocity system having been thus conceded in the case of the intercourse with the United States, whose commercial marine is second only to that of Great Britain, it was not possible to refuse acting on the same principle in the case of such European countries as might choose to admit our ships into their ports on a footing of equality.* The first demand of this sort was made on the part of the Prussian government, by whom an order in council was issued on the 20th of June, 1822, which made large additions to the port dues charged on all ships belonging to those nations which did not admit Prussian ships on a footing of reciprocity. The real object of this order was to injure the navigation of this country; and it was speedily found that it had the desired effect, and that its operation on British shipping was most pernicious.

Under these circumstances, the British merchants and ship owners applied to our government for relief. "We were assailed," said Mr. Huskisson, "with representations from all quarters connected with the shipping and trade of the country, against the heavy charges imposed upon British ships in the ports of Prussia. In such circumstances, what course did his Majesty's government take? We felt it to be our duty, in he first instance, to communicate with the Prussian minister in this country; and our minister at Berlin was, I believe, also directed to confer with the Prussian government on the subject. I myself had a conference with the Prussian minister at this court, and

* By the fourth section of the act 6 Geo. 4. c. 1. it is enacted, that his Majesty may, by an order in council, admit the ships of foreign states into our ports, on payment of the like duties that are charged on British vessels, provided that British ships are admitted into the ports of such foreign states, on payment of the like duties that are charged on their vessels.

I well recollect the substance of his reply to me: — 'You have,' he said, 'set us the example, by your port and light charges, and your discriminating duties on Prussian ships; and we have not gone beyond the limits of that example. Hitherto, we have confined the increase of our port and tonnage charges to ships only; *but it is the intention of my government next year,*' (and of this he showed me the written proof,) '*to imitate you still more closely, by imposing discriminating duties on the goods imported in your ships.* Our object is a just protection of our own navigation; and so long as the measure of our protection does not exceed that which is afforded in your ports to British ships, we cannot see with what reason you can complain.'

"Against such a reply what remonstrance could we in fairness make to the Prussian government? We might have addressed ourselves, it may be said by some, to the friendly feelings of that government; we might have pleaded long usage in support of our discriminating duties: we might have urged the advantages which Prussia derived from her trade with England. Appeals like these were not forgotten in the discussion; but they were of little avail against the fact stated by the consul at Dantzic, — that 'the Prussian ship owners were all going to ruin.'

"By others it may be said, 'Your duty was to retaliate, by increasing your own port charges, and discriminating duties on Prussian shipping.' I have already stated generally my reasons against the policy of this latter course. We were not prepared to begin a system of commercial hostility, which, if followed up on both sides to its legitimate consequences, could only tend to reciprocal prohibition. In this state of things, more prudently, as I contend, we entered upon an amicable negotiation with the Prussian government, upon the principle of our treaty with the United States, — that of abolishing, on both sides, all discriminating duties on the ships and goods of the respective countries in the ports of the other.

"Having concluded an arrangement with Prussia upon this basis, we soon found it necessary to do the same with some other of the Northern states. Similar conventions were accordingly entered into with Denmark and Sweden. Reciprocity is the foundation of all those conventions: but it is only fair to add, that they contain other stipulations for giving facility to trade, and from which the commerce of this country, I am confident, will, in the result, derive considerable advantage." — (*Mr. Huskisson's Speech,* 12th of May, 1826, *on the State of the Shipping Interest.*)

This statement shows conclusively, that the establishment of the reciprocity system, with respect to which so violent a clamour was raised, was not a measure of choice, but of necessity. In the state in which our manufactures are now placed, we could not afford to hazard their exclusion from a country into which they are annually imported to a very large extent. So long as the Prussians, Swedes, Danes, &c. chose to submit to our system of discriminating duties on foreign ships, and on the goods imported in them, without retaliating, it was no business of ours to tell them that that system was illiberal and oppressive. But when they found this out without our telling them; and when they declared, that unless we modified our restrictions, they would retaliate on our commerce, and either entirely exclude our commodities from their markets, or load those that were imported in British ships with prohibitory duties; should we have been justified, had we refused to come to an accommodation with them? Were we to sacrifice the substance to the shadow? — to turn away some of our very best customers, because they chose to stipulate that the intercourse between them and us should be conducted either in their ships or in ours, as the merchants might think best? Our government had only a choice of difficulties; and they wisely preferred adopting a system which has preserved free access for the English manufacturer to the markets of Prussia, and to the English ship owners an equal chance with those of Prussia of being employed in the traffic between the two countries, to a system that would eventually, and at no distant period, have put an end to all intercourse between the two countries, and which had already subjected it to great difficulties.

It was said by the ship owners, and others opposed to the late alterations, that the Prussians can build, man, and victual ships at a cheaper rate than we can do; and that the ultimate effect of the reciprocity system would, consequently, be to give them a decided superiority in the trade. But, admitting this statement to be true, still, for the reasons already given, it is pretty evident that the policy we have pursued was, under the circumstances of the case, the best. Had we refused to establish the reciprocity system, we must have submitted to be entirely excluded from the markets of the United States, Prussia, &c. In grasping at what was beyond our reach, we should thus have lost what we were already in possession of. We should not only have injured our ship owners, by getting them forcibly excluded from the ports of many great commercial states, but we should have done an irreparable injury to our manufacturers, — a class which, without undervaluing the ship owners, is of incomparably more importance than they. Although, therefore, no doubt could be entertained with respect to the statements of the ship owners as to the comparative cheapness of foreign shipping, that would

be no good objection to the measures that have been adopted. But these statements, though probably in some respects true, were certainly much exaggerated. In comparing the cost of British and foreign shipping, it is usual to estimate it by the tonnage: but this is a very false criterion; for, while foreign ships are accurately measured, our ships are measured so that a vessel of 150 tons register generally carries 220 tons of a mixed cargo, and a vessel registered at 400 tons seldom carries less than 600. If this difference be taken into account, it will be found that the Prussians, and other Northern nations, from whom the greatest danger was apprehended, have no considerable advantage in the cheapness of their ships; and it is generally admitted that ships built in the ports on the Baltic will not last the time, nor bear the wear and tear, that ships built in this country or France will do. The wages of American seamen are higher than ours; and it is stated by those engaged in the shipping trade, that the wages paid by the Northern ship owners are about as high as in England, and that their crews are larger in proportion to the burden of the ship. The difference in the cost of victualling must be immaterial, for, in all distant voyages, our ships procure provisions and stores of all sorts at the same rate as the foreigner.* On the whole, therefore, it would appear that the alarm with respect to the apprehended decay of our shipping was in a great degree, if not entirely, imaginary. And while the late modifications in the navigation laws were imperiously required by a just regard to our manufacturing and commercial interests, there are no good grounds for thinking that they will be injurious to our shipping.

ABSTRACT OF AN ACT ENTITLED FOR THE ENCOURAGEMENT OF BRITISH SHIPPING AND NAVIGATION.
3 & 4 WILL. 4. c. 54.

This act shall come into and be and continue in full force and operation, from and after the 1st day of September, 1833. — § 1.

Ships in which only enumerated Goods of Europe may be imported. — The several sorts of goods hereinafter enumerated, being the produce of Europe, viz. masts, timber, boards, tar, tallow, hemp, flax, currants, raisins, figs, prunes, olive oil, corn or grain, wine, brandy, tobacco, wool, shumac, madders, madder roots, barilla, brimstone, bark of oak, cork, oranges, lemons, linseed, rape seed, and clover seed, shall not be imported into the United Kingdom to be used therein, except in British ships, or in ships of the country of which the goods are the produce, or in ships of the country from which the goods are imported. — § 2.

Places from which only Goods of Asia, Africa, or America may be imported. — Goods, the produce of Asia, Africa, or America, shall not be imported from Europe into the United Kingdom, to be used therein, except the goods herein-after mentioned; (that is to say,)

Goods, the produce of the dominions of the Emperor of Morocco, which may be imported from places in Europe within the Straits of Gibraltar:
Goods, the produce of Asia or Africa, which (having been brought into places in Europe within the Straits of Gibraltar, from or through places in Asia or Africa within those Straits, and not by way of the Atlantic Ocean) may be imported from places in Europe within the Straits of Gibraltar:
Goods, the produce of places within the limits of the East India Company's charter, which (having been imported from those places into Gibraltar or Malta in British ships) may be imported from Gibraltar or Malta:
Goods taken by way of reprisal by British ships:
Bullion, diamonds, pearls, rubies, emeralds, and other jewels or precious stones. — Sect. 3.

Ships in which only Goods of Asia, Africa, or America may be imported. — Goods, the produce of Asia, Africa, or America, shall not be imported into the United Kingdom, to be used therein, in foreign ships, unless they be the ships of the country in Asia, Africa, or America, of which the goods are the produce, and from which they are imported, except the goods herein-after mentioned; (that is to say,)

Goods, the produce of the dominions of the Grand Seignior, in Asia or Africa, which may be imported from his dominions in Europe, in ships of his dominions:
Raw silk and mohair yarn, the produce of Asia which may be imported from the dominions of the Grand Seignior in the Levant seas, in ships of his dominions:
Bullion. — Sect. 4.

Manufacture deemed Produce. — All manufactured goods shall be deemed to be the produce of the country of which they are the manufacture. — § 5.

From Guernsey, &c. — No goods shall be imported into the United Kingdom from the islands of Guernsey, Jersey, Alderney, Sark, or Man, except in British ships. — § 6.

Exports to Asia, &c. and to Guernsey, &c. — No goods shall be exported from the United Kingdom to any British possession in Asia, Africa, or America, nor to the islands of Guernsey, Jersey, Alderney, Sark, or Man, except in British ships. — § 7.

Coastwise. — No goods shall be carried coastwise from one part of the United Kingdom to another, except in British ships. — § 8.

Between Guernsey, Jersey, &c. — No goods shall be carried from any of the islands of Guernsey, Jersey, Alderney, Sark, or Man, to any other of such islands, nor from one part of any of such islands to another part of the same island, except in British ships. — § 9.

Between British Possessions in Asia, &c. — No goods shall be carried from any British possession in Asia, Africa, or America, to any other of such possessions, nor from one part of any of such possessions to another part of the same, except in British ships. — § 10.

Imports into British Possessions in Asia, &c. — No goods shall be imported into any British possession

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* See on this subject an able pamphlet, entitled "Observations on the Warehousing System and Navigation Laws," by Sir John Hall, Secretary to the St. Katharine's Dock Company. The following extract from the evidence of Mr. Edward Solly, before the Lords' Committee of 1820, seems to be conclusive as to the accuracy of the statements in the text: — "I," said he, "was formerly a considerable owner of Prussian ships, and therefore I had a good deal of experience in Prussian shipping, and I can safely say that Prussian ships cannot compete with English ships in time of peace: the English ships are navigated cheaper than Prussian ships; the Prussian vessels are more heavily masted and rigged, and require a greater complement of men, whilst the English ship is manned mostly by apprentices; the English ships require less ballast; the economy of shipping is better understood and practised in them; there is greater activity of the captain and crew; they are insured in clubs at the average rate of 5 per cent., while the Prussian ships cannot get the same insurance done for 12; and as to the outfit, the provisions, and other necessaries for the ship, both parties have their choice where they will lay in their stock, whether in a Prussian or an English port: if provisions are cheap in the Prussian port, the English captain lays in his stock of provisions there. Generally, I am of opinion that British ships can sail cheaper than those of any other nation." — (*Evidence*, p. 14.)

in Asia, Africa, or America, in any foreign ships, unless they be ships of the country of which the goods are the produce, and from which the goods are imported. — § 11.

No Ship British, unless registered and navigated as such. — No ship shall be admitted to be a British ship, unless duly registered and navigated as such; and every British register ship (so long as the registry of such ship shall be in force, or the certificate of such registry retained for the use of such ship) shall be navigated during the whole of every voyage (whether with a cargo or in ballast), in every part of the world, by a master who is a British subject, and by a crew, whereof 3-4ths at least are British seamen; and if such ship be employed in a coasting voyage from one part of the United Kingdom to another, or in a voyage between the United Kingdom and the islands of Guernsey, Jersey, Alderney, Sark, or Man, or from one of the said islands to another of them, or from one part of either of them to another of the same, or be employed in fishing on the coasts of the United Kingdom or of any of the said islands, then the whole of the crew shall be British seamen. — § 12.

Exception in favour of Vessels under 15 Tons Burden, &c. — All British-built boats or vessels under 15 tons burden, wholly owned and navigated by British subjects, although not registered as British ships, shall be admitted to be British vessels, in all navigation in the rivers and upon the coasts of the United Kingdom, or of the British possessions abroad, and not proceeding over sea, except within the limits of the respective colonial governments within which the managing owners of such vessels respectively reside; and all British-built boats or vessels wholly owned and navigated by British subjects, not exceeding the burden of 30 tons, and not having a whole or a fixed deck, and being employed solely in fishing on the banks and shores of Newfoundland and of the parts adjacent, or on the banks and shores of the provinces of Canada, Nova Scotia, or New Brunswick, adjacent to the Gulf of Saint Lawrence, or on the north of Cape Canso or of the islands within the same, or in trading coastwise within the said limits, shall be admitted to be British boats or vessels, although not registered, so long as such boats or vessels shall be solely so employed. — § 13.

Honduras Ships to be as British, in Trade with United Kingdom and Colonies in America. — All ships built in the British settlements at Honduras, and owned and navigated as British ships, shall be entitled to the privileges of British registered ships in all direct trade between the United Kingdom or the British possessions in America and the said settlements; provided the master shall produce a certificate under the hand of the superintendent of those settlements, that satisfactory proof has been made before him that such ship (describing the same) was built in the said settlements, and is wholly owned by British subjects; provided also, that the time of the clearance of such ship from the said settlements for every voyage shall be endorsed upon such certificate by such superintendent. — § 14.

Ship of any Foreign Country to be of the Built of, or Prize to such Country; or British-built, and owned and navigated by Subjects of the Country. — No ship shall be admitted to be a ship of any particular country, unless she be of the built of such country; or have been made prize of war to such country; or have been forfeited to such country under any law of the same, made for the prevention of the slave trade, and condemned as such prize or forfeiture by a competent court of such country; or be British-built (not having been a prize of war from British subjects to any other foreign country); nor unless she be navigated by a master who is a subject of such foreign country, and by a crew of whom 3-4ths at least are subjects of such country; nor unless she be wholly owned by subjects of such country usually residing therein, or under the dominion thereof: provided always, that the country of every ship shall be deemed to include all places which are under the same dominion as the place to which such ship belongs. — § 15.

Master and Seamen not British, unless natural-born, or naturalised, &c. — No person shall be qualified to be a master of a British ship, or to be a British seaman within the meaning of this act, except the natural-born subjects of his Majesty, or persons naturalised by any act of parliament, or made denizens by letters of denization; or except persons who have become British subjects by virtue of conquest or cession of some newly acquired country, and who shall have taken the oath of allegiance to his Majesty, or the oath of fidelity required by the treaty or capitulation by which such newly acquired country came into his Majesty's possession; or persons who shall have served on board any of his Majesty's ships of war in time of war for the space of 3 years: provided always, that the natives of places within the limits of the East India Company's charter, although under British dominion, shall not, upon the ground of being such natives, be deemed to be British seamen: provided always, that every ship (except ships required to be wholly navigated by British seamen) which shall be navigated by 1 British seaman, if a British ship, or 1 seaman of the country of such ship, if a foreign ship, for every 20 tons of the burden of such ship, shall be deemed to be duly navigated, although the number of other seamen shall exceed 1-4th of the whole crew: provided always, that nothing herein contained shall extend to repeal or alter the provisions of an act passed in the 4th year of the reign of his late Majesty King George IV. for consolidating and amending the laws then in force with respect to trade from and to places within the limits of the East India Company's charter. — § 16.

Foreigners having served 2 Years on board H. M. Ships during War. — It shall be lawful for his Majesty, by his royal proclamation during war, to declare that foreigners, having served 2 years on board any of his Majesty's ships of war, in time of such war, shall be British seamen within the meaning of this act. — § 17.

British Ship not to depart British Port unless duly navigated, &c. — No British registered ship shall be suffered to depart any port in the United Kingdom, or any British possession in any part of the world (whether with a cargo or in ballast), unless duly navigated: provided always, that any British ships trading between places in America may be navigated by British negroes; and that ships trading eastward of the Cape of Good Hope, within the limits of the East India Company's charter, may be navigated by Lascars, or other natives of countries within those limits. — § 18.

If Excess of Foreign Seamen, Penalty 10l. for each, &c. — If any British registered ship shall at any time have, as part of the crew, in any part of the world, any foreign seaman not allowed by law, the master or owners of such ship shall for every such foreign seaman forfeit the sum of 10l.: provided always, that if a due proportion of British seamen cannot be procured in any foreign port, or in any place within the limits of the East India Company's charter, for the navigation of any British ship; or if such proportion be destroyed during the voyage by any unavoidable circumstance, and the master of such ship shall produce a certificate of such facts under the hand of any British consul, or of 2 known British merchants, if there be no consul at the place where such facts can be ascertained, or from the British governor of any place within the limits of the East India Company's charter; or, in the want of such certificate, shall make proof of the truth of such facts to the satisfaction of the collector and comptroller of the customs of any British port, or of any person authorised in any other part of the world to inquire into the navigation of such ship; the same shall be deemed to be duly navigated. — § 19.

Proportion of Seamen may be altered by Proclamation. — If his Majesty shall, at any time, by his royal proclamation, declare that the proportion of British seamen necessary to the due navigation of British ships shall be less than the proportion required by this act, every British ship navigated with the proportion of British seamen required by such proclamation shall be deemed to be duly navigated, so long as such proclamation shall remain in force. — § 20.

Goods prohibited only by Navigation Law may be imported for Exportation. — Goods of any sort or the produce of any place, not otherwise prohibited than by the law of navigation herein-before contained, may be imported into the United Kingdom from any place in a British ship, and from any place not being a British possession in a foreign ship of any country, and however navigated, to be warehoused for exportation only, under the provision of any law in force for the time being, made for the warehousing of goods without payment of duty upon the first entry thereof. — § 21.

Forfeitures how incurred. — Any goods imported, exported, or carried coastwise, contrary to the law of navigation, shall be forfeited, and the masters of ships carrying the same shall forfeit each the sum of 100l. — § 22.

Recovery of Forfeitures. — All penalties and forfeitures incurred under this act shall be sued for, prosecuted, recovered, and disposed of, or shall be mitigated or restored, in like manner as any penalty or forfeiture can be sued for, prosecuted, recovered, and disposed of, or may be mitigated or restored, under an act passed in the present session of parliament for the prevention of smuggling. — § 23.

NEW ORLEANS, the capital of Louisiana, one of the United States, situated on the eastern bank of the Mississippi, about 105 miles from its mouth, in lat. 29° 57′ 45″ N., lon. 90° 9′ W. Population, in 1830, 46,309. The new-built streets are broad, intersecting each other at right angles; and the houses are mostly of brick. It is the grand emporium of all the vast tracts traversed by the Mississippi, the Missouri, and their tributary streams, enjoying a greater command of internal navigation than any other city either of the Old or New World. Civilisation has hitherto struck its roots, and begun to flourish, only in some comparatively small portions of the immense territories of which New Orleans is the sea-port; and yet it appears, from the official accounts printed by order of Congress, that during the year ending the 30th of September, 1832, the value of the native American produce exported from this city amounted to 14,105,118 dollars, while the value of that exported from New York only amounted to 15,057,250. With respect to imports, the case is materially different; the value of those of New Orleans, in the year just mentioned, being only 8,871,653 dollars, or not more than a *sixth* part of those of New York. It is believed by many, seeing how rapidly settlements are forming in the "West," that New Orleans must, at no very distant period, exceed every other city of America, as well in the magnitude of its imports as of its exports; and, considering the boundless extent and extraordinary fertility of the uncultivated and unoccupied basins of the Mississippi and Missouri, the anticipations of those who contend that New Orleans is destined to become the greatest emporium, not of America only, but of the world, will not appear very unreasonable. Steam navigation has been of incalculable service to this port, and, indeed, to the whole of central America. The voyage up the Mississippi, that used formerly to be so difficult and tedious, is now performed in commodious steam packets with ease, celerity, and comfort. "There have been counted," says Mr. Flint, "in the harbour, 1,500 flat boats at a time. Steam boats are arriving and departing every hour; and it is not uncommon to see 50 lying together in the harbour. A forest of masts is constantly seen along the *levée*, except in the sultry months. There are often 5,000 or 6,000 boatmen from the upper country here at a time; and we have known *thirty* vessels advertised together for Liverpool and Havre. The intercourse with the Havannah and Vera Cruz is great, and constantly increasing."—(*Geography and History of the Western States*, vol. i. p. 557.) From 1811, when the first steam boat was launched in the Mississippi, down to the beginning of 1830, no fewer than 336 steam boats had been built for the navigation of this river, the Missouri, Ohio, &c., of which 213 were employed at the latter period. In December, 1831, the aggregate burden of the steam vessels belonging to this port amounted to 36,676 tons! Vessels of the largest burden may navigate the river several hundreds of miles above New Orleans. A large proportion of the foreign trade of New Orleans is carried on in foreign bottoms; and as a shipping port, she ranks far below several of the other ports of the Union. The total of the registered, enrolled, and licensed tonnage belonging to New Orleans on the 31st of December, 1831, amounted to 55,407 tons; of which 37,849 tons were employed in the coasting trade. The depth of water in the river opposite to New Orleans is, at a medium, about 70 feet; and it maintains soundings of 30 feet till within a mile of its confluence with the sea. Besides 3 or 4 of inferior consequence, the Mississippi has 4 principal passes or outlets. In the south-east, or main pass, at Balize, the water on the bar at ordinary tides does not exceed 12 feet; and as the rise of tides in the Gulf of Mexico is not more than 2 or 2½ feet, vessels drawing much water cannot make their way from the ocean to New Orleans.—(*Darby's View of the United States*, p. 467.)

The unhealthiness of the climate is the great drawback on New Orleans. This probably arises from the low and marshy situation of the city and surrounding country, which is under the level of the Mississippi, being protected from inundation only by an artificial *levée* or mound, varying from 5 to 30 feet in height, and extending along the bank of the river a distance of 100 miles. The unhealthy season includes July, August, and September; during which period the yellow fever often makes dreadful havoc, particularly among the poorer classes of immigrants from the North and from Europe. Latterly, great efforts have been made to improve the health of the city, by supplying it abundantly with water, paving the streets, removing wooden sewers, and replacing them with others of stone, &c. Many places, where water used to stagnate, have been filled up; and large tracts of swampy ground contiguous to the town have been drained. And as such works will no doubt be prosecuted on a still larger scale, according to the increase of commerce and population, it is to be hoped that the ravages of fever may be materially abated, though the situation of the city excludes any very strong expectation of its ever being rendered quite free from this dreadful scourge.

The following Tables give a very complete view of the trade of this great and growing emporium: —

I. Account of the Quantity of the various Articles imported from the Interior to New Orleans during the Nine Years ending with the 30th of September, 1832. These, of course, form also the Articles of Exportation.

Articles.	1832.	1831.	1830.	1829.	1828.	1827.	1826.	1825.	1824.
Apples - - - bbls.	12,218	4,300	8,762	7,779	10,225	7,317	4,919	11,827	6,825
Apple brandy - - - —	51	2	169	59	78	25	30	149	15
Bacon, assorted - hhds.	4,314	4,869	30,211	2,868	3,097	1,533	470	1,210	349
casks	537	558	477	761	1,050	564	202		
boxes	370	1,207	312	752	1,190	274	143	385	
Bacon hams - - hhds.	2,724	2,096	322	2,902	1,423	1,011	468	367	
boxes	65	305	176	1,157	456	149	108	71	
Bacon in bulk - - lbs.	907,387	1,282,334	309,017	291,001	229,756	327,269	369,437	211,259	550,877
Bagging, Kentucky - pieces	23,960	25,956	12,306	13,472	5,972	2,795	5,299	6,191	4,562
Bale rope - - coils	22,973	43,560	20,288	16,054	17,038	11,749	6,654	4,838	7,704
Beans - - - bbls.	2,833	1,648	2,989	1,920	773	755	341	537	1,867
Butter - - - kegs	4,939	4,106	5,489	3,995	3,860	4,561	2,926	2,130	1,868
jars	563	205	95	148	138	110	427	60	56
hhds.	13	5	1	1	4	44	3	20	22
firkins	75	113	357	145	187	108	110	102	48
bbls.	165	446	83						
lbs.	- -	- -	- -	3,301	3,956	27,305	9,100	8,300	7,950
Bees-wax - - bbls.	512	332	811	795	770	603	560	503	295
boxes	374	183	73	40	69	185	17	29	31
lbs.	- -	500	441	5,400	6,484	8,039	10,075	12,920	-
Beef - - bbls.	4,550	10,596	7,566	5,405	5,622	1,792	1,203	1,242	732
hhds.	3	80	22	133	33	35	12	3	7
dried - - - lbs.	172,410	40,600	200	2,100	17,272	4,500	19,000	4,000	850
Buffalo robes - - packs	1,992	2,554	3,061	15,210	19,987	13,412	7,740	18,411	12,609
Cotton, Louisiana and Miss. bales	198,610	242,427	174,194	150,570	191,176	170,295	143,124	124,630	74,970
Mobile - - —	17,663	367	6,093	6,350	3,484	2,613	2,685	7,615	13,819
Lake - - —	7,354	10,338	9,302	8,753	8,017	9,627	7,512	4,998	2,275
N. Alabama and Tenn. —	114,954	171,516	168,806	99,355	92,648	152,166	96,574	68,895	51,181
Missouri and Illinois - —	- -	- -	7	20	109	3	10	26	31
Arkansas - - —	1,187	1,769	1,525	1,332	1,201	1,739	1,002	403	285
Florida - - - —	9,499	2,024	3,521	2,907	1,543	1,481	1,076	226	11
Texas - - - —	540	535	193	284					
Corn meal - - bbls.	1,996	2,313	2,443	6,849	498	1,827	729	3,420	4,727
in ears - - - —	71,047	42,194	42,397	91,882	89,876	79,937	143,373	72,563	37,551
shelled - - sacks	7,112	290,754	21,190						
Cheese - - casks	329	120	179	84	147	6	3	17	3
Candles - - - boxes	127	103	622	318	731	124	121	768	305
Cider - - - bbls.	782	239	635	455	646	320	237	1,025	1,224
Coal, western - - —	50,000	- -	40,800						
Dried peaches - - —	47	50	136	336	338	201	161	31	69
apples - - - —	250	65	231	126	140	368	235	105	119
Feathers - - - bags	143	438	98	373	285	262	294	513	194
Flax-seed - - - bbls.	887	400	724	541	260	378	501	180	
Flour - - - —	210,887	360,580	133,700	157,323	152,593	131,096	129,094	140,546	100,923
Furs - - - hhds.	149	103	80	67	86	174	217	201	50
boxes	12	17	12	21	8	13	27	12	
bundles	671	318	387	431	271	123	164	449	
Gin - - bbls.	468	- -	10	143	285	33	33	- -	12
Ginseng - - bags and cases	270	162	133	47	56	189	28	- -	5
lbs.	- -	- -	- -	- -	350	62	46	150	48
Hemp - - bundles	497	278	6,429	2,137	724	- -	19	1,149	910
Hempen yarn - - reels	333	188	398	379	256	42	99	337	209
Packing yarn - - —	16	- -	88						
Hides - - - -	12,929	22,716	15,823	18,439	12,934	29,129	15,959	11,199	6,610
Horns - - - -	30,267	32,686	29,192	17,327	23,298	12,924	12,505	14,852	10,535
Hay - - bundles	1,155	247	1,025	777	167	615	682	588	110
Iron, pig - - tons	30	411	328						
Iron - - lbs.	49,283	- -	2,542	922,348	1,176,022	680,586			
Lard - - hhds.	- -	10	6	19	11	13	8	1	2
bbls.	1,241	1,338	117	531	1,082	855	344	486	170
kegs	151,420	131,111	70,276	110,206	115,635	85,865	51,053	34,573	18,210
lbs.	- -	505	- -	12,000	74,073	146,914	66,776	47,960	151,355
Leather - - bundles	325	489	214	519	312	594	553	410	94
sides	- -	- -	240	135	385	849	1,363	73	1,593
Lead, pig - - pigs	122,933	151,251	254,805	146,203	183,712	106,405	86,242	58,479	45,454
bar - kegs and boxes	343	2,022	2,034	792	471	1,299	473	306	442
lbs.	245,500	- -	- -	409,641	- -	- -	190,292	198,244	592,853
Oats - - bbls.	2,169	1,852	4,110	5,210	1,763	2,162	3,957	1,267	463
Onions - - - —	554	809	1,325	548	357	566	227	278	101
Oil, linseed - - —	57	1,666	1,840	2,940	2,637	1,723	708	622	191
bear - - - —	48	151	146	254	63	91	29	127	
castor - - - —	347	572	726	166	91	68			
Peach brandy - - —	25	5	206	217	192	54	52	82	9
Pecans - - - —	6	2	234	242	747	165	357	168	
Pickles - - - —	57	19	108	156	88	200	39	5	54
kegs	250	983	1,060	218	780	250	91	150	114
Potatoes - - bbls.	7,842	2,722	5,148	5,883	1,852	4,268	2,199	2,750	2,827
Pork - - - —	67,672	62,152	35,407	49,110	35,817	25,467	33,632	15,552	10,184
hhds.	30	117	33	604	362	376	793	521	544
in bulk - - lbs.	4,114,096	953,200	311,128	941,400	863,690	291,500	999,853	146,750	85,663
Porter and ale - - bbls.	1,516	206	631	424	536	120	296	242	468
Peas - - - —	15	71	58	157	12	53	113	2	57
Rum - - - —	397	684	87	416	286	362	298	140	354
Skins, deer - - packs	3,809	3,805	4,089	6,215	3,160	4,169	11,693	4,820	3,863
bear - - - —	197	140	128	159	155	253	161	396	168
Ship bread - - bbls.	- -	- -	- -	3,076	95	320	520	253	176
Shot - - kegs	1,196	3,096	4,528	2,443	1,127	2,881	1,472	1,081	53
lbs.	- -	- -	- -	- -	- -	- -	- -	9,300	30,800
bags	- -	- -	1	146	213	551	78	15	509
Soap - - boxes	76	408	1,340	4,475	6,906	4,118	2,539	2,367	934
Shingles - - mille	251	- -	- -	331	- -	17	7	5	16
Staves - - - —	700	990	933	856	827	666	776	615	98
Segars - - bbls.	2	- -	- -	22	11	14	6	6	12
boxes	523	- -	- -	156	152	50	6	94	
Moss, Spanish - - bales	720	192	779						
Tallow - - - bbls.	1,587	631	1,337	3,900	612	397	747	444	655
Tobacco, leaf - hhds.	30,015	32,708	33,781	29,432	30,345	31,704	19,385	18,049	25,733
chewing - kegs and boxes	11,468	1,875	1,668	4,571	4,978	2,677	1,028	2,321	2,321
carrots	1,447	1,028	631	2,137	2,821	2,556	1,744	41	2,142
bales	2,272	- -							
Tow linen - - yards	- -	- -	- -	4,400	450	500	3,600	115	1,800
bales	- -	4	56	33	10	2	13	- -	5
Twine - bundles	126	202	264	445	183	18	44		
lbs.	- -	- -	- -	2	129	500	500	- -	3,920
boxes	11	21	67	139	234	41	47	19	
Venison hams	970	4,698	4,133	28,152	6,670	3,108	11,603	191	4,656
Vinegar - - bbls.	64	124	63	79	1,725	170	79	50	24
Whisky - - - —	37,012	30,579	24,691	26,449	44,507	35,982	10,526	32,704	18,897
Window glass - - boxes	1,195	2,...5	4,741	912	459	1,189	1,896	2,304	728

II. Exports of Cotton and Tobacco from New Orleans during each of the Nine Years ending the 30th of September, 1832.

Whither exported.	1831-32.	1830-31.	1829-30.	1828-29.	1827-28.	1826-27.	1825-26.	1824-25.	1823-24.
	Bales of Cotton.								
Great Britain	203,365	225,374	196,892	130,514	142,546	193,539	116,918	101,904	61,624
France	78,158	60,913	93,446	78,370	66,425	60,101	63,760	32,834	34,424
North of Europe	4,423	2,911	4,213	12,953	8,215	9,279	4,500	773	146
South of Europe	5,752	2,400	1,223	5,095	1,379	-	137	-	930
Coastwise	64,728	135,086	56,116	41,017	86,283	66,763	66,609	69,046	46,819
Total	356,406	424,684	351,890	267,949	304,848	329,682	251,924	204,557	143,943
	Hogsheads of Tobacco.								
Great Britain	8,448	6,131	1,792	4,567	5,400	2,832	1,889	3,008	2,782
France	576	258	451	230	382	770	-	76	154
North of Europe	7,157	4,815	5,161	3,732	6,526	4,183	2,661	1,102	4,217
South of Europe	1,401	2,524	6,644	8,288	4,294	2,763	2,599	2,590	4,139
Coastwise	15,392	21,240	13,980	8,674	18,509	16,022	11,331	10,073	14,618
Total	32,974	34,968	28,028	25,491	35,111	26,570	18,480	16,849	25,910

III. — Arrivals of Ships, Brigs, Schooners, Sloops, and Steam Boats, for Four Years, ending the 30th of September, 1832.

Months.	1832.						1831.						1830.						1829.					
	Ships.	Brigs.	Schnrs.	Sloops.	Total.	Steam Boats.	Ships.	Brigs.	Schnrs.	Sloops.	Total.	Steam Boats.	Ships.	Brigs.	Schnrs.	Sloops.	Total.	Steam Boats.	Ships.	Brigs.	Schnrs.	Sloops.	Total.	Steam Boats.
October	25	32	37	1	95	50	19	22	21	3	65	27	12	22	18	3	55	39	18	19	7	2	46	41
November	38	45	48	2	131	85	45	61	32	4	142	49	40	48	31	2	121	59	46	53	12	5	116	55
December	41	45	39	10	135	84	37	35	40	3	115	90	50	43	35	3	131	98	37	63	18	6	124	84
January	33	49	64	6	152	102	23	36	38	1	98	85	20	61	31	2	114	96	27	52	28	25	132	97
February	29	41	58	3	131	94	29	40	51	2	122	71	24	73	53	3	153	69	14	36	27	1	78	77
March	36	57	57	4	154	107	55	51	68	7	161	114	18	37	34	6	95	96	40	47	21	6	104	88
April	22	30	60	4	116	109	37	66	46	6	155	106	42	43	38	4	127	90	27	39	24	3	93	93
May	43	33	51	2	129	108	74	87	68	6	235	109	34	36	29	4	103	83	24	47	31	7	109	89
June	31	20	30	1	82	61	21	59	43	2	125	79	25	37	25	2	89	80	24	21	19	4	68	73
July	14	21	25	-	60	50	26	39	35	2	102	41	15	19	28	2	64	39	19	2	15	1	58	34
August	15	24	21	-	60	23	11	25	30	1	67	20	2	15	24	1	42	12	10	10	15	1	36	24
September	11	6	20	-	37	34	12	23	20	-	55	22	4	11	20	1	26	17	6	10	8	1	25	15
Totals	338	399	510	33	1,280	887	369	544	492	37	1,442	813	286	445	366	33	1,120	778	282	420	225	62	989	770

We are indebted for the above valuable information to the *Circular Statement of Messrs. John Hagan* and Co., New Orleans, the 1st of October, 1832.

There were in this city, in 1830, 4 banks, with a capital of 9,000,000 dollars, exclusive of a branch of the Bank of the United States, having a capital of 1,000,000 dollars. The aggregate amount of dividends on bank stock during that year amounted to 542,400 dollars. But one of the banks, having a capital of 2,500,000, had only commenced; and as the whole capital of another bank had not been paid up, the dividend was really the produce of a capital of 6,750,000 dollars; being at the rate of 8·037 per cent. thereon. There were, during the same year, 6 insurance companies in the city, having an aggregate capital of 2,400,000 dollars. — (*Statement by J. H. Goddard, Esq., New York Daily Advertiser*, 29th of January, 1831.)

For *Monies, Weights, and Measures*, see NEW YORK.

NEWSPAPERS. Publications in numbers, consisting commonly of single sheets, and published at short and stated intervals, conveying intelligence of passing events.

Importance and Value of Newspapers in a Commercial Point of View. — It is foreign to the purposes of this work to consider the moral and political effects produced by newspapers: of the extent of their influence there is no doubt, even among those who differ widely as to its effect. Their utility to commerce is, however, unquestionable. The advertisements they circulate, though these announcements are limited in Great Britain by a heavy duty, the variety of facts and information they contain as to the supply and demand of commodities in all quarters of the world, their prices, and the regulations by which they are affected, render newspapers indispensable to commercial men, supersede a great mass of epistolary correspondence, raise merchants in remote places towards an equality, in point of information, with those in the great marts, and wonderfully quicken all the movements of commerce. But newspapers themselves have become a considerable commercial article in Great Britain. In the year 1830, the produce of the stamp duty, deducting the discount, levied on newspapers, was 410,980*l.* 6*s.* 6*d.* The gross produce of the sale must have been more than double this sum, without allowing for the papers sold at a higher price than 7*d.*; so that the consumption of newspapers must have amounted, in that year, to nearly 1,000,000*l.* sterling.

Newspapers, in London, are sold by the publishers to newsmen or newsvenders, by whom they are distributed to the purchasers in town and country. The newsmen, who are the retailers, receive, for their business of distribution, a regulated allowance. The papers which are sold to the public at 7*d.*, which form the great mass of London newspapers, are sold to the newsmen in what are technically called quires. Each quire consists of 27 papers, and is sold to the newsmen for 13*s.*; so that the newsman's gross profit on 27 papers is 2*s.* 9*d.* In some instances, where newspapers are sent by the post,

$\frac{1}{2}d.$ additional on each paper is charged by the newsmen to their country customers. Some of the clerks at the post-office, called clerks of the roads, are considerable news-agents. The stamp duty on a newspaper is, at present, nominally 4*d.*; but a discount is allowed on those papers which are sold at a price not exceeding 7*d.*, of 20 per cent. which reduces the stamp duty actually paid to $3\frac{1}{5}d.$ Each paper being sold to the newsman at a little less than $5\frac{3}{4}d.$, the sum which is received by the newspaper proprietors for paper, printing, and the expenses of their establishments, is a small fraction more than $2\frac{1}{5}d.$ for each copy. Advertisements form a considerable source of profit to newspapers; and without this source, some of the most widely circulated of them could not support their great expenditure. Each advertisement is now charged, without distinction of length, with a government duty of 1*s.* 6*d.*; but until last year (1833), the duty was 3*s.* 6*d.* In 1832, the advertisements produced 155,400*l.* 16*s.* in Great Britain, and 15,248*l.* 17*s.* 4*d.* in Ireland. We have no means of ascertaining exactly the portion of this sum derived from newspapers, as distinguished from other publications, but we believe we should under-estimate it by taking it at 3-4ths of the whole. The charges of newspapers for advertisements are proportioned to their length, and to the character of the newspaper itself. The sum received for them may now be taken, inclusive of the duty, at 200,000*l.*

Newspaper stamps are obtained at the Stamp Office, where the paper is sent by the stationers to be stamped. The stamps are paid for before the paper is returned. The duty on advertisements, which is also under the management of the commissioners of stamps, is paid monthly; and, for securing these payments, the printer and 2 sureties become bound in moderate sums.

The London newspapers have become remarkable for the great mass and variety of matter which they contain, the rapidity with which they are printed and circulated, and the accuracy and copiousness of their reports of debates. These results are obtained by a large expenditure and considerable division of labour. The reports of parliamentary proceedings are obtained by a succession of able and intelligent reporters, who relieve each other at intervals of $\frac{3}{4}$ of an hour, or occasionally less. A newspaper cannot aim at copious and correct reports with less than 10 reporters for the House of Commons; and the expense of that particular part of a morning newspaper's establishment exceeds 3,000*l.* per annum.

Regulations as to Newspapers. — The 38 Geo. 3. c. 78. enacts, that no person shall print or publish a newspaper, until an affidavit has been delivered at the Stamp Office, stating the name and places of abode of the printer, publisher, and proprietor; specifying the amount of the shares, the title of the paper, and a description of the building in which it is intended to be printed. A copy of every newspaper is to be delivered within 6 days, to the commissioners of stamps, under a penalty of 100*l.*

The act 39 Geo. 3. c. 79. requires that the name of every printer, type-founder, and maker of printing-presses, shall be entered with the clerk of the peace, under a penalty of 20*l.*; and every person selling types or presses must, if required by a justice of the peace, state to whom they are sold.

A printer is bound to print, upon the front of every page printed on 1 side only, and upon the first and last sheet of every publication containing more than 1 leaf, his name and place of abode. He is also required to keep a copy of every work he prints, on which shall be written or printed the name of his employer; and shall produce the same to any justice, if required, within 6 months.

Persons publishing papers without the name and abode of the printer may be apprehended, and carried before a magistrate; and a peace officer, by warrant of a justice of peace, may enter any place to search for printing presses or types suspected to be kept without the notice required by the act, and may carry them off, together with all printed papers found in the place.

The 1 Geo. 4. c. 9. enacts, that all periodical pamphlets or papers, published at intervals not exceeding 2 days, containing public news, intelligence, or occurrences, or any remarks thereon, and not containing more than 2 sheets, or published for less price than 6*d.*, shall be deemed newspapers, and shall be subject to the same regulations and stamp duties.

Influence of the Tax on Newspapers. — At present it is impossible, without a violation of the stamp laws, to sell newspapers under 7*d.* or $7\frac{1}{2}d.$; so that those poorer persons, who cannot afford so large a sum, or who have no means of getting a newspaper in company with others, are obliged either to be without one, or to resort to those low priced journals that are circulated in defiance of the law. It has been proposed to reduce the duty to 2*d.*; but it may be doubted whether this would be any improvement, and whether the duty be not at present sufficiently low on a paper sold at 7*d.* or upwards. All fixed duties on newspapers seem, however, to be essentially objectionable, inasmuch as, by effectually hindering the free and open circulation of the cheaper sort, they throw their supply into the hands of the least reputable portion of the community, who circulate them surreptitiously, and not unfrequently make them vehicles for diffusing doctrines of the most dangerous tendency. The better way, therefore, would be to assess the duty on newspapers on an *ad valorem* principle, making it, in all cases, 50 per cent., that is, 6*d.* on a newspaper sold at 1*s.*, 1*d.* on one sold at 2*d.*, $\frac{1}{2}d.$ on one sold at 1*d.*, and so on, proportionally to the price. Several advantages would result from such a plan. It would remove the unjust stigma that now attaches to low-priced papers; and men of talent and principle would find it equally advantageous to write in them as in those of a higher price. Were such an alteration made, it seems probable that the present two-penny papers, than which nothing can be conceived more utterly worthless, would, very soon, be superseded by others of a very different character; and if so, the change would

be in the highest degree beneficial. It would also, we apprehend, introduce into newspaper compiling, that division of labour, or rather of subjects, which is found in every thing else. Instead of having all sorts of matters crammed into the same journal, every different topic of considerable interest would be separately treated in a low-priced paper, appropriated to it only, and conducted by persons fully conversant with its principles and details. Under the present omnivorous system, individuals who care nothing for the theatre are, notwithstanding, unable to procure a paper in which it does not occupy a prominent place; and those who cannot distinguish one tune from another have daily served up to them long dissertations on concerts, operas, oratorios, and so forth. The proposed system would give the power of selecting. Those who preferred an *olla podrida* to any thing else, would be sure of finding an abundant supply; while those who wished for a more select regimen — who preferred one or two separate dishes to a multitude huddled together — would be able, — which at present they are not, — to gratify their taste. Neither can there be much doubt that an *ad valorem* duty would be more productive than the present duty; inasmuch as, by legitimatising the circulation of low-priced papers, their number would be prodigiously augmented. It also would have the advantage of being easy of collection; for, being a certain portion of the price, no question could arise with respect to it.

Instead, however, of imposing an *ad valorem* duty on newspapers, it has been proposed to repeal the duty entirely, and to substitute in its stead a post-office duty, similar to that charged in the United States. A scheme of this sort would entirely exempt all newspapers printed and sold in large towns from the duty; a result which, we confess, we do not think is in any respect desirable, but the reverse. In our view of the matter, the object ought not to be to relieve newspapers from the tax, or to create differences in their price by charging a duty only on those carried by post, but to assess the duty so that it should fall equally on them all.

Notices of Newspapers. — The history of newspapers, and of periodical literature in general, remains to be written; and were the task executed by an individual of competent ability, and with due care, it would be a most interesting and important work. It appears, from the researches of Mr. Chalmers, that the first newspaper published in modern Europe made its appearance at Venice, in 1536; but the jealousy of the government would not allow of its being printed; so that, for many years, it was circulated in manuscript! It would seem that newspapers were first issued in England by authority, in 1588, during the alarm occasioned by the approach of the *Armada* to our shores; in order, as was stated, by giving real information, to allay the general anxiety, and to hinder the dissemination of false and exaggerated statements. From this era, newspapers, of one sort or other, have, with a few intermissions, generally appeared in London; sometimes at regular, and sometimes at irregular intervals. During the civil wars, both parties had their newspapers. The earliest newspaper published in Scotland made its appearance under the auspices of Cromwell, in 1652. The Caledonian Mercury was, however, the first of the Scotch newspapers of native manufacture; it made its appearance at Edinburgh, under the title of *Mercurius Caledonius*, in 1660; but its publication was soon afterwards interrupted. In 1715, a newspaper was, for the first time, attempted in Glasgow.

The *Daily Courant*, the first of the daily newspapers published in Great Britain, made its appearance at London in the early part of the reign of Queen Anne. — (See the *Life of Ruddiman*, pp. 102—121.)

From the Stamp Office accounts, it appears that the number of newspapers sold annually in England, during the 3 years ending with 1753, was 7,411,757; in 1760, 9,464,790; in 1790, 14,035,639; in 1792, 15,005,760.

I. Account of the Aggregate Number of Stamps issued for Newspapers in each of the undermentioned Years; distinguishing the Numbers in England, Scotland, and Ireland.

Years.	England.	Scotland.	Great Britain.	Years.	England.	Scotland.	Great Britain.	Ireland.*
1801	15,090,805	994,280	16,085,085	1817	20,946,252	850,816	21,797,068	2,480,401
1802	14,264,289	967,750	15,232,039	1818	21,015,429	1,048,900	22,064,329	2,654,212
1803	15,888,921	1,060,210	16,949,131	1819	21,904,834	1,143,615	23,048,449	2,782,903
1804	16,921,768	1,156,525	18,078,293	1820	25,177,127	1,236,560	26,413,687	2,974,156
1805	17,610,069	1,172,200	18,782,269	1821	23,699,752	1,162,434	24,862,186	2,931,037
1806	19,218,984	1,313,709	20,532,793	1822	22,709,159	1,223,244	23,932,403	3,088,472
1807	20,097,602	1,337,259	21,434,861	1823	23,422,526	1,247,739	24,670,265	3,339,492
1808	20,714,566	1,343,925	22,058,491	1824	24,556,860	1,017,049	25,573,909	3,364,999
1809	22,536,331	1,470,552	24,006,883	1825	25,485,503	1,465,191	26,950,094	3,500,482
1810	22,519,786	1,459,775	23,979,561	1826	25,684,003	1,296,549	26,980,552	3,473,014
1811	22,977,963	1,443,750	24,421,713	1827	25,863,499	1,795,771	27,659,270	3,545,846
1812	23,719,000	1,573,600	25,292,600	1828	26,632,566	2,162,643	28,795,209	3,790,272
1813	24,839,397	1,503,221	26,342,618	1829	26,337,006	2,699,328	29,036,334	3,953,550
1814	24,931,910	1,376,093	26,308,003	1830	27,370,092	3,133,988	30,504,080	4,035,314
1815	23,075,985	1,309,523	24,385,508	1831	30,170,093	3,280,072	33,450,165	4,361,430
1816	21,053,627	996,727	22,050,354	1832	29,427,580	3,264,851	32,692,431	4,518,260
				1833	27,690,929	3,033,292	30,724,221	3,791,000

* Until 1817, no distinct account was kept of the stamps issued for newspapers in Ireland.

II. An Account showing the Number of Stamps issued to each of the Provincial Newspapers in England in the Year ending the 1st of April, 1833, with the Duty on Advertisements paid by the same during the Year ending the 5th of January, 1833. — (*Parl. Papers*, Nos. 569. and 524. Sess. 1833.)

Title of Newspaper.	Number of Stamps.	Advertisement Duty.		
		L.	*s.*	*d.*
Bath Herald	56,200	411	12	0
Chronicle	47,000	428	15	0
Journal	55,000	461	13	0
and Cheltenham Gazette	58,000	487	7	6
Bee, Stamford	13,000	130	16	0
Berkshire Chronicle	30,050	278	14	6
Berwick Advertiser	27,000	253	15	0
Birmingham Gazette (Aris's)	121,000	1,891	11	6
Journal	118,000	538	2	6
Blackburn Alfred	7,340	25	0	6
Gazette	4,000	130	4	0
Bolton Chronicle	40,000	230	6	6
Boston Gazette	10,000	178	13	6
Brighton Herald	26,000	482	9	6
Gazette	41,000	454	16	0
Guardian	44,000	392	17	6
Bristol Gazette	25,000	445	18	0
Journal	86,000	722	11	6
Mirror	107,150	804	9	6
Mercury	45,387	281	1	0
Times	7,500	47	8	6
Bucks Gazette	29,448	231	12	0
Herald	15,500	160	6	0
Bury Post	75,600	461	13	0
and Suffolk Press	9,000	31	10	0
and Suffolk Herald	19,000	581	3	6
Cambrian	60,100	481	15	0
Cambridge Chronicle	55,050	175	12	0
Carlisle Journal	66,000	340	18	0
Patriot	50,000	285	1	6
Carmarthen Journal	25,900	219	5	6
Carnarvon Herald	19,000	130	4	6
*Chelmsford Chronicle, and Essex Herald	98,000	559	6	0
Cheltenham Chronicle	36,500	547	4	6
Journal	13,000	234	6	6
Chester Chronicle	61,000	539	10	6
Courant	45,000	490	3	6
Chesterfield Gazette	28,000			
Colchester Gazette	18,000	232	11	6
Cornubian (Falmouth)	12,000	86	12	6
Cornwall Gazette	24,000	228	7	6
West Briton	50,900	293	15	6
Coventry Herald and Observer	32,525	284	0	6
Mercury	18,000	274	1	0
County Press, Hertford	26,100	193	18	0
Cumberland Packet	25,000	244	15	0
Derby Mercury	48,000	539	17	6
Reporter	40,200	318	6	6
Devizes Gazette	32,100	286	15	0
Devonport Telegraph	38,250	375	0	6
Independent	5,000			
*Devonshire Chronicle, North Devon Journal, and Exeter News	23,950	248	6	6
Doncaster Gazette	76,000	590	12	6
Dorchester Journal	60,100	324	9	0
Dorset County Chronicle	47,750	336	12	0
Durham Advertiser	30,000	319	4	0
Chronicle	27,000	335	3	6
Essex Standard	33,900	251	2	6
Independent	26,375	91	14	0
Exeter Flying Post	48,500	480	14	6
and Plymouth Gazette	75,125	523	7	0
Falmouth Packet	26,821	169	11	6
Gloucester Journal	102,300	818	4	0
Halifax Express	21,500	200	11	0
Guardian	8,500			
Hampshire Advertiser, or Southampton Herald	50,000	506	12	6
Telegraph	166,000	801	10	0
Chronicle	67,250	485	12	6
Hereford Journal	72,415	571	18	0
Times	39,950	120	11	6
Herts Mercury	22,650	218	18	6
Hull Packet	22,000	276	13	6
Advertiser	56,825	544	12	0
Rockingham	35,000	284	18	0
Huntingdon Gazette	95,000	647	10	0
Ipswich Journal	100,000	642	8	6
Kentish Chronicle	12,000	196	0	0
Gazette	78,000	627	0	6
Observer	27,000	31	17	0
Kent Herald	66,000	438	7	6
Lancaster Herald	22,464	120	11	6
Gazette	22,000	194	12	0
Leamington Spa Courier	29,000	303	9	0
*Leeds Intelligencer, and Newcastle Journal	168,750	1,027	19	0
Leeds Times	2,000			
Mercury	311,000	1,463	17	6
Patriot	9,000	177	12	6
Leicester Chronicle	43,400	264	15	6
Herald	4,075	80	3	0
Journal	89,500	580	6	0
Lincoln Herald	11,625	142	16	0
Lincolnshire Chronicle	20,000			
Litchfield Mercury	6,750	25	14	6
Liverpool Courier	65,500	747	5	0
Albion	85,000			
Mercantile Advertiser	27,750	1,261	4	6
General Advertiser	49,500	1,730	15	0
Mercury	172,500	1,276	9	0
Saturday's Advertiser	10,500	382	18	0
Chronicle	25,000	561	11	6
Journal	77,000	353	13	6
Standard	37,000			
Times	42,000	515	0	6
Macclesfield Courier	87,000	235	15	0
Maidstone Gazette	42,500	430	13	6
Journal	52,950	438	14	6
Manchester Times	185,500	558	11	6
Chronicle	47,250	634	7	6
Guardian	182,000	1,671	1	6
and Salford Advertiser	159,933	508	11	0
* Courier, and Manchester Herald	132,360	868	7	0
Merthyr Guardian	10,500			
Monmouthshire Merlin	38,900	285	19	0
Newcastle Chronicle	121,000	622	6	0
Newcastle-upon-Tyne Mercury	33,500	565	12	0
Newcastle Courant	159,475	1,217	13	0
Norfolk Chronicle	196,000	909	16	6
Herald and East Anglian	29,500	291	14	6
Norwich Mercury	86,000	912	16	0
Northampton Mercury	84,000	818	16	6
Free Press	25,500	201	15	6
Herald	36,000	304	13	6
Northumberland Advertiser	13,500	125	16	6
North Devon Advertiser	11,500	81	4	0
Wales Chronicle	17,500	200	2	0
Nottingham Journal	45,000	444	13	6
Review	70,800	375	18	0
and Newark Mercury	44,000	274	11	6
Oxford Herald	46,000	364	17	6
Journal	117,500	877	16	0
Plymouth Herald	26,500	282	2	0
and Devonport Journal	18,500	210	17	6
Portsmouth Herald	55,500	336	0	0
Preston Chronicle	129,000	225	11	6
Pilot	21,000	176	18	6
Reading Mercury	114,700	867	5	6
Rochester Gazette	3,000	57	18	6
Salisbury Journal	150,000	1,070	16	6
Salopian Journal	56,000	619	3	0
Sheffield Independent	35,300	257	8	6
Courant	23,500	211	15	0
Mercury	37,250	334	1	6
Iris	25,000	291	18	0
Sherborne Mercury	47,000	371	14	0
Shrewsbury Chronicle	93,700	682	3	0
Staffordshire Mercury	15,500	154	10	6
Advertiser	135,000	719	12	0
Stamford News	52,500	185	1	0
Mercury	272,500	1,509	7	6
Stockport Advertiser	34,736	197	13	0
Suffolk Chronicle	81,080	663	1	6
Sunderland Herald	19,000	356	7	0
Sussex Advertiser	58,800	577	6	6
Taunton Courier	22,000	267	4	6
Wakefield and Halifax Journal	26,500	165	11	0
Warwick General Advertiser	50,000	409	13	6
Welshman, The	29,900	128	2	0
Western Luminary (Exeter)	31,500	220	3	0
Times (Exeter)	46,000	287	7	0
Westmoreland Advertiser	12,000	103	5	0
Gazette	13,000	99	4	6
Whitehaven Herald	22,000	200	0	6
Wiltshire Standard	2,400			
Windsor Express	34,500	270	10	0
Wolverhampton Chronicle	41,100	408	9	0
Worcester Journal	60,000	666	1	0
Herald	73,000	598	6	6
York Chronicle	16,000	93	5	6
* Herald, and York Courant	120,000	935	14	6
Yorkshire Gazette	72,500	543	0	6
Racing Calendar	5,150	19	5	0

Note. — This return is founded upon periodical accounts rendered by stationers, who procure the stamps at this office for country newspapers. The papers marked thus * being the property of 1 person, in whose name the stamps are taken out, the number used for each paper cannot be distinguished.

*** We extract the following important paragraph from a note by Mr. Wood, the present very intelligent chairman of the Board of Stamps, subjoined to the *Parl. Paper*, No. 758. Sess. 1833. It shows that the returns given above, as to the circulation of country newspapers, cannot be much depended upon. Of course, there are no such inaccuracies in the accounts of advertisements: —

"Supposing, however, that the returns had been correct transcripts of the books in this office, it is worthy of remark, that they would not have afforded accurate information as to the circulation of newspapers. The circumstances hereafter detailed will show that such returns must be always incomplete and fallacious.

"In the instance of the London newspapers, the account may approach to tolerable correctness, as the stamps are usually obtained by the parties directly from this office; but it may be observed, that these papers borrow from each other, and we have also reason to believe that agents of country papers have been induced by London printers to take out stamps in the name of the latter which were intended for country use; so that, even with regard to the London papers, perfect accuracy cannot be attained.

III. An Account showing the Number of Stamps issued for the following London Newspapers, in the Years 1830, 1831, and 1832, and the respective Amount of Stamp and Advertisement Duty paid by each in the same Years.

Title of Newspaper.	1830.				1831.				1832.			
	Number of Stamps.	Stamp Duties paid by each.		Advertisement Duties paid by each.	Number of Stamps.	Stamp Duties paid by each.		Advertisement Duties paid by each.	Number of Stamps.	Stamp Duties paid by each.		Advertisement Duties paid by each.
		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.		£ s. d.
* Times, and Evening Mail	3,499,986	58,333	2 0	15,449 3 6	4,328,025	72,133	15 0	16,506 17 6	3,836,987	63,949	15 8	17,351 1 6
* Morning Herald, and English Chronicle	2,310,500	38,508	6 8	7,226 12 6	2,606,000	43,433	6 8	7,446 1 6	2,598,491	43,308	3 3	7,743 4 6
* Morning Chronicle, Observer, Bell's Life in London, and Englishman	2,131,799	35,529	19 8	4,673 7 6	2,269,850	37,830	16 8	4,450 12 0	1,886,124	31,435	8 0	3,794 17 6
Morning Advertiser	1,157,785	19,296	8 4	5,603 6 6	1,140,000	19,000	0 0	5,591 1 6	1,131,500	18,858	6 8	5,404 17 6
Morning Post	585,050	9,750	16 8	5,586 0 0	684,500	11,408	6 8	5,400 6 6	692,500	11,541	13 4	4,899 9 6
* Public Ledger, British Traveller, and Weekly Times	574,000	9,566	13 4	4,779 19 0	452,318	7,538	12 8	3,746 11 6	302,718	5,045	6 0	3,739 4 6
Courier	976,500	16,275	0 0	2,701 9 6	1,037,000	17,283	6 8	2,877 10 6	954,250	15,904	3 4	2,083 0 6
Globe and Traveller	957,000	15,950	0 0	1,839 8 6	1,047,125	17,452	1 8	1,803 7 6	1,102,500	18,375	0 0	1,784 6 0
Sun	747,000	12,450	0 0	952 7 0	957,000	15,950	0 0	996 12 6	748,500	12,475	0 0	816 18 0
* Standard, St. James's Chronicle, London Packet, and Baldwin's London Weekly Journal	1,281,000	21,350	0 0	2,066 15 0	1,372,600	22,876	13 4	1,716 18 6	1,545,500	25,758	6 8	1,603 0 0
* County Chronicle, and County Herald	170,500	2,841	13 4	1,015 7 0	157,500	2,625	0 0	882 3 6	145,500	2,425	0 0	862 1 0
John Bull	249,742	4,162	7 4	1,104 15 6	307,600	5,126	13 4	988 1 0	305,000	5,083	6 8	834 15 0
Bell's Weekly Messenger	608,000	10,133	6 8	581 14 0	489,000	8,150	0 0	533 1 0	487,000	8,116	13 4	544 12 0
Dispatch	1,327,103	22,118	7 8	544 15 6	1,732,391	28,873	3 8	635 12 0	1,555,947	25,932	9 0	621 1 6
News	220,000	3,666	13 4	333 18 0	197,000	3,283	6 8	278 8 6	142,000	2,366	13 4	224 14 0
* Sunday Times, and Kent and Essex Mercury	491,000	8,183	6 8	1,034 19 0	508,000	8,466	13 4	965 13 0	439,500	7,325	0 0	897 8 0
Farmer's Journal	108,500	1,808	6 8	132 16 6	96,000	1,600	1 0	121 19 6	46,975	782	18 4	67 18 0
Literary Gazette	63,238	1,053	19 4	547 8 0	51,425	857	0 8	463 11 6	44,125	735	8 4	421 1 0
Examiner	198,543	3,309	1 0	445 16 0	229,331	3,822	3 8	384 6 0	216,050	3,600	16 8	360 17 0
Law Advertiser	35,250	587	10 0	21 3 6	32,820	547	0 0	12 19 0	-	-	-	1 18 6
Cobbett's Weekly Political Register	160,160	2,669	6 8	15 8 0	104,500	1,741	13 4	28 7 0	87,000	1,450	0 0	25 0 6
Atlas	277,200	4,620	0 0	812 14 0	234,500	3,908	6 8	670 12 0	185,000	3,083	6 8	576 9 6
Age	318,525	5,308	15 0	927 9 6	287,000	4,783	6 8	878 13 6	266,000	4,433	6 8	720 16 6
Record	199,000	3,316	13 4	516 5 0	255,950	4,265	16 8	611 12 6	264,000	4,400	0 0	661 13 6
London Mercantile Price Current (Price's)	4,500	75	0 0	- -	4,500	75	0 0	- -	3,360	56	0 0	
New Price Current (Nicholson's)	17,050	284	3 4	- -	15,900	265	0 0	- -	15,220	253	13 4	
Corn Trade Circular (Althan's)	4,700	78	6 8	- -	3,000	50	0 0	- -	3,000	50	0 0	
Course of the Exchange (Wettenhall's)	5,700	95	0 0	- -	5,520	92	0 0	- -	5,400	90	0 0	
Financial and Commercial Record	3,840	64	0 0	- -	2,880	48	0 0	- -	3,840	64	0 0	

Note. — The papers marked * being the property of 1 person, in whose name the stamps are taken out, the number used, and amount of duty received for each of such papers, cannot be distinguished.

Stamps and Taxes,
August 24th, 1833.

"But in the case of country papers still less reliance can be placed on these accounts. The supply of stamps to country papers is effected through London stationers and paper-makers, and sometimes also through country stationers. These persons take out large quantities of stamps, and furnish them, from time to time, to the respective newspapers as required. It is only from the returns made by those stationers that the numbers of stamps obtained by each country paper are known at this office. The stationers are bound to make these returns, but in general they furnish them with much reluctance and irregularity, and frequently omit them altogether. It is well known that the Board have no means of detecting or punishing any mis-statement, and it is therefore believed, that, even when furnished, little regard is paid to accuracy.

"The trouble occasioned at this office ought not to be a consideration, if the returns were really a source of useful and authentic information. But the preceding observations show that no useful results arise; on the contrary, such returns occasion endless complaints from persons whose circulation is under-rated, and on whom positive injury is thus inflicted.

"It is, therefore, worthy of consideration whether similar returns should in future be allowed.

"J. W."

IV. A Return showing the Number of Stamps issued for London Newspapers during Eight Years, ending with 1832.

1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.
16,940,066	16,631,099	17,242,697	17,735,604	17,996,279	19,765,921	22,048,509	21,432,882

Note. — As a few of the London newspapers are supplied with stamps through stationers (who also procure stamps for the provincial newspapers), the total number of stamps issued for the whole of the London newspapers cannot be furnished.

V. An Account of the Number of Stamps issued to each of the Newspapers and Advertising Papers in Scotland, in the Year 1831; also, an Account of the Amount of Advertisement Duty paid in the same Year by each Paper.—(*Parl. Paper*, No. 465. Sess. 1832.)

Names of Newspapers.	Number of Stamps, at		Advertisement Duty, at 3*s.* 6*d.*
	Two Pence.	Four Pence.	£ s. d.
Edinburgh Evening Courant		250,500	1,923 12 0
Caledonian Mercury		113,500	813 4 6
Advertiser		75,000	444 3 0
Gazette		7,000	296 16 0
Weekly Journal		114,000	466 0 6
Chronicle		71,750	164 13 6
New Weekly Chronicle (discontinued)		1,000	4 7 6
Scotsman		199,050	749 19 0
Observer		83,500	336 7 0
North British Advertiser	306,000		1,952 16 6
Evening Post		62,550	315 3 6
New North Briton		77,500	317 19 6
Aberdeen Journal		116,000	1,252 6 0
Chronicle			204 8 0
Observer		21,000	177 5 6
Ayr Advertiser		57,000	306 1 6
Dumfries Journal		23,000	236 19 0
Courier		75,500	413 14 0
Dundee Advertiser		60,500	418 12 0
Courier		13,000	170 2 0
Elgin Courier		11,225	187 1 6
Journal (discontinued)			2 9 0
Fife Herald		26,500	199 13 6
Glasgow Courier		69,500	1,007 16 6
Journal			57 18 6
Chronicle		149,000	745 13 6
Herald		168,000	1,424 13 6
Free Press		75,750	689 10 0
Scots Times		6,000	403 7 6
Saturday Evening Post			44 19 6
Trades' Advocate		5,750	
Greenock Advertiser		31,000	279 2 6
Inverness Journal		30,425	327 5 0
Courier		32,000	305 18 0
Kelso Mail		36,000	468 16 6
Montrose Review		40,500	327 5 0
Paisley Advertiser		23,000	154 10 6
Perth Courier		20,000	277 0 6
Advertiser		31,000	237 2 6
Stirling Journal		25,000	135 16 0
Advertiser		18,500	124 5 0
Kilmarnock Chronicle		13,250	55 9 6
Totals	306,000	2,287,750	18,418 4 6

Stamp Office, Edinburgh, April, 26. 1832.

VI. An Account of the Gross Produce of the Duties on Newspapers and Advertisements during each of the under-mentioned Years, in England, Scotland, and Ireland.

Years ending 5th of Jan.	Newspapers.			Advertisements.		
	England.	Scotland.	Ireland.	England.	Scotland.	Ireland.
	L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
1811	328,413 10 11	21,288 7 8	In those years there was no separate account kept of stamps issued for newspapers in Ireland.	113,546 19 1	15,041 8 0	15,723 11 7
1812	335,095 6 0	21,054 13 9		114,195 11 5	14,397 9 0	20,479 5 3
1813	345,902 1 8	22,948 6 8		115,875 18 3	14,448 6 0	20,915 5 10
1814	362,241 4 4	21,921 19 7		114,111 12 10	14,623 7 0	21,253 3 11½
1815	363,500 0 0	20,158 7 7		106,575 9 8	13,410 3 0	19,759 17 6
1816	363,414 3 5	20,281 12 10½		110,941 6 6	14,017 7 0	20,475 16 1½
1817	350,893 15 8	16,612 2 4		118,202 3 4	15,353 8 6	18,498 7 5
1818	349,104 4 0	14,180 5 4	18,885 1 2½	116,352 4 11	16,666 13 0	18,191 12 7
1819	350,257 3 0	17,481 13 4	20,210 16 6	119,788 19 4	17,240 6 0	18 535 12 6
1820	365,080 11 4	19,060 5 0	21,187 1 11¾	122,227 3 3	16,911 9 6	16,721 1 8½
1821	419,618 15 8	20,609 6 8	22,693 10 10	123,772 15 6	16,416 15 0	15,491 0 0
1822	394,995 17 4	19,373 18 0	22,346 9¼ 7	125,965 17 5	16,095 2 0	15,102 5 0½
1823	378,485 19 8	20,387 8 0	23,556 1 0¼	131,288 12 0	17,030 16 6	13,708 7 3½
1824	390,375 8 8	20,795 13 0	25,448 2 5	125,475 5 7	16,020 11 0	14,524 3 8½
1825	409,281 0 0	22,587 9 4	25,633 13 6½	134,633 19 3½	17,825 17 0	16,426 10 9
1826	425,154 10 8	24,419 17 0	26,659 9 5½	144,751 2 6½	18,708 18 0	15,907 15 0
1827	429,662 15 2	22,013 6 4	25,187 11 9½	135,687 7 2	17,779 13 0	15,720 0 0
1828	428,629 9 8	29,929 10 4	25,561 3 11¼	133,978 16 11	18,400 14 6	14,379 17 6
1829	439,798 8 0	33,556 2 8	27,330 16 8	136,368 17 10	18,939 12 5	15,532 15 0
1830	438,667 10 8	42,301 6 0	28,578 16 7¼	136,052 18 10	17,592 5 7	14,985 6 0
1831	455,972 10 6	49,466 10 0	29,560 18 3¾	137,915 19 4	19,566 8 0	16,337 14 0
1832	502,697 19 4	52,090 15 2	31,846 16 3	137,838 12 5	19,060 0 0	15,672 10 2
1833	490,451 6 8	51,465 14 8	32,515 9 4½	137,122 10 0	18,278 6 0	15,248 17 4

VII.—Return of the Number of Stamps issued to each Newspaper in Ireland, from the 5th of January, 1832, to the 5th of April, 1833.—(*Parl. Paper*, No. 503. Sess. 1833.)

Title of Newspaper.	Number of Stamps.
Dublin Newspapers.	
Christian Journal	5,500
Comet	198,718
Dublin Evening Mail	445,375
Evening Post	231,000
Gazette	36,900
Mercantile Advertiser	27,500
Morning Post 3 months	12,000
Times	84,000
Evening Packet	335,500
Evening Freeman	110,500
Express 4 months	34,321
Empire 4 months	23,500
Freeman's Journal	309,000
Morning Register	207,500
Mooney's Circular 4 months	4,500
Observer	50,250
People 2 months	9,363
Pilot	174,500
Plain Dealer 4 months	20,700
Press 2 months	8,300
Racing Calendar	1,205
Repealer 10 months	29,571
Saunders's News Letter	534,000
Stewart's Despatch 5 months	34,000
Warder	142,750
Weekly Freeman	193,750
Register	114,000
	3,378,203
Country Newspapers.	
Antrim:	
Belfast Guardian	108,983
News Letter	139,500
Commercial Chronicle	154,225
Northern Whig	88,500
Athlone and Westmeath:	
Westmeath Journal	12,100
Clare:	
Clare Journal	15,350
Cork:	
Cork Commercial Chronicle	65,799
Southern Reporter	261,375
Constitution	192,480
Donegal:	
Ballyshannon Herald	10,023
Down:	
Newry Examiner	79,469
Telegraph	95,575
Drogheda:	
Drogheda Journal	33,000
Fermanagh and Cavan:	
Impartial Reporter	9,200
Enniskillener	6,850
Enniskillen Chronicle	16,050
Galway:	
Western Argus	18,750
Galway Advertiser	18,555
Independent	5,405
Connaught Journal	8,500
Free Press	13,650
Kerry:	
Kerry Evening Post	9,500
Western Herald	12,975
Tralee Mercury	21,675
Kilkenny and Carlow:	
Kilkenny Journal	31,984
Moderator	29,375
Carlow Morning Post	22,450
Sentinel	21,950
Standard	5,225
King's and Queen's County:	
Leinster Express	23,175
Limerick:	
Limerick Chronicle	204,825
Evening Post	15,475
Herald	97,700
Munster Journal	1,850
Londonderry:	
Londonderry Journal	34,100
Sentinel	68,375
Mayo:	
Ballina Impartial	6,865
Mayo Constitution	30,965
Telegraph	25,500
Roscommon:	
Roscommon Gazette	5,000
Journal	5,000
Sligo:	
Sligo Journal	10,200
Tipperary:	
Clonmel Advertiser	28,840
Herald	10,500
Tipperary Free Press	43,250
Tyrone:	
Strabane Morning Post	5,450
Waterford:	
Waterford Chronicle and Weekly Chronicle	70,485
Mail	38,325
Mirror	28,608
Wexford:	
Wexford Herald	12,900
Independent	32,961
Freeman	19,025
Conservative	12,550
Dublin Newspapers, brought forward	3,378,203
Total	5,718,600

The increase of newspapers in Great Britain, though it is shown by these documents to have been pretty considerable, has been materially repressed by the mode in which the stamp duty has been assessed. The circulation of the Parisian daily papers much exceeds that of the London journals; a result which can only be ascribed to their greater cheapness.

American Newspapers. — The increase of newspapers in the United States has also been a good deal more rapid than in England; a consequence, partly, no doubt, of the greater increase of population in the Union, but more, probably, of their freedom from taxation, and of the violence of party contests. The total number of newspapers annually issued in the Union has been estimated at from 55,000,000 to 60,000,000, while the total number issued in Great Britain and Ireland, in 1833 (see No. I.) was only 34,515,221; so that, making allowance for the difference of population, every individual in America has, at an average, more than twice the supply of newspapers enjoyed by individuals in England. "From this exuberant supply of daily and weekly papers, and the low price charged as compared with the English and French newspapers, they are liberally patronised by all classes, and are found in almost every dwelling and counting house, and in all hotels, taverns, and shops; and attract a large share of the public attention. As the paths of honour and promotion are alike open to every one, it follows that public discussion forms the principal staple of the newspapers. There is no country where the press has a more powerful influence over public opinion."—(*Picture of New York*, p. 391.)

We are not, however, to estimate the influence of newspaper literature by its quantity only, but must have regard also to its *quality*. The latter is, indeed, the principal thing to be attended to; and in whatever degree the Americans may exceed us in the number, they certainly are immeasurably below us in the quality, of their newspapers. Speaking generally, we do not hesitate to say that the newspaper press is a disgrace to the Union. The journals indulge, with few exceptions, in the most offensive personalities. Instead of examining the principles of the measures brought forward, they assail the character and misrepresent the motives of those by whom they are introduced. It is impossible, we believe, to name an individual, who has attained to any high office in the United States, or to consideration in Congress, who has not been libelled, traduced, and calumniated by a large portion of the press, to a degree that can hardly be imagined. The magnitude of the evil will, probably, lead to its cure. An intelligent and well instructed people cannot, surely, continue to patronise a press whose principal features are misrepresentation, exaggeration, and abuse.

The following Table contains a Statement of the Number of Newspapers published in the United States at the Commencement of the Revolutionary War, and the Number of Newspapers and other Periodical Works published in the same in 1810 and 1828.

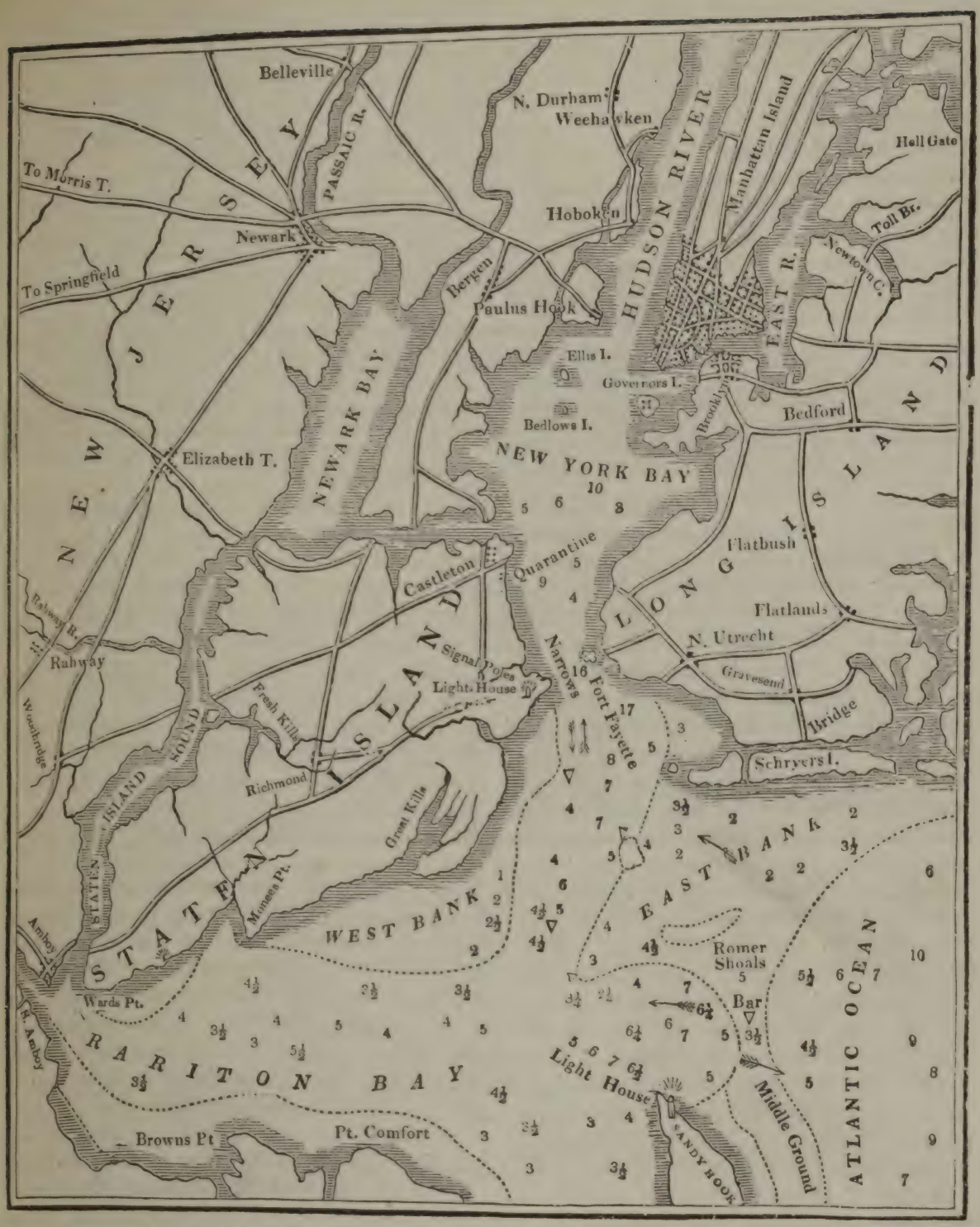
States.	1775.	1810.	1828.	States.	1775.	1818.	1828.
Maine	-	-	29	Georgia	1	13	18
Massachusetts	7	32	78	Florida	-	1	2
New Hampshire	1	12	17	Alabama	-	-	10
Vermont	-	14	21	Mississippi	-	4	6
Rhode Island	2	7	14	Louisiana*	-	10	9
Connecticut	4	11	33	Tennessee	-	6	8
New York	4	66	161	Kentucky	-	17	23
New Jersey	-	8	22	Ohio	-	14	66
Pennsylvania	9	71	185	Indiana	-	-	17
Delaware	-	2	4	Michigan	-	-	2
Maryland	2	21	37	Illinois	-	-	4
District of Colombia	-	6	9	Missouri	-	-	5
Virginia	2	23	34	Arkansas	-	-	1
North Carolina	2	10	20	Cherokee nation	-	-	1
South Carolina	3	10	16				
				Total	37	358	802

NEW YORK, the capital of the state of that name, and the commercial metropolis of the United States, in lat. 40° 42′ N., lon. 74° 8′ W. It is situated on the southern extremity of Manhattan Island, at the point of confluence of the Hudson river, which separates Manhattan from New Jersey, with East River, which separates it from Long Island. New York bay, or inner harbour, is one of the most capacious and finest in the world; it is completely land-locked, and affords the best anchorage. The entrance to the bay through the Narrows is extremely beautiful. On each side, the shore, though wooded down to the water's edge, is thickly studded with farms, villages, and country seats. At the upper end are seen the spires of the city; and in the distance the bold precipitous banks of the Hudson. From New York to the bar between Sandy Hook Point and Schryer's Island (the division between the outer bay or harbour and the Atlantic) is about 17 miles. Fortifications have been erected at the Narrows, Governor's Island, and other places, for the defence of the city and shipping. The wood-cut on the opposite page represents the city and bay of New York, and the surrounding country.

The Hudson river was first explored in 1609, by the famous English navigator whose name it bears, then in the service of the West India Company of Holland. In 1612, New Amsterdam, now New York, was founded by the Dutch, as a convenient station for the fur trade. In 1664, it was taken by the English. The Dutch again recovered possession of it in 1673; but it was retaken by the English in the following year, and continued in their occupation till the termination of the revolutionary war.

New York has increased faster than any other city of the United States. In 1699, it contained 6,000 inhabitants. In 1774, previously to the commencement of the war of independence, the population amounted to 22,750. During the war, the population continued stationary; but since 1783, its increase has been quite extraordinary. In 1790, the population amounted to 33,131; in 1800, to 60,489; in 1810, to 96,373; in 1820, to 123,706; and in 1830, to above 213,000! Originally the houses were mostly of wood, and the streets narrow and confined. In these particulars, however, a great improvement has taken place during the last half century; most of the old houses having been pulled down, and rebuilt with brick. The new streets, which are broad, and intersect each other at right angles, are well paved and lighted. Broadway, the principal street, is one of the largest and finest in the world. Many of the public buildings are commodious and elegant. The pools, that were formerly abundant in the city and its vicinity,

* For some curious details with respect to newspapers in Louisiana, see Mr. Stuart's *Three Years in America*, vol. ii. p. 210. — the most instructive and trustworthy of all the recent works on the United States.



have been completely filled up; a measure that has done much to improve the health of the population. In respect of cleanliness, however, New York is not to be compared with an English town. There is hardly such a thing as a sink or common sewer in the whole city: the night-soil and filth are collected in pits, of which there is one in every house, and, being conveyed to the nearest quay, are thrown into the water; but as these quays are made of timber, with many projections, a great deal of filth is retained about them, producing, in hot weather, an abominable stench. The yellow fever, by which New York is sometimes visited, uniformly breaks out in the lower and dirtiest part of the town; and seldom, indeed, extends to the new and more elevated streets. It is now much less prevalent than formerly; and the general opinion seems to be, that if stones were substituted for timber in the quays, sewers constructed, and proper regulations enforced as to cleanliness, the scourge would entirely disappear.

New York is indebted, for her wonderful increase, to her admirable situation, which has rendered her the greatest emporium of the New World. The rise of the tide is about 6 feet; and even at ebb, there is 21 feet water on the bar; and the water in the outer and inner bays, and in the river, is so deep, that ships of the largest burden lie close to the quays, and may proceed to a great distance up the river. The navigation of the bay is but rarely impeded by ice. The great strength of the tide, and the vicinity of the ocean, keep it generally open, even when the Chesapeake and Delaware bays are frozen over. The influence of the tides is felt in the Hudson as far as Troy, 160 miles above New York, affording very peculiar facilities for its navigation. These natural advantages have been vastly extended by a system of canalisation, which has already connected the Hudson with Lake Ontario and Lake Erie; and which, when completed,

will connect it with the Ohio river, and consequently with the Mississippi and the Gulf of Mexico! So prodigious a command of internal navigation is not enjoyed by any other city, with the exception of New Orleans; but the readier access to the port of New York, the greater salubrity of the climate, and her situation in the most industrious part of the Union, where slavery is abolished, give her advantages over her southern rival, which, it is most probable, will secure her continued preponderance.

Entrance to Harbour, Light-houses, &c. — The course in entering the harbour of New York is nearly due W. from the outermost white buoy on the bar, till the buoy on the S. W. point of the east bank be passed, and then nearly due N. The navigation is extremely easy. Pilots generally board vessels without the bar; for, otherwise, they are only entitled to half fees. Were it not for fear of vitiating insurances, their services would seldom be required. — (See *Rates of Pilotage, post.*) The light-house near the extremity of the long, low, narrow tongue of land, projecting from the New Jersey shore, called Sandy Hook, is in lat. 40° 28′ N., lon. 74° 8′ W. It is fitted up with a very powerful fixed light, which, in clear weather, may be seen by vessels coming from the westward 10 leagues off. But, from its position, it is not readily discovered by ships coming from the S. till too near. To obviate this inconvenience, a floating light was moored about 7 miles E. from Sandy Hook Point. In 1828, however, 2 light-houses were erected on Neversink hills, nearly 4 miles S. by E. from Sandy Hook. They are 300 feet apart; the most northerly being furnished with a fixed, and the other with a revolving light, both of great power. The lights are elevated 250 feet above the level of the sea; and may be seen, in clear weather, in all directions, from 40 to 50 miles. Since they were fitted up, the floating light has been discontinued. Vessels load and unload at the wharfs on both sides the city.

Trade, &c. — The commerce of New York is very extensive. The value of the merchandise annually loaded and unloaded in the port is estimated at from 100,000,000 to 120,000,000 dollars. The number of vessels in the port in the busy season varies from 500 to 750, exclusive of about 50 steam packets. The number of arrivals from foreign ports amounted in 1832 to 1,808; and the coasting arrivals are between 4,000 and 5,000. The total value of the imports into the United States in the year ending the 30th of September, 1832, was 101,029,266 dollars; of which no less than 53,214,402, or more than the half, were imported into New York! The customs revenue on the goods paying duties, imported into this city, amounts to about 13,000,000 dollars, while the total customs revenue of the United States seldom exceeds 22,000,000 dollars. The imports comprise an infinite variety of articles. The principal are cottons woollens, linens, hardware, and cutlery; earthenware, brass and copper manufactures, &c. from Great Britain; silk, wine, brandy, &c. from France and Spain; sugar and, coffee from the Havannah and Brazil; with tea, spices, cochineal, indigo, dye woods, &c. The value of the exports from New York in the year ending the 30th of September, 1832, amounted to 26,000,945 dollars, being between $\frac{1}{3}$ and $\frac{1}{4}$ part of the total exports from the United States. The exports principally consist of wheat flour, corn, rice, and cotton; beef, pork, butter, dried fish, and all sorts of provisions; furs, tobacco, coarse manufactured goods, lumber, &c. The great excess of the imports into New York over the exports is accounted for by the fact, that, while mostly all articles of export from the Western States are shipped at New Orleans, the greater part of the more valuable articles brought from abroad, and destined for the consumption of Ohio, Indiana, Illinois, and, in some degree, even Kentucky, are principally imported into New York.

The tonnage of New York is greater than that of Liverpool, or any other city, with the single exception of London. The registered tonnage belonging to the port on the last day of December, 1831, amounted to 122,458 tons, and the enrolled and licensed tonnage to 163,980 tons; making a grand total of 286,438 tons, being between $\frac{1}{3}$ and $\frac{1}{6}$ of the whole tonnage of the United States.

Account of the Quantities of some of the principal Articles of Native American Produce exported from New York during each of the Three Years ending with the 1st of January, 1833.

Articles.	1830.	1831.	1832.
Ashes, pot - - - barrels	19,613	19,393	18,241
pearl - - - —	4,152	5,694	2,356
Beef - - - —	15,022	17,913	17,223
Pork - - - - - —	13,085	20,147	29,418
Lard - - - kegs	14,136	24,885	11,101
Butter - - - —	6,761	12,282	9,286
Cotton - - - bales	104,940	118,502	108,741
Cotton goods - - packages	5,306	3,030	7,545
Flour (wheat) - - barrels	304,352	437,104	195,614
Corn - - - - bushels	174,182	245,868	93,716
Rice - - - tierces	13,373	15,205	16,678
Tar - - - barrels	19,397	18,879	18,537
Turpentine - - - —	102,441	121,762	144,878
Hides - - - number	- -	- -	169,493
Whale oil - - - gallons	- -	- -	1,392,600
Soap - - - boxes	- -	- -	76,981
Tobacco - - - hogsheads	8,088	7,815	7,783

Shipping. — Arrivals from and Departures for Foreign Ports in 1831.

Flags.	Arrived.		Departed.		Flags.	Arrived.		Departed.	
	No. of Vessels.	Tonnage.	No. of Vessels.	Tonnage.		No. of Vessels.	Tonnage.	No. of Vessels.	Tonnage.
British - -	278	41,758	273	31,716	Hayti - -	2	330	2	330
United States -	1,294	306,529	1,275	265,205	Brazil - -	2	134	2	134
France - -	25	6,710	22	3,228	Genoa - - -	1	260	still in port.	
Spain - -	8	1,762	7	1,076	Russia - -	1	260	1	260
Netherlands -	1	260	1	170	Mexico - -	1	260	1	260
Germany - -	10	2,798	7	2,042	Denmark -	18	3,709	16	2,003
Holland - -	2	315	2	315					
Hanse Towns -	1	260	1	260	Totals -	1,658	368,684	1,622	316,472
Sweden - -	14	3,339	12	2,473					

The arrivals in 1832 from foreign ports, were, ships, 444; barques, 75; brigs, 885; schooners, 386; galliots, 2; sloops, 6; being, in all, 1808. Of these there were, American, 1,290; British, 369; French, 42; Dutch, Hamburgh, and Bremen, 32; Swedish, 25; Spanish, 19; Danish, 11, &c. By far the greater part of the British ships are from our colonies in North America and the West Indies.

Regulations as to Passengers arriving at New York. — On the arrival of passengers, an entry must be made at the Custom-house of their names, clothes, or implements of trade or profession (all of which are exempt from duty), and an oath taken respecting them; the form of which, and the entry, may be had at the office gratis. Cabin passengers make this entry themselves, and pay 20 cents each for a permit; on exhibiting which to the officer on board, they are allowed to remove their baggage after it has been inspected. Only 1 entry and permit is necessary for a *family*, and only 20 cents demanded, whatever may be the number of the family. Remains of sea stores, such as tea, sugar, foreign spirits and wines, are liable to pay duties; but unless these are of great bulk or quantity, they are generally allowed to pass free.

An entry is usually made by the master of the vessel of steerage passengers and their baggage: they pay each 20 cents for a permit. When entry is made by any person not the owner, he gives bond for payment of the duties, if any; and if, after entry is made at the Custom-house, and the oath taken, any article is found belonging to a passenger, liable to pay duty, *not specified in the entry*, it is forfeited, and the person in whose baggage the article is found, subjected in treble the value.

Besides making entry at the Custom-house, it is provided by a law of the State, that every master of a vessel arriving from a foreign country, or from any other port of the United States, "shall, within 24 hours after entering his vessel at the Custom-house, make a report in writing, on oath, to the mayor, and in case of his sickness or absence, to the recorder of the said city, of the name, age, and occupation of every person who shall have been brought as passenger in such ship or vessel on her last voyage, upon pain of forfeiting, for every neglect or omission to make such report, the sum of 75 dollars for every alien, and the sum of 50 dollars for every other person neglected to be so reported as aforesaid."

Masters of ships bringing passengers to New York must also pay a dollar on account of each passenger to the corporation, as commutation money, or give bond that none of them shall become chargeable on the city poor rates for the space of 2 years. They almost uniformly prefer paying the commutation. The number of immigrants arriving at New York from the British islands during the 5 years ending with 1832, was as follows: —

Years.	From England.	From Ireland.	From Scotland.	Total.
1828	6,631	6,197	2,717	15,547
1829	8,110	2,443	948	11,501
1830	16,352	3,497	1,584	21,433
1831	13,808	6,721	2,078	22,607
1832	18,947	6,050	3,286	28,283
Totals -	63,848	24,908	10,613	99,371

In addition to which there were great numbers of immigrants from Germany, the Netherlands, &c.

Lines of Packets. — The establishment of regular lines of packets from New York to foreign ports, and also to every principal port in the United States, has produced a new era in the commerce of the city, and redounded equally to the benefit of the enterprising individuals by whom they were projected, and the public. The principal intercourse is carried on with Liverpool. There are above 20 packet ships employed between these cities, distributed in 4 *lines*.

Statement of the Passages made by the different Ships and Masters employed in the Old Line, from 1818 to 1827, inclusive, embracing a Period of 10 Years, and comprising 188 complete Voyages.

The passages from New York to Liverpool, during the said period, have averaged - 24 days each.
Those from Liverpool to New York, during the said time, have averaged - - 38 —
The shortest passage from New York to Liverpool was made by the ship New York, Captain Maxwell, in December, 1823, being - - - - 16 days.
The longest passage from New York to Liverpool was made by the ship Nestor, Captain S. G. Macy, in December, 1820, and January, 1821, being - - - 37 —
The shortest passages from Liverpool to New York were made by the ship Amity, Captain George Maxwell, in April, 1819, and by the ship Colombia, Captain Rogers, in February, 1824, being - - - - - - 22 —
The longest passage from Liverpool to New York was made by the ship Pacific, Captain Crocker, in December, 1827, and January and February, 1828, being - - 71 —
The passages are not reckoned from land to land, as is sometimes the case; but from one city to the other.

Packet ships for *New York* sail from Liverpool on the 1st, 8th, 16th, and 24th of each month throughout the year. And they sail on the same days in each month *from* New York for Liverpool.

The cabin passage *to* New York, 35 guineas; *from* New York, 30 guineas; which includes provisions, wines, beds, &c., so that the passengers have no occasion to provide any thing except personal apparel.

Sixteen ships in the whole, varying in size from 500 to 580 tons burden each, are employed as regular packets betwen New York and Liverpool: they are all American property, and built chiefly in New York, of beautiful workmanship, and fitted up with every convenience for passengers, and in a most expensive and splendid style. Each ship has a separate cabin for ladies; each state-room, in the respective cabins, will accommodate *two* passengers; but a *whole* state-room may be secured for 1 individual by paying at the rate of 1½ passage, that is, 52½ guineas.

Packets for *Philadelphia* sail from Liverpool on the 8th and 20th of every month throughout the year: and 4 of these ships sail *from* Philadelphia for Liverpool on the 20th of each month; the others do not always return *direct* from Liverpool, but go to Charleston, Savannah, &c., to bring cargoes of produce to Liverpool.

Cabin passage same as that to and from New York.

These ships, 9 in number, are all American built and owned, and are from 300 to 500 tons burden: some of them are as splendid as the New York packets, and all are fitted up with every regard to comfort.

Packet ships for *Boston* sail at specified periods in January, February, and March, and again in June, July, and August, in each year; but they seldom return *direct* from Boston to Liverpool. The rate of passage the same as that by the packets for New York.

The rate of *steerage* passage varies, in the course of the year, considerably; depending on the number of ships and the number of passengers going at the time. By the packet ships, it fluctuates from 5 to 6 guineas for each full-grown person; and children under 14 years are taken at half-price. By other ships, the rate of steerage passage varies from 1*l.* 10*s.* to 5*l.*; being sometimes reduced, by competition, so low as 30*s.*; but the *average* rate may be taken at 4*l.* 4*s.* For these rates, the ship provides nothing but berths, fire, and water; the passengers provide their own provisions, bedding, &c. The expense of provisions for a poor person, who might wish to be as economical as possible, for the voyage out to the United States, would not be more than from 40*s.* to 50*s.*

The *cabin* passage by the common traders (and many of them are quite equal to the packets in equipment and safety) varies from 15*l.* to 25*l.*; no wines being provided by the ships at these rates, but provisions, bedding, malt liquor, and spirits.

The rates of *freight* to New York, are —

	By Packets.	By other Ships.
	L. s. d. to *L. s. d.*	*L. s. d.* to *L. s. d.*
Fine goods, per ton measurement of 40 cubic feet	2 0 0 to 0 0 0	1 5 0 to 1 10 0
Hardware	1 10 0 - 0 0 0	0 17 6 - 1 2 6
Coarse low-priced goods	1 0 0 - 1 5 0	0 12 6 - 0 17 6
Iron, per ton of 20 cwt.	0 10 0 - 0 12 6	0 9 0 - 0 12 6
Coals, do. do.	1 0 0 - 1 5 0	0 12 6 - 0 15 0
Crates of earthenware, per ton of 40 cubic feet	0 10 0 - 0 12 6	0 8 0 - 0 12 6
Salt, per ton of 40 bushels	0 17 6 - 1 5 0	0 12 6 - 0 15 0

New York and London Packets. — Nine ships are engaged in this trade. They are fitted out in the same way as the Liverpool packets. They touch at Cowes.

New York and Havre Packets. — Twelve ships are engaged in this trade, all fitted up with the greatest splendour and attention to comfort. Cabin passage, 140 dollars, including bed, bedding, wines, and stores of every description.

Banks, Insurance Companies, etc. — We borrow from a detailed and authentic statement by Thomas H. Goddard, Esq., published in the *New York Daily Advertiser* for the 29th of January, 1831, the following particulars in relation to the banks, insurance companies, &c. of New York, in 1830, with a view of their progress from 1819 to 1830.

Banks.	When chartered.	Length of Charter.	No. of Shares.	Amount of Share.	Amount of Capital.	Time and Rate of Dividend.	Amount of Dividend.
			Dollars.	*Dollars.*	*Dollars.*		*Dollars.*
United States Branch	-	-	25,000	100	2,500,000	Jan. 3½ — July 3½	175,000
America	1822	20 years	20,000	100	2,000,000	Jan. 2½ — July 2½	100,000
Mechanics'	1810	22 do.	80,000	25	2,000,000	Jan. 3½ — July 3½	140,000
Manhattan Company	1790	perpetual	41,000	50	2,050,000	Jan. 3½ — July 3½	145,500
Delaware and Hudson Canal Company	1825	do.	15,000	100	1,500,000	June 0 — Dec. 0	
Merchants'	1805	27 years	28,000	50	1,400,000	June 3 — Dec. 3	84,000
City	1812	20 do.	25,000	50	1,250,000	May 3 — Nov. 3	75,000
New York	18—	- -	1,900	500	950,000	May 4 — Nov. 4	76,000
Phœnix	1812	20 do.	20,000	25	500,000	Jan. 3½ — July 3½	35,000
North River	1821	21 do.	10,000	50	500,000	Jan. 4 — July 4	40,000
Tradesmen's	1822	10 do.	12,000	40	480,000	Jan. 3 — July 3½	31,000
Chemical	1824	21 do.	20,000	25	500,000	Jan. 3½ — July 0	22,500
Union	1811	20 do.	20,000	50	6,000,000	May 3 — Nov. 3	60,000
Fulton	1824	20 do.	20,000	30	600,000	May 3½ — Nov. 3½	42,000
Dry Dock	-	perpetual	14,000	50	700,000	Jan. 2 — July 0	14,000
Greenwich	1830	new	8,000	25	200,000	not determined	
			359,900		18,130,000		1,037,700

Recapitulation. — There were, in 1830, 16 banks in this city, whose aggregate capital was - *Dollars.* 18,130,000

And these made dividends for - - 1,037,700

Of these, the Hudson and Delaware made no dividend, in consequence of appropriating their means to the great work of completing the canal between the 2 rivers, which promises a great advantage to the city. The Greenwich had just commenced; so that the dividend accrued upon a capital of 17,930,000 dollars — making an interest of 5·7875 per cent., as the paper discounted would average 60 days' notes, and 6 per cent. discount deducted, there must have been discounted during the year paper to the amount of - - - 105,769,952

Marine Insurance. — During 1830, there were in this city 8 marine insurance companies, with an aggregate capital of - - - 3,050,000

And these made dividends for - - 405,000

But 2 companies, whose capital amounted to 450,000 dollars, divided nothing, so that the dividend really arose out of a capital of 2,600,000 dollars, making an interest of 15·572 per cent. The American Company commenced in 1815, and its dividends to 1830 inclusive were 312 per cent., amounting to - - 1,560,000

The Ocean, with a capital of 350,000, has, from 1823 to 1830 inclusive, made dividends for 126 per cent. - - - 441,000

Fire Insurance. — During 1830, there were in this city 20 fire companies, whose aggregate capital was - - - - - 7,800,000

And these made dividends for - - 479,750

But 2 companies, whose capital amounted to 750,000 dollars, divided nothing, so that the dividend really arose out of a capital of 7,050,000 dollars, making an interest of 6·805 per cent. The Washington commenced in 1814, and has made a uniform semi-annual dividend of 4½ per cent., making in all 144 per cent., amounting to - - - 720,000

From 1823 to the year 1830 inclusive —

The dividends of the Eagle were	69⅕ per cent.	347,500
Globe	52 per cent.	520,000
Franklin	44½ —	133,000
North River	64 —	224,000
New York	76 —	380,000

Progress of Stocks in the City of New York, from 1819 to 1830, both inclusive.

Years.	Banks in New York City.				Marine Insurance Companies.			Fire Insurance Companies.		
	Amount of Capital.	Amt. of Div. declared.	Rate per Ct.	Amount of Paper discounted.	Amount of Capital.	Amount of Div. declar.	Rate per Cent.	Amount of Capital.	Amt. of Div. declared.	Rate per Ct.
	Dollars.	*Dollars.*		*Dollars.*	*Dollars.*	*Dollars.*		*Dollars.*	*Dollars.*	
1819	15,900,000	782,000	4·918	78,199,992	3,850,000	412,250	10·707	4,500,000	237,500	5·277
1820	15,900,000	921,500	5·795	92,149,980	3,850,000	250,750	6·513	4,500,000	365,000	8·111
1821	15,900,000	920,500	5·789	92,649,984	3,850,000	250,650	6·510	4,500,000	364,500	8·100
1822	16,000,000	921,200	5·757	92,119,976	3,850,000	320,150	8·310	4,500,000	365,500	8·122
1823	15,500,000	992,500	6·403	99,250,060	3,150,000	276,500	8·777	7,400,000	485,000	6·554
1824	15,600,000	617,050	3·947	61,705,020	4,650,000	317,000	6·817	7,400,000	552,500	7·466
1825	17,450,000	936,500	5·366	93,649,972	5,500,000	221,000	4·169	1,190,000	767,500	6·459
1826	17,500,000	1,031,500	5·894	103,149,856	5,500,000	260,000	4·905	12,150,000	717,750	5·825
1827	17,880,000	1,025,400	5·751	102,539,996	4,350,000	228,000	5·241	12,450,000	602,000	4·835
1828	18,330,000	1,039,200	5·669	103,919,972	4,100,000	301,500	7·353	10,100,000	467,000	4·524
1829	17,830,000	977,000	5·479	97,699,992	3,000,000	442,000	14·733	7,800,000	464,500	5·955
1830	18,130,000	1,037,700	5·723	103,769,952	3,050,000	405,000	13·213	7,800,000	479,750	6·150
	12 years -	11,202,050		1,120,204,752		3,682,800			5,868,500	

In the previous estimates, the rate per cent. on the actually productive capital was given. Here the interest is determined by comparing the whole capital with the whole dividend.

Remarks on Banking at New York. — The reader will find in the article BANKS, FOREIGN (*antè*, p. 109.), some details as to the banking system of the United States. It seems to be quite as defective in New York as in any other part of the Union. Several banks in that State have failed, and some of those that still exist, obtained their charters by resorting to the most disgraceful practices. In the summer of 1826, the grand jury of the city entered upon an investigation of certain circumstances connected with the formation of some of these establishments, which ended in the conviction, as conspirators to defraud the public, of not a few citizens, and even of some members of the legislature, who had previously been deemed highly respectable! The Court of Errors afterwards decided, by a small majority, that these convictions were illegal; but the fact of the most scandalous abuses having prevailed was established beyond all question. We may mention, by way of example, that the United States Lombard Association, incorporated in 1825, was sworn to as having a paid up capital of 300,000 dollars; but the association having failed in 1826, it was ascertained that not more than 30,000 dollars had ever been paid up! There were, we are sorry to say, several other cases quite as bad, or, if possible, even worse than this. — (*Report and Observations on the Banks, &c. of the State of New York*, p. 10.)

With the exception of the branch of the United States' Bank, all the other New York banks issue notes of so low a value as 1 dollar. They all discount bills: generally at 6 per cent.

In order to protect the public from the mischief resulting from the failure of banks, the legislature of the State of New York enacted a law, in 1829, compelling all banks chartered in future, or getting their charters renewed, to pay from ½ to 1 per cent. of their capital stock to the treasurer of the State, by whom it is invested and accumulated as a guarantee fund. When a bank fails, its debts, under certain restrictions, are to be paid from this fund. Commissioners have also been appointed, having authority to examine upon oath, and to inquire into any particulars as to the management of the different banks subjected to this regulation.

This system has not been established for a sufficient length of time to enable a conclusive opinion to be formed as to its practical operation. We believe, however, that it will be found quite inadequate to eradicate the evils complained of. Even were it otherwise successful, what can be more unjust than to tax the capital of solid and well-managed concerns, to create a fund to pay the debts of those set on foot for the purpose of swindling? The interference of the commissioners, by lessening the responsibility of the directors, must be a good deal worse than useless; and can have no effect other than the multiplication of abuses. We have not, indeed, the least doubt, that it will be found in America, as in England, that banking can acquire no real solidity till a stop be put to the issue of all notes for payment of which security has not previously been given. Nothing short of this can be of any material service. It is mere error and delusion to suppose that it is possible to prevent fraud or mismanagement by any system of official superintendence.

Forgery is extremely prevalent in the State of New York, and, indeed, throughout the Union; a consequence of the low value at which notes are issued, and of their employment even in the smallest transactions. It is not, in truth, easy to imagine that the paper currency of any country can be in a less satisfactory condition than that of the United States. And it will not, certainly, be improved, but much deteriorated, should the president succeed in his efforts to destroy the Bank of the United States.

SALES BY AUCTION. — The practice of selling goods, particularly those imported from abroad, by auction, is of long standing in New York, and is carried to a very great extent. Auctioneers are appointed by the senate, on the nomination of the governor.

Statement of Sales at Auction in the State of New York, from 1810 to 1830 inclusive, from Returns made by the Auctioneers to the Comptroller.

Years.	Amount of Duties.		Amount of Sales dutiable.		Amount of Sales not dutiable.		Total.	
	Dollars.	*cents.*	*Dollars.*	*cents.*	*Dollars.*	*cents.*	*Dollars.*	*cents.*
1810	126,404	62	5,602,662	59	510,760	28	6,113,422	87
1811	110,220	76	4,393,987	51	342,155	24	4,736,142	75
1812	124,236	92	5,203,566	67	425,451	30	5,629,017	97
1813	156,481	05	6,001,162	40	1,051,646	40	7,052,808	80
*1814	86,067	76	3,527,155	88	387,631	12	3,914,787	00
1815	182,936	57	12,124,054	76	1,057,695	01	13,161,749	77
1816	171,907	40	11,349,826	07	765,889	76	12,115,715	83
1817	199,123	38	12,472,446	92	726,165	73	13,198,612	65
1818	176,032	24	11,873,658	42	1,614,418	83	13,488,077	25
1819	141,570	96	9,538,202	51	1,727,356	31	11,265,558	82
1820	153,999	86	10,182,967	00	1,833,229	75	12,016,196	75
1821	154,543	92	10,525,791	05	1,819,434	72	12,345,275	77
1822	180,761	68	12,340,127	54	1,798,880	88	14,139,008	42
1823	208,254	01	13,754,821	57	3,117,128	86	16,871,950	43
1824	226,218	13	15,716,432	88	3,587,586	48	19,304,019	36
1825	285,037	62	19,713,686	67	4,530,600	69	24,244,287	36
1826	242,810	06	16,328,198	52	4,722,154	73	21,050,353	25
1827	247,808	24	16,401,643	68	3,063,576	64	19,465,220	32
1828	257,180	40	17,449,544	64	8,590,116	29	26,039,660	93
†1829	242,552	54	16,536,906	60	8,685,802	29	25,222,708	89
1830	218,513	66	15,465,405	99	10,300,705	79	25,766,111	78
	3,892,661	78	246,502,249	87	60,638,437	10	307,140,686	97

Abstract of the principal Provisions of the Law concerning Auctions.

The duties are —
1. On wines and ardent spirits, foreign or domestic, 2 per cent.
2. On goods imported from beyond the Cape of Good Hope, and sold in packages, bales, &c., as imported, 1 per cent.
3. On all other articles, subject to duties, 1½ per cent.

The following articles are not subject to duties: —
1. Ships and vessels.
2. Utensils of husbandry, horses, neat cattle, hogs, and sheep.
3. Articles grown, produced, or manufactured in this state, except distilled spirits.
4. All fabrics of cotton, wool, hemp, and flax, manufactured within the jurisdiction of the United States.

Goods are exempted from auction duties, —
1. When they belong to the United States or this State.
2. When sold by the authority of a court, or when seized by a public officer on account of any forfeiture or penalty, or under a distress for rent.
3. The effects of a deceased person sold by executors or administrators, or by a person authorised by a surrogate.
4. The effects of a bankrupt or insolvent sold by his assignees, appointed pursuant to law, or by a general assignment for the benefit of all his creditors.
5. Goods damaged at sea and sold within 20 days after being landed, for the owners or insurers.

* The returns of sales for 1814, having been mislaid at the comptroller's office, the amounts are stated by estimating the average of the 4 preceding years in proportion to the duties paid, which are exactly correct as stated.

† The amount of real estate sold in 1829 (included in the above not dutiable) was 2,131,390 dollars and 62 cents.

Any citizen of this State may sell at auction (except in the city of New York) all such goods as are not subject to duties. But in the city of New York, or where the goods pay duties, the sale must be by an authorised auctioneer, his partner, or clerk. And any person selling contrary to the said provisions is guilty of a misdemeanour.

When an auctioneer cannot attend an auction by *sickness*, by *duty as a fireman*, by *military orders*, or *necessary attendance in a court of justice*, or when he is *temporarily* absent from the place for which he is appointed, he may employ a partner to attend in his behalf.

He must give bond to the people of this State, with 2 freehold sureties, conditioned in the penalty of 5,000 dollars, for the payment of the duties imposed by law and accruing on the sales. The penalty of selling without the bond, is 125 dollars for each article offered for sale.

No auctioneer in any city shall at the same time have more than 1 house or store for holding his auctions, and shall, before entering on his office, designate in a writing, to be filed with the clerk of the city, such house or store, and his partner or partners. But goods sold in the packages in which they were imported, furniture, and such bulky articles as have usually been sold in warehouses, in the streets, or on the wharfs, need not be sold in the house or store designated in such writing, if such sales be advertised at least 2 days previously in 1 or more newspapers.

Auctioneers are to receive 2½ per cent. on the amount of all sales, unless by previous agreement in writing; and for *demanding* or receiving an unlawful commission, shall forfeit 250 dollars, and refund the monies so received.

No auctioneer, on the same day and at the same place where his public auction shall be held, nor any other person at the same time and place, shall sell at private sale any goods liable to auction duties, under penalty of forfeiting their price.

Every auctioneer shall make out in writing a quarterly account, dated on the 1st days of April, July, October, and January in the year for which he is appointed, stating minutely —

1. The sum for which any goods shall have been sold at every auction held by or for him, from the time of his giving bond, or from the date of his last quarterly account.
2. The days on which sales were so made, and the amount of each day's sale, designating the sales made by himself, or in his presence, and those made in his absence by his partner or clerk, and the causes of his absence.
3. The amount of all private sales made by himself or his partners, and the times thereof.
4. The amount of duties chargeable on all sales made.

Every such account shall, within 20 days after its date, be exhibited, by auctioneers for a city, to the mayor or recorder; and if by an auctioneer for a county, to a county judge, and be verified by oath. Every partner of an auctioneer, and every clerk who has made any sales, shall also swear to his belief in the truth and justice of every particular of such account.

The State duties (together with the addition of 2½ per cent. on the whole amount of them) are to be paid within 10 days after exhibiting such account.

Any deceit or fraud in violating any provision of the law respecting auctioneers, is made a misdemeanor, and subjects the offending party to the payment of *treble* damages to the party injured.

Coins.

A Table of various Foreign Coins, &c. with their Value in Federal Money.

	Dols.	cts.	m.
Sixteenth of a dollar	0	6	2½
Half a pistareen	0	9	0
Real plate of Spain	0	10	0
An English sixpence	0	11	1
Eighth of a dollar	0	12	5
Livre Tournois of France	0	18	5
Franc of France	0	18	7½
A pistareen	0	18	5
An English shilling	0	22	2
Quarter of a dollar	0	25	0
Marc banco of Hamburgh	0	23	0
The florin or guilder of the United Netherlands	0	40	0
Half dollar	0	50	0
Rupee of Bengal	0	50	0
Rix-dollar of Denmark	1	0	0
Rix-dollar of Sweden	1	0	0
Spanish dollar	1	0	0
Rouble of Russia	1	0	0
Crowns of England and France	1	9	0
Milree of Portugal	1	24	0
Tale of China	1	48	0
Pagoda of India	1	84	0
French pistole	3	66	7
Spanish pistole	3	77	3
Pound of Ireland	4	10	0
Pound sterling of Great Britain	4	44	0
French guinea	4	60	0
English guinea	4	65	7
A moidore	6	0	8
Half Johannas	8	0	0
A doubloon	14	93	4
A Johannas	16	0	0
Real vellon of Spain	0	5	0
Real of Gibraltar	0	8	5
Rix-dollar of Bremen	0	75	0
Pezza of Leghorn	0	90	0
Ducat of Naples	0	80	0
Ounce of Sicily	2	50	0

Coins of the United States.

Gold Coins.				L.	s.	d.	
Eagle, value 10 dol., wt. 270 grs. stand. gold				2	3	8	sterl.
Half eagle,	5 do.	135 do.	—	= 1	1	10	—
Quarter,	2½ do.	67½ do.	—	= 0	10	11	—

Standard gold is 11 parts pure and 1 alloy.

Silver Coins.				s.	d.	
Dollar, val. 10 dimes, wt. 416 grs. stand. silver				= 4	3·75	ster
Half dollar	5 do.	208 do.	—	= 2	4·87	—
Quarter,	2½ do.	104 do.	—	= 1	0·93	—
Dime,	10 cents,	41 3-5ths	—	= 0	5·46	—
Half dime,	5 do.	20 4-5ths	—			

Standard silver is 1,485 parts pure, and 179 alloy.

A pound of pure gold is valued at 15 lbs. of pure silver.

Coins of the United States decimally divided. — 10 mills make 1 cent, 10 cents 1 dime, 10 dimes 1 dollar, 10 dollars 1 eagle.

Rules for reducing the Currencies of the different States into each other.

To reduce the currencies of New Hampshire, Massachusetts, Rhode Island, Connecticut, and Virginia, into those of New York and North Carolina, — to the given sum add 1-3d part thereof. Of Pennsylvania, New Jersey, Delaware, and Maryland, — to the given sum add 1-4th thereof. Of South Carolina and Georgia, — from the given sum subtract 2-9ths thereof.

To reduce New York and North Carolina into New Hampshire, Massachusetts, Rhode Island, Connecticut, and Virginia, — from the given sum deduct 1-4th thereof. Into Pennsylvania, New Jersey, Delaware, and Maryland, — from the given sum deduct 1-6th thereof. Into South Carolina, — to the sum given add 1-16th, then take ½ of the whole.

To reduce Pennsylvania, New Jersey, Delaware, and Maryland, into New Hampshire, Massachusetts, Rhode Island, Connecticut, and Virginia, — from the sum given deduct 1-5th thereof. Into New York and North Carolina, — to the sum given add 1-5th thereof. Into South Carolina and Georgia, — multiply by 3 and 1-9th, and divide the product by 5; or multiply by 28, and divide by 45.

To reduce South Carolina and Georgia into New Hampshire, Massachusetts, Rhode Island, Connecticut, and Virginia, — to the given sum add 2-7ths thereof. Into Pennsylvania, New Jersey, Delaware, and Maryland, — multiply the given sum by 45, and divide by 28. Into New York and North Carolina, — from the given sum subtract 1-7th, and double the remainder.

Custom-House Regulations. — Vessels must be reported to the collector by the master 24 hours after arrival; must come to a full entry 48 hours after arrival, at which time the commander swears to a detailed account of his cargo, stores, and passengers, and that he has deposited all letters in the post-office, except such as are for his ship's husband, at which time he must also deposit the register, clearance, and cockets in the Custom-house.

Warehousing. — There is no warehousing system, but goods are received into the public stores, where they are allowed to remain 9 months at the risk and expense (for fees of cartage, labourage and storage, as fixed by the Chamber of Commerce, see *post*) of the owner, without any duties being demandable. Woollens are the only exception to this rule: since 1833, interest is charged upon the amount of duty payable on their account from the time of their importation.

Port Charges. — For American vessels, or those of States having reciprocity treaties: —

	Doll.	cts.	L.	s.	d.
Fees on entering	5	70 or 1	5	7½	
Fees on clearing	2	70 — 0	12	1¾	

Custom-House Fees. — 1. *Fees payable to Collector.* — Entry of a vessel of 100 tons or upwards, 2 dollars and 50 cents; clearance of a vessel of 100 tons or upwards, 2 dollars and 50 cents; entry of a vessel under 100 tons, 1 dollar and 50 cents; clearance of a vessel under 100 tons, 1 dollar and 50 cents; every post entry, 2 dollars; permit to land goods, 20 cents; every bond taken officially, 40 cents; permit to load goods, for the exportation, for drawback, 30 cents; debenture or other official certificate, 20 cents; official document (register excepted), required by any person, 20 cents.

2. *Fees payable to the Surveyor.* — Admeasuring and certifying the same, of every ship or vessel of 100 tons and under, per ton, 1 cent; admeasurement of every ship or vessel above 100 tons, and not exceeding 200 tons, 1 dollar and 50 cents; above 200 tons, 2 dollars; for all other services on board any ship or vessel of 100 tons and upwards, having on board goods, wares, or merchandise subject to duty, 3 dollars; for like services on board any ship or vessel of less than 100 tons, 1 dollar and 50 cents; on all vessels not having on board goods, wares, or merchandise subject to duty, 66 2-3d cents. Certificate of registry of vessels, 2 dollars. Endorsement on registry or record, 1 dollar. Every bond required by this act, 25 cents; every bond for a Mediterranean passport, 40 cents; every seaman's protection, 25 cents.

Under the Coasting Act. — Admeasuring every vessel in order to the registering, enrolment, licensing, or recording the same, of 5 tons or upwards, and less than 20, 50 cents; 20 and not exceeding 70, 75 cents; 70, 1 dollar; above 100, 150 cents. For every certificate of enrolment, 50 cents; every endorsement of ditto, 20 cents; every licence, including the bond, not exceeding 20 tons, 25 cents; above 20 tons, and not more than 100, 50 cents; more than 100, 1 dollar. Recording certificate, manifest, and granting permit, of less than 20 tons, 25 cents; above 50 tons, 50 cents. For certifying a manifest, and granting permit for registered vessels, 150 cents. For receiving certified manifest and granting permit for registered vessels, 150 cents. Granting permit for a vessel not belonging to a citizen, on arrival, to proceed from district to district, and receiving a manifest, 2 dollars; receiving manifest and granting permit to unload, as above, 2 dollars. Granting permit for a vessel to carry on fishery in a foreign port, 25 cents. For report and entry of any foreign goods imported in such last-mentioned vessel, 25 cents.

	Dolls.	L.	s.	d.
Expense of loading a vessel of 300 tons, in the port of New York, with the usual cargo exported from thence	160	36	0	0
Ditto of discharging	80	18	0	0
For discharging —	*Cents.*			
Coals, per chaldron	25	0	1	1
For loading —				
Tobacco, per hhd.	25	0	1	1
Cotton, per bale	25	0	1	1
Flour, per bl.	3½	0	0	1¾
Flax-seed, do.	7	0	0	3½

Rates of Wharfage. — Vessels under 50 tons, 50 cents per day = 2*s.* 3*d.*; and for every 50 tons more, 12½ cents additional = 7*d.*

N. B. — Wharfs are all private property.

RATES OF COMMISSION, — *recommended for general Adoption, and allowed by the New York Chamber of Commerce, when no Agreement subsists to the contrary.*

On Foreign Business.—On the sale of merchandise, 5 per cent. —sale or purchase of stocks, 1 per cent.—Specie, ½ per cent. — Purchase and shipment of merchandise, with fund in hand, *on the aggregate amount of costs and charges*, 2½ per cent. — Drawing or indorsing bills, in all cases, 2½ per cent.—Vessels, selling or purchasing, 2½ per cent. — Procuring freight, 5 per cent. — Collecting freight on general average, 2½ per cent. — Outfits or disbursements, with funds in hand, 2½ per cent.— Effecting marine insurance, in all cases, when the premium does not exceed 10 per cent., *on the amount insured*, ½ per cent. —When the premium exceeds 10 per cent., *on the amount of premium*, 5 per cent. — Collecting dividends on stock, ½ per cent. —Collecting delayed or litigated accounts, 5 per cent. — Adjusting and collecting insurance losses, 2½ per cent. — Receiving and paying monies, from which no other commission is derived, 1 per cent.—Remittances in bills, in all cases, ½ per cent.—Landing and reshipping goods from vessels in distress, *on the value*, 2½ per cent. — Receiving and forwarding goods entered at the Custom-house, *on the value*, 1 per cent. — and 2½ per cent. on responsibilities incurred.

On Inland Business.—On the sale of merchandise, 2½ per cent. — Purchase and shipment of merchandise, or accepting for purchase, without funds or property in hand, 2½ per cent. — Sale or purchase of stocks, 1 per cent. — Sale or purchase of specie, ½ per cent. — Sale of bills of exchange with indorsement, ½ per cent. — Sale of bank notes or drafts not current, ½ per cent. — Selling or indorsing bills of exchange, 2½ per cent.—Selling or purchasing vessels, 2½ per cent. — Chartering to proceed to other ports to load, 2½ per cent. — Procuring or collecting freight, 2½ per cent. — Outfits or disbursements, 2½ per cent. —Collecting general average, 2½ per cent.—Effecting marine insurances, in all cases when the premium does not exceed 10 per cent., *on the amount insured*, ½ per cent. When the premium exceeds 10 per cent., *on the amount of premium*, 5 per cent. — Adjusting and collecting insurance losses, 2½ per cent.— Collecting dividends on stocks, ½ per cent. — Collecting bills, and paying over the amount, or receiving and paying monies from which no other commission is derived, 1 per cent. —Receiving and forwarding goods, *on the value*, ½ per cent. — The same when entered for duty or debenture, 1 per cent. — Remittances in bills, in all cases, ½ per cent.

The above commissions to be exclusive of the guarantee of debts for sales on credit, storage, brokerage, and every other charge actually incurred. — The risk of loss by fire, unless insurance be ordered, and of robbery, theft, and other unavoidable occurrences, if the usual care be taken to secure the property, is in all cases to be borne by the proprietor of the goods. When bills are remitted for collection, and are returned under protest for non-acceptance or non-payment, the same commission to be charged as though they were duly honoured. On consignments of merchandise withdrawn or reshipped, full commission to be charged to the extent of advances or responsibilities incurred, and half commission on the residue of the value.

RATES OF STORAGE, — *chargeable per month, as established by the New York Chamber of Commerce.*

	Cents.
Almonds, in frails or packages, cwt.	6
Alum, in casks or bags, per ton	40
Ashes, pot and pearl, bbl.	8
Beef, bbl.	6
Bottles, quart, in mats, cr. or hmp. gr.	8
Bark, quercitron, in casks, ton	60
Bagging, cotton, loose or in bales, pc.	3
Butter, in firkins of 60 lbs., per fir.	2
Brandy. *See* Liquors.	
Candles, in boxes of 50 or 60 lbs., box	2
Chocolate, in boxes of 50 lbs., box	2
Cocoa, in bags, per cwt.	2½
in casks, ditto	3
Coffee, in casks, ditto	2½
in bags, ditto	2
Copperas, in casks, per ton	40
Copper, in pigs, ditto	20
in sheets or bolts, ton	30
braziers' bottoms, ton	75
Cordage, per ton	50
Cassia, in mats or boxes, per cwt.	10
Cotton, American, in square bales, 300 lbs.	12½
ditto in round bales, ditto	16
West Indian, in proportion to round.	
East Indian, in bales, per 300 lbs.	9
Cheese, casks, boxes, or loose, cwt.	3
Duck, heavy, per bolt	1½
Ravens or Russia sheeting, piece	0¾
Dry goods, in boxes or bales, 40 cubic feet	40
Fish, pickled, per bbl.	6
dry, in casks or boxes, cwt.	4
in bulk, per cwt.	2½
Figs, in frails, boxes, or drums, cwt.	2½
Flax, per ton	60
Flax-seed, or other dry articles, in tierces of 7 bushels per tierce	10
Flour, or other dry articles, in bbls.	4
Earthenware, in crates of 25 to 30 feet	15
in hhds. of 40 to 50 feet	30
Grain, in bulk, per bushel	1
Ginger, in bags, per cwt.	2
Glass, window, in boxes of 50 feet	1½
Gin. *See* Liquors.	
Hemp, per ton	75
Hides, dried or salted, per hide	1½
Hardware, in casks of 40 cubic feet	40
Indigo, in serons or boxes, per cwt.	4
Iron, in bars or bolts, per ton	20
in hoops, sheets, or nailrods, ton	30
Liquors, in puncheons of 120 gallons, per puncheon	30
in ¼ casks	6½
in pipes or casks, 120 gallons	30
bottled, in casks or boxes, doz. bottles	1½
Leather, per side	¼
Lard, in firkins of 60 lbs.	2
Lead, pig or sheet, per ton	20
dry or gr. in oil, ditto	20
Molasses, per hhd. of 110 gallons (other casks in proportion)	30
Nails, in casks, per cwt.	2
Oil, in hhds. or casks, 110 gallons	30
in chests of 30 flasks, per chest	4
bottled, in boxes or baskets, doz.	1½
Paints, in casks or kegs, per ton	40
Pork, per bbl.	6
Porter. *See* Liquors.	
Pepper, in bags, per cwt.	2½
Pimento, in casks or bags, cwt.	2½
Rice, in tierces, per tierce	12
in ½ ditto, per ½ ditto	8
Rags, in bales, per cwt.	6
Raisins, Malaga, in casks	3
ditto, in boxes	1
in other packages, per cwt.	2
Rum. *See* Liquors.	
Saltpetre, in bags, per cwt.	2
in casks, ditto	2½
Salt, in bags or bulk, per bushel	¼
Shot, in casks, per ton	37
Soap, in boxes of 50 to 60 lbs.	2
Steel, in bars or bundles, per ton	30
in boxes or tubs, ditto	40
Sugar, raw, in bags or boxes, per cwt.	2
ditto, in casks, ditto	2½
refined, in casks or packages	3
Tallow, in casks or serons, cwt.	2
Tea, bohea, in whole chests	15
ditto, in ½ chests	8
green or black, in ¼ chests	4½
in boxes, in proportion to ¼ chests.	
Tin, block, per ton	20
in boxes of usual size, per box	1½
Tobacco, in hhds., per hhd.	37½
in bales or serons, per cwt.	4
manufactured, in kegs of 100 lbs.	2
Wines. *See* Liquors.	
Woods, for dyeing, under cover, per ton	50
ditto, in yards	25
Whiting, in hhds., per ton	37½

On articles on which the rate is fixed by weight, it is understood to be on the gross weight; and on liquors, oil, &c. on which the rate refers to gallons, it is understood to be on the whole capacity of the casks, whether full or not. The proprietor of goods to be at the expense of putting them in store, stowing away, and turning out of store. — All goods taken on storage to be subject to 1 month's storage; if taken out within 15 days after the expiration of the month, to pay ½ a month's storage; if after 15 days, a whole month's storage.

RATES OF CARTAGE.

	s.	*d.*
Ale or beer, per hhd.	2	0
hhd. from 60 to 90 gallons	2	0
Alum or copperas, from 12 to 15 cwt., per hhd.	2	6
from 15 to 20 cwt.	3	0
over 1 ton	4	6
Bar iron, per load	2	0
Boards and plank, per load	2	0
Brandy, pipe over 100 gallons	3	0
Bread, 4 tierces	2	0
Bricks, per load	2	0
handled and piled	2	6
Building or paving stones, load	2	0
Calves, sheep, and lambs	2	6
Cider, cheese, and cocoa	2	0
Clay and sand, 12 bushels	2	0
Coal, half chaldron, per load	2	6
Cocoa, per load	2	0
Coffee, in bags or bbls.	2	0
above 10 cwt., per hhd.	2	6
Cordage, small, per load	2	0
Cotton, per load of 3 bales	2	0
Cut stone, per load	2	6
Dried fish, loose, load	2	6
Dye wood, per load	2	0
Earthenware, loose, per load	2	6
European goods, per load	2	0
Flax, in bales and bundles, load	2	6
Flax-seed, 3 tierces	2	0
Fire-wood, per load	2	0
Flour, in bags, 12 per load	2	0
7 bbls. per load	2	0
Gammons or hams, per load	2	0
Gin, pipe over 100 gallons	3	0
Hay, in trusses, bundles, bales, per load	2	6
loose	6	0
Heading or staves, per load	2	0
Hides, 50 per load	2	6
Hemp, in bales or bundles, per load	2	6
loose, not over 12 cwt.	3	6
Hoops, in bundles	2	0
Hoop-poles, per load	2	6
Hollow ware, per load	2	6
Household furniture	4	0
Molasses, from 60 to 90 gallons	2	6
from 90 to 140 gallons	3	0
Oil, per load of 3 bbls.	2	0
Oysters, ditto shells, &c., load	2	6
Potashes, per load of 3 bbls.	2	0
Paints, common, load	2	0
per hhd., from 12 to 15 cwt.	2	6
from 15 to 20 cwt.	3	0
above 20 cwt.	4	6

	s.	d.
Pantiles, per load	2	6
Plaster of Paris, ton	4	0
Pork, beef, tar, pitch, and turpentine, 5 bbls.	2	0
Rum, per hhd.	3	0
Salt, 20 bushels	2	0
Shingles, long cedar, pine, in bundles	2	0
Cyprus, 2,000 (22 inch)	3	0
Stone, paving or building	2	0
Sugar, Havannah, 3 boxes	2	6
from 9 to 15 cwt.	2	6
from 15 to 20 cwt.	3	0
above 20 cwt.	4	6
Scantling, or timber, per load	2	0
Tea, per load	2	6
Tiles or slate, per load	2	6
Tobacco, in hhds., from 9 to 15 cwt. per hhd.	2	6
from 15 to 20 cwt.	3	0
above 20 cwt.	4	6
Wheat, or other grain, per load	2	0
Wine, pipe, over 100 gallons	3	0
in 4 quarter-casks	3	0
Whiting, common load	2	0
per hhd., 12 to 15 cwt.	2	6
from 15 to 20 cwt.	3	0
above 20 cwt.	4	6

Cables.

For every cable, whole shot of 5 inches in circumference to 7 inches	5	0
Do. half shot of like dimensions	2	6
Do. whole shot of 7 to 10 inches	12	0
Do. half shot of like dimensions	6	0
Do. whole shot of 10, and not exceeding 12 inches in circumference	14	0
Do. whole shot of 12, and not exceeding 14 inches in circumference	20	0
Do. half shot of the dimensions of the two last mentioned	10	0
Do. whole shot of 14 and not exceeding 15 inches	24	0
Do. half shot of like dimensions	12	0
Do. whole shot of 15 inches	32	0
Do. half shot of like dimensions	16	0
*** *Goods, wares, merchandise, or other articles not herein enumerated, per load*	2	0

In all cases where the distance exceeds ½ a mile, and not 2 miles, ½ in addition to be allowed.

Rates of Porterage. — For any distance not exceeding ¼ a mile, 12½ cents; over ¼ a mile, and not exceeding a mile, 25 cents; and in that proportion for any greater distance. For carrying a load upon a hand-barrow, for any distance not exceeding ¼ a mile, 25 cents; over ¼ a mile, and not exceeding a mile, 44 cents; and in that proportion for any greater distance.

Hand-cartmen. — For any distance not exceeding ¼ a mile, 18¾ cents; over ¼ a mile and not exceeding a mile, 31¼ cents; and in that proportion for any greater distance.

Harbour Master.

The office of harbour master was created in 1808, by legislative enactment, with power to regulate and station all vessels in the harbour, or at the wharfs, to accommodate vessels wishing to discharge their cargoes, and to decide promptly all disputes connected with the foregoing subjects. Resisting his authority subjects to a fine of 50 dollars and costs, for the benefit of the New York hospital.

Fees. — On vessels unloading, 1½ cent per ton. Vessels paying foreign duties and tonnage, *double*; which must be paid within 48 hours after arrival. Schooners and sloops in the coasting trade, 2 dollars. For adjusting any difference respecting situation, 2 dollars.

Pilots must register their vessels, names and places of abode, in his office; and are obliged to put to sea whenever ordered by him. The penalty for refusing is 5 dollars and loss of licence.

Pilotage.

There are 9 branch and 9 deputy pilots, and as many registered boats.

Rates of Pilotage. — Every pilot who shall take charge of any vessel to the eastward or southward of the White Buoy on the eastern ridge near the bar, and conducts and moors safely such vessel to a proper wharf, or from the city to the southward or eastward of said buoy, is entitled by law to the following rates, to wit:—For vessels of the United States, and those who are entitled by treaty to enter upon the same terms as American vessels, the sums which follow:—Every vessel drawing less than 14 feet, 1 dol. 50 cts. per foot; do. drawing 14 feet, and less than 18, 1 dol. 75 cts. per foot; do. drawing 18 feet or upwards, 2 dols. 25 cts. per foot. The same rates of pilotage to be allowed for any vessel that may be piloted any where within the Hook, whose master or owner does not wish the same to be brought to the city wharfs. Half pilotage only to be allowed to any pilot who shall take charge of a vessel to the westward of the White Buoy. No pilotage whatsoever to be given to any pilot, unless he shall take charge of a vessel to the southward of the upper Middle Ground, nor unless such vessel shall be of 70 tons burden, provided the usual signal be not given, in which case half pilotage is to be allowed. Between the 1st of November and the 1st of April, inclusive, 4 dols. additional to be allowed for vessels of 10 feet water and upwards; if less than 10 feet, 2 dols. One fourth additional to be given to the pilots who shall take charge of vessels out of sight of the light-house. For every day any pilot shall be required to remain on board, 3 dols. per day. Foreign vessels not entitled by treaty to enter on the same terms as those of the United States, to pay 1-4th additional to the pilots, and also 5 dols. over and above the foregoing rates of pilotage.

Wardens of the Port.

Vessels and goods arriving in a damaged state, and required to be sold by auction for the benefit of underwriters out of the city of New York, must be under the inspection of the wardens, who may be required to certify the cause of the damage, and amount of sale and charges.

Fees. —1½ per cent. on gross amount of sales; and for each survey on board of any vessel, at any store, or along the docks or wharfs, 3 dols. on damaged goods; each survey on hull, spars, rigging, &c., 5 dols.; each certificate, 1 dol. 25 cts.; ditto of distress of said vessel, 2 dols. 50 cts.; same services for vessels paying foreign duties and tonnage, *double*.

QUANTITY OF GOODS TO COMPOSE A TON.

Extract from the By-Laws of the New York Chamber of Commerce.

Resolved,—That when vessels are freighted by the ton, and no special agreement is made between the owner of the vessel and freighter of the goods, respecting the proportion of tonnage which each particular article shall be computed at, the following regulation shall be the standard of computation:—

That the articles, the bulk of which shall compose a ton, to equal a ton of heavy materials, shall be in weight as follows:—1,568 lbs. of coffee in casks, 1,830 ditto in bags; 1,120 lbs. of cocoa in casks, 1,307 ditto in bags.

952 lbs. of pimento in casks, 1,110 ditto in bags.

8 barrels of flour of 196 lbs. each.

6 barrels of beef, pork, tallow, pickled fish, pitch, tar, and turpentine.

20 cwt. of pig and bar iron, potashes, sugar, logwood, fustic, Nicaragua wood, and all heavy dye woods, rice, honey, copper ore, and all other heavy goods.

16 cwt. of coffee, cocoa, and dried codfish, in bulk, and 12 cwt. of dried codfish in casks of any size.

6 cwt. of ship bread in casks, 7 cwt. in bags, and 8 cwt. in bulk.

200 gallons (wine measure) reckoning the full contents of the casks, of oil, wine, brandy, or any kind of liquors.

22 bushels of grain, peas, or beans in casks.

36 bushels of ditto in bulk.

56 bushels of European salt.

31 bushels of salt from the West Indies.

29 bushels of sea coal.

40 feet (cubic measure) of mahogany, square timber, oak plank, pine and other boards, beaver, furs, peltry, bees' wax, cotton, wool, and bale goods of all kinds.

1 hogshead of tobacco, and 10 cwt. of dry hides.

8 cwt. of China raw silk, 10 cwt. nett bohea, and 8 cwt. green tea.

Tares allowed by Custom.

Alum, in bags	5 lbs.
in casks	10 per cent.
Almonds, in cases	8 —
in bales	8 lbs.
double bales	16 —
in bags	4 per cent.
Cheese, in casks or tubs	15 —
Cocoa, in serons	8 —
Copperas, in casks	10 —
Cassia, in boxes	actual
in mats	6 per cent.
Cinnamon, in boxes	actual
in bales	6 per cent.
Cloves, in casks	12 —
in bags	4 —
Currants, in casks	12 —
in boxes	10 —
Figs, in boxes	10 —
in mats or frails	4 —
in drums	8 —
in casks	12 —
Glue, in casks	20 —
in boxes	15 —
Hemp, in bales	5 —
Indigo, in cases	15 —
Lead (white, in oil), in kegs	8 —
do. if the kegs are packed in hogsheads, extra allowed for the hogshead is	100 lbs.
(white, dry), in casks	6 per cent.
(red, dry), do.	5 —
(red, in oil), do.	10 —
in casks	3 —
Nails, in bags	3 —
Nutmegs, in casks	12 —
in bags	4 —
Ochre (in oil), in casks	12 —
(dry), do.	10 —
Powder, gun, in ¼ casks	5 lbs.
in ½ do.	9 —
whole do.	23 —
Plums, in boxes	8 per cent.
Prunes, in do.	8 —
Paris, white, in casks	10 —
Raisins, in jars	18 lbs.
in boxes	15 per cent.
in casks	12 —
in frails	4 —
in drums	10 —
Rice	10 —
Snuff, in boxes	15 —
Sugar-candy, in tubs	15 —
Sugar in loaves	1¼ lbs.
Steel, per bundle	3 —
Shumac, no tare: sometimes 1 lb. per bag is allowed.	
Sheet iron, in casks	15 per cent.
Steel, in cases and casks	8 —
Spikes, in casks	8 —
in bags	3 —
Tallow, in bales	8 —
in casks	12 —
in serons	8 —
in tubs	15 —
Twine, in boxes	15 —
in casks	12 —
in bales	3 —
Tobacco, in boxes	15 —

Wire, in casks	8 per cent.
Whiting, in do.	10 —

Actual tare is allowed on fruit, if required.

Tares allowed by Law.

On candles, in boxes	8 —
Cheese, in hampers or baskets	10 —
in boxes	20 —
Chocolate, in boxes	10 —
Coffee, in bags	2 —
in bales	3 —
in casks	12 —
Cocoa, in bags	1 —
in casks	4 —
Cotton, in bales	2 —
in serons	6 —
Indigo, in do.	10 —
Nails, in casks	8 —
Pimento, in bags	3 —
Pepper, in bags	2 per cent.
Sugar, other than loaf sugar, in casks	12 —
in boxes	15 —
in mats or bags	5 —
Salts, Glauber	8 —
Sugar-candy, in boxes	10 —
Soap, in boxes	10 —
Shot, in casks	3 —
Every whole chest of bohea tea	70 lbs.
½ do. do.	36 —
¼ do. do.	20 —
Every chest of hyson or other green tea of 70 lbs. or upwards	20 —
Every box of other tea between 50 and 70 lbs.	18 —
do. do. if 80 lbs.	20 —
do. do. from 80 lbs. and upwards	22 —

The above to include ropes, canvass, and other coverings. On all other boxes of teas, according to the invoices or actual weight thereof.

We have derived these statements from the *New York Annual Register* for 1831; *The Picture of New York*; the *Consul's Answers to the Circular Queries*, and *private communications*.

Trade and Navigation of the United States.

Trade and Navigation of the United States, for the Year ending the 30th of September, 1832. — (From the Official Accounts, printed by order of Congress.)

I. Statistical View of the Commerce of the United States, exhibiting the Value of every Description of Imports from, and the Value of every Description of Exports to, each Foreign Country; also the Tonnage of American and Foreign Vessels arriving from, and departing to, each Foreign Country, during the Year ending on the 30th of September, 1832.

Countries.	Commerce.				Navigation.			
	Value of Imports.	Value of Exports.			American Tonnage.		Foreign Tonnage.	
		Domestic Produce.	Foreign Produce.	Total.	Entered into the U. S.	Departed from U. S.	Entered into the U. S.	Departed from U. S.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Russia	3,251,852	121,114	461,568	582,682	21,824	3,146	1,832	391
Prussia	27,927	11,116	- -	11,116	268	179		
Sweden and Norway	1,097,394	214,048	152,365	366,413	12,401	1,868	7,478	3,078
Swedish West Indies	53,410	141,249	7,478	148,727	2,058	4,651	427	644
Denmark	63,342	181,605	350,115	531,720	779	4,268	149	723
Danish West Indies	1,119,566	1,393,490	282,341	1,675,831	21,560	39,762	1,870	3,803
Netherlands	1,560,668	2,232,792	2,870,490	5,103,282	29,912	38,770	5,630	8,372
Dutch W. Indies and American colonies	328,832	357,520	46,644	404,164	10,176	9,511	-	80
East Indies	668,974	24,516	503,504	528,020	5,084	7,456	-	680
England	34,848,562	26,632,068	2,875,137	29,507,205	179,679	187,579	110,788	96,615
Scotland	1,380,812	1,125,898	20,864	1,146,762	4,565	3,932	19,631	9,410
Ireland	491,891	152,913	4,115	157,028	2,584	1,791	11,147	
Guernsey, Jersey, &c.	554	3,700	- -	3,700	-	-	162	
Gibraltar	279,858	428,833	185,074	613,907	5,666	14,989	353	431
British East Indies	2,538,938	189,218	339,235	528,453	7,249	5,916		
West Indies	1,422,237	1,655,448	33,828	1,689,276	61,408	66,769	27,328	19,357
Newfoundland, &c.	- -	- -	- -	- -	470	428	1,335	219
British American colonies	1,229,526	3,569,302	45,083	3,614,385	74,001	65,056	108,671	146,292
Other British colonies	2,551	7,840	- -	7,840	167	240		
Hanse Towns	2,865,096	2,435,542	1,652,670	4,088,212	20,741	18,452	21,287	25,778
France on the Atlantic	10,931,983	9,028,185	1,536,771	10,565,256	71,680	79,330	11,934	12,769
on the Mediterranean	1,243,775	914,091	1,140,376	2,054,467	13,207	16,486	2,313	3,638
French W. Indies and Amer. colonies	578,857	605,793	19,182	624,975	20,578	26,677	8,282	4,448
Other French African ports	- -	- -	- -	- -	-	-	-	316
Hayti	2,055,386	1,243,510	425,493	1,669,003	30,387	29,990	1,067	1,279
Spain on the Atlantic	677,483	302,584	44,631	347,265	9,371	6,033	819	2,093
on the Mediterranean	740,701	186,864	1,054	187,918	9,813	3,286	896	1,808
Teneriffe and the other Canaries	154,837	14,567	7,851	22,418	2,971	925		
Manilla and Philippine Islands	332,250	20,906	113,414	134,320	2,345	1,289		
Cuba	7,068,857	3,681,397	1,630,754	5,312,151	111,805	123,588	28,135	25,632
Other Spanish West Indies	1,889,182	322,559	72,552	395,111	26,741	9,343	1,657	717
Portugal	123,816	28,262	300	28,562	8,087	1,177	1,166	600
Madeira	228,318	145,667	929	146,596	1,958	4,623	124	124
Fayal and the other Azores	21,682	23,402	11,363	34,765	828	812	191	
Cape de Verd Islands	87,706	66,858	19,707	86,295	2,430	2,603	150	162
Other Portuguese African ports	22,742	- -	- -	- -	193			
Italy	1,619,795	178,597	509,056	687,563	11,672	6,042	243	732
Sicily	156,617	3,088	- -	3,088	3,491	-	603	432
Trieste and other Austr. Adriatic ports	362,027	199,911	936,775	1,136,686	3,405	6,497	1,020	1,521
Turkey, Levant, and Egypt	923,629	64,722	681,886	746,608	7,356	4,805	247	
Mexico	4,293,954	845,777	2,621,764	3,467,541	25,459	24,111	9,457	9,364
Central Republic of America	288,316	139,206	196,101	335,307	5,286	4,589	-	116
Colombia	1,439,182	406,857	710,167	1,117,024	9,258	9,443	2,507	269
Honduras, Campeachy, &c.	34,162	65,459	17,397	82,856	1,736	2,677	825	97
Brazil	3,890,845	1,222,077	822,717	2,054,794	31,222	30,439	3,314	356
Argentine Republic	1,560,171	464,632	458,408	923,040	11,821	6,987		
Cisplatine Republic	- -	3,525	- -	3,525	103	378		
Chili	504,623	579,370	641,749	1,221,119	4,194	8,105		
Peru	725,098	7,126	10,884	17,960	244	72		
South America, generally	- -	41,302	- -	41,302	244	1,564		
Cape of Good Hope	12,015	- -	- -	- -	322	155		
China	5,344,907	356,162	924,360	1,260,522	11,149	7,232		
Arabia	24,025							
Asia, generally	111,180	42,838	469,489	512,327	2,153	6,520		
East Indies, generally	- -	- -	- -	- -	297	1,342		
West Indies, generally	12,740	556,446	6,508	562,954	1,950	12,879	-	4,290
Europe, generally	- -	174,182	7,411	181,593	1,897	1,951	-	622
Africa, generally	221,532	257,422	106,549	363,971	4,896	4,997	-	217
South Seas	15,175	30,096	12,838	42,934	38,183	52,573		
Sandwich Islands	920							
North-west coast of America	- -	46,078	50,526	96,604	-	782		
Uncertain ports	5,028							
Total	101,029,266	63,137,470	24,039,473	87,176,943	949,622	974,865	393 0 8	387, 05

II. Value of the Exports and Imports of the United States, for the following Years, ending repectively on the 30th of September, together with a Column showing the Population, as ascertained at the different Periods when a Census was taken.

Years.	Articles, the Growth, Produce, or Manufacture of the United States, exported.	Articles, the Growth, Produce, or Manufacture, of Foreign Countries, re-exported.	Total Value of Exports from the United States.	Total Value of Imports into the United States from Foreign Countries.	Population of the United States, according to the Official Census.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	
1790			20,205,156	- -	3,921,426
1791			19,012,041		
1792	[Previously to 1796, the returns do		20,753,098		
1793	not discriminate between domestic		26,109,572		
1794	and foreign productions.]		33,026,233		
1795			47,989,472		
1796	40,764,097	26,300,000	67,064,097		
1797	29,850,206	27,000,000	56,850,206		
1798	28,527,097	33,000,000	61,527,097		
1799	33,142,522	45,523,000	78,665,522		
1800	31,840,903	39,130,877	70,971,780	- -	5,319,762
1801	47,473,204	46,642,721	94,115,925		
1802	36,708,189	35,774,971	72,483,160		
1803	42,205,961	13,594,072	55,800,033		
1804	41,467,477	36,231,597	77,699,074		
1805	42,387,002	53,179,019	95,566,021		
1806	41,253,727	60,283,236	101,536,963		
1807	48,699,592	59,643,558	108,343,150		
1808	9,433,546	12,997,414	22,430,960		
1809	31,405,702	20,797,531	52,203,233	Period embracing	
1810	42,366,675	24,391,295	66,757,970	the embargo,	7,230,903
1811	45,294,043	16,022,790	61,316,833	non-importation,	
1812	30,032,109	8,495,127	38,527,236	and non-inter-	
1813	25,008,152	2,847,845	27,855,997	course laws, and	
1814	6,782,272	145,169	6,927,441	the war.	
1815	45,974,403	6,583,350	52,557,753		
1816	64,781,896	17,138,556	81,920,452		
1817	68,313,500	19,358,069	87,671,569	[Previous to Oct.	
1818	73,854,437	19,426,696	93,281,133	1. 1820, the returns	
1819	50,976,838	19,165,683	70,142,521	do not show the	
1820	51,683,640	18,008,029	69,691,669	value of imports.]	9,637,999
1821	43,671,894	21,302,488	64,974,382	62,585,724	
1822	49,874,079	22,286,202	72,160,281	83,241,541	
1823	47,155,409	27,543,622	74,699,030	77,579,267	
1824	50,649,500	25,337,157	75,986,657	80,549,007	
1825	66,944,745	32,590,643	99,535,388	96,340,075	
1826	53,055,710	24,539,612	77,595,322	84,974,477	
1827	58,921,691	23,403,156	82,324,827	79,484,068	
1828	50,669,669	21,593,017	72,264,686	88,509,824	
1829	55,700,193	16,658,478	72,358,671	74,492,527	
1830	59,462,029	14,337,479	73,899,508	70,876,920	12,788,742
1831	- -	- -	81,310,583	103,191,124	
1832	63,137,470	24,039,473	87,176,943	101,029,266	

III. Summary Statement of the Value of the Exports of the Growth, Produce, and Manufacture, of the United States, during the Year commencing on the 1st of October, 1831, and ending on the 30th of September, 1832.

The Sea.	*Dollars.*	*Dollars.*	*Dollars.*
Fisheries —			
Dried fish, or cod fisheries	- -	749,909	
Pickled fish, or river fisheries, herring, shad, salmon, mackarel	- -	306,812	
Whale and other fish oil	- -	1,009,728	
Spermaceti oil	- -	38,161	
Whalebone	- -	186,595	
Spermaceti candles	- -	267,333	
			2,558,538
The Forest.			
Skins and furs	- -	691,909	
Ginseng	- -	99,545	
Product of wood —			
Staves, shingles, boards, and hewn timber	1,522,053		
Other lumber	188,608		
Masts and spars	73,368		
Oak bark and other dye	52,944		
All manufactures of wood	312,072		
Naval stores, tar, pitch, resin, and turpentine	476,291		
Ashes, pot and pearl	930,398		
		3,556,340	
			4,347,794
Agriculture.			
Product of animals —			
Beef, tallow, hides, horned cattle	774,087		
Butter and cheese	290,820		
Pork (pickled), bacon, lard, live hogs	1,928,196		
Horses and mules	164,034		
Sheep	22,585		
Vegetable food —		3,179,322	
Wheat	93,500		
Flour	4,880,623		
Indian corn	278,740		
Indian meal	480,035		
Rye meal	75,392		
Rye, oats, and other small grain, and pulse	78,447		
Biscuit or ship bread	255,735		
Potatoes	42,077		
Apples	15,314		
Rice	2,152,631		
		8,352,494	
			11,532,016
Tobacco	- -	- -	5,999,769
Cotton	- -	- -	31,724,682
All other agric. products —			
Flax-seed	- -	123,036	
Hops	- -	25,448	
Brown sugar	- -	11,232	
			159,716
Manufactures.			
Soap and tallow candles	- -	701,184	
Leather, boots and shoes	- -	277,388	
Household furniture	- -	169,038	
Coaches and other carriages	- -	45,277	
Hats	- -	316,912	
Saddlery	- -	25,572	
Wax	- -	- -	62,444
Spirits from grain, beer, ale, and porter	- -	- -	127,583
Snuff and tobacco	- -	- -	295,771
Lead	- -	- -	4,483
Linseed oil and spirits of turpentine	- -	- -	33,304
Cordage	- -	- -	13,863
Iron, pig, bar, and nails	- -	- -	65,979
castings	- -	- -	26,629
manufactures of	- -	- -	120,222
Spirits from molasses	- -	- -	38,221
Sugar, refined	- -	- -	74,673
Chocolate	- -	- -	2,255
Gunpowder	- -	- -	96,023
Copper and brass	- -	- -	105,774
Medicinal drugs	- -	- -	130,238
			2,730,833
Cotton piece goods —			
Printed or coloured	104,870		
White	1,052,891		
Nankeens	341		
Twist, yarn, and thread	12,618		
All other manufactures of	58,854		
		1,229,574	
Flax and hemp —			
Cloth and thread	- -	1,570	
Bags, and all manufac. of	- -	2,685	
Wearing apparel	- -	80,803	
Combs and buttons	- -	124,305	
Brushes	- -	4,754	
Billiard tables	- -	1,310	
Umbrellas and parasols	- -	20,361	
Leather and Morocco skins not sold per pound	- -	42,565	
Printing presses and type	- -	22,558	
Musical instruments	- -	4,952	
Books and maps	- -	29,892	
Paper and other stationery	- -	64,847	
Paints and varnish	- -	24,611	
Vinegar	- -	4,677	
Earthen and stone ware	- -	6,333	
Fire engines and apparatus	- -	7,758	
Manufactures of glass	- -	106,855	
tin	- -	3,157	
pewter and lead	- -	983	
marble and stone	- -	3,455	
gold and silver, and gold leaf	- -	653	
Gold and silver coin	- -	1,410,941	
Artificial flowers & jewellery	- -	14,852	
Molasses	- -	2,493	
Trunks	- -	5,314	
Brick and lime	- -	3,502	
Domestic salt	- -	27,914	
			3,253,674
Articles not enumerated —			
Manufactured	- -	477,267	
Other	- -	353,181	
			830,448
			63,137,470

IV. Statement of the Commerce of each State and Territory, commencing on the 1st Day of October, 1831, and ending on the 30th Day of September, 1832.

States and Territories.	Value of Imports.			Value of Exports.						Total Value of Domestic and Foreign Produce.
				Domestic Produce.			Foreign Produce.			
	In American Vessels.	In Foreign Vessels.	Total.	In American Vessels.	In Foreign Vessels.	Total.	In American Vessels.	In Foreign Vessels.	Total.	
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Maine	988,043	135,283	1,123,326	783,974	123,512	907,286	73,531	626	74,157	981,443
New Hampshire	115,051	120	115,171	115,582	- -	115,582	-	- -	- -	115,582
Vermont	214,672	- -	214,672	349,820	- -	349,820	- -	- -	- -	349,820
Massachusetts	17,670,184	448,716	18,118,900	4,281,130	375,505	4,656,635	7,162,311	174,822	7,337,133	11,993,763
Rhode Island	657,629	340	657,969	377,656	- -	377,656	156,803	- -	156,803	534,459
Connecticut	432,664	5,051	437,715	416,729	13,737	430,466	- -	- -	- -	430,466
New York	48,728,649	4,485,753	53,214,402	12,399,692	2,657,558	15,057,250	8,115,475	2,828,220	10,943,695	26,000,945
New Jersey	45,757	24,703	70,460	51,991	2,000	53,991	7,803	- -	7,803	61,794
Pennsylvania	9,960,114	718,244	10,678,358	1,775,254	233,737	2,008,991	1,162,650	344,425	1,507,075	3,516,066
Delaware	17,119	6,534	23,653	16,242	- -	16,242	- -	- -	- -	16,242
Maryland	4,138,212	491,061	4,629,303	2,377,893	637,980	3,015,873	1,381,427	102,618	1,484,045	4,499,918
Dist. of Colombia	172,517	15,530	188,047	1,013,621	132,445	1,146,066	8,158	250	8,408	1,154,474
Virginia	422,052	131,587	553,639	3,774,249	719,667	4,493,916	16,722	12	16,734	4,510,650
North Carolina	195,590	19,594	215,184	296,301	41,945	338,246	3,795	- -	3,795	342,041
South Carolina	597,953	615,772	1,213,725	4,321,141	3,364,692	7,685,833	13,330	53,568	66,898	7,752,731
Georgia	138,697	114,720	253,417	3,853,555	1,661,126	5,514,681	795	407	1,202	5,515,883
Alabama	245,408	61,437	306,845	1,372,365	1,361,189	2,733,554	2,833	- -	2,833	2,736,387
Mississippi										
Louisiana	5,416,225	3,425,428	8,871,653	9,288,428	4,816,690	14,105,118	1,106,237	1,319,575	2,425,812	16,530,930
Ohio	11,224	1,168	12,392	12,576	45,818	58,394	- -	- -	- -	58,394
Florida territory	7,791	28,996	107,787	38,457	24,179	62,636	3,000	80	3,080	65,716
Michigan territory	22,648	- -	22,648	9,234	- -	9,234	- -	- -	- -	9,234
Total	90,298,229	10,731,037	101,029,266	46,925,890	16,211,580	63,137,470	19,214,870	4,824,603	24,039,473	87,176,943

V. A Comparative View of the registered, enrolled, and licensed Tonnage of the United States, from 1815 to 1832 inclusive.

Years.	Registered Tonnage.	Enrolled and licensed Tonnage.	Total Tonnage.	Years.	Registered Tonnage.	Enrolled and Licensed Tonnage.	Total Tonnage.
	Tons. 95*ths.*	*Tons.* 95*ths.*	*Tons.* 95*ths.*		*Tons.* 95*ths.*	*Tons.* 95*ths.*	*Tons.* 95*ths.*
1815	854,294 74	513,833 4	1,368,127 78	1824	669,972 60	719,190 87	1,389,163 2
1816	800,759 63	571,458 85	1,372,218 53	1825	700,787 8	722,323 69	1,423,111 77
1817	809,724 70	590,186 66	1,399,911 41	1826	737,978 15	796,212 68	1,534,190 83
1818	606,088 64	609,095 51	1,225,184 20	1827	747,170 44	873,437 34	1,620,607 78
1819	612,930 44	647,821 17	1,260,751 61	1828	812,619 37	928,772 50	1,741,391 87
1820	619,047 53	661,118 66	1,280,166 24	1829	650,142 88	610,654 88	1,260,977 81*
1821	619,096 40	679,062 30	1,298,958 70	1830	576,475 33	615,301 10	1,191,776 43
1822	628,150 41	696,548 71	1,324,699 17	1831			
1823	639,920 76	696,644 37	1,336,565 68	1832	620,451 92	647,394 32	1,267,846 29

Prices at New York.—The following statements of the wholesale prices of some of the principal articles of exportation at New York, are taken from the *New York Price Current* for the 15th of January, 1834.

	Dls. cts.	*Dls. cts.*
Cotton — *Import duty*, 3 cents per lb.		
New Orleans, per lb.	0 12 to 0	13½
Alabama, do.	0 12 - 0	13
Upland, do.	0 10 - 0	12
Tennessee, do.	0 10½ - 0	11
Cotton bagging — *Import duty*, 3½ cents. per square yard.		
Hemp, per yard	0 20 to 0	21
Flax, do.	0 17 - 0	18
American, do.	0 20 - 0	0
Flour and meal —		
New York, superfine, per barrel	5 25 - 5	37½
Troy, do.	5 37½ - 5	50
Western Canal, do.	5 50 - 5	75
Philadelphia, do.	0 0 - 5	50
Baltimore, Howd Street, do.	5 62½ - 5	75
Richmond Country mills, do.	0 0 - 5	50
Georgetown, do.	0 0 - 5	75
Alexandria, do.	5 37½ - 5	50
Fredericksburgh, do.	5 25 - 5	37½
Petersburgh, do.	5 37½ - 5	50
Scratched and fine, do.	5 0 - 0	0
Middlings, fine, do.	4 75 - 0	0
Rye flour, do.	3 62½ - 3	75
Indian meal, do.	3 50 - 3	62½
per hogshead	15 0 - 0	0
Furs — *Import duty*, — dressed, 12½ per cent. *ad valorem*; undressed, free.		
Beaver, parchment, per lb.	5 75 to 6	0
North, do.	4 0 - 4	75
South, do.	0 0 - 3	0
West, do.	3 25 - 5	50
Otter, per skin	3 50 - 7	0
Raccoon, S. W., do.	0 12 - 0	20
Detroit, &c., do.	0 30 - 0	50
Musk rat, S. and N., do.	0 15 - 0	23
Martin, Canada, do.	0 85 - 1	0
N. W., do.	1 12½ - 1	50
Red fox, do.	0 90 - 1	0
Minx, S. and N., do.	0 25 - 0	50
Nutria skins, do.	0 0 - 0	0
Hare skins, Russia, do.	0 20 - 0	25
Grain —		
Wheat, Virginia, per bushel	1 5 - 1	10
North Carolina, do.	0 0 - 0	0
Rye, Northern, do.	0 67 - 0	70
Corn, yellow, Northern, do.	0 65 - 0	70
white, Long Island and Jersey, do.	0 65 - 0	70
Southern, do.	0 58 - 0	63
Barley, North River, do.	0 0 - 0	0
Oats, Southern and Northern, do.	0 36 to 0	42
Beans, per tierce of 7 bushels	9 0 - 11	0
Peas, white, dry, do.	7 0 - 8	0
Lumber — *Yard selling prices.*		
Boards, North River, per mille feet	16 0 - 17	0
Eastern pine, do.	17 0 - 18	0
Albany do., per piece	0 17 - 0	18
Plank, Georgian do., per mille feet	25 0 - 35	0
Heading, W. O., per mille	0 0 - 55	0
Staves, W. O., pipe, do.	68 0 - 0	0
hogshead, do.	0 0 - 45	0
barrel, do.	36 0 - 40	0
R. O., hogshead, do.	27 0 - 28	0
Hoops, do.	25 0 - 30	0
Scantling, pine, do.	15 0 - 16	0
oak, do.	20 0 - 25	0
Timber, oak, per square foot	0 20 - 0	25
Georgian yellow pine, do.	0 28 - 0	30
Shingles, Cypress, per mille	4 0 - 10	0
Naval stores —		
Tar, per barrel	1 62½ - 1	75
Pitch, do.	0 0 - 1	75
Rosin, do.	1 37½ - 2	0
Turpentine, Wilmington, soft, do.	0 0 - 3	62½
North Co., do. do.	0 0 - 3	25
Spirits of turpentine, per gallon	0 53 - 0	55
Oils — *Import duty*, — Linseed, 25 cents; Olive, in casks, 20 cents per gallon; Salad, 15 per cent. *ad valorem*; Palm, free.		
Florence, 30 flasks, per box	0 0 to 5	0
French, 12 bottles, per basket	3 25 - 4	0
Olive, per gallon	1 4 - 1	6½
Palm, per lb.	0 6 - 0	6½
Linseed, American, per gallon	0 92 - 0	0
English and Dutch, do.	0 94 - 0	0
Whale, do.	0 25 - 0	26
Sperm, summer, do.	0 88 - 0	90
winter, do.	1 6 - 1	12½
Liver, Straits, per barrel	0 0 - 14	0
Shore and bank, do.	12 0 - 13	0
Tobacco — *Import duty*, Leaf, 15 per cent. *ad valorem.*		
Richmond and Petersburgh, per lb.	0 5 to 0	8½
North Carolina, do.	0 0 - 0	0
Kentucky, do.	0 5 - 0	8½
Cuba (in parcels), do.	0 8 - 0	16
St. Domingo, do.	0 9 - 0	15
Manufactured, No. 1., do.	0 11 - 0	13
No. 2., do.	0 8 - 0	9
No. 3., do.	0 7 - 0	8
Ladies' twist, do.	0 15 - 0	18
Cavendish, do.	0 12 - 0	37

* The decrease of shipping in 1829 is apparent only. From 1790 down to that year, the returns were made up from the registries, without making any allowance for the vessels worn out, lost, sold, or captured! This glaring defect was, if noticed at all, not obviated till 1829. No dependence can, therefore, be placed on any previous statement as to the amount of American tonnage. We hope that measures have been taken to prevent the future publication of any such scandalously inaccurate official accounts.

VI. Abstract of the Tonnage of the several Districts of the United States on the last Day of December, 1831; showing of what it consisted, and how it was employed.

Districts.	Registered.		Enrolled and licensed.		Licensed, under 20 Tons.		Aggregate of each District.	Registered Tonnage, employed in the		Proportion of the enrolled and licensed Tonnage employed in the				
	Permanent.	Temporary.	Permanent.	Temporary.	Coasting Trade.	Cod Fishery.		Whale Fishery.	Steam Navigation.	Coasting Trade.	Cod Fishery.	Mackarel Fishery.	Whale Fishery.	Steam Navigation.
	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.	Tons. 95ths.
Passamaquoddy, Ma.	489 40	5,462 75	3,613 49	-	-	39 11	9,604 80	-	-	2,762 16	311 53	539 75		
Machias - -	137 46	57 49	3,794 22	-	13 12	61 49	4,063 83	-	-	3,238 82	512 21	43 14		
Frenchman's Bay -	270 32	649 87	4,179 84	-	61 56	118 64	5,280 38	-	-	2,751 6	1,143 86	240 26	61 61	
Penobscot - -	2,304 60	378 13	16,698 40	-	379 68	238 50	19,999 41	-	-	8,644 91	5,515 45	2,537 94		
Belfast - -	2,836 21	1,250 86	11,492 58	-	36 3	50 54	15,666 32	-	-	9,728 0	1,149 36	615 22		
Waldoborough -	2,168 88	794 54	18,455 7	-	163 46	827 71	22,409 76	-	-	18,455 7				
Wiscasset - -	1,455 36	418 26	5,073 73	-	-	-	6,927 40	-	-	5,073 73				
Bath - - -	14,233 71	2,518 76	9,268 0	-	39 17	177 48	26,237 22	-	-	7,137 46	1,653 66	476 78		
Portland - -	27,051 06	2,547 6	12,848 34	-	173 71	221 71	42,844 93	-	-	6,458 82	1,661 22	4,728 25		
Saco - - -	1,123 23	-	2,209 91	-	137 81	-	3,471 5	-		2,046 61	142 66	20 59		
Kennebunk - -	3,154 63	470 47	2,041 53	-	-	16 14	5,682 82	-	-	1,291 25	507 28	243 0		
York - - -	-	-	860 15	-	-	19 18	879 33	-	-	587 79	337 50	134 76		
Portsmouth, N. H. -	8,304 0	486 36	5,789 44	-	35 89	84 22	14,700 1	-	-	844 58	3,237 47	1,687 34		
Newburyport, Mass.	8,847 39	1,640 26	7,172 23	-	-	-	17,659 88	-	-	793 93	1,839 18	4,539 7		
Ipswich - -	-	-	1,567 31	-	-	-	1,567 31	-	-	779 41	335 89	451 91		
Gloucester - -	2,694 17	67 84	9,583 91	-	31 38	461 34	12,838 74	-	-	3,662 76	3,883 88	2,037 22		
Salem - - -	18,473 94	584 90	6,480 55	-	-	-	25,539 49	-	-	1,008 27	4,549 67	922 56		
Marblehead -	1,309 31	-	5,605 50	-	-	-	6,914 81	-	-	874 61	5,762 18	968 66		
Boston - -	91,075 10	8,191 54	38,768 18	-	42 8	97 30	138,174 25	-	-	21,084 10	6,882 81	10,801 22		360 49
Plymouth - -	9,940 44	-	7,858 55	-	21 63	55 31	17,876 3	-	-	1,482 58	2,109 60	4,266 52		
Dighton - - -	645 17	-	3,210 45	-	-	43 80	3,899 47	-	-	3,210 45	-	-		168 94
New Bedford -	56,018 58	595 93	7,258 29	-	38 5	138 46	64,049 41	45,101 81	-	5,714 42	475 70	751 86	316 21	129 64
Barnstaple - -	2,274 63	117 58	21,315 12	-	150 55	-	26,857 93	1,283 22	-	462 4	13,544 53	10,204 50	101 0	
Edgartown - -	1,312 34	465 39	660 37	-	-	182 42	2,620 57	1,361 20	-	522 10	138 27			
Nantucket - -	20,889 10	82 74	3,472 25	179 41	40 52	14 18	24,678 30	20,889 10	-	3,542 30	109 36			
Providence, R. I. -	12,205 19	384 12	4,314 86	-	23 78	-	16,928 5	-	-	4,131 58	183 28	-		423 60
Bristol - -	7,167 68	-	2,153 94	-	46 49	-	9,368 21	-	-	2,081 47	72 47			
Newport - -	4,679 23	83 72	2,758 88	-	252 56	92 84	7,867 38	-	-	2,225 43	535 45	-	-	96 73
Middleton, Conn. -	1,730 69	191 32	6,309 9	142 89	182 48	-	8,556 57	-	-	6,412 91	39 7	-	-	500 31
New London - -	10,835 86	1,141 71	5,184 49	-	124 20	579 59	17,866 0	7,766 81	-	2,937 69	2,246 75	-	-	126 61
New Haven - -	2,698 47	-	3,755 5	-	205 92	32 51	6,692 5	-	-	3,755 5	-	-	-	545 70
Fairfield - -	291 27	174 91	7,661 39	-	108 11	-	8,235 73	-	-	7,661 39				
Vermont, Conn. -	877 38	-	-	-	-	-	877 38	-	877 38					
Champlain, N. S. -	2,417 38	-	-	-	-	-	2,417 38							
Sackett's Harbour -	-	-	1,379 11	-	-	-	1,379 11	-	-	1,379 11	-	-	-	415 20
Oswego - -	144 31	-	731 16	-	-	-	875 47	-	-	731 16				
Genessee - -	-	-	420 44	-	-	-	420 44	-	-	420 44				
Oswegatchie - -	-	-	209 81	-	-	-	209 81	-	-	209 81				
Sagg Harbour - -	5,913 55	-	2,842 17	-	120 69	55 87	8,932 38	5,913 55	-	2,502 56	339 56			
New York - -	104,439 22	18,018 70	156,019 45	-	7,803 75	127 37	286,438 59	-	-	156,049 45	-	-	-	13,488 52
Cape Vincent - -	-	-	165 23	-	-	-	165 23	-	-	165 23				
Perth Amboy, N. J.	981 32	104 10	6,244 21	-	407 57	-	7,757 25	-	-	6,244 21	-	-	-	136 69
Bridgetown - -	31 37	-	10,249 38	-	439 47	-	10,720 27	-	-	10,249 38				
Burlington - -	-	-	2,726 40	-	-	-	2,726 40	-	-	2,726 40				
Little Egg Harbour -	-	-	2,140 11	-	246 74	-	2,386 85	-	-	2,140 11				
Great Egg Harbour -	-	143 20	8,502 63	-	21 21	-	8,667 9	-	-	8,502 63				
Philadelphia, Penn.	46,320 37	4,973 42	27,244 2	-	1,430 44	-	79,968 30	-	-	27,244 2	-	-	-	2,659 93
Presque Isle - -	-	-	550 87	-	-	-	550 87	-	-	550 87	-	-	-	334 71
Wilmington, Del. -	-	99 83	13,119 22	79 10	253 77	-	13,552 2	-	-	13,198 32	-	-	-	503 75
Baltimore, Md. -	22,334 66	2,961 30	17,575 60	-	392 8	-	43,263 69	-	-	17,575 60	-	-	-	4,819 4
Oxford - -	-	-	9,111 60	-	107 10	-	9,218 70	-	-	9,111 60				
Vienna - - -	606 44	57 6	10,056 5		828 8		11,547 63	-	-	10,056 5				

Snowhill	-	-	-		-		4,176	91	-		194	1	-		4,370	92	-	-	4,176	91				
Annapolis	-	-	-		-		3,140	57	-		332	20	-		3,472	77	-	-	3,140	57	-		-	297 0
St. Mary's	-	-	-		-		1,984	16	-		54	60	-		2,038	76	-	-	1,984	16				
George Town, Col.	-	475	49	880	40		4,015	28	-		27	12	-		5,398	34	-	-	4,015	28	-		-	674 85
Alexandria	-	3,045	63	1,670	61		4,226	87	-		479	61	-		9,422	82	-	-	4,226	87	-		-	514 18
Norfolk, Vir.	-	1,704	29	2,876	93		7,213	8	-		417	55	-		12,341	90	-	-	7,313	8	-		-	741 73
Petersburgh	-	1,686	43	947	48		1,507	70	256	35	107	68	-		4,505	74	-	-	1,764	10				
Richmond	-	866	76	1,033	43		1,866	85	-		208	44	-		3,975	58	-	-	1,866	85	-		-	189 61
York Town	-	87	55	48	6		1,330	8	-		-		-		1,465	69	-	-	1,330	08				
East River	-	753	33	-			2,717	27	-		256	84	-		3,727	49	-	-	2,717	27				
Tappahannock	-	293	37	1,343	46		4,433	26	-		295	44	-		6,365	58	-	-	4,433	26				
Folly Landing	-	433	33	-			1,728	79	-		968	37	-		3,130	54	-	-	1,728	79				
Cherrystone	-	325	51	-			1,315	25	-		189	30	-		1,830	11	-	-	1,315	25				
Wilmington, N.C.	-	1,765	59	6,930	40		483	67	-		39	10	-		9,218	81	-	-	483	67				
Newbern	-	783	41	147	83		1,469	26	-		281	43	-		2,682	3	-	-	1,469	26				
Washington	-	375	21	811	16		757	20	-		619	78	-		2,563	90	-	-	757	20				
Edenton	-	147	27	1,081	84		2,268	38	-		1,460	8	-		4,957	62	-	-	2,268	88				
Camden	-	1,666	64	891	12		2,044	8	-		462	10	-		5,063	94	-	-	2,044	8				
Beaufort	-	48	77	481	18		576	76	-		281	90	-		1,388	71	-	-	576	76				
Plymouth	-	203	59	114	47		544	65	-		-		-		862	76	-	-	544	65				
Ocracoke	-	151	54	676	57		571	64	-		-		-		1,399	80	-	-	571	64				
Charleston, S.C.	-	2,446	14	3,080	92		5,425	68	1,721	47	334	41	-		13,008	72	-	-	7,147	20	-		-	1,623 23
Georgetown	-	-		275	77		1,558	12	-		-		-		1,833	89	-	-	1,558	12				
Savannah, Geor.	-	291	59	4,183	10		1,159	33	-		-		-		5,634	7	-	-	1,159	33				
Brunswick	-	-		424	53		433	42	-		57	30	-		915	30	-	-	433	42	-		-	250 0
St. Mary's	-	-		-			423	73	-		101	83	-		525	61	-	-	423	73				
Cuyahoga	-	66	80	60	0		1,327	18	-		-		-		1,454	3	-	-	1,327	18	-		-	219 0
Sandusky	-	-		-			241	92	-		46	69	-		288	66	-	-	241	92	-		-	241 92
Detroit, Mich.	-	-		-			1,202	50	-				-		1,202	50	-	-	1,202	50				
Mobile, Ala.	-	656	94	1,480	57		3,496	49	-		427	19	-		6,061	29	-	-	3,496	49	-		-	2,440 25
Pearl River, Miss.	-	-		-			835	64	-		94	80	-		930	49	-	-	835	64				
New Orleans, Lou.	-	7,841	51	8,567	6		37,849	6	-		1,149	74	-		55,407	42	-	-	37,849	6	-		-	36,675 84
Pensacola, Flo.	-	-		119	2		694	36	-		300	40	-		1,113	78	-	-	694	36				
St. Augustine	-	-		-			463	37	-		-		-		463	37	-	-	463	37				
Key, West	-	192	51	235	87		194	24	126	86	59	17	-		808	75	-	-	321	15				
Total	-	526,974	12	93,477	80		617,511	22	2,506	23	23,637	56	3,739	26	1,267,846	29	82,315	79	877	38	516,086	18	57,238	55	46,210	80	481	82	68,568 36

Recapitulation of the Tonnage of the United States for the Year 1831.

	Tons.	*95ths.*	*Tons.*	*95ths.*	*Tons.*	*95ths.*
The aggregate amount of the tonnage of the United States on the 31st of December, 1831, is stated at - - - - -	-	-	-	-	1,267,846	29
Whereof						
Permanent registered tonnage - - - - -	526,974	12				
Temporary do. - - - - - -	93,477	80				
Total registered tonnage - -	-	-	620,451	92		
Permanent enrolled and licensed tonnage - - - -	617,511	22				
Temporary do. - - - - - - -	2,506	23				
Total enrolled and licensed tonnage -	-	-	620,017	45		
Licensed vessels under 20 tons employed in the coasting trade - -	23,637	56				
— — — cod fishery - -	3,739	26				
Total licensed tonnage under 20 tons -	-	-	27,376	82		
Total - -	-	-	-	-	1,267,846	29

Of the enrolled and licensed tonnage, there were employed in the	*Tons.*	*95ths.*
Coasting trade - - - - - -	516,086	18
Whale fishery - - - - - - -	481	82
Cod fishery - - - - - -	57,238	55
Mackarel fishery - - - - -	46,210	80
As above -	620,017	45

Of the enrolled and licensed tonnage employed in the coasting trade, amounting, as above stated, to 516,086 tons 18-95ths, there were employed in steam navigation 68,568 tons 36-95ths.

There was added to the tonnage of the United States, during the year 1831, 79,808 tons 53-95ths.

New York Canals, 1833. — In addition to the information laid before the reader at page 226., we have now to state, that the total amount of tolls collected on all the canals of the State, for the year ending the 30th of September, 1833, was as follows, viz. —

	Dolls.	cts.
Erie and Champlain Canals	1,324,421	63
Oswego Canal	20,950	23
Cayuga and Seneca Canals	14,783	59
	1,360,155	45
The expenses of collection are deducted from the tolls received by the collectors, which add, say	25,800	0
Total amount of tolls — D.	1,385,955	45
The nett revenue of the Erie and Champlain Canal fund, after paying all expenses, amounts to	1,135,161	33

The debt standing against the State, on the 30th of September, 1833, for the several canals, was as follows, to wit: —

	Dolls.	cts.
Erie and Champlain Canal debt	5,521,459	29
Oswego do.	427,547	0
Cayuga and Seneca do.	227,000	0
Chemung do.	316,000	0
Crooked Lake do.	120,000	0
Chenango do.	50,000	0
Total — D.	6,673,006	29

Bills of Exchange. — By a revised law of the State of New York, the following damages on bills drawn or negotiated in this State, and protested for non-payment, are allowed, viz. —

Bills drawn on the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Pennsylvania, Ohio, Delaware, Maryland, Virginia, or district of Colombia, 3 per cent.

North Carolina, South Carolina, Georgia, Kentucky, or Tennessee, 5 per cent.

Any other State or territory of the United States, or any other place on or adjacent to this continent, and north of the equator, or any British or other foreign possessions in the West Indies, or elsewhere on the Western Atlantic Ocean, or any port or place in Europe, 10 per cent.

Such damages shall be in lieu of interest, charges of protest, and all other charges incurred previous to and at the time of giving notice of non-payment, but the holder of such bill shall be entitled to demand and recover lawful interest upon the aggregate amount of the principal sum specified in such bill, and of the damages thereon, from the time at which notice of protest for non-payment shall have been given, and payment of such principal sum shall have been demanded. — Sect. 19.

If the contents of such bill be expressed in the money of account of the United States, the amount due thereon and of the damages herein allowed for the non-payment thereof, shall be ascertained and determined without any reference to the rate of exchange existing between this State and the place on which such bill shall have been drawn, at the time of the demand of payment or of notice of non-payment. — Sect. 20.

If the contents of such bill be expressed in the money of account or currency of any foreign country, then the amount due, exclusive of the damages payable thereof, shall be ascertained and determined by the rate of exchange or the value of such foreign currency, at the time of the demand of payment. — Sect. 21.

Tariff of the United States. — Notwithstanding the unprecedented progress of the United States in wealth and population, their foreign trade was nearly stationary for the 10 years ending with 1830! And yet, considering the spirit of commercial enterprise by which the people, particularly in the New England States and New York, are animated, and their skill in navigation, it might have been fairly presumed that the growth of their foreign trade would, at least, have kept pace with the development of the internal resources of the country. That it did not do so, is wholly owing to the policy of government. Not satisfied with the extraordinary advances their constituents had made in numbers and wealth, Congress seems to have believed that their career might be accelerated by means of Custom-house regulations! — by giving an artificial direction to a portion of the public capital and industry, and turning it into channels into which it would not naturally flow!

No one who has the slightest acquaintance with the condition of America — who knows that she is possessed of boundless tracts of fertile and unappropriated land — that her population is comparatively thin, and wages high — can doubt for a moment that agriculture *must*, for a long series of years, be the most profitable species of employment in which her citizens can engage. There can be no question, indeed, that such branches of manufacture as are naturally adapted to her peculiar situation, will gradually grow up and flourish in America, without any artificial encouragement, according as her population becomes denser, and as the advantage which now exists on the side of agriculture becomes less decided. But to force, by means of duties and prohibitions, the premature growth of manufactures, is plainly to force a portion of the industry and capital of the country into businesses in which it will be *least* productive.

Such, however, has been, for a lengthened period, the policy of the American legislature. The exploded sophisms of the mercantile system, though renounced by every statesman in Europe, acquired a noxious influence in congress, and were put forth with as much confidence, as if their soundness neither had been, nor could be, questioned! From 1816 down to 1832, the object of the American legislature was to bolster up a manufacturing interest, by imposing oppressive duties on most manufactured articles imported from abroad. Now, it is obvious, even had the articles produced in America through the agency of this plan been as cheap as those they superseded, that nothing would have been gained by it; for, to whatever extent the importation of foreign articles may be diminished, there must be a corresponding diminution in the exportation of native American products; so that the only result would have been the raising up of one species of industry at the expense of some other species, entitled to an equality of protection. But the "American system" was not so innocuous. Instead of the goods manufactured in the States being as cheap as similar ones manufactured in Europe, they were admitted to be, at an average, from 30 to 100 per cent. dearer! The extent of the pecuniary sacrifice that was thus imposed on the Union has been variously estimated by American writers; but we have been assured by those who have the best means of knowing, that it may be moderately estimated at from 50,000,000 to 60,000,000 dollars, or from about 11,000,000*l.* to 13,000,000*l.*! And this immense burden — a burden nearly *three* times as great as the whole public expenditure of the republic — was incurred for no purpose of public utility, and was productive of nothing but mischief. The whole effect of the scheme was to divert a certain amount of the national capital from the production of cotton, wheat, rice, tobacco, &c., the equivalents sent to foreigners in payment of manufactured goods, to the direct production of these goods themselves! And as the

latter species of industry is nowise suitable for America, a tax of 13,000,000*l.* a year was imposed on the Union, that the manufacturers might be enabled to continue a losing business. We leave it to others to determine whether the absurdity of the system, or its costliness, be its more prominent feature. That its influence was not more injurious, is solely owing to the smuggling it occasioned. With a frontier like that of America, and with a half or more of the population hostile to the tariff, it would have been worse than absurd to suppose that it could be carried into full effect. But it had enough of influence to render it in the last degree prejudicial — to occasion a great rise in the price of many important articles — to cripple the trade and navigation of the country — and to throw a considerable part of it into the hands of foreigners, who carried it on in defiance of the law.

It is difficult, however, to say how long this perverse system might have been maintained, but for its political effects. It was principally patronised by the Northern States. We believe, indeed, that it is quite impossible to show that they either did or could derive any benefit from it; but, at all events, it is quite certain that it was highly injurious to the Southern States. Their staple products are cotton, tobacco, and rice, of which by far the largest portion is exported to foreign countries; and the planters speedily found that every restriction on importation from abroad occasioned a corresponding difficulty of exportation. This led to a disunion of interests, and to strong remonstrances against the tariff by the Southern States. These, however, were disregarded. Provoked by this treatment, South Carolina took the decisive step of refusing to enforce the customs acts; and threatened if coercion were attempted, to repel force by force, and to recede from the Union! This was a death-blow to the tariff. Congress now saw, what all sensible men had seen long before, that it was necessary to recede; that, in fact, either the tariff must be modified, or the integrity of the Union be brought into jeopardy. A law was accordingly passed on the 14th of July, 1832, which directed a considerable deduction to be made from the duties on various articles after the 3d of March, 1833; and a subsequent act, commonly called "Mr. Clay's New Tariff Bill," was passed on the 2d of March, 1833, providing for the future gradual reduction of the duties. These judicious acts restored tranquillity; and, there can be no doubt, will be, in every point of view, highly beneficial to the republic.

We subjoin the act of the 22d of March, 1833, and the explanatory letter of Mr. M'Lane, Secretary to the Treasury.

Mr. Clay's New Tariff Bill,

To modify the Act of the 14th of July, 1832, and all other Acts imposing Duties on Imports.

Be it enacted by the Senate and House of Representatives of the United States of America, in congress assembled, that, from and after the 31st of December, 1833, in all cases where duties are imposed on foreign imports by the act of July 14, 1832, entitled "An Act to alter and amend the several Acts imposing Duties on Imports," or by any other act, shall exceed 20 per cent. on the value thereof, one tenth part of such excess shall be deducted; from and after the 31st of December, 1835, another tenth part thereof shall be deducted; from and after the 31st of December, 1837, another tenth part thereof shall be deducted; from and after the 31st of December, 1839, another tenth part thereof shall be deducted; and from and after the 31st of December, 1841, one half of the residue of such excess shall be deducted; and from and after the 30th of June, 1842, the other half thereof shall be deducted.

Sect. II. — And be it further enacted, that so much of the second section of the act of the 14th of July aforesaid, as fixes the rate of duty on all milled and fulled cloth, known by the name of plains, kerseys, or Kendal cottons, of which wool is the only material, the value whereof does not exceed 35 cents a square yard, at 5 per cent. *ad valorem*, shall be and the same is hereby repealed. And the said articles shall be subject to the same duty of 50 per cent. as is provided by the said 2d section for other manufactures of wool, which duty shall be liable to the same reductions as are prescribed by the 1st section of this act.

Sect. III. — And be it further enacted, that until the 30th of September, 1842, the duties imposed by existing laws, as modified by this act, shall remain and continue to be collected. And from and after the day last aforesaid, all duties on imports shall be collected in ready money, and all credits now allowed by law, to the payment of duties, shall be and are hereby abolished, and such duties shall be laid for the purpose of raising such revenues as may be necessary to an economical administration of the government; and from and after the day last aforesaid, the duties required to be paid by law on goods, wares, and merchandise, shall be assessed upon the value thereof at the port where the same shall be entered, under such regulations as may be prescribed by law.

Sect. IV. — And be it further enacted, that, in addition to the articles now exempted by the act of the 14th of July, 1832, and the existing laws, from the payment of duties, the following articles imported from and after the 31st of December, 1833, and until the 30th of June, 1842, shall also be admitted to entry free from duty; to wit, bleached and unbleached linens, table linens, linen napkins, and linen cambrics, and worsted stuff goods, shawls, and other manufactures of silk and worsted, manufactures of silk, or of which silk shall be the component material of chief value, coming from this side of the Cape of Good Hope, except sewing silk.

Sect. V. — And be it further enacted, that from and after the said 30th of June, 1842, the following articles shall be admitted to entry free from duty; to wit, indigo, quicksilver, sulphur, crude saltpetre, grindstones, refined borax, emery, opium, tin in plates or sheets, gum Arabic, gum Senegal, lac dye, madder, madder root, nuts and berries used in dyeing, saffron, turmeric, woad or pastel, aloes, ambergris, Burgundy pitch, cochineal, camomile flowers, coriander seed, catsup, chalk, cocculus Indicus, horn plates for lanterns, ox horns, other horns and tips, India rubber, unmanufactured ivory, juniper berries, musk, nuts of all kinds, oil of juniper, unmanufactured rattans and reeds, tortoiseshell, tin foil, shellac, all vegetables used principally in dyeing and composing dyes, weld, and all articles employed chiefly for dyeing, except alum, copperas, bichromate of potash, prussiate of potash, chromate of potash, and nitrate of lead, aquafortis and tartaric acid. And all imports on which the 1st section of this act may operate, and all articles now admitted to entry, free from duty or paying a less rate of duty than 20 per cent. *ad valorem* before the said 30th of June, 1842, from and after that day may be admitted to entry, subject to such duty, not exceeding 20 per cent. *ad valorem*, as shall be provided for by law.

Sect. VI. — And be it further enacted, that so much of the act of July 14, 1832, or of any other act, as is inconsistent with this act, shall be and the same is hereby repealed: provided that nothing herein

contained shall be so construed as to prevent the passage, prior or subsequent to the said 30th of June, 1842, of any act or acts from time to time, that may be necessary to detect, prevent, or punish evasion of the duties on imports imposed by law; nor to prevent the passage of any act prior to the 30th of June, 1842, in contingency either of excess or deficiency of revenue, altering the rate of duties on articles which, by the aforesaid act of the 14th of July, 1832, are subject to a less rate of duty than 20 per cent. *ad valorem*, in such manner as not to exceed that rate, and so as to adjust the revenue to either of the said contingencies.

Circular to Officers of the Customs.

Treasury Department, April 20. 1833.

The 7th section of the act of the 14th of July, 1832, entitled "An Act to alter and amend the several Acts imposing the Duties on Imports," provides, that in all cases where the duty which now is or hereafter may be imposed on any goods, wares, or merchandise imported into the United States, shall, by law, be regulated, or be directed to be estimated or levied upon the value of the square yard, or any other quantity or parcel thereof, and in all cases where there is or shall be imposed any *ad valorem* rate of duty on any goods, wares, or merchandise imported into the United States, it shall be the duty of the collector, within whose district the same shall be imported or entered, to cause the actual value thereof, at the time purchased, and place from which the same shall have been imported into the United States, to be appraised, estimated, and ascertained, and the number of such yards, parcels, or quantities, and such actual value of every of them as the case may require; and it shall, in every case, be the duty of the appraisers of the United States, and every of them, and every other person who shall act as such appraiser, by all the reasonable ways or means in his or their power, to ascertain, estimate, and appraise the true and actual value, any invoice or affidavit thereto to the contrary notwithstanding, of the said goods, wares, and merchandise, at the time purchased, and place from whence the same shall have been imported into the United States, and the number of such yards, parcels, or quantities, and such actual value of every of them as the case may require, &c. &c.

The 9th section of the same act provides, "that it shall be the duty of the secretary of the treasury, under the direction of the President of the United States, from time to time to establish such rules and regulations, not inconsistent with the laws of the United States, as the President of the United States shall think proper, to secure a just, faithful, and impartial appraisal of all goods, wares, and merchandise as aforesaid, imported into the United States, and just and proper entries of such actual value thereof, and of the square yards, parcels, or other quantities, as the case may require, and of such actual value of every of them; and it shall be the duty of the secretary of the treasury to report all such rules and regulations, with the reasons therefor, to the next session of Congress."

The 1st section of the act of the 2d of March, 1833, entitled "An Act to modify the Act of the 14th of July, 1832, and all other Acts imposing Duties on Imports," declares, "that from and after the 31st of December, 1833, in all cases where duties are imposed on foreign imports by the act of the 14th of July, 1832, entitled 'An Act to alter and amend the several Acts imposing Duties on Imports,' or by any other act, shall exceed 20 per cent. on the value thereof, one tenth part of such excess shall be deducted," &c.

It is believed that by this provision, and as necessary to the execution of the law, all duties imposed by any act of Congress upon foreign imports are substantially regulated by, and are directed to be estimated and levied upon, the value of the square yard, where that is the form, and upon some other quantity or parcel in cases where the duty is not imposed by the square yard; and that consequently the authority conferred by the 9th section aforesaid must necessarily be exercised, for the more effectual execution of the said act of the 2d of March, 1833.

The following rules and regulations are therefore established, under the direction of the President of the United States, for the purpose of securing a just, faithful, and impartial appraisal of all goods, wares, and merchandise imported into the United States from and after the 31st of December next, and for the just and proper entries of the actual value thereof, and of the square yard, parcels or other quantities, as the case may require.

In all cases of *ad valorem* duties under the act of the 14th of July, 1832, or any other act, the regulations at present authorised by law, for ascertaining the actual value, will remain unaltered. With respect to those articles liable to a specific duty, or other duty than that of *ad valorem*, the actual value thereof at the time purchased, and place from which the same shall have been imported into the United States or in the country wherein the same may have been originally manufactured, or produced, as the case may be, will be appraised, estimated, and ascertained, and the number of yards, or square yards, tons, pounds, gallons, bushels, or other parcels or quantities, and such actual value of any of them as the case may require, and just and proper entries thereof be made, in the same manner and according to the same regulations, as are required by the said act of the 14th of July, 1832, and other acts now in force in regard to articles paying *ad valorem* duty; and in all such cases the same verification of invoices and other proofs will be required and produced as are at present authorised in respect to articles liable by previous acts to an *ad valorem* duty. The value of all such articles being thus ascertained, the proportion which the duty now paid by such articles bears to the said value will be calculated, and from the excess thereof beyond 20 per cent. there will be deducted, from and after the 31st of December next, 10 per cent.; that is to say, where such proportion shall be equal to 50 per cent., there shall be deducted 10 per cent. upon 30 per cent.; or 3 dollars; and from and after the 31st of December, 1835, the like deduction shall be made from the same excess, or 10 per cent. upon 30 per cent., being 3 dollars more; and in the same manner, at the several periods specified in the said act of the 2d of March, 1833, until the 31st of December, 1841; from and after which, one half of the residue of such excess will be deducted, and the other half thereof from and after the 30th of June, 1842.

From the proportion of the duty thus ascertained upon the wines of France, in addition to the said 10 per cent., there will also be deducted such further per cent. as will be necessary to preserve the discrimination in favour of such wines, stipulated in the convention between the United States and his Majesty the King of the French, concluded at Paris on the 4th of July, 1831, and authorised by law.

It may be proper to observe, that all manufactures of cotton, or of which cotton shall be a component part, will be appraised, estimated, and ascertained, and the number of yards, square yards, or otherwise, parcel or quantities, and of such actual value thereof as the case may require, will be ascertained, and just and proper entries thereof made, according to the foregoing regulations.

It is believed that the value of foreign imports referred to in the act of the 2d of March, 1833, is not the assumed value on which the duty upon all manufactures of cotton, or of which cotton shall be a component part, is directed to be estimated under the act of the 14th of July, 1832; viz. of *thirty cents*, if not dyed, coloured, painted, or stained, though valued at less than 30 cents; and of *thirty-five cents*, if dyed, coloured, painted, or stained, though valued at less than 35 cents the square yard. This value is merely artificial, and assumed by previous laws as a means of augmenting the *ad valorem* rate of duty, imposed for the purpose of protection, upon such articles; and the amount of the duty, although ascertained by the adoption of the minimum principle, is the proportion which the sum collected by the government bears to the actual value of the article; and, therefore, a quantity of such cottons, costing in fact 80 dollars, but valued for the purpose of the act of the 14th of July, 1832, at 240 dollars, really pays a duty of 75 per cent. upon the true value thereof.

The act of the 2d of March, 1833, however, proceeds upon a different principle, and aims at a different purpose. It obviously intends to make an equal deduction from the duty on all foreign imports, and ultimately to reduce it to a rate not exceeding 20 per cent. upon the real, and not an assumed, value of the articles imported. This last purpose is explicitly stated in the last clause of the 5th section, which pro-

vides "that all imports on which the 1st section of this act may operate, and all articles now admitted to entry free of duty, or paying a less rate of duty than 20 per cent. *ad valorem*, before the said 30th of June, 1842, from and after that day may be admitted to entry, subject to such duty, not exceeding 20 per cent. *ad valorem*, as shall be provided for by law." And the 1st section, which has been already referred to, expressly provides for the deduction, after the 30th of June, 1842, of all excess of foreign imports above 20 per cent. on the value thereof, which shall have been imposed by previous laws, and to which they may then be subject.

The object of thus establishing a general *ad valorem* duty on foreign imports, and of equalising the rate, can only be attained by calculating the duty on the real instead of the assumed value. This purpose is more particularly manifest from the last clause of the 3d section, which provides, that from and after the 30th of June, 1842, "the duties required to be paid by law on goods, wares, and merchandise, shall be assessed upon the value thereof at the port where the same shall be entered, under such regulations as may be prescribed by law." Each of these clauses relates to the actual value of the foreign import, and they differ only in estimating that value; previously to the 30th of June, 1842, the value in the foreign port being taken, and after that time, the value at the port of entry. The object of neither can be accomplished at any period, by adhering either to the nominal value assumed by previous acts, or to the rate of *ad valorem* founded upon such assumption.

In all importations of manufactures of cotton, therefore, or of which cotton shall be a component part, after the 31st of December, 1832, the value thereof will be ascertained in the manner aforesaid; and from the amount which the rate of duty under the act of the 14th of July, 1832, or any other act, shall exceed 20 per cent. on such value, the deduction required by the act of the 2d of March, 1833, will be made according to the foregoing rules.

Though these rules and regulations will not go into effect until the 1st of January next, they have been thus early adopted and made public, for the purpose of giving timely notice to the manufacturers and merchants, and all others concerned; and especially as to the verification, by the consuls abroad of the invoices of importations to be made after that time.

LOUIS M'LANE, Secretary of the Treasury.

The following Table exhibits the progressive reductions that will take place in the duties on some of the principal articles imported into the United States, under Mr. Clay's Bill.

Articles.	Per Cent. ad Valorem.	1833. Dec. 31. 1-10th per Cent.	1835. Dec. 31. 1-10th per Cent.	1837. Dec. 31. 1-10th per Cent.	1839. Dec. 31. 1-10th per Cent.	1841. Dec. 31. Half of Excess per Cent.	1842. June 30. Remdr. of Excess per Cent. ad Valorem.
Wool manufactured, the value at the place of exportation less than 8 cents per lb.	free	free	free	free	free	free	20
Wool, exceeding 8 cents per lb. at the place of exportation, 4 cents per lb. specific, and 40 per cent., equal to average	54	50·60	47·20	43·80	40·40	30·20	20
Woollen cloths, milled, fulled; known by the name of plains, kerseys, or Kendal cottons, of which wool is the only material, the value exceeding 35 cents a square yard, 5 per cent., raised by H. Clay's Bill to	50	47	44	41	38	29	20
All other woollen cloths	50	47	44	41	38	29	20
Flannels, Bocking, baizes, 16 cents the square yard, equal to average	50	47	44	41	38	29	20
Cottons, white, costing under 30 cents a square yard, valued at 30 cents, and pay 25 per cent., equal to average	42½	40·25	38	35·75	33·50	26·75	20
Cottons, coloured, valued at 35 cents a square yard, pay 25 per cent., equal to average	42½	40·25	38	35·75	33·50	26·75	20
Nails, 5 cents per lb., equal to average	78	72·20	66·10	60·60	54·80	37 40	20
Spikes, 4 cents per lb., equal to average	96	88·40	80·80	73·20	65·60	42·80	20
Brazier's rod, spike rod, sheet, hoop, slit, or rolled iron, 3 cents per lb., equal to average	113	103·70	94·40	85·10	75·80	47·90	20
Pig iron, 50 cents per cwt., equal to	43	40·70	38·40	36·10	33·80	26·90	20
Bar iron, rolled, 1 dol. 50 cents per cwt., equal to	95	87·50	80	72·50	65	42·50	20
hammered, 90 cents per cwt., equal to	33	31·70	30·40	29·10	27·08	23·90	20

Drawback. — All articles subject to duty imported into the United States, not having been landed more than 3 years, are allowed a drawback of the duties, on exportation of the same (except foreign dried and pickled fish, and other salt provisions, and chain cables).

Credits. — When the duty on an article of which wool is not a component part does not exceed 200 dollars, it must be paid in cash without discount; when it exceeds 200 dollars, a credit of 3 months is allowed for the ½, and of 6 months for the other ½, reckoning from the date of the vessel's entry. Duties on wool, and all manufactures of wool, to be paid in cash without discount.

Discount. — When the duties on any article, except wool and woollen manufactures, exceed 200 dollars, and they are paid in cash at the time of entry, the importer is entitled to a discount of 4 per cent.

Leakage and Breakage. — On spirits, 2 per cent.; ale, beer, and porter, in bottles, 10 per cent.; all other liquors, in bottles, 5 per cent.

Restrictions. — No goods to be imported in vessels less than 30 tons burden. No beer, ale, and porter, in casks of less capacity than 40 gallons, beer measure; or, if in bottles, in packages less than 6 dozen. No distilled spirits in casks of less capacity than 90 gallons, wine measure, except brandy, which may be imported in casks of any capacity, not less than 15 gallons.

Tonnage Duty. — On American vessels, and the vessels of Denmark, Central America, Netherlands, Hamburgh, Bremen, Lubeck, Prussia, Sweden, Norway, Oldenburgh, Russia, Austria, Brazil, Hanover, Papal Dominions, Portugal, and Sardinia, from whatever port or place, and on French vessels coming from Martinique and Guadeloupe, free. On French vessels from other ports, and on all other foreign vessels (except as above enumerated) coming from ports where Americans are permitted to trade, 1 dollar per ton; and from ports where Americans are not permitted to trade, 2 dollars and 50 cents per ton.

On Spanish vessels, coming direct from Spain, 5 cents per ton.

Free Goods. — The following, among other articles, are admitted free of duties: — Antimony, almonds, aloes, arrowroot, arsenic, assafœtida. Balsams, barilla, bees' wax, bleaching powder, brimstone, borax. — Cantharides; camphor, crude; capers, chalk, cinnamon, cloves, cocoa, cochineal, coffee; copper, in pigs and bars, and sheathing; cream of tartar, currants. — Dye woods of all kinds. — Fruits of all kinds, flax; furs of all kinds, not dressed. — Ginger, gums of all kinds, gunny bags. — Hemp, Manilla and Sisal, hides, horns, honey. — Ipecacuanha, juniper berries, ivory, jalap. — Lac dye, liquorice paste. — Mace, madder, manna, marble, munjeet. — Nuts of all kinds, nutmegs, nutgalls. — Oils — of almonds, aniseed, cassia, cinnamon, cloves, palm, juniper, lavender, bergamot, lemons, roses, opium, olives. — Pepper, Peruvian bark, pimento, plaster of Paris. — Quicksilver. — Rags, rhubarb. — Sarsaparilla, sulphur, shellac. — Teas, from China; tin, in bars, plates, or sheets; tartar, tortoise-shell. — Verdigris. — Wood; wool, not costing over 8 cents per lb.

NICARAGUA OR PEACH WOOD (Ger. *Nicaragaholz, Blutholtz;* Du. *Bloedhaut;* Fr. *Bois de sang, Bois de Nicarague;* It. *Legno sanguigno;* Sp. *Palo de sangre;* Port. *Pao sanguinho*), a tree of the same genus (*Cæsalpinia*) as the Brazil and sapan wood; but the species has not been exactly ascertained. It grows principally in the vicinity of the lake of Nicaragua, whence its name. It is said by Dr. Bancroft to be almost as red and heavy as the true Brazil wood, but it does not commonly afford more

than a third part, in quantity, of the colour of the latter; and even this is rather less durable and less beautiful, though dyed with the same mordants. Nicaragua or peach woods differ greatly in their quality as well as price; one sort being so deficient in colouring matter, that 6 pounds of it will only dye as much wool or cloth as 1 pound of Brazil wood; while another variety of it will produce nearly half the effect of an equal quantity of Brazil wood, and will sell proportionally dear. —(*Bancroft on Colours*, vol. ii. p. 332.)

The London dealers distinguish Nicaragua wood into 3 sorts, viz. *large*, *middling*, and *small*; the price of the 1st sort (duty included) being from 14*l.* to 20*l.* per ton; of the 2d, from 8*l.* to 10*l.* per do.; and of the 3d, from 7*l.* to 8*l.* per do. The entries of Nicaragua wood for home consumption amounted, in 1831, to 1,485 tons: in 1832, they amounted to 1,880 tons; an increase that was, no doubt, in part at least, occasioned by the duty having been reduced in 1831 from 15*s.* to 5*s.* a ton.

NICKEL, a scarce metal, which occurs always in combination with other metals, from which it is exceedingly difficult to separate it. When pure, it is of a fine white colour resembling silver. It is rather softer than iron: its specific gravity, when cast, is 8·279; when hammered, 8·932. It is malleable, and may without difficulty be hammered into plates not exceeding $\frac{1}{100}$th part of an inch in thickness. It is attracted by the magnet; and is not altered by exposure to the air, nor by being kept under water. It is employed in potteries, and in the manufacture of porcelain. —(*Thomson's Chemistry.*)

NITRE. See SALTPETRE.

NOTE, PROMISSORY. See BANKING, and BANKS.

NUT, OR HAZEL NUT (Ger. *Haselnüsse*; Fr. *Noisettes*, *Avelines*; It. *Naccinole*, *Avelane*; Sp. *Avellanas*; Port. *Avellãas*; Lat. *Avellanæ*), the fruit of different species of *Coryli*, or hazels. The kernels have a mild, farinaceous, oily taste, agreeable to most palates. A kind of chocolate has been prepared from them; and they have sometimes been made into bread. The expressed oil of hazel nuts is little inferior to that of almonds. Besides those raised at home, we import nuts from different parts of France, Portugal, and Spain, but principally from the latter. The Spanish nuts in the highest estimation, though sold under the name of Barcelona nuts, are not really shipped at that city, but at Tarragona, a little more to the south. Mr. Ingliss says that the annual average export of nuts from Tarragona is from 25,000 to 30,000 bags, of 4 to the ton. They cost, free on board, in autumn, 1830, 17*s.* 6*d.* per bag. —(*Spain in* 1830, vol. ii. p. 362.) The entries of nuts for home consumption amount to from 100,000 to 125,000 bushels a year; the duty of 2*s.* a bushel producing from 10,000*l.* to 12,500*l.* nett.

NUTMEG (Ger. *Muskatennüsse*; Du. *Muskaät*; Fr. *Muscades*, *Noix muscades*; It. *Noce muscada*; Sp. *Moscada*; Arab. *Jowzalteib*; Sans. *Jātiphala*; Malay, *Buah-pala*), the fruit of the genuine nutmeg tree (*Myristica Moschata*), a native of the Moluccas, but which has been transplanted to Sumatra, Penang, &c. An inferior and long-shaped nutmeg is common in Borneo; but the fruit nowhere attains to the same perfection as in the Moluccas. Of the several varieties of the tree, that denominated the Queen Nutmeg, which bears a small round fruit, is the best. The kernel, or proper nutmeg, is of a roundish oval form, marked on the outside with many vermicular furrows, within of a fleshy farinaceous substance, variegated whitish and bay. Nutmegs are frequently punctured and boiled, in order to obtain the essential oil; the orifice being afterwards closed; but the fraud is easily detected by the lightness of the nutmeg. —(*Thomson's Dispensatory*; *Ainslie's Materia Indica.*)

Nutmegs should be chosen large, round, heavy, and firm, of a lightish grey colour on the outside, and the inside beautifully marbled, of a strong fragrant smell, warm aromatic taste, and a fat oily body. They are very subject to be worm-eaten. The best manner of packing them is in dry chunam. The oblong kind, and the smaller ones, should be rejected. 15 cwt. are allowed to a ton. —(*Milburn's Orient. Com.*)

The dried produce of a nutmeg tree consists of nutmeg, mace (which see), and shell. Supposing the whole produce to be divided into 100 parts, there are 13⅓ of mace, 33⅓ of shell, and 53⅓ of nutmeg. In the ancient commerce, and down to the establishment of the Dutch monopoly, nutmegs were always sold and exported in the shell. The natives, whenever the commerce is left to their management, continue the practice, which is strongly recommended by Mr. Crawfurd. —(*East Indian Archipelago*, vol. iii. p. 396.)

The jealous and miserable policy of the Dutch has reduced the trade in nutmegs to a mere trifle, compared to what it would otherwise have been. They have, in so far at least as it was possible, exerted themselves to exterminate the nutmeg plants every where except in Banda. They bribe the native princes of the surrounding islands to root out the trees; and annually send a fleet to see that the work of destruction has been effected, and that the bribes have not been bestowed in vain. To engage in an illicit trade in spices is *death* to an inferior person, and *banishment* to a noble; and yet, notwithstanding these tremendous penalties, it is supposed that about 60,000 lbs. of nutmegs, and 15,000 lbs. of mace, are clandestinely exported each year! In Banda, the aboriginal inhabitants have been expatriated, and the island parcelled among settlers from Holland, under the name of *park keepers*. These persons, who may be turned out of their farms on the most trifling pretext, have about 2,000 slaves, who cultivate and prepare the nutmegs. The prices paid to the cultivator are all fixed by government; and it deserves to be mentioned, as affording one of the most striking illustrations of the ruinous effects of monopoly, that the fixed price which the government is now obliged to pay for nutmegs is FIVE *times greater than the price at which they bought them when the trade was free!* Such is a rough outline of that monstrous system, which has reduced what used to be one of the most important branches of Eastern commerce so low, that it is unable to afford employment for the capital of a single wealthy merchant. We cannot conceive how so enlightened and liberal a government as that of Holland should continue to tolerate such scandalous abuses—abuses destructive alike of the rights of those subjected to its authority in the East, and the

commerce and wealth of its subjects at home. — (*Modern Universal History*, vol. x. p. 457—467. 8vo ed.; and *Crawfurd's Eastern Archipelago*, vol. iii. p. 394—413.)

Mr. Crawfurd estimates the produce of the Banda Islands at about 600,000 lbs. of nutmegs, and 150,000 lbs. of mace.

During the period that the English had possession of the Spice islands, nutmeg plants were carried to Penang, Bencoolen, and some of the West India islands. In the latter they have altogether failed, at least as far as respects any useful purpose; but very good nutmegs, and in considerable quantities, are now raised at Penang and Bencoolen. Mr. Crawfurd, however, alleges that the cost of bringing them to market is there so high, that the restoration of a free culture in the native country of the nutmeg would instantly destroy this unstable and factitious branch of industry. — (*Eastern Archipelago*, vol iii. p. 409.)

The duty on nutmegs was reduced, in 1819, from *5s. 5d.* to *2s. 6d.* per lb.; and the quantities entered for home consumption have since rapidly increased. We subjoin

An Account of the Quantities of Nutmegs retained for Home Consumption in the United Kingdom, in each Year since 1810, the Nett Amount of Duty received thereon, and the Rates of Duty.

Years.	Quantities retained for Home Consumption.	Nett Amount of Duty received thereon.	Rates of Duty charged thereon.
		L. s. d.	
1810	39,127	11,166 11 1	*4s. 8d.* per lb. and *2l. 15s. 4d.* per cent. ad valorem.
1811	50,860	14,462 14 4	ditto
1812	47,186	11,205 2 9	ditto
1813	Records destroyed.		(From 15 April) *5s. 6½d.* per lb. and *3l. 3s. 4d.* per cent. ad valorem.
1814	43,160	14,710 8 3	(From 10 April) *5s. 5d.* per lb.
1815	59,839	16,209 11 1	ditto
1816	54,677	14,808 2 8	ditto
1817	65,747½	17,808 1 8	ditto
1818	66,255½	17,944 8 6	ditto
1819	107,575	17,805 18 5	(From 5 July) *2s. 6d.* per lb.
1820	90,771½	11,212 8 9	*2s. 6d.* per lb.
1821	94,589¼	11,721 2 5	ditto
1822	112,096	14,000 10 6	ditto
1823	117,767¾	14,723 7 9	ditto
1824	129,702	16,176 19 7	ditto
1825	99,211¼	12,406 13 2	ditto
1826	101,117¼	12,623 13 10	ditto
1827	125,529	15,707 2 8	ditto
1828	140,002½	17,514 6 4	ditto
1829	113,273½	14,114 6 2	ditto
1830	121,260	15,158 0 0	ditto
1831	152,369	19,025 0 0	ditto
1832	117,405	14,678 0 0	ditto

NUTRIA, OR NEUTRIA, the commercial name for the skins of *Myopotamus Bonariensis* (Commerson), the *Coypou* of Molina, and the *Quoiya* of D'Azara. In France, the skins were, and perhaps still are, sold under the name of *racoonda*; but in England they are imported as *nutria* skins — deriving their appellation, most probably, from some supposed similarity of the animal which produces them, in appearance and habits, to the otter, the Spanish name for which is nutria. Indeed, Molina speaks of the *coypou* as a species of water rat, of the size and colour of the otter.

Nutria fur is largely used in the hat manufacture; and has become, within the last 15 or 20 years, an article of very considerable commercial importance. The imports fluctuate considerably. In 1823, they amounted to 1,570,103 skins; but they have not in any other year been much more than half that number. In 1826, they were only 60,871. In 1831 and 1832, the imports were, at an average, 358,280 skins a year. Those entered for home consumption pay a duty of 1½*d.* a skin. They are principally brought from the Rio de la Plata. Nutria skins are very extensively used on the Continent. Geoffroy mentions *, that in certain years, a single French furrier (M. Bechem), has received from 15,000 to 20,000 skins. — (See FUR TRADE.)

The *coypou* or *quoiya* is a native of South America, very common in the provinces of Chili, Buenos Ayres, and Tucuman, but more rare in Paraguay. In size it is less than the beaver, which it resembles in many points. The head is large and depressed, the ears small and rounded, the neck stout and short, the muzzle sharper than that of the beaver, and the whiskers very long and stiff. There are, as in the beaver, 2 incisor teeth, and 8 molar, above and below — 20 teeth in all. The limbs are short. The fore feet have each 5 fingers not webbed, the thumb being very small: the hind feet have the same number of toes; the great toe and 3 next toes being joined by a web which extends to their ends, and the little toe being free, but edged with a membrane on its inner side. The nails are compressed, long, crooked, and sharp. The tail, unlike that of the beaver, is long, round, and hairy; but the hairs are not numerous, and permit the scaly texture of the skin in this part to be seen. The back is of a brownish red, which becomes redder on the flanks: the belly is of a dirty red. The edges of the lips and extremity of the muzzle are white.

Like the beaver, the coypou is furnished with 2 kinds of fur; viz. the long ruddy hair which gives the tone of colour, and the brownish ash-coloured fur at its base, which, like the down of the beaver, is of much importance in hat making, and the cause of the animal's commercial value.

The habits of the coypou are much like those of most of the other aquatic rodent animals. Its principal food, in a state of nature, is vegetable. It affects the neighbourhood of water, swims perfectly well, and burrows in the ground. The female brings forth from 5 to 7 at a time; and the young always accompany her.

The coypou is easily domesticated, and its manners in captivity are very mild.

*** We are indebted for this account of nutria — the first, we believe, that appeared in any English work, to W. J. Broderip, Esq. F.R.S., &c.

NUX VOMICA (Fr. *Noix Vomique*; Hind. *Kaachla*), the fruit of a species of *Strychnos*, growing in various places in the East Indies. The fruit is about the size of an orange, covered with a smooth crustaceous yellow bark, and filled with a fleshy pulp, in which are imbedded several orbicular flatted seeds, about ¾ of an inch in diameter. Nux vomica is inodorous, and has a very bitter, acrid taste, which remains long on the palate. It is known as a very virulent poison. A suspicion has, however, been entertained, that it has been used in porter breweries; but its introduction into them is prohibited under heavy penalties. — (*Thomson's Dispensatory, &c.*)

* Annales du Muséum, vol. vi. p. 82. The figure given is, generally speaking, good; but the tail is too hairy, and contradicts the description.

O.

OAK (Ger. *Eiche*; Du. *Eik*; Da. *Eeg*; Sw. *Ek*; Fr. *Chêne*; It. *Quercia*; Sp. *Roble, Carballo*; Port. *Roble, Carbalho*; Rus. *Dub*; Pol. *Dab*; Lat. *Quercus*; Arab. *Baalut*). There are several varieties of this valuable tree; but the common English oak (*Quercus robur*) claims precedence of every other. The oak timber imported from America is very inferior to that of this country: the oak from the central parts of Europe is also inferior, especially in compactness and resistance of cleavage. The knotty oak of England, the "unwedgeable and gnarled oak," as Shakspeare called it, when cut down at a proper age (from 50 to 70 years), is the best timber known. Some timber is harder, some more difficult to rend, and some less capable of being broken across; but none contains all the three qualities in so great and equal proportions; and thus, for at once supporting a weight, resisting a strain, and not splintering by a cannon shot, the timber of the oak is superior to every other.

A fine oak is one of the most picturesque of trees: it conveys to the mind associations of strength and duration, which are very impressive. The oak stands up against the blast, and does not take, like other trees, a twisted form from the action of the winds. Except the cedar of Lebanon, no tree is so remarkable for the stoutness of its limbs; they do not exactly spring from the trunk, but divide from it; and thus it is sometimes difficult to know which is stem and which is branch. The twisted branches of the oak, too, add greatly to its beauty; and the horizontal direction of its boughs, spreading over a large surface, completes the idea of its sovereignty over all the trees of the forest. Even a decayed oak,

> "——————— dry and dead,
> Still clad with reliques of its trophies old,
> Lifting to heaven its aged, hoary head,
> Whose foot on earth has got but feeble hold,"

—even such a tree as Spenser has thus described, is strikingly beautiful; decay in this case looks pleasing. To such an oak Lucan compared Pompey in his decline:—

> "Qualis frugifero quercus sublimis in agro
> Exuvias veteres populi, sacrataque gestans
> Dona ducum; nec jam validis radicibus hærens,
> Pondere fixa suo est; nudosque per aëra ramos
> Effundens, trunco, non frondibus, efficit umbram.
> At quamvis primo nutet casura sub Euro,
> Tot circum silvæ firmo se robore tollant,
> Sola tamen colitur."—(Lib. i. lin. 136.)

The oak is raised from acorns, sown either where the oak is to stand, or in a nursery whence the young trees are transplanted.

The colour of oak wood is a fine brown, and is familiar to every one: it is of different shades; that inclined to red is the most inferior kind of wood. The larger transverse septa are in general very distinct, producing beautiful flowers when cut obliquely. Where the septa are small, and not very distinct, the wood is much the strongest. The texture is alternately compact and porous; the compact part of the annual ring being of the darkest colour, and in irregular dots, surrounded by open pores, producing beautiful dark veins in some kinds, particularly pollard oaks. Oak timber has a particular smell, and the taste is slightly astringent. It contains gallic acid, and is blackened by contact with iron when it is damp. The young wood of English oak is very tough, often cross-grained, and difficult to work. Foreign wood, and that of old trees, is more brittle and workable. Oak warps and twists much in drying; and, in seasoning, shrinks about $\frac{1}{32}$d of its width.

Oak of a good quality is more durable than any other wood that attains a like size. Vitruvius says it is of eternal duration when driven into the earth: it is extremely durable in water; and in a dry state it has been known to last nearly 1,000 years. The more compact it is, and the smaller the pores are, the longer it will last; but the open, porous, and foxy coloured oak, which grows in Lincolnshire and some other places, is not near so durable.

Besides the common British oak (*Quercus robur*), the sessile-fruited bay oak (*Quercus sessiliflora*) is pretty abundant in several parts of England, particularly in the north. The wood of this species is said by Tredgold to be darker, heavier, harder, and more elastic than the common oak; tough, and difficult to work; and very subject to warp and split in seasoning. Mr. Tredgold seems disposed to regard this species as superior to the common oak for ship building. But other, and also very high authorities, are opposed to him on this point; and, on the whole, we should think that it is sufficiently well established, that for all the great practical purposes to which oak timber is applied, and especially for ship building, the wood of the common oak deserves to be preferred to every other species. A well-informed writer in the *Quarterly Review* has the following remarks on the point in question:—

"We may here notice a fact long known to botanists, but of which our planters and purveyors of timber appear to have had no suspicion, — that there are two distinct species of oak in England — the *Quercus robur*, and the *Quercus sessiliflora*; the former of which affords a close-grained, firm, solid timber, rarely subject to rot; the other more loose and sappy, very liable to rot, and not half so durable. This difference was noted so early as the time of Ray; and Martyn in his *Flora Rustica*, and Sir James Smith in his *Flora Britannica*, have added their testimonies to the fact. The second species is supposed to have been introduced some 2 or 3 ages ago, from the Continent, where the oaks are chiefly of this latter species, especially in the German forests, the timber of which is known to be very worthless. But what is of more importance to us is, that *de facto* the imposture abounds, and is propagated vigorously, in the New Forest and other parts of Hampshire; in Norfolk, and the northern counties, and about London; and there is but too much reason to believe that the numerous complaints that were heard about our ships being infected with what was called, improperly enough, *dry rot*, were owing to the introduction of this species of oak into the naval dock-yards, where, we understand, the distinction was not even suspected. It may thus be discriminated from the true old English oak: — The acorn stalks of the *robur* are *long*, and its leaves *short*; whereas the *sessiliflora* has the acorn stalks *short*, and the leaves *long*: the acorns of the former grow singly, or seldom two on the same footstalk; those of the latter, in clusters of 2 or 3 close to the stem of the branch. We believe the Russian ships of the Baltic, that are not of larch or fir, are built of this species of oak; but if this were not the case, their exposure on the stocks, without cover, to the heat of summer, which, though short, is excessive, and the rifts and chinks which fill up with ice and snow in the long winter, are enough to destroy the stoutest oak, and quite sufficient to account for their short-lived duration."

A great deal of inquiry and discussion has taken place at different periods as to the supply and consumption of oak timber; but the results have not been very satisfactory. In a *Report of the Commissioners of Land Revenue*, printed in 1812, it is stated that, taking the tonnage of the navy in 1806 at 776,087 tons, it would require, at 1½ load to a ton, 1,164,085 loads to build such a navy; and supposing the average duration of a ship to be 14 years, the annual quantity of timber required would be 83,149 loads, exclusive of repairs, which they calculate would be about 27,000 loads; making the whole about 110,000 loads: of which, however, the commissioners reckon may be furnished 21,341 loads as the annual average of the prizes; and of the remaining 88,659 loads, they think it not unreasonable to calculate on 28,659 from other sources than British oak. "This," they observe, "leaves 60,000 loads of such oak, as the quantity which would be sufficient annually to support, at its present unexampled magnitude, the whole British navy, including ships of war of all sorts; but which may be taken as equivalent together to 20 74-gun ships, each of which, one with another, contains about 2,000 tons, or would require, at the rate of 1½ load to the ton, 3,000 loads; making just 60,000 loads for 20 such ships."

Now, it has been supposed that not more than 40 oak trees can stand on an acre of ground, so as to grow to a full size fit for ships of the line, or to contain each 1½ load of timber: 50 acres, therefore, would be required to produce a sufficient quantity of timber to build a 74-gun ship, and 1,000 acres for 20 such ships; and as the oak requires at least 100 years to arrive at maturity, 100,000 acres would be required to keep up a successive supply, for maintaining a navy of 700,000 or 800,000 tons. The commissioners further observe, that as there are 20,000,000 acres of waste lands in the kingdom, a 200th part set aside for planting would at once furnish the whole quantity wanted for the use of the navy.

According to Mr. Barrow, this calculation is over-rated by about a half. "In the first place," says he, "it supposed a state of perpetual war, during which the tonnage of the whole navy is considered as more than double of what it now actually is: and, in the second place, it reckons the average duration of the navy at 14 years only; which, from the improvements that have taken place in the construction and preservation of ships of war, with the resources of teak ships built in India, we should not hesitate in assuming at an average of twice that number of years; and if so, the quantity of oak required for the navy will be nothing like that which the commissioners have stated.

"The fact, however, is certain, that long before the conclusion of the late war, a scarcity began to be felt, especially of the larger kind of timber fit for ships of the line; and so great was this scarcity, that if Sir Robert Seppings had not contrived the means of substituting straight timber for that of different forms and dimensions, before considered to be indispensable, the building of new ships must entirely have ceased.

"If, however, the growth of oak for ship timber was greatly diminished during the war, so as to threaten an alarming scarcity, there is little doubt that, from the increased attention paid by individuals to their young plantations, and their great extension, as well as from the measure of allotting off portions of the royal forests to those who had claims on them, and inclosing the remainder for the use of the public, this country will, in future times, be fully adequate to the production of oak timber equal to the demand for the naval and mercantile marine." — (*Supp. Ency. Brit.* art. *Navy*.)

The bark of the oak tree is very valuable. It is preferred to all other substances for the purpose of tanning, and brings a high price. — (See BARK.)

The foreign oak timber imported into Great Britain is principally derived from Canada and Prussia. The latter is the most valuable — its price being to the former in the proportion of about 9 to 6; that is, if a load of Prussian oak timber brought 9*l*., a load of Canada ditto would not bring more than about 6*l*. The quantity imported varies; but may, at an average, amount to about 10,000 loads, of 50 cubic feet each; the greater part from Quebec. Oak plank is almost wholly imported from Prussia. The quantities imported during the 6 years ending the 5th of January, 1833, were —

Years.	Loads.	Years.	Loads.	Years.	Loads.
1827	5,470	1829	1,434	1831	2,525
1828	2,449	1830	1,542	1832	1,789

For further details with respect to the importation of oak, its price, duty on, &c., see WOOD. — See, also, *Tredgold's Principles of Carpentry*; art. *Navy*, *Supplement to Ency. Brit.*; the very interesting work on *Timber Trees and Fruits*, in the *Library of Entertaining Knowledge*; *Rees's Cyclopædia*, &c.

OATS (Ger. *Hafer*; Du. *Haver*; Da. *Havre*; Sw. *Hafre*; Fr. *Avoine*; It. *Vena*, *Avena*; Sp. *Avena*; Port. *Avea*; Russ. *Owes*; Pol. *Owies*), a species of grain, the *Avena sativa* of botanists. There are innumerable varieties of this grain, some of which are said to be indigenous to Britain. It is the hardiest of all the cereal grasses, growing luxuriantly in cold northern climates, and in coarse mountainous districts, where neither wheat nor barley can be advantageously cultivated. It thrives best, and is, indeed, chiefly raised, in latitudes north of Paris; being but little known in the south of France, Spain, or Portugal. It is, however, cultivated in Bengal, so low as the 25th degree of latitude, and, it is said, with considerable success. In Scotland, where it has long formed a principal part of the food of the people, it is far more generally cultivated than any other species of grain. It is also very extensively cultivated in Ireland. In England it is grown principally in the northern counties, and in the fens of Lincoln, Huntingdon, Cambridge, and Norfolk; but the oats of Northumberland and Scotland are reckoned superior to those raised farther south.

There are 4 leading varieties of this grain cultivated in England, viz. white, black, grey, and brown or red oats. The sub-varieties of the white are numerous. That denominated the potato oat is at present almost the only one raised on land in a good state of cultivation in the north of England and the south of Scotland, and usually brings a higher price in the London market than any other variety. It was accidentally discovered growing in a field of potatoes in Cumberland in 1788; and from the produce of that single stalk has been produced the stock now in general cultivation. Black and grey oats are little cultivated, except in some places in the north of Scotland. The red oat is chiefly confined to Cheshire, Derbyshire, and Staffordshire. A species of naked oats, provincially called *pillar*, is raised in Cornwall.—(*Loudon's Encyc. of Agriculture; Brown's Rural Economy*, vol. ii. pp. 47—52.)

In 1765, Mr. Charles Smith estimated the number of consumers of oats in England and Wales at 623,000.—(*Tracts on the Corn Trade*, 2d edit. p. 140.), but at present we believe they are very considerably fewer. The feeding of horses has at all times occasioned the greatest consumption of oats in this part of the kingdom; and as the number of horses kept for business and pleasure has been vastly increased within the last 30 or 40 years, the culture of oats has been considerably extended, notwithstanding the increasing imports from Ireland. Perhaps the produce of no species of grain varies more than that of oats. Where the ground is foul and exhausted, not more than 20 bushels an acre are obtained; but on rich soils, well managed, 64, 72, and sometimes 80 bushels and upwards have been reaped. Oats yield, at an average, 8 lbs. meal for 14 lbs. corn.

For information as to the laws regulating the importation and exportation of oats, their prices, the quantities imported and exported, &c., see Corn Laws and Corn Trade.

ODESSA, a flourishing sea-port of Southern Russia, on the north-west coast of the Black Sea, between the rivers Dniester and Bug, in lat. 46° 28′ 54″ N., lon. 30° 43′ 22″ E. Population said to amount to 40,000. The foundations of Odessa were laid so lately as 1792, by order of the Empress Catharine, after the peace of Jassy. It was intended to serve as an *entrepôt* for the commerce of the Russian dominions on the Black Sea and the Sea of Azoff, and has in a great measure answered the expectations of its founders. By an Imperial ukase, dated the 7th of February, 1817, it was declared a free port, and the inhabitants exempted from taxation for 30 years; since which period its increase has been extremely rapid. The bay or roadstead of Odessa is extensive, the water deep, and the anchorage good, the bottom being fine sand and gravel; it is, however, exposed to the south-easterly wind, which renders it less safe in winter. The port, which is artificial, being formed by 2 moles, one of which projects to a considerable distance into the sea, is calculated to contain about 300 ships. It has also the advantage of deep water. There is a convenient lazaretto, on the model of that of Marseilles. The want of fresh water used to be the greatest disadvantage under which the inhabitants laboured; but this has been obviated by the construction of a canal which conveys an abundant supply of water into the town. There are no trees in the vicinity, which has, in consequence, a bleak and arid appearance.

Light-houses. — A light-house has been erected on Cape Fontan, about 6½ nautical miles S. of Odessa. The light, which formerly revolved, is now *fixed*, and is about 203 (Russian) feet above the level of the sea. At the distance of 11 leagues E.S.E. ½ S. from Odessa, on the north end of the long, narrow, low island of Tendra, a light-house has been erected, of great use to ships approaching Odessa from the S. or W. The lantern, elevated 92½ (Russian) feet above the level of the sea, was lighted, for the first time, on the 15th of September, 1827. It consists of 3 reflecting lights, suspended in the form of a triangle, revolving in the space of 4 minutes, so that each lamp arrives at its maximum of brilliancy after an interval of 1 min. 20 sec. Being also of a *red* colour, this light is readily distinguished from Fontan light, and the other lights in the Black Sea. In foggy weather, a bell is kept ringing.—(*Coulier sur les Phares*, 2d ed.; *Norrie's Sailing Directions for the Mediterranean and Black Seas*, &c.)

For several years after Odessa was founded, wheat formed almost the only, as it still forms the principal, article of export.—(For details with respect to the corn trade of Odessa, see *antè*, p. 432.) But large quantities of tallow, wool, iron, hides, copper, wax, caviare, potash, salt beef, furs, cordage, sail-cloth, tar, butter, isinglass, &c. are now exported. The tallow of Odessa is of a bright yellow straw colour, and is said to be superior to that of Petersburgh. The following account of the quantity (since 1824) and value of the tallow exported from Odessa from 1814, sets the rapid increase in the trade in this article, and its importance, in a very striking point of view:—

Years.	Value of Tallow exported.	Years.	Value of Tallow exported.	Quantity.	Years.	Value of Tallow exported.	Quantity.
	Roubles.		*Roubles.*	*Poods.*		*Roubles.*	*Poods.*
1814	84,554	1820	1,137,461		1826	2,800,000	331,873
1815	72,175	1821	1,591,540		1827	- -	195,425
1816	103,397	1822	991,323		1828	- -	13,686
1817	90,318	1823	2,184,762		1829	- -	16[illegible],024
1818	185,110	1824	1,674,566	209,118	1830	- -	245,038
1819	368,792	1825	2,657,334	316,157	1831	- -	257,240

This Table, says the *Journal d' Odessa* (1827, No. 16.), serves to give some idea of the means which the south of Russia possesses for carrying on commerce. The exports of

tallow have increased twenty-fold in 10 years; materially augmenting the value of the herds, and enriching vast countries, which must have remained comparatively poor, had not this outlet been found for their produce.

The increase in the exportation of wool is also very considerable. Within the last 20 years, the Merino breed of sheep has been extensively introduced into the governments of Taurida, Cherson, and Ekaterinoslov; so that there has been not only a great increase, in the quantity, but also a very decided improvement in the quality, of the wool exported.

The iron shipped at Odessa is principally brought from Siberia, partly by the Volga, and partly by the Don to Taganrog, whence it is conveyed to Odessa. A good deal of it is in a manufactured state, from the founderies at Tula. Timber for ship building, and pitch and tar, are also brought from Taganrog. In fact, from its not being at the mouth of any great river, nor having any considerable manufactures, Odessa is not a port for the exportation of what may be termed articles of native growth: but in consequence of its convenient situation, and the privileges which it enjoys, it is, as already remarked, the emporium where most of the produce of Southern Russia destined for foreign countries is collected previously to its being exported, and where most of the foreign articles required for home consumption are primarily imported. The shallowness of the water at Taganrog, and the short period during which the Sea of Azoff is navigable, hinder foreign vessels of considerable burden from visiting her port, and occasion the shipment of a considerable part of the produce brought down the Volga and the Don in lighters to Caffa and Odessa, particularly the latter. A good deal is, however, exported direct from Taganrog to the Mediterranean. All the products brought down the Dniester, the Bug, and the Dnieper, are exported from Odessa; but owing to the difficult navigation of the first and last mentioned rivers, most part of the corn brought to Odessa from Podolia, the Ukraine, &c. is conveyed in wagons drawn by oxen. —(See *antè*, p. 432.)

The principal trade of Odessa is with Constantinople, Smyrna, and other towns in the Levant, Naples, Leghorn, Genoa, Marseilles, &c. "It is generally stated," says Mr. Jacob (*Memoir on the Trade of the Black Sea*, in the *Appendix* to the 8vo edition of *Tracts on the Corn Trade*), "that the supply of Constantinople requires annually 100,000 quarters of Black Sea wheat. The Greek islands scarcely, on the average of years, produce sufficient wheat for their own consumption; and, in some years, require a large supply, which is furnished partly from the neighbouring continent, and partly from the Black Sea.

"The Asiatic coasts of the Turkish empire, especially in Anatolia, are nearly in the same predicament. At times, the market of Smyrna is very favourable for the sale of the corn of Southern Russia. The islands of Malta and Gozo produce only about half as much corn as the 120,000 inhabitants require.

"Sicily, though it has greatly declined from its ancient productiveness, has still a quantity of grain to spare for the less fruitful parts of Italy in most years; and its wheat enters into competition with that of the Black Sea, in the ports of Naples, Genoa, and Leghorn.

"There are few years in which Tuscany grows a sufficiency of wheat; and its chief port, Leghorn, being one of those in which ships can unload their cargoes of corn, without being detained to perform quarantine, has been at all times a place of deposit for the wheat of the Black Sea. A market at some price may always be found there, as the capitalists are disposed to purchase; relying on the uncertain productiveness of some adjacent country, in which they may realise a profit at no great distance.

"Genoa, like Leghorn, is a port where wheat can be unloaded within the bounds of the lazaretto. The country around it yields but little wheat; and at some periods, it enjoys a trade in that article even as far as Switzerland. This internal demand, and the chance of advantageous re-exportation, induces much trade in corn. There is said to be seldom less than 100,000 quarters in store at the two ports of Genoa and Leghorn; and at some periods, a far greater quantity.

"Nice, though not having the same advantageous quarantine regulations, and, consequently, not being a *depôt* for corn beyond its own demand, from the sterile soil that surrounds it, requires every year a large importation of wheat. That of Sicily and Odessa create a competition in its port; and the government draws a revenue, by imposing a heavy duty on both.

"Though the corn laws of France have kept the ports closed against the introduction of foreign corn for domestic use, yet it is allowed to be bonded for re-exportation. From the frequent local and partial scarcities which occur on the eastern coast of Spain, at which periods wheat is allowed to be lawfully imported, and, it is said, from the facility of its introduction by contraband, when not legally allowed, Marseilles has been a great *depôt* for the wheat of the Black Sea.

"From thence, as also from Gibraltar, where there is generally some in store, it can easily be transported to Spain, to Sardinia, to Corsica, to Tunis, to Tripoli, or wherever scarcity has created a beneficial market.

"The coasts of Barbary, though often having a surplus of wheat, much of which occasionally assists to feed Portugal, in some seasons have been affected with most deficient harvests. This was recently the case in a remarkable degree. Tripoli and Tunis experienced, in the year 1820, a harvest most miserably short, and were supplied from other countries."

But exclusive of wheat, the other articles mentioned as being exported from Odessa, find their way to the different markets in the Mediterranean. Those shipped for Turkey are iron, tallow, sail-cloth, cordage, anchors for ships of war, butter, &c. The exports to Italy and other European countries are similar.

The importation of all foreign articles into the Russian dominions on the Black Sea and the Sea of Azoff is confined to Odessa, Theodosia or Kaffa, and Taganrog. The import trade is, however, of inferior importance when compared with the export trade. The principal articles are sugar and coffee, dye woods, wine and brandy, cotton stuffs, spices, cutlery, oranges and lemons, lemon juice, oil, tin and tin plates, dried fruits, paper, silk, specie, &c.

Principal Articles imported into Odessa in the following Years: —

Articles.		1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.
Coffee	poods	2,882	2,615	2,747	8,024	6,664	8,642	8,005	5,014
Sugar, raw	—	2,183	2,746	653	6,744	4,262	6,753	8,362	0,357
refined	—	- -	- -	- -	12,253	12,280	11,234	22,125	21,188
Olive oil	—	27,017	27,649	25,797	18,227	7,030	18,308	50,987	68,636
Cotton, raw	—	5,110	3,891	6,478	3,456	1,110	1,483	6,289	6,184
twist	—	11,916	8,532	6,650	8,005	2,380	340	3,575	3,121
Silk	—	747	543	2,563	3,785	1,039	107	2,346	1,658
Tea	—	- -	- -	- -	345	522	606	620	600
Pepper	—	- -	- -	- -	- -	4,630	2,267	7,643	5,971
Tin plates	—	- -	- -	- -	- -	1,131	1,973	1,160	2,682
Incense	—	- -	- -	- -	- -	8,306	6,027	7,750	14,403
Olives	—	- -	- -	- -	- -	12,879	4,544	18,779	16,502
Tobacco	—	- -	- -	- -	- -	13,901	5,801	13,022	12,826
Wine	oxhofts	2,485	2,498	2,195	13,424	12,524	8,034	21,823	13,861
	bottles	6,341	8,136	11,925	31,055	12,691	24,040	53,448	27,393
Fruit, for	Rou.	1,175,015	1,217,024	1,138,905	946,102	570,143	1,067,152	1,180,354	1,865,558
Cotton manufactures	—	66,160	118,614	359,446	611,419	399,877	432,321	744,384	
Woollen do.	—	42,647	134,936	132,093	326,973	286,719	246,468	354,476	
cloth	—	- -	- -	- -	326,061	152,617	307,070	311,799	1,536,306
Silk manufactures	—	267,954	337,267	258,741	494,428	324,202	248,953	256,830	
Dye woods and colours	—	473,620	164,706	55,847	102,858	8,867	58,641	125,123	181,561

Principal Articles exported from Odessa in the following Years: —

Articles.		1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.
Wheat	chetwerts	561,465	712,378	804,763	1,200,826	28,860	317,683	1,215,189	487,382
Rye	—	- -	2,220	8,680	39,940	2,050	- -	3,276	14,249
Barley	—	32	5,305	9,055	6,852	377	2,507	62,543	15,029
Oats	—	- -	1,506	1,710	5	707	3,030	29,244	33,600
Wheat flour	—	- -	- -	- -	- -	10,282	22,155	15,358	40
Linseed	—	- -	58	80	931	- -	- -	6,327	18,356
Tallow	poods	209,118	316,157	331,852	195,425	13,686	160,024	245,038	287,240
Hides, raw	—	34,000	44,635	40,209	30,996	3,932	15,246	23,705	42,080
tanned	—	- -	5,080	5,000	56,430	6,045	39,944	3,462	
youfts	—	4,378	1,938	409					
Potashes	—	7,514	9,390	1,611	3,118	- -	3,059	- -	3,347
Cordage	—	41,248	49,132	60,484	71,320	11,317	12,826	63,901	94,390
Flax	—	- -	82	- -	1,188	- -	- -	- -	7
Wax	—	5,456	8,401	8,178	4,152	49	598	4,379	8,751
Hemp	—	- -	3	- -	13,040	- -	751	14,805	522
Copper	—	7,890	8,996	10,011	2,865	194	- -	- -	19,000
Iron	—	40,059	86,580	78,504	75,515	3,452	2,524	17,364	
Salt butter	—	- -	- -	- -	1,200	1,304	10,257	5,911	5,037
Caviare	—	- -	- -	- -	2,800	2,089	4,942	3,393	1,629
Wool	—	- -	- -	- -	30,000	5,115	3,402	21,361	35,058
Total value of imports	Rou.	6,946,714	5,801,012	6,879,504	10,185,357	5,735,225	7,810,806	15,357,464	12,322,056
Ditto of exports by sea	—	13,039,573	20,029,370	14,711,834	18,479,652	1,248,543	7,240,325	27,031,960	20,063,953

Movement of Shipping at the Port of Odessa in the following Years: —

Vessels.	1826.		1827.		1828.		1829.		1830.		1831.	
	Arrived.	Sailed.	Arrived.	Sailed.	Arrived.	Sailed.	Arrived.	Sailed.	Arrived.	Sailed.	Arrived.	Sailed.
Russian	164	111	167	122	50	38	24	30	172	194	155	136
Austrian	189	186	292	278	58	41	81	80	219	257	114	107
Sardinian	112	116	236	235	14	11	46	33	224	231	46	48
English *	104	105	155	143	4	8	65	43	147	169	81	83
French	1	- -	1	1	- -	- -	4	2	9	1	2	2
Swedish	- -	- -	2	2	- -	- -	- -	- -	8	8	1	
Dutch	- -	- -	- -	- -	1	- -	- -	1	2	2		
Spanish	- -	- -	- -	- -	-	- -	1	1	5	5	2	2
Neapolitan	- -	- -	- -	- -	2	- -	2	2	16	14	5	5
Turkish	8	10	9	7	1	1	1	- -	11	11	3	4
American	- -	- -	- -	- -	- -	- -	- -	- -	2	2		
Greek	- -	- -	- -	- -	- -	- -	- -	- -	54	54	27	24
Tuscan	- -	- -	- -	- -	- -	- -	- -	- -	3	3		
Total	587	529	862	788	130	99	224	192	872	960	435	411

The previous statements, for which we are indebted to Messrs. Moberly and Simpson, show the effect of the war between Russia and Turkey on the trade of Odessa; but it has again resumed its former activity; and will, doubtless, continue progressively to increase with the improvement of the vast countries of which it is the principal *entrepôt*. Several American merchantmen appeared, for the first time, in the Black Sea, in 1830.

A Tribunal of Commerce was established at Odessa in 1824, the jurisdiction of which extends over all disputes connected with trade. There is no appeal from its decision, except to the senate. Its institution s said to have been productive of considerable advantage.

There are 12 sworn brokers, approved and licensed by the Tribunal of Commerce, who have deputies appointed by themselves. They receive ½ per cent. from each party as commission. They are bound to register the various transactions in which they are employed.

A discount or loan bank has been established at Odessa, which discounts bills, not having more than 9 months to run, at the rate of 6 per cent. interest; and makes advances upon the security of goods. Two institutions for marine insurance, and 1 for fire insurance, have been established within the last 4 or 5 years.

Most articles of provision are very cheap. Beef may be bought for ½*d.* or 1*d.* per lb.; a quarter of lamb for 5*d.*; and poultry at proportionally low prices. Fish costs almost nothing, and is excellent. Water is an expensive article; and fire-wood is for the most part scarce and dear. Latterly, however, he inhabitants have begun to supply themselves with coal from Bakhmoute, in the government of Ekaterinoslov. A good deal of English coal has been taken to Odessa as ballast, and sold at a fair price. — (*Morton's Travels in Russia*, p. 262. &c.)

Monies, Weights, and Measures, same as at Petersburgh; which see.

* Maltese and Ionians included.

Odessa has a considerable and increasing trade with Redout-kalé, at the mouth of the Phasis, and with Trebisond and several ports on the south coast of the Black Sea. Georgian and Armenian merchants are already considerable purchasers at the Leipsic and other German fairs; and civilisation is beginning to strike its roots throughout all the extensive countries between the Black Sea and the Caspian. It is probable that, at no very remote period, the Phasis will be frequented by British ships; and that our merchants, without any enchantress to aid them, and depending only on the superior cheapness and excellence of their goods, will be hospitably received in the ancient Colchis, and bear away a richer prize than fell to the lot of Jason and his Argonauts.

Account of Imports at Redout-kalé from Odessa, from 1825 to 1830, both inclusive.

Articles.	1825.	1826.	1827.	1828.	1829.	1830.
	Roubles.	*Roubles.*	*Roubles.*	*Roubles.*	*Roubles.*	*Roubles.*
Wine	4,600	20,695	40,700	11,590	20,675	2,600
Sugar, refined	91,000	196,800	100,000	28,500	129,610	71,080
Cotton goods	70,285	455,685	355,775	1,434,560	711,945	21,080
Silk do.	10,130	20,830	32,435	60,435	109,270	4,725
Cloth	111,750	328,125	132,500	138,700	533,980	
Woollen goods	35,785	154,235	110,000	290,545	337,100	1,015
Tea	1,900	30,600	44,000	7,400	43,100	1,600
Hardware, earthenware, glass, tobacco, &c. &c.	71,875	55,261	103,537	29,660	103,185	19,583
Total R.	397,325	1,262,231	918,947	2,001,390	1,988,865	121,683

For some further details as to the trade of the Black Sea, see the article SINOPE.

Epochs in the Trade of the Black Sea. Depth of Water. Difficulty of Navigation, &c. — The trade of the Black or Euxine Sea was of great importance in antiquity. The shores of the Crimea, or Taurica Chersonesus, were settled by Milesian adventurers, who founded Panticapæum and Theodosia. The exports thence to Athens were nearly the same as those which are now sent from Odessa and Taganrog to Constantinople, Leghorn, &c.; viz. corn, timber, and naval stores, leather, wax, honey, salt fish, caviare, &c., with great numbers of slaves, the best and most serviceable that were anywhere to be met with. The Athenians set a very high value upon this trade, which supplied them annually with about 400,000 medimni of corn; and to preserve it, they carefully cultivated the alliance of the Thracian princes, and kept a garrison at Sestus, on the Hellespont. — (See the authorities in *Anacharsis's Travels*, c. 55.; and in *Clarke's Connexion of the Saxon and English Coins*, pp. 54—64.) During the middle ages, the Genoese acquired an ascendancy on this sea, and laboured with pretty considerable success to monopolise its trade. Their principal establishment was at Caffa, which was the centre of a considerable commerce. But the conquest of Constantinople by the Turks, in 1453, was soon after followed by the conquest of Caffa, and the total exclusion of European vessels from the Black Sea, which became in a great measure unknown. This exclusion was maintained for about 300 years, or till it was opened to the ships of Russia by the treaty of Kainardgi in 1774. The Austrians obtained a similar equality of privileges in 1784; and British, French, &c. ships were admitted by the treaty of Amiens. There were, however, some restraints still kept up; but these have been abolished by the late treaty between the Turks and Russians in 1829; and, for commercial purposes at least, the Black Sea is now as free as the Mediterranean.

Notwithstanding the number of English and other European ships that have visited this sea within the last 20 years, its geography is still very imperfectly known. A notion seems to have been long prevalent, that it was not only stormy, but also infested with numerous shoals. Polybius, indeed, contends, that, owing to the vast quantities of alluvial deposit brought down by the Danube and other large rivers that fall into the Black Sea, it was gradually filling up, and would become, at no very remote period, an immense morass! Dr. Clarke seems to have espoused the same theory. But, how probable soever it may appear, extremely little progress has hitherto been made towards the consummation described by Polybius. Instead of being shallow, the water is for the most part remarkably deep; with a bottom, where soundings have been obtained, of gravel, sand, and shells. A strong current sets from the Black Sea, through the Bosphorus, or Canal of Constantinople, into the Sea of Marmara, and from the latter through the Dardanelles, which it requires a fresh breeze to stem. This current is said to be sensibly felt in the Black Sea, 10 or 12 miles from the Bosphorus; and it may probably carry off some of the mud brought down by the rivers. — (See *Tournefort's Voyage du Levant*, Lett. 15, 16.; Art. 9. in No. I. of the *Journal of the Geographical Society*; *Macgill's Travels in Turkey*, vol. i. p. 245., *&c.*)

The navigation of the Black Sea has been represented, by most modern and all ancient writers, as exceedingly dangerous. We believe, however, that there is a good deal of exaggeration in the greater number of the statements on this subject. It is said to be particularly subject to dense fogs, and to currents; but the former are prevalent only at particular seasons, and the influence of the latter is not greater than in many other seas which are not reputed dangerous. Tournefort, one of the best and most accurate of

travellers, considers the navigation of the Black Sea as safe as that of the Mediterranean: — "*Il n'a rien de noir, pour ainsi dire, que le nom: les vents n'y soufflent pas avec plus de furie, et les orages ne sont guères plus frequens que sur les autres mers.* — (Tome ii. p. 164. 4to ed.) Dr. Clarke (*Travels*, vol. ii. p. 387. 8vo ed.) affects to doubt this; but he assigns no grounds for his opinion; and who would think of putting his authority in competition with that of Tournefort? The truth is, that any sea would be dangerous to the Greek and Turkish pilots, by whom the Black Sea is principally navigated. If the progress of navigation were to be estimated by its state amongst them, we should have to conclude that it had been stationary from the era of the Argonauts. They seldom venture to get out of sight of the coasts; they have neither charts nor quadrants; and hardly even know that one of the points of the needle turns towards the North! — (*Tournefort, in loc. cit.*) There is not, certainly, much room for wonder at shipwrecks being frequent among vessels so navigated. On leaving the Black Sea, the greatest difficulty is in making the Bosphorus. "The mountains," says Mr. Macgill, "are all so much alike, that it is difficult to determine which of them is at the entrance, until you are within a very few miles of the coast: then, with a fair wind, you are on a lee shore with a lee current; and if you make a mistake, destruction is almost inevitable. The Turks have two light-houses at the entrance; but unless you see them before sunset, they are of little use: in the forests, on its borders, great quantities of charcoal are made, and the lights from it bewilder, and often mislead, the unhappy mariner." — (Vol. i. p. 245.)

From the vast quantity of fresh water poured into the Black Sea, the saline particles are so much diluted, that, with a slight frost, the surface becomes covered with ice; hence, during a great part of the year, hardly any navigation is attempted. The vessels that resort to Odessa seldom arrive at that port before the latter end of May; and those whose cargoes are not completed before the end of October, more frequently wait the return of spring, than adventure to encounter the dangers of an autumnal or winter voyage.

At Taganrog the frost commences earlier, and continues longer, than at Odessa; so that there are scarcely more than 4 or 5 months in the year, during which the Sea of Azoff can be safely navigated.

OIL (Fr. *Huile;* Ger. *Oel;* It. *Olie;* Lat. *Oleum;* Rus. *Maslo;* Sp. *Aceite*). The term *oil* is applied to designate a number of unctuous liquors, which, when dropped upon paper, sink into it and make it seem semi-transparent, or give it what is called a greasy stain. These bodies are very numerous, and have been in common use from time immemorial. Chemists have divided them into two classes; namely, *volatile* and *fixed* oils. We borrow from Dr. Thomas Thomson the following statement with respect to these bodies: —

I. Volatile Oils, called also *essential oils*, are distinguished by the following properties: — 1. Liquid, often almost as liquid as water, sometimes viscid; 2. Very combustible; 3. An acrid taste and a strong fragrant odour; 4. Volatilised at a temperature not higher than 212°; 5. Soluble in alcohol, and imperfectly in water; 6. Evaporate without leaving any stain on paper.

By this last test it is easy to discover whether they have been adulterated with any of the fixed oils. Let a drop of the volatile oil fall upon a sheet of writing paper, and then apply a gentle heat to it: if it evaporates without leaving any stain upon the paper, the oil is pure; but if it leaves a stain upon the paper, it has been contaminated with some fixed oil or other.

Volatile oils are almost all obtained from vegetables, and they exist in every part of plants, — the root, the bark, the wood, the leaves, the flower, and even the fruit; though they are never found in the substance of the cotyledons; whereas the fixed oils, on the contrary, are almost always contained in these bodies.

When the volatile oils are contained in great abundance in plants, they are sometimes obtained by simple expression. This is the case with oil of oranges, of lemons, and bergamotte; but in general they can only be obtained by distillation. The part of the plant containing the oil is put into a still with a quantity of water, which is distilled off by the application of a moderate heat. The oil comes over along with the water, and swims upon its surface in the receiver. By this process are obtained the oil of peppermint, thyme, lavender, and a great many others, which are prepared and employed by the perfumer: others are procured by the distillation of resinous bodies. This is the case in particular with oil of turpentine, which is obtained by distilling a kind of resinous juice, called turpentine, that exudes from the juniper.

Volatile oils are exceedingly numerous. They have been long known; but as their use in chemistry is but limited, they have not, hitherto, been subjected to an accurate chemical investigation. They differ greatly in their properties from each other; but it is impossible at present to give a detailed account of each.

1. The greater number of volatile oils are *liquid;* many, indeed, are as limpid as water, and have none of that appearance which we usually consider oily. This is the case with the following; namely, oil of turpentine, oranges, lemons, bergamotte, roses. — Others have the oily viscidity. It varies in them in all degrees. This is the case with the oils of mace, cardamom, sassafras, cloves, cinnamon. — Others have the property of becoming solid. This is the case with the oils of parsley, fennel, aniseed, balm. — Others crystallise by slow evaporation. This is the case with oil of thyme, peppermint, marjoram. — The oil of nutmegs has usually the consistence of butter. This is the case also with the oils of hops and of pepper.

2. The colour of the volatile oils is as various as their other properties. A great number are limpid and colourless; as oil of turpentine, lavender, rosemary, savine, aniseed: some are yellow; as spike, bergamotte: some are brown; as thyme, savory, wormwood: others blue; as camomile, motherwort: others green; as milfoil, pepper, hops, parsley, wormwood, cajeput, juniper, sage, valerian: others, though at first colourless, become yellow or brown by age; as cloves, cinnamon, sassafras.

3. The odours are so various as to defy all description. It is sufficient to say, that all the fragrance of the vegetable kingdom resides in volatile oils. Their taste is acrid, hot, and exceedingly unpleasant.

4. Their specific gravity varies very considerably, not only in different oils, but even in the same oil in different circumstances. The following are the specific gravities of several of the volatile oils, as ascertained by Dr. Lewis: —

Oil of Sassafras	1·094	Oil of Tansy	·946
Cinnamon	1·035	Caraway seeds	·940
Cloves	1·034	Origanum	·940
Fennel	·997	Spike	·936
Dill	·994	Rosemary	·934
Pennyroyal	·978	Juniper berries	·911
Cummin	·975	Oranges	·888
Mint	·975	Turpentine	·792
Nutmegs	·948		

When the volatile oils are heated in the open air, they evaporate readily, and without alteration diffuse their peculiar odours all around; but there is a considerable difference between the different oils in this respect. When distilled in close vessels, they do not so readily assume the form of vapour. Hence they lose their odour, become darker in colour, and are partly decomposed. Oils do not seem very susceptible of assuming the gaseous form, unless some other substance, as water, be present.

II. Fixed Oils are distinguished by the following characters: — 1. Liquid, or easily become so when exposed to a gentle heat; 2. An unctuous feel; 3. Very combustible; 4. A mild taste; 5. Boiling point not under 600°; 6. Insoluble in water, and nearly so in alcohol; 7. Leave a greasy stain upon paper.

These oils, which are called fat or expressed oils, are numerous, and are obtained partly from animals and partly from vegetables, by simple expression. As instances, may be mentioned whale oil or train oil, obtained from the blubber of the whale and from cod; olive oil, obtained from the fruit of the olive; linseed oil and almond oil, obtained from linseed and almond kernels. Fixed oils may also be extracted from poppy seeds, hemp seeds, beech mast, and many other vegetable substances.

All these oils differ from each other in several particulars, but have also many particulars in common.

1. Fixed oil is usually a liquid with a certain degree of viscidity, adhering to the sides of the glass vessels in which it is contained, and forming streaks. It is never perfectly transparent; has always a certain degree of colour, most usually yellowish or greenish; its taste is sweet, or nearly insipid. When fresh, it has little or no smell.

There exist also in the vegetable kingdom a considerable number of bodies which, at the ordinary temperature of the atmosphere, are solid, and have hitherto been considered as fixed oils. Palm oil may be mentioned as an example. The various substances used in India and Africa as substitutes for butter, and as unguents, may likewise be mentioned.

2. All the fixed oils hitherto examined are lighter than water: but they differ greatly from one another in specific gravity. The same difference is observable in different samples of the same oil. The following Table contains the specific gravity of such oils as have been examined: —

Oil of Palm	·968	Oil of Beech nuts	·923
Hazel nuts	·941	Ben	·917
Poppies	·939	Olives	·913
Linseed	·932	Rape-seed	·913
Almonds	·932	Cacao	·892
Walnuts	·923 to ·947		

Fixed oil, when in the state of vapour, takes fire on the approach of an ignited body, and burns with a yellowish white flame. It is upon this principle that candles and lamps burn. The tallow or oil is first converted into a state of vapour in the wick; it then takes fire, and supplies a sufficient quantity of heat to convert more oil into vapour; and this process goes on while any oil remains. The wick is necessary, to present a sufficiently small quantity of oil at once for the heat to act upon. If the heat were great enough to keep the whole oil at a temperature of 600°, no wick would be necessary, as is obvious from oil catching fire spontaneously when it has been raised to that temperature. When oil is used in this manner, either in the open air or in contact with oxygen gas, the only new products obtained are *water* and *carbonic* acid.

The drying oils are used as the vehicle of paints and varnishes. Linseed, nut, poppy, and hemp-seed oils, belong to this class. These oils in their natural state possess the property of drying oils, but imperfectly. To prepare them for the use of the painter and varnish-maker, they are boiled for some time in an iron pot, and sometimes burnt till they become viscid. When they burn for some time, their unctuous quality is much more completely destroyed than by any method that has been practised. Hence it is followed frequently in preparing the drying oils for varnishes, and always for printers' ink, which requires to be as free as possible from all unctuosity.

Nut oil has been found preferable to all other oils for printers' ink; though the dark colour which it acquires during boiling renders it not so proper for red ink as for black. Linseed oil is considered as next after nut oil in this respect. Other oils cannot be employed, because they cannot be sufficiently freed from their unctuosity. Ink made with them would be apt to come off and smear the paper while in the hands of the bookbinder, or even to spread beyond the mark of the types and stain the paper yellow.

For the regulations with respect to the importation and exportation of train oil, see p. 134.

OLIBANUM (Fr. *Encens;* Ger. *Weiranch;* It. *Olibano;* Arab. *Looban*), a gum-resin, the produce of a large tree (*Libanus thurifera*) growing in Arabia and India. It is imported in chests, containing each about 1 cwt., from the Levant and India; the best comes from the former, and is the produce of Arabia. Good olibanum is in semi-transparent tears, of a pink colour, brittle, and adhesive when warm; when burnt, the odour is very agreeable; its taste is bitterish, and somewhat pungent and aromatic; it flames for a long time with a steady clear light, which is not easily extinguished, leaving behind a *black* (not, as has been said, a whitish) ash. Olibanum is the frankincense (*thus*) of the ancients; and was extensively used by them in sacrifices. — (*Plin. Hist. Nat.* lib. xii. c. 14.) It has also been used in the ceremonies of the Greek and Roman churches. — (*Ainslie's Mat. Indica; Thomson's Chemistry; Kippingii Antiq. Rom.* lib. i. c. 11.)

OLIVE, OLIVES (Ger. *Oliven;* Fr. *Olives;* It. *Ulive, Olive;* Sp. *Aceitunas;* Port. *Azeitonas;* Lat. *Olivæ*), a fruit yielding a large quantity of oil, the produce of the *Olea*, or olive tree. The wild olive is indigenous to Syria, Greece, and Africa, on the lower slopes of Mount Atlas. The cultivated species grows spontaneously in Syria, and is easily reared in Spain, Italy, and the south of France. It has even been raised in the open air in England, but its fruit is said not to have ripened. The fruit is a smooth oval plum, about $\frac{3}{4}$ of an inch in length, and $\frac{1}{2}$ an inch in diameter; of a deep violet colour when ripe, whitish and fleshy within, bitter and nauseous, but replete with

a bland oil; covering an oblong, pointed, rough nut. Olives intended for preservation are gathered before they are ripe. In pickling, the object is to remove their bitterness, and to preserve them green, by impregnating them with a brine of aromatised sea salt; for this purpose various methods are employed. The wood of the olive tree is beautifully veined, and has an agreeable smell. It is in great esteem with cabinet-makers, on account of the fine polish of which it is susceptible.

OLIVE OIL (Ger. *Baumöl*; Fr. *Huile d'olives*; It. *Olio d' uliva*; Sp. *Aceite de aceitunas*; Lat. *Oleum olivarum*). The olive tree is principally cultivated for the sake of its oil. This is an insipid, inodorous, pale greenish yellow coloured, viscid fluid, unctuous to the feel, inflammable, incapable of combining with water, and nearly insoluble in alcohol. It is the lightest of all the fixed oils; and is largely used, particularly in Greece, Italy, Spain, and France, as an article of food, and in medicine, and the arts. It is also very extensively used in this country, particularly in the woollen manufacture.

The ripe fruit is gathered in November, and immediately bruised in a mill, the stones of which are set so wide as not to crush the kernel. The pulp is then subjected to the press in bags made of rushes; and by means of a gentle pressure, the best, or *virgin* oil, flows first; a second, and afterwards a third, quality of oil is obtained by moistening the residuum, breaking the kernels, &c., and increasing the pressure. When the fruit is not sufficiently ripe, the recent oil has a bitterish taste; and when too ripe, it is fatty. After the oil has been drawn, it deposits a white, fibrous, and albuminous matter; but when this deposition has taken place, if it be put into clean glass flasks, it undergoes no further alteration; the common oil cannot, however, be preserved in casks above 1½ or 2 years. It is sometimes adulterated by the admixture of poppy oil. — (*Thomson's Dispensatory.*)

The best olive oil is said to be made in the vicinity of Aix, in France. That which is brought from Leghorn, in chests containing 30 bottles, or 4 English gallons, is also very superior; it is known in our markets by the name of Florence oil, and is used mostly for culinary purposes. Olive oil is the principal article of export from the kingdom of Naples. — (See NAPLES.) Apulia and Calabria are the provinces most celebrated for its production. The Apulian is the best, and is preferred by the woollen manufacturers, by whom it is extensively used. By far the largest portion of the olive oil brought to England is imported from Italy; principally from Gallipoli, on the east coast of the Gulf of Taranto, in lat. 40° 3′ N., lon. 18° 25′ 55″ E., whence it is commonly known by the name of Gallipoli oil. But, besides Italy, Spain sends us a large quantity; and we derive smaller supplies from Malta, Turkey, the Ionian Islands, &c. Thus, of 2,791,057 gallons of olive oil imported in 1830, 2,034,237 were from Italy; 639,468 do. from Spain; 52,004 do. from Malta, partly at second hand; 21,467 do. from Turkey; 11,300 do. from the Ionian Islands; and about 30,000 do., at second hand, from the Netherlands and Germany.

The price of olive oil, duty paid, in London, in January, 1834, was as follows: —

		L. s.	L. s.			L. s.	L. s.
Gallipoli	tun (252 gals.)	59 0 to	60 0	Barbary	tun (252 gals.)	53 0 to	54 0
Spanish Calabria	—	55 0 —	0 0	Lucca, in jars	—	6 15 —	0 0
Calcia, Genoa, and Provence, 1st	—	75 0 -	80 0	Florence	½ chest	1 1 —	0 0

The duty of 8*l.* 8*s.* a tun (252 wine gallons) amounts to about 20 per cent., or 1-5th of the price. But as olive oil is an article much used in household economy, and of essential importance in the arts, particularly the woollen manufacture, such a duty seems to be quite oppressive. Were it reduced to 2*l.* 2*s.* a tun, we believe it would be very little, if at all, less productive than at present, while the fall of price consequent upon such a reduction would have many beneficial consequences. Nothing can be more absurd than to elevate duties till they become less productive than they would be were they lower; but when the articles so overtaxed are of great utility, the mischievousness of the practice exceeds its irrationality. Olive oil is necessary to the preparation of the best species of soap; but the high duty prevents it from being so employed in this country, and, consequently, obliges us to make use of an inferior article.

An Account of the Quantity of Olive Oil entered for Home Consumption in each Year since 1820; distinguishing the Rate of Duty, and stating the Amount of Duty received in each Year.

Years.	Quantities entered for Home Consumption in the United Kingdom.	Amount of Duty received thereon.	Rates of Duty charged.	Years.	Quantities entered for Home Consumption in the United Kingdom.	Amount of Duty received thereon.	Rates of Duty charged.
	Imp. Tuns.	*L. s. d.*	*Per Imp. Tun. L. s. d.*		*Imp. Tuns.*	*L. s. d.*	*Per Imp. Tun. L. s. d.*
1821	2,373	44,706 17 7	18 15 7 in British ships. 19 19 7 in for. ships.	1828	6,959	58,580 5 1	9 9 0 in ships of Naples & Sicily. 8 8 0 in other ships.
1822	3,162	59,164 10 5	—				
1823	2,699	50,852 12 10	—				10 10 0 in ships of Naples & Sicily. 8 8 0 in other ships.
1824	3,529	66,295 2 11	—	1829	3,299	45,250 12 0	
1825	3,996	44,288 4 9	8 8 0 in any ship, from 5th July.	1830	8,524	71,878 11 9	—
1826	3,376	28,366 9 6	—	1831	7,575	64,243 0 0	—
1827	4,219	35,877 18 10	8 8 0 —	1832	5,095	43,350 0 0	—

Olive oil, the produce of Europe, may not be imported into the United Kingdom for home consumption, except in British ships, or in ships of the country of which it is the produce, or from which it is imported, on forfeiture of the same and 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54. §§ 2. 22.)

It is ordered by a Customs Minute of the 23d of July, 1828, that when the actual tare is not taken, 1-3d for tare on each jar, and 1-7th for foot, may be allowed.

Oil Trade of Naples. — The oils of the kingdom of Naples are produced in Apulia, from Bari to its southern extremity, the Capo di Leuca; a district comprising the territories which export from Gallipoli and Taranto; and in Calabria, from Rossano, on the gulf of Taranto, across to Gioja. The whole coast from Gioja as far as Gaeta is covered with olive trees. They are also abundant in the Abruzzi and the Terra di Lavoro; but Apulia and Calabria furnish by far the greatest quantity of oil.

The principal magazines, or *caricatori*, for oil, are at Gallipoli and Gioja.

Gallipoli supplies England, Holland, the north of Europe, and, in short, all those countries that require the most perfectly purified oil. It is clarified to the highest degree, by merely keeping it in cisterns hollowed out of the rock on which the town is built. The voyages it has to perform being long, it is put into casks so well constructed, that it frequently arrives at Petersburgh, in the heat of summer, without the least waste or leakage, — an advantage attributed to the seasoning of the staves, which, before they are put together, are well soaked in sea water.

We borrow the following details with respect to the preparation of oil at Gallipoli, from a very interesting paper, communicated by an English gentleman who had resided in the town, in the volume entitled *Vegetable Substances Materials of Manufactures*, published by the Society for the Diffusion of useful Knowledge.

"The rock on which the town is built is easily excavated; and in caverns thus constructed oil clarifies sooner, and keeps without rancidity much longer, than in any other place. Hence numerous oil-houses are established at Gallipoli, and a very considerable portion of the rock is cut into cisterns. A Gallipolitan oil warehouse generally occupies the ground floor of a dwelling-house, and has a low arched roof. Some are more extensive, but on an average they are about 30 feet square. In the stone floor you see 4, 6, or more holes, which are circular, about 2 feet in diameter, and like the mouths of wells. Each of these holes gives access to a separate cistern beneath your feet; and when the oil is poured into them, care is taken not to mix different qualities, or oils at different stages, in the same reservoir. One cistern is set apart for *oglio mosto*, or oil that is not clarified, another for pure oil of the season, another for old oil, &c. I have seen oil that had thus been preserved for 7 years in a perfect state, or, as the Gallipoli merchants have it, *chiaro, giallo, e lampante*, — words which, during some months, I have heard at least 100 times a day. I also many times verified the fact: the *mosto*, or oil in its turbid state, which arrived almost as black and thick as pitch, soon became bright and yellow in these excellent reservoirs, without any help from man.

"All the oil, whatever may be its quality, is brought to the magazine in sheep or goat skins, which are generally carried on mules — there being but few *strade rotabile*, or roads fit for wheeled carriages, in these parts. In a good year, and at the proper season, I have counted, in the course of an afternoon's ride, as many as 100 mules returning from Gallipoli, where they had been to deposit their unctuous burdens, to different towns and villages in the Terra d'Otranto, or the more distant province of Bari. The quantity of oil required may be conceived, when I state, that at one time (in the year 1816) I saw 9 English, 3 American, 2 French, and 6 Genoese vessels, (not to mention some small craft from the Adriatic,) all waiting in the port of Gallipoli for entire or partial cargoes of it. When the oil is to be shipped, it is drawn off the cistern into *uteri*, or skins, and so carried on men's shoulders down to a small house on the sea shore. In that house there is a large open basin, capable of containing a given quantity, and of measuring the oil; and into that the porters empty their skins as they arrive. A tube communicates from the basin to a large cock at the outside of the house. When the basin is full, well-made casks, of various sizes for the convenience of stowage, are placed under the cock, which is then turned, and the casks are filled. As the casks are closed up by the cooper, the porters roll them down to the brink of the sea, where the sailors secure several of them together with a rope, and taking the end of the cord into the boat, they row off to the vessel, towing the oil casks through the water after them.

"I first became acquainted with the Gallipolitans shortly after the fall of Napoleon, whose system, whatever good parts of it may have done in the rest of Italy, was certainly most ruinous to the provinces of Lecce and Bari. Unable to export, or find any market for their produce, the proprietors in many parts of those provinces let the olives lie and rot upon the ground. For some years, indeed, the price of oil scarcely paid the cost of its preparation, to say nothing of transport and other necessary expenses. During the Continental system, the best *chiaro, giallo, e lampante* oil was sold at Gallipoli for 8 Neapolitan ducats the salma; in 1816 and 1817, it found a ready market at from 60 to 70 ducats per salma!

"Those who, during the evil time, had penetration enough to foresee better days, and that a system opposed to the general commercial prosperity of Europe could not last; and who had, at the same time, money enough for such objects; by annually making their oil as usual, and buying up the oil of others at the low current prices of the day, realised enormous profits when peace threw open the port of Gallipoli, and ships of all nations flocked thither as before.

"The olives of which the Gallipoli oil is made, are never gathered, but allowed to drop in their maturity from the tree on the ground, where they are picked up chiefly by women and children, and carried to the mill.

"The machinery employed in expressing the oil is of the rudest kind, and, no doubt, numerous improvements might be introduced, not only into this branch, but into that of cultivating the olive tree. The peasantry, however, and, in the kingdom of Naples, those who stand higher in the scale of fortune and rank, are too often but boors in intellect, are obstinate in their attachment to old practices, and are apt, when any of these are reprehended, to stop discussion by saying — *Faccio come faceva la buon' anima di mio padre, e cio basta.* (I do as my father of blessed memory did before me, and that 's enough.)

"The poor people of the country make culinary uses of the same oil that is exported, and which in England is only used in manufactures, or burnt in lamps; but in the houses of the gentry I have often tasted oil prepared with more care, which was truly delicious, being equal to that of Sorrento, Vico, and Massa, or even to the best oils of Tuscany or Provence."—(Pp. 200—204.)

The *caricatori* of Bari and Monopoli furnish oils for the consumption of Upper Italy and Germany, through the medium of Venice and Trieste. They also draw supplies from Brindisi and Otranto.

The *caricatori* of Taranto, of Eastern Calabria or Retromarina, and of Western Calabria, the principa of which is Gioja, furnish supplies for Marseilles, &c. But the *caricatori* now mentioned, having no conveniences for clarification, produce only the thick oils used for soap-making.

The oils of Sicily, like those of Tunis, are too thin to be used singly in the making of soap; and being used only for mixing, are less valuable than most others.

The oil trade in the provinces is in the hands of respectable houses, which purchase by retail of the several planters. The oil thus collected is sold in Naples at a profit equal to the difference between the size of the measures by which it is bought and those by which it is sold. To facilitate transactions, orders or *cedules* are circulated, representing quantities of oil deposited in the provincial *caricatori*. These orders are negotiable, like bills of exchange, and are indorsed by the intermediate holder, who receives their value in cash, without, however, becoming liable for their due satisfaction. The only responsible parties are the drawer and drawee. The latter is obliged to deliver the oil at sight of the order, or to hold it, at the bearer's disposal, till the 10th of November for the *caricatori* of Apulia, and till the 31st of December for those of Calabria. If the contract be for time, that is, from one year to another, the oil is usually placed at the purchaser's command on the 1st of March. Purchases for time are effected by means of a contract, wherein the vendor undertakes to deliver the oil by the end of January, on receiving payment of the money; but the oil, as observed above, is not really at the purchaser's disposal before the beginning of March. Hence, in time bargains, the payment of the money precedes the delivery of the oil more than a month: scarce an instance is on record of an engagement of this sort having been broken, and the order is as readily negotiable as any other security.

In purchases of oil at command, payment likewise precedes the delivery of the article; but in this case the advance is confined to the 5 days necessary to transmit the order to the *caricatore* where the oil is kept for delivery.

The oil remains in the *caricatore* under the care and responsibility of the vendor, to be delivered on demand to the bearer of the order, free of all costs and charges whatever for the first year; but for every successive year from 25 to 30 grains per salma are charged for keeping, and for renewal of warranty. —

(We are indebted for these details to a *brochure* of M. Millenet, entitled *Coup d'Œil sur le Royaume de Naples.* Naples, 1832.)

OMNIUM, a term used at the Stock Exchange, to express the aggregate value of the different stocks in which a loan is now usually funded.

Thus, in the loan of 36,000,000*l.* contracted for in June, 1815, the omnium consisted of 130*l.* 3 per cent. reduced annuities, 44*l.* 3 per cent. consols, and 10*l.* 4 per cent. annuities, for each 100*l.* subscribed.

The loan was contracted for on the 14th of June, when the prices of the above stocks were — 3 per cent. reduced, 54; 3 per cent. consols, 55; 4 per cents., 70: hence the parcels of stock given for 100*l.* advanced, were worth —

	£	s.	d.
130*l.* reduced, at 54	70	4	0
44*l.* consols, at 55	24	4	0
10*l.* 4 per cents., at 70	7	0	0
Together	£101	8	0

which would be the value of the omnium, or 1*l.* 8*s.* per cent. premium, independently of any discount for prompt payment.

ONION (Ger. *Zwiebel*; Fr. *Oignon*; It. *Cipolla*; Sp. *Cebolla*; Rus. *Luk*), a well known bulbous plant (*Allium Cepa* Lin.) cultivated all over Europe for culinary purposes. The Strasburgh, Spanish, and Portuguese varieties are the most esteemed.

ONYX (Ger. *Onyx*; Fr. *Onix, Onice*; Sp. *Onique*; Lat. *Onyx*). "Any stone exhibiting layers of 2 or more colours strongly contrasted is called an *onyx*; as banded jasper, chalcedony, &c., but more particularly the latter, when it is marked with white, and stratified with opaque and translucent lines. But the Oriental onyx is considered a substance consisting of 2 or more layers or bands of distinct and different colours. A sard, or sardoine, having a layer of white upon it, would be called an onyx; and according to the number of layers it would be distinguished as an onyx with 3 or more bands. Some of the antique engravings are upon onyxes of 4 bands."—(*Mawe's Treatise on Diamonds, &c.*)

OPAL (Ger. *Opal*; Fr. *Opale*; It. *Opalo*; Sp. *Opalo, Piedra iris*; Port. *Opala*; Lat. *Opalus*), a stone, of which there are several varieties, found in different parts of Europe, particularly in Hungary, and in the East Indies, &c. When first dug out of the earth it is soft, but it hardens and diminishes in bulk by exposure to the air. The opal is always amorphous; fracture conchoidal; commonly somewhat transparent. Hardness varies considerably. Specific gravity from 1·958 to 2·54. The lowness of its specific gravity in some cases is to be ascribed to accidental cavities which the stone contains. These are sometimes filled with drops of water. Some specimens of opal have the property of emitting various coloured rays, with a particular effulgency, when placed between the eye and the light. The opals which possess this property are distinguished by lapidaries by the epithet *Oriental*; and often, by mineralogists, by the epithet *nobilis*. This property rendered the stone much esteemed by the ancients.—(*Thomson's Chemistry*; see also *Plin. Hist. Nat.* lib. xxxvii. c. 6., where there are some very curious details as to this stone.)

Mr. Mawe gives the following statement with respect to the precious opal, or opal *nobilis*:—"The colour of the opal is white or pearl grey, and when held between the eye and the light is pale red, or wine yellow, with a milky translucency. By reflected light it exhibits, as its position is varied, elegant and most beautiful iridescent colours, particularly emerald green, golden yellow, flame and fire red, violet, purple, and celestial blue, so beautifully blended, and so fascinating, as to captivate the admirer. When the colour is arranged in small spangles, it takes the name of the harlequin opal. Sometimes it exhibits only 1 of the above colours, and of these the most esteemed are the vivid emerald green and the orange yellow. When the stone possesses the latter of these colours, it is called the golden opal.

"The precious opal is not quite so hard as rock crystal: it is frequently full of flaws; which greatly contributes to its beauty, as the vivid iridescent colours which it displays are occasioned by the reflection and refraction of light, which is decomposed at these fissures. It is never cut in facets, but always hemispherical. It is generally small, rarely so large as an almond or hazel nut, though I have seen some specimens the size of a small walnut, for which several hundred pounds were demanded. At present, a pretty opal may be bought at from 1 to 3 or 5 guineas, sufficiently large for a pin or ring stone. It requires great care and judgment in the cutting, as it is fragile and easily spoiled.

"The opal, in all ages, has been highly esteemed: the history of the Roman senator, who preferred death rather than give up his opal ring to the Emperor Nero, is familiar to every one. Among the Eastern nations, the opal ranks higher than in Europe.

"A spurious substance is sometimes sold for black and green opal, and often set in jewellery; it occurs of the size of a small almond, but more commonly not larger than a lentil or pea. This *precious gem* is nothing more than the cartilage of the hinge of a large shell. Glass, and even scoria, having an iridescent appearance, have also often been sold for opal."—(*Treatise on Diamonds, &c.* 2d ed. pp. 123—125.)

OPIUM (Ger. *Mohnsaft*; Fr. *Opium*; It. *Oppio*; Sp. and Port. *Opio*; Lat. *Opium*; Arab. *Ufyoon*; Hind. *Ufeem*; Turk. *Madjoon*), the concrete juice of the white poppy (*Papaver somniferum*), which is most probably a native of Asia, though now found growing wild in the southern parts of Europe, and even in England. Opium is chiefly prepared in India, Turkey, and Persia; but the white poppy is extensively cultivated in France, and other parts of Europe, on account of its capsules, and of the useful bland oil obtained from its seeds. It has also been cultivated, and opium made, in England; but there is very little probability of its ever being raised here to any considerable extent.

The poppy is an annual plant, with a stalk rising to the height of 3 or 4 feet; its leaves resemble those of the lettuce, and its flower has the appearance of a tulip. When

at its full growth, an incision is made in the top of the plant, from which there issues a white milky juice, which soon hardens, and is scraped off the plants, and wrought into cakes. In India, these are covered with the petals of the plant to prevent their sticking together, and in this situation are dried, and packed in chests lined with hides and covered with gunny, each containing 40 cakes, and weighing 2 maunds or 149⅓ lbs.; they are exported in this state to the places where the opium is consumed. Turkey opium is in flat pieces, covered with leaves, and the reddish capsules of some species of *rumex*; which is considered an indication of its goodness, as the inferior kinds have none of these capsules adhering to them.

According to Dr. A. T. Thomson, Turkey opium has a peculiar, strong, heavy, narcotic odour, and a bitter taste, accompanied by a sensation of acrid heat, or biting on the tongue and lips, if it be well chewed. Its colour when good is a reddish brown, or fawn colour; its texture compact and uniform. Its specific gravity is 1·336. When soft, it is tenacious; but when long exposed to the air, it becomes hard, breaks with a uniform shining fracture, is pulverulent, and affords a yellowish brown powder.

East Indian opium has a strong empyreumatic smell; but not much of the peculiar narcotic, heavy odour of the Turkey opium; the taste is more bitter, and equally nauseous, but it has less acrimony. It agrees with the Turkey opium in other sensible qualities, except that its colour is blacker, and its texture less plastic, although it is as tenacious. Good Turkey opium has been found to yield nearly 3 times the quantity of *morphia*, or of the peculiar principle of the drug, that is yielded by East Indian opium.

Opium is regarded as bad, when it is very soft, greasy, light, friable, of an intensely black colour, or mixed with many impurities. A weak or empyreumatic odour, a slightly bitter or acrid, or a sweetish taste, or the power of marking a brown or black continuous streak when drawn across paper, are all symptoms of inferior opium. — (*Dispensatory.*)

The raising of opium is a very hazardous business; the poppy being a delicate plant, peculiarly liable to injury from insects, wind, hail, or unseasonable rain. The produce seldom agrees with the true average, but commonly runs in extremes; while one cultivator is disappointed, another reaps immense gain: one season does not pay the labour of the culture; another, peculiarly fortunate, enriches all the cultivators. This circumstance is well suited to allure man, ever confident of good fortune. — (*Colebrooke's Husbandry of Bengal*, p. 119.)

In England, opium is little used, except as a medicine. In 1831 and 1832, the quantity entered for home consumption amounted, at an average, to 28,097 lbs. a year. The principal part of our supply is brought from Turkey. Opium from the latter was worth, in the London market, in December, 1833, from 16*s*. to 17*s*. per lb. The duty is 4*s*.

Consumption and Trade of Opium in China. — Opium is pretty extensively used, both as a masticatory and in smoking, in Turkey and India; but its great consumption is in China and the surrounding countries, where the habit of smoking it has become almost universal. The Chinese boil or seethe the crude opium; and by this process the impurities, resinous and gummy matter, are separated, and the remaining extract only is reserved for use. Thus prepared, the drug loses its ordinary strong and offensive aromatic odour, and has even a fragrant and agreeable perfume. A small ball of it, inserted in a large wooden pipe with some combustible matter, is lighted, and the amateur proceeds to inhale four or five whiffs, when he lies down and resigns himself to his dreams, which are said to have no inconsiderable resemblance to the sensations produced by inhaling the oxide of azote. Those who do not carry the indulgence to excess, do not, it is said, experience any bad effects from it.

The supplies for the Chinese market are derived from India and Turkey, but principally from the former. The government of China has issued edict upon edict, forbidding the importation and consumption of the drug, but without effect. Most part of the authorities openly connive at the proceedings of the smugglers, while the few who might be desirous to enforce the law are wholly without the power; so that the trade is conducted with the greatest facility, and almost perfect security. It was at first carried on at Whampoa, about 15 miles below Canton; next at Macao, whence it was driven by the exactions of the Portuguese; and now the principal *entrepôt* is in the bay of Lintin. The opium is kept on board ships, commonly called receiving ships, of which there are often 10 or 12 lying together at anchor. The sales are mostly effected by the English and American agents in Canton, who give orders for the delivery of the opium; which, on producing the order, is handed over to the Chinese smuggler, who comes alongside at night to receive it. Frequently, however, the smuggler purchases the opium on his own account, paying for it on the spot in silver; it being a rule of the trade, never departed from, to receive the money before the drug is delivered. When it is landed, the laws are equally set at defiance in its conveyance throughout the country; and public smoking houses are said to be every where established!

The consumption of opium in China is rapidly extending. During the first 10 years of the present century, the exports from India to China were about 2,500 chests (of 149⅓ lbs. each). In 1821–22, after the introduction of Malwa opium into the markets of Calcutta and Bombay, the exports increased to 4,628 chests; and, owing, no doubt, to the greatly increased supply and lower price of the article, the exports in 1831–32 exceeded 20,000 chests, worth above 13,000,000 dollars! — (See *antè*, p. 239.) The whole of this immense trade is in the hands of private individuals; the Company not choosing to engage in a business prohibited by the Chinese government. The imports of Turkey opium into China are believed to amount at present to about 1,000 chests. Smyrna is the principal Turkish port for the export of opium. — (See SMYRNA.)

Cultivation of Opium in India. Monopoly. — The cultivation of opium in India is a government monopoly, and is confined to the provinces of Bahar * and Benares, and Malwa in Central India. Every one within the prescribed limits may engage in the opium cultivation; but the drug, when prepared, must all be sold at a fixed price to the Company's agents. The price is very far below the price at which it is

* The opium of Bahar is known in commerce by the name of Patna opium.

afterwards sold for exportation; and the circumstance of its being fixed and inadequate deprives the cultivators of most part of the favourable chances in the lottery previously alluded to by Mr. Colebrooke. Indeed, Mr. C. distinctly tells us (*Husb. Bengal*, p. 118.) that, except in a few situations that are peculiarly favourable, its cultivation is unprofitable. The peasants engage in it with reluctance; and are tempted only by the immediate advances the government agents are obliged to make to enable them to carry on the business.

The monopoly has sometimes produced a nett revenue of about 1,000,000*l.* a year. Latterly, however, this revenue has been materially diminished. This has been occasioned, partly by the conquest of Malwa, and the impossibility of extending the same sort of monopoly into that province that was established in Bahar and Benares, and partly to the introduction of Turkey opium into the Chinese market by the Americans.

The system under which the Indian opium trade has been conducted, has been the theme of much eulogy, and has been supposed to afford the only example of an *unexceptionable monopoly!* By confining the cultivation of the plant to particular districts, and taking care that the whole produce raised in them shall be exported, we prevent, it is said, the use of this deleterious drug from gaining ground in India; while the high price at which it is sold produces a large revenue to the Company's treasury. It is affirmed, too, that even the interests of the Chinese are consulted by the system; that they obtain the drug in a state of purity, which would otherwise be adulterated; and that the high price they are obliged to pay for it merely acts as a wholesome restraint on their vicious propensity to indulge in what is so very injurious. We doubt, however, whether there be much foundation for these eulogies. There can be no question that opium is a very excellent subject for taxation; and the higher the duty can be raised on it, without encouraging smuggling, the better. It is not, however, so clear that the monopoly system is the best way of accomplishing this; and, though the system had been originally a good one, it is no longer possible to enforce it. To imagine, indeed, that the illicit cultivation of, and traffic in, opium can be prevented, now that it is raised in most parts of the extensive country of Malwa, is altogether ludicrous. As to the supposed influence of the monopoly in insuring the purity of the drug, it is sufficient to observe that Malwa opium, which is produced under a comparatively free system, has been rapidly improving in its quality, and now very often fetches a higher price than the opium of Bahar and Benares, where the strictest *surveillance* is kept up. The latter, indeed, has sometimes been nearly unsaleable, from the careless way in which it has been prepared, and the extent to which it was adulterated.—(*Crawfurd on the Monopoly of the East India Company*, p. 55.) It is needless, however, to say more on this point, than that Turkish opium maintains, in respect of purity and careful preparation, a decidedly higher reputation than any produced in India.—(*Thomson's Dispensatory.*)

We doubt, too, whether the use of opium, when taken in moderate quantities, be really so injurious as has been represented. That it may, like spirits and wine, be abused, is abundantly certain; but it has not been shown that it is more liable to abuse than either of these articles. No one doubts that the Chinese, by whom it is principally consumed, are a highly industrious, sober, frugal people; but though it were otherwise, we really do not see that the East India Company are warranted in subjecting a profitable article of cultivation in India to the fetters of monopoly, that the morals of the Chinese may be preserved! It is unnecessary, however, to dwell upon this view of the matter. The Turks and Americans have no scruples of this sort; and the only effect of the Company's attempting to force up the price of opium to an extravagant height, would be to throw a still greater proportion of the trade into the hands of their active competitors, to the great injury of the Indian cultivators

Neither must the interests of the cultivators in India be lost sight of, who are materially injured by the existing system. Even were it in other respects proper, their allowances are far too small.

Upon the whole, therefore, we do not see any solid grounds for supposing that this monopoly forms an exception to the common rule; and we agree with those who think that the better way would be to establish the same system, as to the trade in opium, that is established with respect to the spirit trade in this country; that is, to allow every one to cultivate it upon taking out a licence, and to lay an excise duty on the prepared article. Such a plan would put an end to some most oppressive regulations; and while it would open a new source of wealth to the cultivators, the revenue derived by government would be materially augmented.

Besides the works previously referred to, we have consulted, in compiling this article, *Ainslie's Mat. Indica; Milburn's Orient. Com.; Bell's Review of the Commerce of Bengal; Evidence on East Indian Affairs, before the Parliamentary Committee*, in 1830 and 1831, *&c. &c.*.

OPOBALSAM. See Balsam.

OPOPONAX (Ger. *Opoponax*; Fr. *Opopanax*; It. *Opoponasso*; Sp. *Opoponaca*; Arab. *Jawesheer*), a gum-resin obtained from the *Pastinaca Opoponax*, a species of parsnep. It is a native of the south of Europe, and Asia Minor. The stem rises to the height of 4 or 5 feet, with a thick branched yellow-coloured root. The roots being wounded, a milky juice flows from them, which, being dried in the sun, is the opoponax of the shops. It is in lumps of a reddish yellow colour, and white within. Smell peculiar. Taste bitter and acrid. Specific gravity 1·622. It is imported from Turkey. Being used only to a small extent in medicine, the consumption is inconsiderable.—(*Thomson's Chemistry; Ainslie's Mat. Indica.*)

OPORTO, or PORTO, a large city and sea-port of Portugal, situated on the north bank of the river Douro, about 2 miles from its mouth, in lat. 41° 10′ 30″ N., lon. 8° 37′ 18″ W. It is a beautifully situated, well-built city; and is supposed to have contained, before the late hostilities, 70,000 inhabitants.

Harbour.—The harbour of Oporto is a bar harbour, and can only be entered, at least by vessels of considerable burden, at high water; and it is seldom at any time practicable for vessels drawing more than 16 feet. On the north side of the entrance is the castle of St. Joao de Foz, whence a ledge of rocks, some of which are at all times above water, extends in a south-west direction. The outermost of these rocks, named Filgueira, which is always visible, is left on the left or larboard side on entering. Cabedelo Point, forming the southern extremity of the entrance, is low and sandy. The bar being liable, from the action of the tides, and of sudden swellings or *freshes* in the river, to perpetual alterations, it is exceedingly dangerous for any vessel to attempt crossing it without a pilot. Pilots are always on the alert, and ready to offer their services when a vessel comes in sight, unless the weather be so bad that they cannot go off. On some few occasions of this sort, vessels have been detained for 3 weeks off the port, without having an opportunity of entering. The chapel of St Catherine in a line with that of St. Michael leads over the bar. The ordinary rise of spring tides is from 10 to 12 feet, and of neaps from 6 to 8 feet. A light-house with a fixed light is erected on a hill about 600 yards N. N. W. of St. Joao de Foz.

The swellings of the river, or *freshes*, as they are called, most commonly occur in spring, and are caused by heavy rains, and by the melting of the snow on the mountains. The rise of water at such times is frequently as much as 40 feet; and the rapidity and force of the current are so very great, that no dependence can be placed on anchors in the stream. Fortunately, a *fresh* never occurs without previous warning; and it is then the practice to moor with a cable made fast to trees, or stone pillars erected on the shore for

that purpose. — (For further information as to the harbour of Oporto, see Mr. Purdy's valuable *Sailing Directions for the Bay of Biscay.*)

Trade. — Oporto is the emporium of a large portion of the kingdom of Portugal, and enjoys a pretty considerable foreign commerce. The well known red wine, denominated Port, from its being exclusively shipped at this city, forms by far the largest article of export. The exports vary in different years, from about 16,500 to above 40,000 pipes. England is much the largest consumer of port. The high discriminating duties on French wine originally obtained for it a preference in the British market, to which, though an excellent wine, it had no natural claim; and its long continued use has so confirmed the taste for it, that it is probable it will maintain its ascendancy notwithstanding the late equalisation of the duties. At an average of the 10 years ending with 1833, there were shipped from Oporto for England 22,121 pipes a year; but exclusive of the port shipped from Oporto, a considerable quantity of red wine is now brought from Figueira. Next to England, Brazil, Russia, and the north of Europe in general, are the principal consumers of port. The other exports are oil, oranges and other fruits, wool, refined sugar, cream of tartar, shumac, leather, cork, &c. The imports are corn, rice, beef, salt fish, and other articles of provision; sugar, coffee, &c. from Brazil; cotton and woollen goods, hardware, tin plates, &c. from England; hemp, flax, and deals, from the Baltic, &c.

Besides the British manufactured goods imported into Portugal for the use of the natives, a considerable quantity is destined for the consumption of Spain; being smuggled into that country through Braganza and other towns on the frontier.

Monies, Weights, and *Measures* same as those of Lisbon; which see.

We subjoin an account, obtained from the Portuguese Custom-house, of the wine shipped from Oporto during the 10 years ending with 1833.

Account of the Quantities of Wine exported from Oporto during the Ten Years down to 1833 inclusive; specifying the Countries to which they were sent, and the Quantities sent to each.

Countries.	1833.	1832.	1831.	1830.	1829.	1828.	1827.	1826.	1825.	1824.
Brazil pipes	131	434	824	3,568	6,212	9,585	7,410	61	36	
Denmark	28	100	63	68	88	57	53	11	13	43
U. S. of America	418									
Gibraltar & Spain	37	- -	- -	2	10	5	16	- -	- -	42
Hamburgh	248	771	1,446	375	286	1,600	1,525	12	33	72
Holland	51	48	54	12	82	31	123	9	41	89
The Azores	1	4	2	1	1	26	2	3	1	
Great Britain	19,432	13,573	20,171	19,333	17,832	27,932	24,207	18,310	40,277	9,968
Italy	3	1	3	4	- -	42	13	4	5	2
Ports in Portugal	3	306								
Russia	54	209	145	86	22	129	52	- -	1	138
Newfoundland	84	13	85	76	170	130	21	1	22	7
Sweden	- -	226	433	311	300	225	231	-	8	23
Ports in the Baltic	- -	6	3	- -	- -	- -	- -	- -	- -	11
India	- -	1	1	- -	- -	- -	- -	2	- -	120
Cape Verd Islands	- -	- -	2	- -	- -	1	39			
France	- -	- -	1	2	4	7	5	- -	- -	238
Angola	- -	- -	- -	- -	3	13	71			
South America	- -	858	206	527	361	1,367	337	143	5	5,340
Guernsey & Jersey	- -	- -	- -	- -	- -	73	99	38	- -	24
Bremen	- -	- -	- -	- -	- -	- -	31			
Ships' stores	5	- -	- -	- -	- -	4	2	3	5	
Total	20,495	16,550	23,439	24,165	25,371	41,227	34,237	18,597	40,447	26,117

N.B. — It was not till 1826, that the exclusive privilege possessed by the Oporto Wine Company, of shipping wine for Brazil, was put an end to, previously to which period the shipments for that country were not given.

It is hardly possible to form any estimate of the value of the wine shipped from Oporto; the price varying from 5*l.* to 50*l.* per hogshead. The export duty on wine approved for exportation (*vinho d'embarque*), is about 6 ⊕ 500 *rs.* per pipe, or, at the present (January, 1834) rate of exchange, 1*l.* 9*s.* a pipe. Separated wine (*vinho separado*) is not generally allowed to be exported; but at present it may be shipped on paying 18 ⊕ 500 *rs.* more, or 5*l.* 9*s.* 2*d.* a pipe. The other expenses are trifling. Freight to this country varies from 1*l.* to 1*l.* 11*s.* 6*d.* per pipe. — (For an account of the Oporto Wine Company, see WINE.)

Sometimes wine is purchased from the farmer in the wine country. In this case, the casks are sent about 60 miles up the river, in boats, to be filled. Owing to the miserable state of the roads, the expense of carriage is very considerable; the cartage from and to the river side frequently costing from 1*l.* to 2*l.* per pipe. The freight from the upper country down the river to Oporto is about equal to that from the latter to England. There is also an internal duty of about 1*l.* 2*s.* per pipe on all wine brought down the river. Inasmuch, however, as these charges are perpetually varying, it is not possible to lay before the reader any *pro formâ* account of the cost of wine bought in the Upper Douro.

The Oporto Wine Company have the monopoly of the brandy as well as of the wine trade of the Douro. The consequence is, that brandy costs at this moment, at Oporto, about 36*l.* per pipe; while equally good brandy may be bought in Lisbon, and much better in Cognac, for about 18*l.* per pipe! The abolition of this company would certainly be one of the most desirable reforms that could be accomplished, even in Portugal. — (*Private information.*)

ORANGES (Ger. *Pomeranzen;* Du. *Orangen;* Fr. *Oranges;* It. *Melarance;* Sp. *Naranjas;* Rus. *Pomeranezü;* Hind. *Narunge;* Malay, *Simao-manis*), the fruit of the orange tree. The common, or sweet orange (*Citrus sinensis,* or *Citrus nobilis*), and the Seville, or bitter orange (*Citrus aurantium*), are natives of China; and the Portuguese are entitled to the honour of having transferred the plant to other countries. Particular species of *Citrus* seem to be indigenous to various Eastern countries; but the birth-place of the proper orange may be distinctly traced to China. It is now to be found in our green-houses. Oranges are imported in chests and boxes, packed separately in paper. The best come from the Azores and Spain; very good ones are also brought from Portugal, Italy, Malta, and other places.

The orange trade carried on by this country is of considerable value and importance. Oranges are not much more expensive than most of our superior domestic fruits, while they are, perhaps, the most refreshing and wholesome of those of warmer climates. The entries for home consumption in 1831 and 1832 amounted, at an average, to 270,706 boxes a year; and assuming each box to contain 700 oranges and lemons, the number entered for consumption will have been 189,424,000! The duty produced, at an average of the above years, 61,036*l.* a year. The number of persons employed in the importation and sale of oranges must be very considerable. The policy of charging any duty on oranges seems questionable. They are very apt to spoil; and as no abatement is made from the duty on account of any damage, its influence on their price is much more considerable than might at first be supposed

ORCHILLA WEED, ORCHELLA, OR ARCHIL (Ger. *Orseille;* Fr. *Orseille;* It. *Oricello, Orcella;* Sp. *Orchilla*), a whitish lichen (*Lichen orcella*) found in the Isle of Portland; but that which is used, is imported from the Canary and Cape de Verd Islands, Barbary, and the Levant. From it is obtained the archil, or orchal, of commerce, which yields a rich purple tincture, fugitive, indeed, but extremely beautiful. The preparation of orchilla was long a secret, known only to the Florentines and Hollanders; but it is now extensively manufactured in this country. Archil is generally sold in the form of cakes, but sometimes in that of moist pulp; it is extensively used by dyers; and in times of scarcity, the weed or lichen has sold as high as 1,000*l.* per ton! —(*Thomson's Dispensatory.*) At this moment (January, 1834), Canary orchilla fetches, in the London market, 320*l.* a ton, while that which is brought from Madeira fetches only 200*l.*, and Barbary not more than from 10*l.* to 25*l.* The total quantity imported in 1829 amounted to 1,813 cwt., or 90½ tons.

ORGOL. See ARGOL.

ORPIMENT (Ger. *Operment;* Fr. *Orpiment;* It. *Orpimento;* Sp. *Oropimente;* Lat. *Auripigmentum*), the name usually given to sulphuret of arsenic. When artificially prepared, it is in the form of a fine yellow-coloured powder: but it is found native in many parts of the world, particularly in Bohemia, Turkey, China, and Ava. It is exported from the last two in considerable quantities; and is known in the East by the name of hartal. Native orpiment is composed of thin plates of a lively gold colour, intermixed with pieces of a vermilion red, of a shattery foliaceous texture, flexible, soft to the touch like talc, and sparkling when broken. Specific gravity 3·45. The inferior kinds are of a dead yellow, inclining to green, and want the bright appearance of the best specimens. Its principal use is as a colouring drug among painters, bookbinders, &c. —(*Thomson's Chemistry; Milburn's Orient. Com.*)

ORSEDEW, ORSIDUE, MANHEIM OR DUTCH GOLD (Ger. *Flittergold;* Du. *Klatergoud;* Fr. *Oripeau, Oliquant;* It. *Orpello;* Sp. *Oropel*), an inferior sort of gold leaf, prepared of copper and zinc. It is sometimes called *leaf* brass. It is principally manufactured in Manheim.

OSTRICH FEATHERS. See FEATHERS.

OWNERS OF SHIPS. Property in ships is acquired, like other personal property, by fabricating them, or by inheritance, purchase, &c.

No ship is entitled to any of the privileges of a British ship until she be duly registered as such, and all the provisions in the Registry Act (3 & 4 Will. 4. c. 55.) be complied with. —(See REGISTRY.)

A British ship may belong either to one individual or to several individuals. It is ordered by the act just cited, that the property of every vessel of which there are more owners than one, shall be divided into 64th shares; and that no person shall be entitled to be registered as an owner who does not, at least, hold one 64th share. It is further provided by the same statute, that not more than *thirty-two* persons shall be owners of any one ship at any one time. Companies or associations holding property in ships, may choose *three* of their members to act as trustees for them.

Neither the property of an entire ship, nor any share or shares in such ship, can be transferred from one individual to another, except by bill of sale or other instrument in writing; and before the sale is valid, such bill or instrument must be produced to the collector and comptroller, who are to enter the names, residences, &c. of the seller and buyer, the number of shares sold, &c. in the book of registry of such vessel, and to indorse the particulars on the certificate of registry. —(See the clause in the statute, art. REGISTRY.)

But, though compliance with the directions in the statute accomplishes a complete transference of the property, when the transaction is not in its nature illegal, it gives no sort of security to a transference that is otherwise bad. The purchaser should in all cases endeavour to get *possession* of the ship, or of his share in her, as soon as his title to her or it is acquired, by the registration of the particulars of the bill of sale; for though all the formalities of sale have been completed, yet, if the sellers continue as apparent owners in possession of the ship, their creditors may, in the event of their becoming bankrupt, acquire a right to it, to the exclusion of the purchasers. In the case of a sale or agreement for a part only, it is enough if, the sale being completed, the seller ceases to act as a part owner. —(*Lord Tenterden on the Law of Shipping,* part i. c. 1.)

Property in ships is sometimes acquired by capture. During war, his Majesty's ships,

and private ships having letters of marque, are entitled to make prizes. But before the captors acquire a legal title to such prizes, it is necessary that they should be condemned in the Admiralty or other court constituted for that purpose. When this is done, the captors are considered to be in the same situation, with respect to them, as if they had built or purchased them.

The act 3 & 4 Will. 4. c. 55. has ruled, that no person having the transfer of a ship, or a share of a ship, made over to him as a security for a debt, shall be deemed an owner, or part owner, of such ship. And when such transfer has been duly registered according to the provisions of the act, the right and interest of the mortgagee are not to be affected by the bankruptcy of the mortgagor, though he be the reputed owner, or part owner, of such ship. — (See REGISTRY.)

In the article MASTERS OF SHIPS is given an account of the liabilities incurred by the owners of ships for the acts of the masters. But it has been attempted to encourage navigation by limiting the responsibility of the owners, without, however depriving the freighter of a ship of an adequate security for the faithful performance of the contract. To effect this desirable object, it has been enacted, that the owner or owners shall not be liable to make good any loss or damage happening *without their fault or privity*, to any goods put on board any ship or vessel belonging to such owner or owners, further than the value of such ship or vessel, with all its appurtenances, and the freight due, or growing due, during the voyage that may be in prosecution, or contracted for, at the time when the loss or damage has taken place. — (*53 Geo. 3. c. 159.*)

This limitation was first introduced into our law by the 7 Geo. 2. c. 15. But it had previously been adopted in the law of Holland, and in the justly celebrated French Ordinance of 1681. In the Ordinance of Rotterdam, issued in 1721, it is expressly declared, that "the owners shall not be answerable for any act of the master, done without their order, any further than their part of the ship amounts to." Independently, however, of this general agreement, the expediency of the limitation appears, for the reasons already stated, sufficiently obvious.

It was also enacted in 1786 (26 Geo. 3. c. 60.), that neither the master nor owners of any ship or vessel shall be liable to answer for or make good any gold or silver, diamonds, watches, jewels, or precious stones, lost or embezzled during the course of the voyage, unless the shipper thereof insert in his bill of lading, or declare in writing to the master or owners, the true nature, quality, and value of such articles.

The responsibility, at common law, of a *master* or *mariner* is not affected by the first-mentioned limitation, even though such master or mariner be owner or part owner of the vessel; neither does the limitation extend to the owner or owners of any lighter, barge, boat, &c. used solely in rivers or inland navigation, nor to any ship or vessel not duly registered according to law.

When several freighters sustain losses exceeding in the whole the value of the ship and freight, they are to receive compensation thereout in proportion to their respective losses: and any one freighter, on behalf of himself and the other freighters, or any part owner, on behalf of himself and the other part owners, may file a bill in a court of equity for the discovery of the total amount of the losses, and of the value of the ship, and for an equal distribution and payment. If the bill be filed by or on behalf of the part owners, the plaintiff must make affidavit that he does not collude with the defendants, and must offer to pay the value of the ship and freight, as the court shall direct.

It is usual in most countries, where the part owners of a ship disagree as to her employment, to give those possessed of the greater number of shares power to bind the whole. But in this country, while the majority of the owners in value have authority to employ the ship as they please, the interests of the minority are secured from being prejudiced by having their property engaged in an adventure of which they disapprove. For this purpose the Court of Admiralty has been in the practice of taking a stipulation from those who desire to send the ship on a voyage, in a sum equal to the value of the shares of those who object to it, either to bring back and restore to them the ship, or to pay them the value of their shares. When this is done, the dissentient part owners bear no portion of the expenses of the outfit, and are not entitled to a share in the profits of the voyage; the ship sails wholly at the charge and risk, and for the profit, of the others. — (*Abbott*, part i. c. 3.)

For the statutory enactments as to the sale and transfer of ships, see REGISTRY.

OYSTER, OYSTERS (Ger. *Austern*; Fr. *Huîtres*; It. *Ostriche*; Sp. *Ostras*; Lat. *Ostreæ*). This well known shell-fish is very generally diffused, and is particularly plentiful on the British coasts, which were ransacked for the supply of ancient Rome with oysters. They differ in quality according to the different nature of the soil or bed. The best British oysters are found at Purfleet; the worst, near Liverpool. The nursing and feeding of oysters is almost exclusively carried on at Colchester, and other places in Essex. The oysters are brought from the coast of Hampshire, Dorset, and other maritime counties, even as far as Scotland, and laid on beds or layings in creeks along the

shore, where they grow, in 2 or 3 years, to a considerable size, and have their flavour improved. There are said to be about 200 vessels, from 12 to 40 or 50 tons burden, immediately employed in dredging for oysters, having from 400 to 500 men and boys attached to them. The quantity of oysters bred and taken in Essex, and consumed mostly in London, is supposed to amount to 14,000 or 15,000 bushels a year. — (*Supp. to Ency. Brit.* art. *Fisheries.*)

The imports of oysters fluctuate very much. From 1824 to 1828, both inclusive, none were imported. But, at an average of 1831 and 1832, the imports amounted to 52,095 bushels a year.

The stealing of oysters, or oyster brood, from any oyster bed, laying, or fishery, is larceny, and the offender, being convicted thereof, shall be punished accordingly; and if any person shall unlawfully and wilfully use any dredge, net, &c. for the purpose of taking oysters, or oyster brood, within the limits of any oyster bed or fishery, every such person shall be deemed guilty of a misdemeanour, and, upon being convicted thereof, shall be punished by fine or imprisonment, or both, as the court may award; such fine not to exceed 20*l.*, and such imprisonment not to exceed 3 calendar months. It is provided, that nothing in the act shall be construed as preventing any one from catching *floating fish* within the limits of any oyster fishery, with any net, instrument, or engine adapted to the catching of such fish. — (7 & 8 *Geo.* 4. c. 29. § 36.)

P.

PACKAGE, SCAVAGE, BAILLAGE, AND PORTAGE, were duties charged in the port of London, on the goods imported and exported by aliens, or by denizens being the sons of aliens.

During the dark ages, it was usual to lay higher duties upon the goods imported or exported by aliens, whether in British or foreign ships, than were laid on similar goods when imported or exported by natives. But according as sounder and more enlarged principles prevailed, this illiberal distinction was gradually modified, and was at length wholly abolished, in so far at least as it was of a public character, by the 24 Geo. 3. c. 16. This act, after reciting that "the several duties and restrictions imposed by various acts of parliament upon merchandise are, by the alterations of the trade now carried on between this kingdom and foreign states, in some cases become an unnecessary burden upon commerce, without producing any real advantage to the public revenue, and that it is expedient they should no longer continue," enacts, that the duty commonly called "the petty customs," imposed by the 12 Car. 2., and all other additional duties imposed by any act upon the goods of aliens above those payable by natural-born subjects, should be no longer payable. The act then goes on to provide, that nothing contained in it shall "alter the duties due and payable upon goods imported into or exported from this kingdom in any *foreign* ship, nor the duties of *package* and *scavage*, or any duties granted by charter to the city of London;" and then follow provisions to prevent the city being defrauded of such duties by false entries of aliens' goods in the name of a British subject. — (*Chitty's Commercial Law*, vol. i. p. 160.)

The duties thus preserved to the city were not very heavy; but the principle on which they were imposed was exceedingly objectionable, and their collection was attended with a great deal of trouble and inconvenience. Not being levied in other places, they operated to the prejudice of the trade of the metropolis. For these reasons, we observed, in the former edition of this work, that "if the funds of the corporation will not admit of their following the liberal example of the legislature, by voluntarily abandoning this vexatious impost, it would be good policy to give them a compensation for relinquishing it." And we are glad to have to state that this suggestion has since been carried into effect. The act 3 & 4 Will. 4. c. 66. authorised the Lords of the Treasury to purchase up the duties in question from the city. This has been done, at an expense of about 140,000*l.*, and the duties are now abolished. There is a Table of the duties in the former edition of this work.

PACKETS. See NEW YORK, PASSENGERS, and POST-OFFICE.

PALERMO (anciently PANORMUS), a large city and sea-port, the capital of the noble island of Sicily, on the north coast of which it is situated, the light-house being in lat. 38° 8′ 15″ N., lon. 13° 21′ 56″ E. Population, 170,000.

The bay of Palermo is about 5 miles in depth, the city being situated on its south-west shore. A fine mole, fully ¼ of a mile in length, having a light-house and battery at its extremity, projects in a southerly direction from the arsenal into 9 or 10 fathoms water, forming a convenient port, capable of containing a great number of vessels. This immense work cost about 1,000,000*l.* sterling in its construction; but the light-house, though a splendid structure, is said to be very ill lighted. There is an inner port, which is reserved for the use of the arsenal. Ships that do not mean to go within the mole may anchor about ½ a mile from it, in from 16 to 23 fathoms, the mole light bearing N.W.¾ W. A heavy sea sometimes rolls into the bay, but no danger need be apprehended by ships properly found in anchors and chain cables. In going into the bay, it is necessary to keep clear of the nets of the tunny fishery, for these are so strong and well moored, as to be capable of arresting a ship under sail. — (*Smyth's Sicily*, p. 70. and *Appen.* p. 4.)

Money. — Since 1818, the coins of Sicily have been the same as those of Naples, their names only differing. — (See NAPLES.) The ducat, = 3*s.* 5·2*d.* sterling, is subdivided into 100 *bajocchi* and 10 *piccioli*;

but accounts are still generally kept in *oncie*, *tari*, and *grani*: 20 grani = 1 taro; 30 tari = 1 oncia. The oncia = 3 ducats; and 1 carlino of Naples = 1 taro of Sicily. The Spanish dollar is current at 12 tari 8 grani

Weights. — These are the *cantaro grosso*, subdivided into 100 *rottoli grossi* of 33 onzie, or into 110 rottoli sottili of 30 oncie; and the *cantaro sottile*, subdivided into 100 rottoli sottili of 30 oncie, or 250 lbs. of 12 oncie. The rottolo of 33 ounces = 1·93 lbs. avoirdupois = 2·34 lbs. Troy = 8·73 hectogrammes = 1·77 lbs. of Amsterdam = 1·8 lbs. of Hamburgh. The rottolo of 30 ounces = 1·75 lbs. avoirdupois = 2·13 lbs. Troy = 7·94 hectogrammes = 1·6 lbs. of Amsterdam = 1·64 lbs. of Hamburgh.

100 Sicilian pounds of 12 ounces = 70 lbs. avoirdupois = 85·11 lbs. Troy = 31·76 kilog. = 64·23 lbs. of Amsterdam = 65·58 lbs. of Hamburgh.

Measures. — The *salma grossa* = 9·48 Winch. bush.: the *salma generale* = 7·62 Winch. bush.

The principal liquid measure is the tonna, divided into 4 barili, each equivalent to 9⅝ wine gallons. 1 barile = 2 quartare; 1 quartara = 20 quartucci. The caffiso of oil = 4⅔ Eng. gallons.

The yard or *canna* = 8 *palmi*; 2½ palms = 1 yard Eng. — (*Nelkenbrecher*; *Smyth*, p. 62. App.)

Tares. — Coffee, indigo, pepper, and dye woods, 2 per cent. and weight of package. Cinnamon, 6 rottoli per seron, with 1 wrapper, or 8 rottoli, with 2 wrappers; cocoa, 2 per cent., weight of package, and 3 per cent. for dust; cod-fish, 3 per cent.; herrings, 12 per cent.; tin, 13 rottoli per barrel; wax, weight of package, and 3 to 4 per cent. extra allowance; Havannah sugars, 16 per cent.; Brazil do., in short cases, 18 per cent., and in long cases, 20 per cent.; crushed sugar, weight of cask, and 5 per cent., or 13 per cent. in all, at the option of the buyer; East India do., in bags, 8 rot. to 10 rot. per bag. 1 rotolo taken as weight of bag, for coffee and cocoa in bags.

Charges on Goods. — The regular charges on the sale of goods consigned to Palermo, are — commission, 3 per cent.; brokerage, ½ per cent.; warehouse rent, ½ per cent.; and porterage and boat hire; with 2 per cent. *del credere*, — imports being almost always sold on credit. The charges may occasionally vary ½ to 1 per cent., and imports are frequently sold duty paid; the prices, however, so obtained, fully compensate for the trifling increase of charges.

The charges on goods exported are — 3 per cent. commission; brokerage, so much per *cantaro*, *salma*, &c., generally amounting to about ½ per cent., except on fruit, on which it is equivalent to from 2 to 3 per cent.

Imports and Exports. — The great articles of export from Sicily are — grain, particularly wheat and barley; beans, wine, brandy, oil, barilla, lemons and oranges, lemon juice, almonds, salt, shumac, salt-fish, cheese, with brimstone, argol, manna, liquorice, pumice stone, rags, skins, honey, cotton wool, nuts, linseed, saffron, &c. Wheat is largely exported. It is of a mixed quality, hard, and is generally sold from the public magazines, or *caricatori* (see *post*), by measure, without weight. But the best hard wheat, grown in the neighbourhood of Palermo, is sold by the salma of 272 rottoli = 476 lbs. Eng.; the difference between weight and measure being made good by the seller or buyer, as the case may be. Wine is principally shipped from Marsala; lemons, oranges, and lemon juice, from Messina; salt, from Trapani; and barilla, from the southern coast. But all the articles to be found on the coast may, for the most part, be had at Palermo; unless, however, the quantity required be small, it is usually best to ship them from the outports, the expense of their conveyance to Palermo being very heavy. The crops of barilla and shumac come to market in August; but brimstone, salt, oil, wine, rags, &c. may generally be had all the year round. The first shipments of lemons and oranges may be made in the beginning of November. Purchases of produce are always paid for in cash, generally ⅓ on making the purchase, and the other ⅔ on delivery, when in Palermo, and on receiving order for delivery, on the coast.

The imports consist of sugar, coffee, cocoa, indigo, dye woods, spices, iron, tin, hides, Newfoundland cod, cotton and woollen stuffs, timber for building, &c. We have no means of forming any estimate either of the quantity or the value of the principal articles of import and export. Silk is a staple produce of the island; but its exportation in an unwrought state, except to Naples, is prohibited. — (We have gleaned these details principally from *private communications*. The best account of the trade of Sicily, though now a little antiquated, that we have met with in any English work, is contained in *Swinburne's Travels in the Two Sicilies*, 4to ed. vol. ii. pp. 401—413. See also the article NAPLES in this work.)

Remarks on the Trade, &c. of Sicily. — This noble island contains about 10,500 square miles, being the largest in the Mediterranean, and one of the most fertile and best situated in the world. Its population is about 1,900,000. In ancient times, Sicily was celebrated for the number, magnitude, and opulence of its cities; and, notwithstanding its population was then, at least, treble its present amount, it obtained, from its furnishing vast supplies of corn and other articles of provision for the use of Rome, the appropriate epithet of *horreum Romanorum*. When the Roman power had been overthrown, Sicily was occupied, first by the Saracens, then by the Normans, and after them by the French. The Sicilian Vespers put a fatal period to the dominion of the latter; and a prince of the house of Aragon having been called to the Sicilian throne, the island became, in course of time, a dependency, first of the crown of Spain, and more recently of that of Naples.

It is to this dependence that we are induced to ascribe the backward state of Sicily. The multiplied abuses which grew up in Spain, under Ferdinand the Catholic, and his successors of the Austrian line, flourished with equal luxuriance in Sicily, and have proved no less destructive of the industry and civilisation of its inhabitants than of those of Spain. The Bourbon or Neapolitan régime has been equally pernicious. "The government of this island," says a recent and most intelligent observer, "seems to unite in itself nearly all the defects, both theoretical and practical, of which political institutions are susceptible. It is a model in its way. We find here a system of laws quite barbarous, and the administration of them notoriously corrupt; high taxes, levied arbitrarily and unequally; the land generally held on such a tenure as makes it unalienable, so that few can ever be proprietors; and farming leases, for church land at least, are binding on the farmer only, and not on his landlord. For want of roads, produce cannot be exported from one part of the island to another; the consequence of which is, that a scarcity and a glut may and frequently do exist at the same time in different parts of the island, without the means of timely and effectual communication." — (*Simond's Italy and Sicily*, p. 529.) But the grand curse of Sicilian, as well as of Sardinian, industry — (see CAGLIARI) — is the restriction on the exportation of corn. It is true that the difficulties in this respect are not so great now as formerly, but they are still such as to oppose an

invincible obstacle to the spread of improvement, and to the developement of the national resources. No exportation of corn can take place without leave of the *real patrimonio*, — a tribunal that pretends to take a yearly account of the crop, and of the supply required to meet the home demand. When this body has determined that an exportation may take place, it issues (or rather, we believe, sells) its licences to export certain specific quantities, to a few favoured individuals *, who, in consequence, are able to regulate the price; so that they, and not the corn growers, reap all the advantage! Thus, says M. Simond, "neither scanty nor plentiful crops affording a chance of gain, farmers are discouraged, and corn is frequently scarce in a country once the granary of Imperial Rome, although its own population be now reduced to 1-6th of what it was at that period.† Such is the system of minute and vexatious regulations, that a man cannot go in or out of town with a loaf of bread or a joint of meat without special permission. The revenue laws in England are sufficiently vexatious, but they at least answer their fiscal purpose. Here the vexation is gratuitous; for little or nothing comes of it ultimately, drained as the little sources of revenue are, in their way to the treasury, by malpractices of all sorts." — (p. 530.)

There are only certain ports from which corn can be exported. This limitation has given rise to the establishment of public magazines or *caricatori*, where the corn may be deposited till an opportunity occurs of shipping it off. Provided it be of good quality (*mercantibile* or *recetibile*), and provided it be brought in immediately after harvest, or, at farthest, in August, it is warehoused free of expense; what it gains in bulk after that period (about 5 per cent.) being sufficient to defray all expenses. The receipt of the *caricator*, or keeper of the magazine, is negotiable like a bill of exchange, and is the object of speculative purchases on the exchange at Palermo, Messina, &c. according to the expected rise or fall in the price of corn. The depositor of a quantity sells it in such portions as he pleases, the whole being faithfully accounted for. The public magazines, in some parts of the island, are either excavations into calcareous rocks, or holes in the ground shaped like a bottle, walled up, and made water-proof, containing each about 200 salme of corn, or about 1,600 English bushels. The neck of the bottle is hermetically closed with a stone fastened with gypsum. Corn may be thus preserved for an indefinite length of time; at least, it has been found in perfectly good order after the lapse of a century. — (*Simond*, p. 540.; *Swinburne*, vol. ii. p. 405. For an account of the oil *caricatori* of Naples, see Olive Oil.)

Hemp grows very well in Sicily; and when the English were there, their ships were abundantly supplied with that article; but its exportation being no longer permitted, its culture is now, of course, neglected! — (*Simond*, p. 539.) Sugar canes were, at one time, pretty extensively cultivated in Sicily; but their culture has been long declining, and is now nearly extinct.

Were the bounty of nature towards Sicily not counteracted by vicious laws and institutions, she would undoubtedly be one of the richest and finest of European countries. All that she requires is security of property and freedom of industry. Let but these be given to her, and a few years will develope her gigantic resources, and elevate Girgenti, Termini, and Sciacca, to a very high rank among corn-shipping ports.

PALM OIL (Ger. *Palmol*; Fr. *Huile de palme*, *Huile de Senegal*; It. *Olio di palma*; Sp. *Aceite de palma*) is obtained from the fruit of several species of palms, but especially from that of the *Elais Guineensis*, growing on the west coast of Africa, to the south of Fernando Po, and in Brazil. When imported, the oil is about the consistence of butter, of a yellowish colour, and scarcely any particular taste: by long keeping it becomes rancid; loses its colour, which fades to a dirty white; and in this state is to be rejected. It is sometimes imitated with hog's lard, coloured with turmeric, and scented with Florentine iris root. The inhabitants of the coast of Guinea employ palm oil for the same purposes that we do butter. — (*Lewis's Mat. Med.*; *Thomson's Dispensatory.*)

Account of the Quantities of Palm Oil entered for Home Consumption in the United Kingdom, the Amount of Duty received thereon, and the Rate of Duty, each Year since 1821.

Years.	Quantities entered for Home Consumption.	Amount of Duty received thereon.	Rates of Duty charged.	Years.	Quantities entered for Home Consumption.	Amount of Duty received thereon.	Rates of Duty charged.
	Cwt.	*L.* *s.* *d.*	*Per Cwt.*		*Cwt.*	*L.* *s.* *d.*	*Per Cwt.*
1821	100,059	12,289 11 6	2*s.* 6*d.*	1827	98,070	12,356 10 4	2*s.* 6*d.*
1822	69,857	8,429 9 8	ditto	1828	120,599	15,084 15 8	ditto
1823	73,666	9,045 5 1	ditto	1829	175,393	21,952 0 5	ditto
1824	74,624	9,373 2 0	ditto	1830	179,658	22,468 5 1	ditto
1825	84,996	10,632 17 4	ditto	1831	175,452	21,932 0 0	ditto
1826	94,268	11,783 10 3	ditto	1832	220,328	27,542 0 0	ditto

The price of palm oil (duty paid) varies from 33*l.* to 34*l.* a ton.

* The late Queen is said to have been a great dealer in corn on her own account!

† We cannot help looking upon this as an exaggeration. There do not seem to be any good grounds for thinking that Sicily ever contained more than 6,000,000 inhabitants, — that is, a little more than 3 times as many as at present.

Almost all the palm oil made use of in this country is brought from the western coast of Africa, south of the Rio Volta.

PAMPHLET, a small book, usually printed in the octavo form, and stitched.

It is enacted by 10 Ann. c. 19. § 113., that no person shall sell, or expose to sale, any pamphlet, without the name and place of abode of some known person, by or for whom it was printed or published, written or printed thereon, under a penalty of 20*l.* and costs.

It is enacted by the 55 Geo. 3. c. 185., that every book containing 1 whole sheet, and not exceeding 8 sheets, in 8vo, or any lesser size; or not exceeding 12 sheets in 4to, or 20 sheets in folio, shall be deemed a pamphlet. The same act imposed a duty of 3*s.* upon each sheet of *one* copy of all pamphlets published. This duty, which was at once vexatious and unproductive, hardly ever yielding more than 1,000*l.* or 1,100*l.* a year, was repealed in 1833.

PAPER (Ger. and Du. *Papier;* Fr. *Papier;* It. *Carta;* Sp. *Papel;* Rus. *Bumaga;* Lat. *Charta;* Arab. *Kartas;* Pers. *Kaghas*). This highly useful substance is, as every one knows, thin, flexible, of different colours, but most commonly white, being used for writing and printing upon, and for various other purposes. It is manufactured of vegetable matter reduced to a sort of pulp. The term paper is derived from the Greek *παπῦρος* (*papyrus*, see *post*), the leaves of a plant on which the ancients used to write. Paper is made up into *sheets*, *quires*, and *reams;* each quire consisting of 24 sheets, and each ream of 20 quires.

Historical Sketch of Paper. Difference between ancient and modern Paper. — It has often been a subject of wonder with those learned and ingenious persons who have written concerning the arts of the ancient world, that the Greeks and Romans, although they possessed a prodigious number of books, and approached very near to printing in the stamping words and letters, and similar devices, should not have fallen upon the art; the first rude attempts at typography being sufficiently obvious, though much time and contrivance have been required to bring the process to the perfection in which it now prevails. They ought rather, perhaps, to have wondered that the more civilised nations of antiquity did not invent paper, which must precede the invention of printing, as may be easily shown. The rocks, pillars of stone or of marble, and especially the walls of edifices, supply fixed surfaces, upon which, were we unprovided with more convenient tablets, much valuable information might be preserved; and were all our public and many of our private buildings thickly covered with inscriptions, the memory of divers historical facts, and other matters of importance, might be handed down to posterity. Men wrote thus in very remote ages; and the old usage is still retained in many instances, particularly in our churches and cemeteries. In very remote ages, also, we read that they were accustomed to write upon portable surfaces of various kinds: and if it were possible to deprive us of our ordinary means of fixing and communicating our thoughts, modern ingenuity would speedily reinvent numerous expedients which have long been superseded; and we should have recourse to plates of metal of various dimensions, sometimes, probably, as thin as foil; to slices of soft, light wood, not thicker than those of which band-boxes are sometimes made; to cloth, leather, and the like. These materials would often be primed, like the canvass of painters, that they might more readily receive, and more plainly show, the ink or paint that formed the characters. It is evident that, in the course of time, large libraries might be gradually composed of books constructed in this manner; and the whole amount of human learning might still be very considerable. The substances which we have enumerated are all somewhat costly: it would be desirable, therefore, to find one that was cheaper; and we should doubtless direct our attention very early to that which has served the office of paper in all times, and is used as such in some countries of the East at this day, — we mean the leaves of trees. Some of the palms, and other vegetables, that are natives of hot countries, furnish the Orientals with books that are not incommodious: the leaves of the indigenous plants of Great Britain are not so well suited for the purpose; but by care in the selection, and skill in the preparation, some might certainly be chosen, which would, in some degree, be fit to receive writing. Leaves, when they are dry, are apt to split in the direction of the fibres; it has commonly been found expedient, therefore, to glue others at the back in an opposite direction; and by thus crossing the fibres at right angles, the texture is strengthened; and when it has been pressed and polished, the page is less unseemly and inconvenient than might have been supposed. Such, in the main, was the structure of the ancient paper. In Sicily, and in other countries on the shores of the Mediterranean Sea, but principally in Egypt and in the Nile, or rather in the ponds and ditches that communicate with that river, grows, in the nineteenth century after the death of the last of the Ptolemies, as of old under that illustrious dynasty, and under their predecessors the Pharaohs, a lofty and most stately reed or rush, the *Cyperus Papyrus* of modern botanists. It has been introduced into the hot-houses of some of our botanical gardens, where it may be seen conspicuous with its long, drooping, and graceful plume. A description of the various purposes to which the ancients applied this useful plant would fill a volume; we shall speak of that only from which it has earned an immortality of renown. The inner bark was divided with a needle into very thin coats; these were placed side by side longitudinally, and the edges were glued together; similar

layers were glued across these behind, at right angles, to give the page the requisite strength; and the sheets were pressed, dried, polished, and otherwise prepared for use. Ancient writers have described the process, and especially Pliny (*Hist. Nat.* lib. xiii. c. 11, 12, 13.). From that naturalist, and the notes of Hardouin and his other commentators, it may be fully traced; and Mr. Bruce has collected the authorities, and has added his own observations, in the 7th vol. of the 8vo edition of his *Travels*. That remarkable person even attempted to make paper from the papyrus; in which, however, he was not very successful; and he imputes his failure to the erroneous directions of Pliny; for it seems not to have occurred to him, that, had he endeavoured, trusting to written directions, without experience and traditional art, to make modern paper, or even a pair of shoes, he would, most probably, have been equally infelicitous. Alexandria was the chief seat of this valuable manufacture; but in later periods much was also made at Rome, where an article of superior beauty was produced. Pliny enumerates the various kinds of paper that were composed, from the coarsest, which was used, like our brown paper, for packing, to the most expensive and finest. The consumption of paper was very considerable; it seems to have been tolerably cheap; and since the principal part was made at Alexandria, it was an important article in the commerce of that city — furnishing employment for many workmen and much capital. Flavius Vopiscus relates, that in the 3d century, the tyrant Firmus used to say there was so much paper there, and so large a quantity of the glue or size used in preparing it, that he could maintain an army with it: — "*Tantum habuisse de chartis, ut publicè sæpe diceret, exercitum se alere posse papyro et glutino.*" We may doubt whether the value of the paper which any single city now contains would do the like. Learned men have discussed the antiquity of this manufacture. It is not improbable that an earlier date ought to be assigned to it than is commonly given: nor ought we rashly to conclude that it was unknown at a particular period, because it is not mentioned in a poem of that time; for the poet sought to celebrate the achievements of gods and heroes, and not to compose an Encyclopædia, or a Dictionary of the Arts and Sciences. Ancient paper was white, smooth, durable, and well adapted in all respects for writing; but it was not suited for the printer: by reason of the closeness of the grain, it would not receive the ink from the types more kindly than shavings of wood, &c.; and so brittle was its texture, that it would have shivered into pieces under the press. Nor did it resemble modern paper in its structure: it was, in truth, an inartificial mass; leaves, or rather strips of bark ("*viscera nivea virentium herbarum*"), being pasted together by the edges, others were laid across them behind; whereas the paper which we now use is, perhaps, the most subtle and extraordinary of human inventions. If a cistern or other vessel be filled with water turbid with lime or clay, and the earth allowed to subside slowly, the water being evaporated, or drawn off gently, and the sediment left to dry, the calcareous or argillaceous deposit will represent faithfully the formation of paper; and it will be smooth, and of an equal thickness throughout; for an equal portion of the earth of which it is formed was suspended in the troubled water over each point in the bottom where it finally lodged. In making paper, the water is turbid with the pulp or paste of triturated rags, and the suspended pulp is not suffered to subside slowly; but a sieve or frame of wire gauze is dipped equally into the cistern, and is raised gently to the surface, and agitated in a level position, which facilitates the passage of the water through the wires, while the fibres of rag are in some degree interwoven by it, and, remaining on the surface of the sieve, form the sheet of paper. This is pressed between felts, to exclude the water, and to render its texture closer; it is dried and sized, and undergoes various operations, which it is unnecessary to enumerate, as we seek only to show that the result of this wonderful invention is as much an aqueous deposit as the earthy sediment at the bottom of a cistern, although it is obtained more rapidly. Modern paper has nothing in common with the ancient, save that vegetable fibre is the basis of both. The application of rotary motion has effected wonders in many of the arts; nor have the results been less astonishing in the paper-mill: instead of dipping the sieves or frames into the cistern of turbid water, a circular web, a round towel of woven wire, revolves under the vessel, receives the deposit, conveys it away, and, by an adjustment of marvellous delicacy, transfers it uninjured, although as frail as a wet cobweb, to a similar revolving towel of felt: thus an endless web of paper is spun, as long as the machine continues to move, and the water charged with pulp is supplied. We are unable to pursue the process, however interesting; for we desire merely to explain the general principle according to which our paper is constructed. It is to this admirable material that we owe the invention of printing, which could not subsist without it: its pervious and spongy texture imbibes and retains the ink, and its toughness resists the most violent pressure; and, in a well-bound book, under favourable circumstances, its duration is indefinite, and, for all practical purposes, eternal! It is true that legal documents are sometimes printed on parchment, which is less liable to be torn, or injured by rubbing; and the luxury of typography occasionally exhibits a few impressions of a splendid work upon vellum; and that these two substances were known

to the ancients: but they are necessarily expensive, and the cost of either far exceeds the price of the best penmanship; so that it would be altogether unprofitable to cast types, to construct presses, and to incur the various and heavy charges of an establishment for printing, unless we possessed a cheaper material.

We owe the introduction of paper into Europe to the Arabians or Moors. There is some uncertainty as to the precise era of its first appearance; and we are unable to trace the origin of the precious invention, or even to imagine by what steps men were led to it. We cannot conceive how any one could be tempted to pound wet rags in a mortar, to stir the paste into a large body of water, to receive the deposit upon a sieve, to press and to dry it. The labour of beating rags into pulp by the hand would be as hopeless as it would be tedious and severe. It is true that paper was originally made of cotton, —a substance less obstinate than linen rags, which are now commonly used. At present, the fresh rags are torn in pieces by a powerful mill: formerly, it was the practice to suffer them to rot; to place them in large heaps in a warm and damp situation, and to allow them to heat and ferment, and to remain undisturbed until mushrooms began to grow upon them; so that, being partially decayed, it might be less difficult to triturate them. Nevertheless, the invention of paper is a mystery. The Chinese possess the arts of making paper and of printing; but we know not how long they have had them, nor whether the Mohammedans learned the former from them. The illiterate inhabitants of some of the islands in the South Seas were able to compose a species of paper, which they used in fine weather for raiment, of the bark of trees. The basis of paper being the vegetable fibre, it has been made of various substances, as straw, as well as of rags.*

Manufacture of Paper in England. — The application of paper to the purposes of writing and printing, and the fact of its being indispensable to the prosecution of the latter, render its manufacture of the highest utility and importance. But, even in a commercial point of view, its value is very considerable. France, Holland, and Genoa had, for a lengthened period, a decided superiority in this department. The finest and best paper being made of linen rags, its quality may be supposed to depend, in a considerable degree, on the sort of linen usually worn in the country where it is manufactured; and this circumstance is said to account for the greater whiteness of the Dutch and Belgian papers, as compared with those of the French and Italians, and still more the Germans. The rags used in the manufacture of writing paper in Great Britain are collected at home; but those used in the manufacture of the best printing paper are imported, principally, from Italy, Hamburgh, and the Austrian States, by way of Trieste. —(See Rags.) We believe, however, that it was owing rather to the want of skill, than, as has sometimes been supposed, to the inferior quality of the linen of this country, that the manufacture of paper was not carried on with much success in England till a comparatively recent period. During the 17th century, most part of our supply was imported from the Continent, especially from France. The manufacture is said to have been considerably improved by the French refugees who fled to this country in 1685. But it is distinctly stated in *The British Merchant* (vol. ii. p. 266.), that hardly any sort of paper, except brown, was made here previously to the Revolution. In 1690, however, the manufacture of white paper was attempted; and within a few years, most branches were much improved. In 1721, it is supposed that there were about 300,000 reams of paper annually produced in Great Britain, which was equal to about two thirds of the whole consumption. In 1783, the value of the paper annually manufactured was estimated at 780,000*l.* At present, besides making a sufficient quantity of most sorts of paper for our own use, we annually export about 100,000*l.* worth of books. We still, however, continue to import certain descriptions of paper for engraving from France, and a small supply of paper hangings. The duty on both amounts to about 2,800*l.* a year.

In 1813, Dr. Colquhoun estimated the value of paper annually produced in Great Britain at 2,000,000*l.*; but Mr. Stevenson, an incomparably better authority upon such subjects, estimated it at only half this sum. From information obtained from those engaged in the trade, we incline to think that the total annual value of the paper manufacture in the United Kingdom, exclusive of the duty, may at present amount to about 1,200,000*l.* or 1,300,000*l.* There are about 700 paper-mills in England, and from 70 to 80 in Scotland. The number in Ireland is but inconsiderable. Of these mills, we believe very few have lately been unemployed. About 27,000 individuals are supposed to be directly engaged in the trade: and, besides the workmen employed in the mills, the paper manufacture creates a considerable demand for the labour of millwrights, machinists, smiths, carpenters, iron and brass founders, wire-workers, woollen manufacturers, and others, in the machinery and apparatus of the mills. Some

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* We are indebted for this valuable historical sketch to our learned friend, T. J. Hogg, Esq., barrister-at-law. The reader may resort, for further information as to the history of paper, to the article on it in *Rees's Cyclopædia.*

parts of these are very powerful, and subject to severe strain; and other parts are complicated and delicate, and require continual renovation. Owing to this, the manufacture is of much greater importance, as a source of employment, than might at first be supposed, or than it would seem to be considered by government, who have loaded it with an excise duty amounting to more than *three times as much as the total wages of the work-people employed!*

The modern discoveries in chemical science have not only materially facilitated the manufacture, but have greatly enlarged the supply of materials from which paper may be made. Until within these few years, the sweepings of cotton mills, owing to the grease and dirt with which they are mixed up, were of no value whatever, except as manure. But means having been discovered of rendering them white, they are now made into very good paper; and the neighbourhood of Manchester has, in consequence, become a principal seat of the manufacture.

During the present century, so remarkable for improvements in the arts, this manufacture has been signally promoted, notwithstanding the excise regulations, by the application of machinery to the conversion of pulp into paper. The first idea of this originated in France: a model of the machinery was brought to this country by a M. Didot, which, though very far from giving assurance of success, was yet sufficient to induce English capitalists and engineers, particularly Mr. Donkin, to follow up the scheme; and in the course of a few years they have brought it to a high degree of perfection. Mr. Dickinson, of Hertfordshire, one of the most intelligent mechanists and extensive paper manufacturers in England, has invented a machine of a different construction for the same purpose, and has also introduced various subsidiary improvements into the manufacture. The result is all but miraculous. By the agency of a great deal of complicated machinery, so admirably contrived as to produce the intended effect with unerring precision and in the very best manner, a process, which in the old system of paper-making occupied about *three* weeks, is performed in as many minutes! A continuous stream of fluid pulp is, within this brief space of time, and the short distance of 30 feet, not only made into paper, but actually dried, polished, and every separate sheet cut round the edges, and rendered completely ready for use! The paper manufactured by this wonderful combination of intelligence and power is, at once, moderate in price, and for most purposes superior in quality to that which was formerly made by hand. The sample before the reader, though not the finest that is made, will warrant what is now stated. Mr. Dickinson has very recently made an important improvement in the paper manufacture, on the principle of veneering in cabinet work. He makes two webs of paper, each by a separate process; and by laying them together while in an early stage, they are rendered inseparable by the pressure to which they are subjected. This paper is used in copperplate printing; and by adopting a peculiar method of preparing the pulp, and selecting a finer rag for the web which forms the face of the paper, it is much better calculated for taking a fine impression. This admirable invention has put nearly a total stop to the importation of French paper, which was formerly used in considerable quantities by copperplate printers.

Duty on Paper. Excise Regulations. — It is difficult to say whether the duty on paper, or the regulations under which that duty is collected, be the more objectionable. All writing, coloured, or wrapping paper, card-boards, and pasteboards, are denominated 1st class paper, and pay 3*d.* per lb. duty (28*s.* a cwt.); unless *manufactured wholly of tarred ropes, without the tar being previously extracted*, in which case the paper is denominated 2d class, and pays 1½*d.* per lb. (14*s.* a cwt.). Millboards and scale-boards, made of the same materials as 2d class paper, pay 2¼*d.* per lb. (21*s.* a cwt.) duty.

The duty on the various descriptions of 1st class paper varies from about 25 or 30 per cent. on the finest, to about 200 per cent. on the coarsest! A duty so oppressive has led to the commission of very great frauds, which all the vigilance of the officers, and the endless multiplication of checks and penalties, have been unable to prevent; the real effect of such miserable devices being to injure the honest manufacturer, and to give those of a different character greater facilities for carrying on their fraudulent schemes. But, laying out of view for a moment the oppressiveness of the duty, can any thing be more preposterously absurd, than to interdict the manufacturer of wrapping paper (for it is to him that the regulation applies) from using any other material than *tarred ropes!* If there must be a duty on paper, let it be assessed upon the finished article on an *ad valorem* principle; but do not let the plans and combinations of the manufacturer be interfered with. Were it not for the existing regulation, wrapping paper of equal strength and better appearance than what is now manufactured, might be made of much less costly materials. Since the peace, and the very general introduction of iron cables, tarred ropes have advanced considerably in price; but as the use of *any other material whatever* would occasion an increase of 14*s.* a cwt. of duty, advantage cannot be taken of this circumstance; so that the excise regulation, without putting one sixpence into the pockets of government, obliges the public to pay an increased price for an inferior article! Neither is this its only effect: a good deal of the refuse thrown out in sorting rags, which might be used in the manufacture of coarse wrapping paper, is at present sold by the manufacturers for about 3*s.* a cwt.; while a good deal that might be used in the same way cannot be sold at all, but is absolutely lost. It is plain, therefore, that this regulation has a two-fold operation: first, in adding to the cost of wrapping paper, by compelling it to be made from a comparatively expensive article; and, secondly, in adding to the expense of fine paper, by preventing the refuse of the rags used in its manufacture from being beneficially employed.

The other regulations in the excise acts (34 Geo. 3. c. 20. and 42 Geo. 3. c. 94.) as to paper, are of a piece with that now brought under the reader's notice. Every step of the manufacture must be conducted under the *surveillance* of the excise; and the provisions as to entries, folding, weighing, sorting, labelling, removing, &c. are not only exceedingly numerous, but are in the last degree vexatious, at the same time that compliance with them is enforced under ruinous penalties. That this is not an exaggerated statement will be obvious from the following extracts from the statements of

manufacturers, given in Mr. Poulett Thomson's admirable speech on the taxation of the empire, 26th of March, 1830.

"We are bound," says a manufacturer on whose accuracy and honour I (Mr. P. Thomson) can rely, "to give 24 or 48 hours' notice (according to the distance the exciseman lives), before we can change any paper, and to keep it in our mills for 24 hours afterwards before we send it to market, unless it has been reweighed by the supervisor; to have the different rooms in our manufactories lettered; to have our engines, vats, chests, and presses numbered; and labels pasted on each ream: should we lose one label, the penalty is 200*l.* I generally write a request for 500 labels to the excise at one time; and should any person get into my mill, and steal or destroy them, the penalty would be 100,000*l.* I believe there is not any kind of paper pays more than 20*s.* per ream duty. If the penalty were 40*s.*, it would be quite sufficient to answer every purpose for the security of the revenue. We are obliged, also, to take out a yearly licence; and a mill with 1 vat pays as much as one that has 10."

Another says,—"It is no slight aggravation of the evil, that the laws are so scattered and confused as to render it almost impossible for any body to have a knowledge of them; and frequently, what is a great annoyance to an honest man, is no check to a rogue. It is true, the excise laws are seldom, or perhaps never, acted upon to their utmost rigour; but still they confer almost unlimited power on those who have the administering of them, over the property of all who come under their influence; and I am persuaded that they never could have existed, if they had affected the whole of the community."

It is singular that nothing should hitherto have been done to amend regulations so justly complained of. In point of fact, they are good for nothing but the oppression of the trade. It has not been shown that their maintenance is indispensable to enable the duty to be assessed and collected; but if such be the case, it is, of itself, a sufficient ground for the repeal of the duty. Our condition is not, fortunately, such as to require that one of the most important manufactures carried on in the empire should be subjected to a system of oppressive regulations for the sake of 700,000*l.* a year.

But, though it were possible to assess and collect the duty so as to prevent fraud, without interfering with the manufacture, we should very much doubt, considering the purposes to which paper is applied, the policy of subjecting it to any duty whatever. Printers, stationers, bookbinders, type-founders, artists, copperplate and lithographic printers, card-makers, paper-stainers and paper-hangers, &c. are all injured by the duty on paper. But the greatest evil of all is its influence in increasing the price, and hindering the publication, of books. "This places a great obstacle in the way of the progress of knowledge, of useful and necessary arts, and of sober, industrious habits. Books carry the productions of the human mind over the whole world, and may be truly called the raw materials of every kind of science and art, and of all social improvement."—(See the admirable work of *Sir H. Parnell*, on *Financial Reform*, 3d ed. p. 30.)

An Account of the Quantities of the different Sorts of Paper charged with Duties in each of the 3 Years ended the 5th of January, 1833; the Rates of Duty on such Paper; the Gross and Nett Produce of the Duties; the Drawbacks on Paper exported, and the Cost per Cent. at which the Nett Revenue is collected, separating the Accounts of England, Scotland, and Ireland.

	Quantities charged with Duty.								Gross Produce.	Nett Produce.	Drawbacks on Paper exported.	Allowances to the Universities, King's Printer, Hot Pressers, &c.
	First Class Paper.	Rate per Lb.	Second Class Paper.	Rate per Lb.	Millbrd., Glazed Paper, &c.	Rate p. Cwt.	Paste-board.	Rate p. Cwt.				
	Lbs.	*d.*	*Lbs.*	*d.*	*Cwt.*	*s.*	*Cwt.*	*s.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
England	39,520,561	3	12,908,470	1½	1,887 27,633	28 21	9,013 2,208	28 14	620,508 10 9	584,539 4 8	21,832 0 9	14,137 5 4
Scotland	7,130,121	-	1,468,362	-	4,236	21	1,716 2,020	28 14	106,568 15 5	98,589 17 9	6,513 3 11	1,465 13 9
Ireland	1,287,344	-	566,972	-	314	-	50 1	28 14	20,037 8 3	18,720 17 2	1,123 5 0	193 6 1
Year ended 5th Jan. 1831.	47,938,026	-	14,943,804	-	34,070	-	15,008	-	747,114 14 5	701,849 19 7	29,468 9 1	15,796 5 2
England	38,629,254	3	13,268,757	1½	1,788 24,097	28 21	8,776 2,233	28 14	607,452 8 8	571,040 9 4	22,414 12 5	13,997 6 11
Scotland	6,775,032	-	1,579,476	-	3,876	21	1,518 1,635	28 14	101,903 12 3	92,853 5 9	7,031 10 3	2,018 16 3
Ireland	1,302,185	-	469,642	-	252	-	20	28	19,506 15 6	18,814 3 5	579 15 10	112 16 3
Year ended 5th Jan. 1832.	46,706,471	-	15,317,875	-	30,013	-	14,182	-	728,862 16 5	682,707 18 6	30,025 18 6	16,128 19 5
England	40,492,151	3	13,457,233	1½	1,577 22,247	28 21	8,887 2,383	28 14	629,938 6 0	591,569 10 11	25,290 3 5	13,078 11 8
Scotland	7,203,035	-	1,603,745	-	4,031	21	1,913 1,939	28 14	108,331 9 0	99,778 2 7	6,068 12 8	2,484 13 9
Ireland	1,709,222	-	470,081	-	470	-	25 1	28 14	24,834 8 11	24,395 11 10	383 1 4	55 15 9
Year ended 5th Jan. 1833.	49,404,408	-	15,531,059	-	28,325	-	15,148	-	763,104 3 11	715,743 5 4	31,741 17 5	15,619 1 2

Note.—The cost per cent. at which the duty on paper is collected, cannot be stated with any degree of accuracy, the officers being employed in charging excise duties generally; but the sum which would probably be saved to the revenue, under the head of "Salaries to Officers," if the duties on paper should be repealed, may be estimated at 5,500*l.*; and for stationery supplied by the revenue for purposes connected with the paper duties, a further saving of 750*l.*, making together 6,250*l.*, which is about $\frac{7}{8}$ per cent. on the nett revenue of the last year.

At all events, the existing duties, varying as they do from 30 to 200 per cent. *ad valorem*, are quite exorbitant; nor can there be a doubt that they would be more productive were they adequately reduced, and assessed on reasonable principles. But, as we have shown in the art. Books, it is not possible to lay a duty on the paper intended to be used in printing, without committing injustice. No one can foretell, with any thing approaching to certainty, whether a new book, or even a new edition of an old book, will sell; and the fact is, that *one third* of the books, and *nineteen twentieths* of the pamphlets published, do not pay their expenses. Now, we ask whether, under such circumstances, any thing can be more obviously unjust, more utterly subversive of every fair principle, than the imposition of the same heavy taxes upon *all* publications,—upon those that do not sell, as well as upon those that do? Upon a successful work, the duty may only be a reasonable deduction from the profits of the author and publisher; but when (as is the case with 1 out of 3 books, and 19 out of 20 pamphlets) the work does not sell, there are no profits from which to defray the duty, which has, of course, to be paid entirely out of the capital

of the author or publisher! Such is the encouragement given to literature, such the facilities afforded to the diffusion of useful information, by the popular government of England! All other businesses meet with very different treatment. Dealers in gin or brandy, for example, may lodge their goods in bonded warehouses, and are not obliged to pay any duty upon them until they are sold for home consumption; but such privilege is denied to the bookseller, though the article in which he deals be a thousand times more capricious. He must pay the duty on the whole impression of every book, before bringing a single copy of it to market; so that he not unfrequently pays duty upon 1,000 volumes, though unable to sell above 150 or 200, except as waste paper! Even this is not the whole injury done him: for upon an advertisement announcing the sale of a 6*d.* pamphlet, as heavy a duty is charged as if it announced the sale of an estate worth 100,000*l.*!

There are but two ways of putting an end to this scandalous injustice; viz. either by entirely repealing the paper duty, or by putting publishers under the *surveillance* of the excise, and assessing the duty on works according to the number sold at the publication price. The former would be the simpler method; but if the state of the finances will not allow of the sacrifice of the paper duty, there are no insuperable difficulties in the way of the latter alternative. And were it adopted, and the duties reduced and simplified, *justice* would be done to authors and publishers, and a very great stimulus given to the paper manufacture, without any loss of revenue.

PARCEL, a term indifferently applied to small packages of wares, and to large lots of goods. In this latter sense, 20 hogsheads of sugar or more, if bought at one price, or in a single lot, are denominated "a parcel of sugar."

PARCELS, BILL OF, an account of the items composing a parcel.

PARCHMENT (Ger. *Pergament*; Fr. *Parchemin*; It. *Cartapecora*; Sp. *Pergamino*), the skin of sheep or goats prepared in such a manner as to render it proper for writing upon, covering books, &c. It is an important article in French commerce: besides being largely exported, the home consumption is very considerable. The name is derived from Pergamus, the city where it is said to have been first manufactured.

PARTIAL LOSS. See Insurance (Marine).

PARTNERSHIP, the association of two or more individuals for carrying on some business or undertaking in common; each deriving a certain share of the profits, and bearing a corresponding share of the loss arising therefrom.

The term partnership is usually applied to those smaller associations in which the partners personally conduct their joint affairs: the term company being applied to those great associations conducted by directors and servants appointed by the body of the partners to act for them; the latter having no direct concern in the management of the affairs of the company. — (See Companies.)

The advantages of partnerships are obvious. Many businesses could not be successfully carried on without a larger command of capital than usually belongs to an individual; and most of them require the combination of various species of talent. An individual may have capital sufficient to undertake a particular business; but he may not be thoroughly versed in any of its details, or he may be familiar with certain parts of it and not with others; so that it might be for his advantage to assume one or more individuals as his partners, supposing them to be without capital, provided they possessed the skill and other qualifications required in prosecuting the business. Associations of this sort enable capital and talent to derive all the assistance that each is capable of lending to the other. And as the gains of each partner usually consist of a certain *proportion* of the total profits made by the company, each has the most powerful motive to exert himself for the benefit of the concern. It is not, indeed, to be denied, that associations of this sort are occasionally productive of mischievous consequences. The public interest requires that the whole partners in a firm should be bound by the acts of any one of their number; so that the folly or fraud of a single partner may entail very serious consequences upon those associated with him. Generally, however, this is not an evil of frequent occurrence; and there can be no question that, both in a private and public point of view, partnerships are highly beneficial.

To enter into any thing like a full discussion of the law of partnership would very far exceed our limits. We shall, therefore, merely state a few of those leading principles with respect to it, as to which it is of importance that mercantile men, and the public generally, should be well acquainted.

Formation of Partnerships. — The mere consent of the partners, fixed and certified by acts or contracts, is quite sufficient to constitute a private copartnership; so that if two or more merchants, or other persons, join together in trade, or in any sort of business, with a mutual, though it may be unequal, participation in the profit and loss of the concern, they are in every respect to be considered as partners. No particular form of words or proceeding is necessary to constitute a partnership. It may be entered into either by an express written agreement, or by a merely verbal one. The former ought in almost all cases to be preferred. The contract of copartnery should state the parties to it, the business to be carried on, the space of time the partnership is to continue, the capital each is to bring into the business, the proportion in which the profit and loss are to be divided, the manner in which the business is to be conducted, the mode agreed upon for settling accounts at the dissolution of the partnership, together with the special covenants adapted to the circumstances of each particular case.

To constitute a partnership, there must be a participation in uncertain profits and losses: and the true criterion to determine, when money is advanced to a trader, whether the individual making the advance is to be looked upon as a partner or not, is to ascertain whether the *premium or profit be certain and defined, or casual, indefinite, and depending upon the accidents of trade.* In the former case he is a lender merely; in the latter he is a partner. The mere participation in the profits of any business or adventure, without a participation in the losses, constitutes a partnership, so far as to render the individual so participating liable to third parties for the engagements of the concern, though as between the parties themselves it may be no partnership Thus, if a clerk or other servant stipulate for a share of the profits of any business as *a reward for his labour,* he becomes responsible to third parties as a partner, and no private arrangement can cancel his liability.

If an individual, by his own act or inadvertence, allow himself *to appear to the world as a partner,* he is precluded from disputing the fact, even though he have no interest in the profits. A partner who withdraws from a firm is liable on account of the remaining partners continuing his name in the firm, though without his consent, unless he take the necessary precautions — (see *post*) — to show that he has ceased to belong to it.

If there be no express stipulation as to the management of partnership property, the majority decide as to the disposition and management of the joint affairs of the firm; or, if there be but two parties in a firm, one may manage the concern as he thinks fit, provided it be within the rules of good faith, and warranted by the circumstances of the case. The general duty of a partner is to keep in view, at all times, and in all transactions, the interest and welfare of the partnership, by acting honestly and uprightly, and as a prudent man would conduct his own affairs.

Liability of Partners as to third Parties. — It may be laid down as a general rule, that partners, whether actual, ostensible, or dormant, are bound by the act of their partner, made in the course of and with reference to the partnership business, and in the regular course of dealing by the firm; and though the general rule of law be, that no one is liable upon any contract, except such as are privy to it, yet this is not contravened by the liability of partners, as they are supposed virtually present at and sanctioning the proceedings they singly enter into in the course of trade, or as being each vested with a power enabling them to act at once as principals and as the authorised agent of their copartners. It is for the advantage of partners that they are thus held liable; for the credit of their firm is in consequence greatly enhanced, and facility is given to all their dealings, even when they reside in different parts of the country, or of the world. A due regard to the interest of strangers is at the same time observed; for where an individual deals with one of several partners, he relies upon the credit of the entire firm, and therefore, ought to have his remedy against all the individuals who compose it.

Unless, however, the act of one partner relate to and be connected with the partnership trade, and in the *course of dealing by the firm,* such acting partner only will be bound; for it is only by acting in the course of their particular trade or line of business that an implied authority is delegated by partners to each other; and it is only in such transactions that third parties have a right to rely upon the partnership funds. To bind a partnership, credit must be given to the firm itself, and not to one merely of its partners. One of them may even, in furtherance of the objects of the firm, enter into a contract with some third party; but if such contract be made *exclusively and solely upon the credit of the individual partner,* it will only bind him, and not the firm. The presumption of the law, however, always is, that a contract with one of the partners in reference to the business of the firm has been entered into upon the credit of the whole; and this presumption is not to be rebutted, except by very clear evidence. One partner cannot, as such, except in bankruptcy, bind another by *deed.*

The authority of a partner is revocable; and it is now fully established that a *disclaimer* of the authority of the partners in any particular transaction will preclude him from binding his copartners. Even during the subsistence of the partnership, one partner may to a certain degree limit his responsibility; and if there be any particular speculation or bargain proposed, which he disapproves of, he may, by giving distinct notice to those with whom his partners are about to contract that he will not be concerned in it, relieve himself from all consequences. Such notice would rebut his *primâ facie* liability. The partnership would be suspended *quoad* this transaction. Thus, if a partner draw, accept, or indorse a bill or note, he will, in all ordinary cases, thereby render the firm liable. But, to use the words of Lord Ellenborough, "it is not essential to a partnership that every partner should have such power; they may stipulate among themselves that it shall not be done; and if a third party, *having notice of this,* will take such security from one of the partners, he shall not sue the others upon it, in breach of such stipulation, nor in defiance of notice previously given to him by one of them, that he will not be liable for any bill or note signed by the others."— (*Galway* v. *Matthew,* 10 East, 264.); and so in other cases.

However small the share a partner may have in a concern, he is liable for the *whole* of the debts contracted by the firm; and must seek his remedy in a rateable contribution against his partners. Should one party enter into a smuggling or other illegal transaction on the partnership account, the other partners are liable to the duties and the penalty; and the Crown may proceed against the real delinquent alone, or against all the partners. A bookseller, or newspaper proprietor, is answerable for the acts of his agent or co-partner, not only civilly, but also *criminally*.

Dissolution of Partnerships. — A partnership may be dissolved by the effluxion or expiration of the time during which it was originally agreed that it should continue. When a copartnership is formed for a single dealing or transaction, the moment that is completed, it is at an end. Partnerships may also be dissolved by death, agreement, bankruptcy, outlawry, &c. A court of equity will interfere to dissolve a partnership, in cases where a partner so misconducts himself as to be injurious to the firm, or to defeat the object for which the partnership was formed; or when a partner becomes insane, or is in such a state of mind as to render him permanently incapable of transacting the peculiar business of the firm; or where a partnership is formed for an impracticable purpose. Indeed, in all cases, where even a partnership may be dissolved without the interference of a court of equity, it may be most prudent, if the dissolution be opposed by one of the partners, to file a bill, praying a dissolution and account, and an injunction against using the partnership name.

When a partnership is dissolved by agreement, or one of the partners withdraws from it, public notice of the dissolution must be given in the *London Gazette*; and *a specific intimation of the circumstance must be sent to* ALL *individuals accustomed to deal with the firm.* Where such intimation has not been sent, the individual withdrawing from the firm may be made liable to third parties after he has ceased to have any thing to do with it. A dormant partner, whose name has never been announced, may withdraw from a firm without making the dissolution of partnership publicly known.

When the joint debts of the firm are paid, and the property duly distributed among the partners, the dissolution may be said, in a general sense, to be accomplished. If any one of the firm be guilty of a breach of duty, in misapplying the effects before the concern is finally wound up, the proper course is to apply to the Court of Chancery to appoint a manager.

Within a reasonable time after the death of one partner, the survivors must account to the representatives of the deceased; and if not willing to do so, a court of equity will compel them. In taking partnership accounts at the death of a partner, they must commence with the last stated account; or, if there be none such, with the commencement of the partnership; and they must end with the state of the stock at the time of the partner's death, and the proceeds thereof until it be got in.

No notice is necessary to third parties of the death of a partner; the partnership is dissolved, and all liabilities for subsequent acts cease. The surviving parties are to be sued alone for the partnership liabilities and obligations, for which they are liable to the full extent. But they are not liable for the separate debts of the deceased partner, unless, after payment of all the joint debts, they have a surplus of the partnership effects in their hands.

Upon a dissolution by death, if the joint effects be insufficient to pay the partnership debts, the separate estate of the deceased partner, if he have any, is liable for the deficiency.

The statements now made will, probably, be sufficient to give our readers a tolerably distinct notion of the formation of partnerships; and of the more important rights, duties, liabilities, &c. arising out of such institutions. Those who wish to go deeper into the subject, may consult the treatises of *Watson* and *Montague* on the *Law of Partnership; Chitty's Commercial Law*, vol. iii. pp. 225 — 269.; *Woolrych on Commercial Law*, pp. 298—317., &c.

PASSENGERS, in commercial navigation, are individuals conveyed for hire from one place to another on board ship. Passage ships are those peculiarly appropriated to the conveyance of passengers.

Regulations as to the Conveyance of Passengers. — The conveyance of passengers between Great Britain and Ireland is regulated by the act 4 Geo. 4. c. 88., which provides, that no vessel employed in the conveyance of passengers, of less than 200 tons burden, shall carry more than 20 persons as passengers, unless a licence to that effect has been obtained from the Custom-house. A licensed vessel is not to take, exclusive of the crew, more than 5 adult persons, or 10 children under 14, or 15 children under 7 years of age, for every 4 tons burden; and if such vessel be partly laden with goods or wares, not to take more than the above proportion of passengers for every 4 tons that remain unladen. Penalty for carrying more than *twenty* without licence, 50*l.*; and for a licensed vessel carrying more than the above proportion for each 4 tons burden, 5*l.* for each passenger. Merchant vessels of not more than 100 tons, not to carry more than 10 persons; or of not more than 200 tons, not more than 20 persons; under a penalty of 5*l.* each person.

The conveyance of passengers to North America is regulated by the 9 Geo. 4. c. 21. This act provides, that no ship shall sail from the United Kingdom for any port or place in his Majesty's possessions on the continent or islands of North America, with more than *three* persons on board for every 4 tons of the registered burden of such ship, the master and crew being included; and no ship to carry passengers,

unless of the height of 5½ feet, at least, between decks: 2 children under 14, or 3 under 9, or 1 child under 12 months with its mother, to be reckoned as 1 person. Good and wholesome provisions to be provided, at the rate of 50 gallons of pure water for every person on board, and 50 lbs. of bread, biscuit, oatmeal, or bread-stuffs, for every passenger. Ships that have their full complement of passengers are prohibited from carrying any part of their cargo or stores between decks. Before clearing out, the master is to deliver to the collector a list of the passengers, specifying as accurately as may be their names, ages, professions or occupations, and the name of the port or place at which each is contracted to be landed. Masters of ships compelling passengers to land at any other place than that agreed upon, shall forfeit to every such passenger so landed a sum of 20*l.* Masters who take a greater number of passengers than allowed by law, or do not provide the requisite quantity of water and provisions, or stow them or any part of the cargo between decks, or furnish false lists to the collector, shall be deemed guilty of a misdemeanor. A bond for 1,000*l.* with one good and sufficient surety, shall be given by the master of every ship clearing out for British North America with passengers on board, that such ship is seaworthy, and that all and every the rules and regulations of this act will be well and truly performed. Such bond may be without a stamp. This act does not extend to Post-office ships, nor to the Bahama Islands, nor to the West Indies.

It is enacted by the 9 Geo. 4. c. 47., that the master of any packet or vessel employed in carrying passengers from one part of the United Kingdom to another is to be licensed by the commissioners of excise to retail foreign wine, strong beer, cider, perry, spirituous liquors, and tobacco. Such licence to be annually renewed, and to be transferable by endorsement. Duty to be paid by the owners on obtaining such a licence, 1*l.* Penalty for selling wines, &c. without a licence, for every offence, 10*l.*

It is enacted by 9 Geo. 4. c. 76., that every *steam vessel* which is of the registered tonnage of 140 tons shall be deemed to be a vessel of 200 tons at least.

The act 6 Geo. 4. c. 116., which regulated the conveyance of passengers to foreign parts, was repealed by 7 & 8 Geo. 4. c. 19.

In some respects, passengers may be considered as a portion of the crew. They may be called on by the master or commander of the ship, in case of imminent danger either from tempest or enemies, to lend their assistance for the general safety; and in the event of their declining, may be punished for disobedience. This principle has been recognised in several cases; but, as the authority arises out of the necessity of the case, it must be exercised strictly within the limits of that necessity. — (*Boyce* v. *Bacliffe*, 1 Campbell, 58.) A passenger is not, however, bound to remain on board the ship in the hour of danger, but may quit it if he have an opportunity; and he is not required to take upon himself any responsibility as to the *conduct* of the ship. If he incur any responsibility, and perform extraordinary services in relieving a vessel in distress, he is entitled to a corresponding reward. The goods of passengers contribute to general average. — (*Abbott on the Law of Shipping*, part iii. c. 10.)

Return of the Number of Persons who have emigrated from the United Kingdom to any of the Colonies of Great Britain in each Year since 1820, and to the United States of America since 1825; distinguishing the Colonies to which they have emigrated. — (*Parl. Paper*, No. 650. Sess. 1830, and No. 696. Sess. 1833.)

Years.	British North American Colonies.	British West Indies.	Cape of Good Hope.	New South Wales, Van Diemen's Land, and Swan River.	United States.
	No. of Persons.	*No. of Persons.*	*No. of Persons.*	*No. of Persons.*	*No. of Persons.*
1821	12,470	1,772	404	320	
1822	11,282	1,423	192	875	
1823	8,133	1,911	184	543	
1824	7,311	1,353	119	780	
1825	8,741	1,082	114	485	5,551
1826	12,818	1,913	116	903	7,063
1827	12,648	1,156	114	715	14,526
1828	12,084	1,211	135	1,056	12,817
1829	13,307	1,251	197	2,016	15,678
1830	30,574	- -	204	1,242	24,887
1831	58,067	- -	114	1,561	23,418
1832	66,339	- -	196	3,733	32,872

The foregoing statement, founded upon special returns transmitted from the various ports of the United Kingdom by the local officers of customs, exhibits the number of persons of both sexes, and of all ages, who have emigrated to the colonies in each of the last 10 years, so far as the same can be ascertained. The officers report that they have not the means of distinguishing males from females, or adults from children, in these returns; and in some cases they state that the distinction cannot be drawn with accuracy between emigrants and passengers of other descriptions.

For the regulations as to the landing of passengers in New York, see NEW YORK.

PATENT, a privilege from the Crown granted by letters patent (whence the name), conveying to the individual or individuals specified therein, the sole right to make, use, or dispose of some new invention or discovery, for a certain specified period.

The power to grant patents seems to exist at common law; but it is limited and defined by the famous statute 21 Jac. 1. c. 3., which enacts, "That any declaration before-mentioned shall not extend to any letters patent and grants of privilege for the term of 14 years or under, thereafter to be made, of the sole working or making of any manner of new manufactures within this realm, to the *true and first* inventor and inventors of such manufactures, which others at the time of making such letters patent and grants shall not use, so as also they be not contrary to the law, nor mischievous to the state, by raising prices of commodities at home, or hurt of trade, or generally inconvenient. The said 14 years to be accounted from the date of the first letters patent, or grant of such privilege thereafter to be made; but that the same shall be of such force as they should be if that act had never been made, and none other."

Policy of Patents. — The law with respect to patents is unavoidably encumbered with several difficulties. The expediency of granting patents has been disputed; though, as it would seem, without any sufficient reason. Were they refused, the inducement to make discoveries would, in many cases, be very much weakened; at the same time that it would plainly be for the interest of every one who made a discovery, to endeavour,

if possible, to conceal it. And notwithstanding the difficulties in the way of concealment, they are not insuperable; and it is believed that several important inventions have been lost, from the secret dying with their authors. On the other hand, it is not easy to decide as to the term for which the patent, or exclusive privilege, should be granted. Some have proposed that it should be made perpetual; but this would be a very great obstacle to the progress of improvement, and would lead to the most pernicious results. Perhaps the term of 14 years, to which the duration of a patent is limited in England, is as proper a one as could be suggested. It may be too short for some inventions, and too long for others; but, on the whole, it seems a pretty fair average.

Specification. — Previously to the reign of Queen Anne, it was customary to grant patents without any condition, except that they should be for really new inventions. But a condition was then introduced into all patents, and is still retained, declaring that if the inventor do not, by an instrument under his hand and seal, denominated a specification, *particularly describe* and ascertain the nature of his invention, and in what manner the same is to be performed, and also cause the same to be enrolled in Chancery within a certain time (generally a month), the letters patent, and all liberties and advantages whatever thereby granted, shall utterly cease and become void. This was a very judicious regulation. It secures the invention from being lost; and the moment the patent expires, every one is in a situation to profit by it.

Mode of granting a Patent. — Letters patent are obtained upon petition and affidavit to the Crown, setting forth, that the petitioner has, after great labour and expense, made a certain discovery, which he describes, and which he believes will be of great public utility, and that he is the first inventor. The petition is referred to the attorney or solicitor general, who is separately attended by the applicant and all competitors, if there be any. They explain their projects to him, and he decides on granting or withholding the patent. When the inventions of two or more conflicting applicants coincide, he rejects all the applications. It would seem, that to decide upon such difficult questions in mechanics as are often agitated in applications for patents, a familiar knowledge of the principles and practical application of mechanical science would be indispensable. But by the law, as it now stands, such knowledge is not deemed necessary. The legal officers of the Crown are the sole judges as to what patents should or should not be granted; their award is *final;* and they are subject to no responsibility, other than the common remedies against public officers by impeachment, indictment, &c. — none of which would be entertained, unless a corrupt motive were established. After approval by the law officers, the grant is made out, sealed, and enrolled.

Considering the authority under which patents are granted, can any one wonder at the number that have been overturned in the courts of justice? or at the litigation to which they have given rise?

Expense of Patents. — Separate patents have to be taken out for England, Scotland, and Ireland, if it be intended to secure the privilege in the three kingdoms. The expense of stamps, fees, &c. is in all cases very heavy. It varies according to the intricacy of the invention, the opposition (if any) to the patent being granted, &c. According to Mr. Farey, it may be estimated at 120*l.* for England, 100*l.* for Scotland, and 125*l.* for Ireland. — (See his valuable evidence in the *Commons' Report on Patents*, p. 17.)

Conditions as to Patents. — The *novelty* and *utility* of the invention are essential to the validity of a patent; if it can be shown to have been in use previously to the grant of the patent, or to be of no utility, it will be void. It must also be for something vendible — something "material and useful made by the hands of man." — (*Lord Kenyon*, 8 T. R. 99.) A philosophical principle only, neither organised, nor capable of being so, is no ground for a patent; because it is an element and rudiment of science, and which, till applied to some new production from these elements, cannot, with justice to other inventors, be applied to the exclusive use of any one of them. In all patents there is required, in the words of Lord Tenterden, "something of a *corporeal or substantial nature*, something that *can be made* by man from the matters subjected to his art and skill, or at the least some *new mode of employing practically his art and skill.*" — (*Godson on the Law of Patents*, p. 81.) Previously to Lord Tenterden, it had been ruled that a new process or method was not the subject of a patent. But his Lordship having suggested that "the word manufacture (in the statute) may, perhaps, extend to a *new process* to be carried on by known implements, or elements acting upon known substances, and ultimately producing some other known substance, &c." — (*Godson*, p. 83.) — this principle of interpretation has now been adopted.

A patent for a machine, each part of which was in use before, but in which the *combination* of the different parts is *new*, and a *new result* is obtained, is valid. But, in order to its being valid, the specification must clearly express that it is in respect of such new combination or application, and of that only; and not lay claim to original invention in the use of the materials.

A patent may be granted for an addition to an old invention. But the patent must be *confined to the addition* or improvement, that the public may purchase it without being encumbered with other things. If the patent include the whole, it will be void; for the property in the addition or improvement can give no right to the thing that has been improved. — (*Godson*, p. 71.)

A valid patent may be obtained for an invention, "*new in this realm*," though it may have been previously practised in a foreign country.

A patent is void, if it be for several distinct inventions, and *any one of them* fail of originality.

The specification must be prepared with *great care*. It should set forth the invention fully and correctly. The terms used must be clear and unambiguous; no necessary description must be omitted, nor what is unnecessary be introduced; and the invention must be described in the *best and most improved state* known to the inventor. If any one of these conditions be not complied with, the patent will be void. Any inaccurate or defective statement, *were it even inserted through inadvertency*, will vitiate the whole.

Caveat. — It is not unusual for inventors who have not brought their inventions to perfection, and who

are afraid lest they be anticipated by others, to lodge a caveat at the offices of the attorney and solicitor general; that is, an instrument by which notice is requested to be given to the person who enters it, whenever any application is made for a patent for a certain invention therein described in general terms. The entry of a caveat is, therefore, nothing more than giving information that an invention is nearly completed; so that, if any other person should apply for a patent for the same thing, the preference may be given to him who entered it.

An injunction may be obtained for the infringement of a patent, in the same way as for a violation of the copyright acts.

Patents have been sometimes extended by act of parliament beyond the term of 14 years, on the ground that that term was too short properly to reward the inventor.

Account of the Number of Patents granted in the Eight Years ending with 1828.

1821 - - 108	1824 - - 181	1827 - - 148
1822 - - 113	1825 - - 249	1828 - - 152
1823 - - 138	1826 - - 131	

Total number of patents in force in May, 1829, 1,855.

The reader will find a great deal of curious and instructive information with respect to patents, in the *Report of the Committee of the House of Commons* on that subject (No. 332. Sess. 1829), particularly in the evidence and papers laid before the Committee by Mr. Farey. The treatise on the *Law of Patents and Copyrights*, by Mr. Godson, is clear and able.

PATRAS, or PETRASSO, a sea-port in the N. W. corner of the Morea, near the entrance of the Gulf of Lepanto, in lat. 38° 14′ 25″ N., lon. 21° 46′ 20″ E. Population variously estimated, from 5,000 to 10,000.

The port lies a little to the northward of the town; but the part fronting it is unsafe, and exposed to heavy seas, particularly in winter. Vessels, therefore, go a little further up the gulf, where there is a mole or quay, and where they can lie close to the wharf. Patras has a more extensive trade than any other port of Greece. The principal exports are currants, oil, valonia, wine, raw silk, raw cotton, wool, skins, wax, &c. Of these, currants are by far the most important. The fruit is larger, and freer from sand and gravel, than that of the Ionian Islands. They are shipped in casks of various sizes; but, as the weight of the cask is included in that of the fruit, it is said to be, for the most part, made heavier and stronger than necessary. Morea currants are preferred in most countries, except England; but here the currants of Zante are held in equal, or perhaps greater, estimation. The exports of currants from Patras, at an average of the 3 years ending with 1831, amounted to about 50,000 cwt. a year, worth about 33,000*l*. More than half the quantity shipped in 1830 and 1831 was for England. The value of the exports of valonia and oil may, together, amount to from 7,000*l*. to 10,000*l*. a year. The imports at Patras, as at the other Greek ports, consist principally of sugar, coffee, and other colonial products; plain and printed cotton stuffs, woollen goods, salted fish, iron, tin plates, hardware, cordage, hemp, deals, &c. Imported articles are brought principally from the Ionian Islands, Malta, Venice, Leghorn, Marseilles, and Trieste; but, from the unsettled state of the country, it is quite impossible to form any accurate estimate of their amount, either as respects Patras, or any other Greek port: —

Shipping. — The arrivals at Patras in 1830 and 1831 have been

Flags.	1830.		1831.	
	Vessels.	Tonnage.	Vessels.	Tonnage.
British -	10	1,417	8	1,105
Greek -	254	9,017	301	10,623
Ionian -	146	5,291	79	3,148
Austrian -	36	3,757	46	7,541
Sardinian -	10	469	4	520
Tuscan -	2	168	1	97
Neapolitan	6	164	5	164
Papal -	3	181	2	177
French -	5	499	3	316
Dutch -	1	130	1	170
Russian -	8	898	11	1,849
Ottoman -	4	481	3	355

Port Charges. — Foreign and Greek vessels pay as follows: —

	Greek.			Foreign.		
	Ph. l.	*L. s. d.*		*Ph. l.*	*L. s. d.*	
Anchorage Port dues Health office	8 23	or 0 5 10		12 74	or 0 9 0	
Additional when cargo or ballast is landed or loaded -	18 0	— 0 12 9		25 0	— 0 17 8	
Total Greek		*L.* 0 18 7	Foreign		*L.* 1 6 8	

The Tariff established by the government in March, 1830, is in force, according to which all articles may be imported and exported, on payment of the duties therein fixed, without distinction of foreign or native flag. The rate of duty is 10 per cent. *ad valorem* for imports, and 6 per cent. *ad valorem* for exports.

Money. — Since the revolution, the Greeks have established a system of coinage in imitation of that of France. The phœnix is a silver coin, that should contain 9-10ths of pure metal, and 1-10th of alloy, or 4·029 grammes of the former, and ·448 do. of the latter, being worth about 8½*d*. sterling. The lepta is a copper coin, being 1-100th part of the phœnix. But the silver coins are already so much debased, that they have been refused even by the officers of government.

Weights and Measures. — The quintal is divided into 44 okes, or 132 lbs. Hence, 100 lbs. of Patras = 88 lbs. avoirdupois. Silk weight is 1-5th heavier.

A sack of currants weighs 140 lbs. of the common weight, or about 123 lbs. avoirdupois.

The staro, corn measure, = 2⅔ Winch. bushels.

The long pic, or pik, used in measuring linens and woollens, = 27 English inches. The short pic, used in measuring silks, = 25 ditto.

We have derived these details, partly from the *Answers* made by the Consul at Patras to the *Circular Queries*; partly from the *Archives du Commerce*, tome ii. pp. 236—242.; and partly from other sources.

Commerce of Greece. — Considering the favourable situation of Greece, the number and excellence of her ports, the hardy enterprising character of the people, and the progress they have already made in navigation, nothing seems to be required to insure her rapid advancement in commercial industry, but the establishment of good order and internal tranquillity. We trust that this *sine quâ non* of prosperity will now be realised; and that the newly constituted government will be strong enough to curb the factions into which the population has been split, and to put down and punish every species of outrage. If they succeed in this, and abstain from all attempts, by prohibition or otherwise, to force manufactures and commerce, we have no doubt that the progress of Greece will be all that her most sanguine friends could wish. It appears from a report presented to the congress at Napoli, in January, 1832, that Greece was at that time possessed of 2,941 vessels of all sorts, of which 614 were of the 1st class, that is,

of more than 150 tons burden. The value of the imports into Greece, in 1831, are estimated in the same document at about 1,100,000*l.* sterling. It must, however, be observed, that a large proportion of these imports is carried to Syra, which has now become an important *entrepôt*, merely that they may be sent at convenient opportunities to the Turkish provinces in Europe, Asia Minor, &c.—(See *Archives du Commerce*, tome ii. p. 239.)

It is deeply to be regretted, that Candia, or Crete, was not either added to the new kingdom of Greece, or made independent. We cannot help considering it as disgraceful to the Christian nations of Europe, that this famous island, where European civilisation first struck its roots, should be consigned to the barbarians by whom it is now laid waste. It is as well entitled to the favourable consideration of England, France, and Russia, as any part of Continental Greece; and we do hope that measures may yet be devised for rescuing it from the atrocious despotism by which it has been so long weighed down.

PATTERNS, are specimens or samples of commodities, transmitted by manufacturers to their correspondents, or carried from town to town by travellers, in search of orders. Patterns, if not exceeding 1 ounce weight, shall be charged with only an additional penny of postage, provided they be sent under cover, open at the sides, and without any letter or writing, except the name of the person sending the same, the place of his abode, and the price of the article or articles.—(52 *Geo.* 3. c. 88.)

PAWNBROKERS AND PAWNBROKING. A pawnbroker is a species of banker, who advances money, at a certain rate of interest, upon security of goods deposited in his hands; having power to sell the goods, if the principal sum, and the interest thereon, be not paid within a specified time.

1. *Advantages and Disadvantages of Pawnbroking.*—The practice of impledging or pawning goods, in order to raise loans, is one that must necessarily always exist in civilised societies, and is, in many cases, productive of advantage to the parties. But it is a practice that is extremely liable to abuse. By far the largest proportion of the *bonâ fide* borrowers of money on pawn consist of the lowest and most indigent classes; and were the lenders not subjected to any species of regulation, advantage might be taken (as, indeed, it is frequently taken, in despite of every precaution) of their necessities, to subject them to the most grievous extortion. But, besides those whose wants compel them to resort to pawnbrokers, there is another class, who have recourse to them in order to get rid of the property they have unlawfully acquired. Not only, therefore, are pawnbrokers instrumental in relieving the pressing and urgent necessities of the poor, but they may also, even without intending it, become the most efficient allies of thieves and swindlers, by affording them ready and convenient outlets for the disposal of their ill-gotten gains. The policy of giving legislative protection to a business so liable to abuse, has been doubted by many. But though it were suppressed by law, it would always really exist. An individual possessed of property which he may neither be able nor willing to dispose of, may be reduced to a state of extreme difficulty; and in such case, what can be more convenient or advantageous for him than to get a loan upon a deposit of such property, under condition that if he repay the loan, and the interest upon it, within a certain period, the property will be returned? It is said, indeed, that the facilities of raising money in this way foster habits of imprudence; that the first resort for aid to a pawnbroker almost always leads to a second; and that it is impossible so to regulate the business, as to prevent the ignorant and the necessitous from being plundered. That this statement, though exaggerated, is to a certain extent true, no one can deny. On the other hand, however, the capacity of obtaining supplies on deposits of goods, by affording the means of meeting pressing exigencies, in so far tends to prevent crime, and to promote the security of property; and it would seem as if the desire to redeem property in pawn would be one of the most powerful motives to industry and economy. At the same time, too, it must be borne in mind, that it is not possible, do what you will, to prevent those who are poor and uninstructed from borrowing; and that they must, in all cases, obtain loans at a great sacrifice, and be liable to be imposed upon. But the fair presumption is, that there is less chance of any improper advantage being taken of them by a licensed pawnbroker, than by a private and irresponsible individual. Although, however, the business had all the inconveniences, without any portion whatever of the good which really belongs to it, it would be to no purpose to attempt its suppression. It is visionary to imagine that those who have property will submit to be reduced to the extremity of want, without endeavouring to raise money upon it. Any attempt to put down pawnbroking would merely drive respectable persons from the trade, and throw it entirely into the hands of those who have neither property nor character to lose. And hence the object of a wise legislature ought not to be to abolish what must always exist, but to endeavour, so far at least as is possible, to free it from abuse, by enacting such regulations as may appear to be best calculated to protect the ignorant and the unwary from becoming the prey of swindlers, and to facilitate the discovery of stolen property.

2. *Obligations under which Pawnbrokers should be placed.* — For this purpose it seems indispensable that the interest charged by pawnbrokers should be limited; that they should be obliged to give a receipt for the articles pledged, and to retain them for a reasonable time before selling them; that the sale, when it does take place, should be by public auction, or in such a way as may give the articles the best chance for being sold at a fair price; and that the excess of price, if there be any, after deducting the amount advanced, and the interest and expenses of sale, should be paid over to the original owner of the goods. To prevent pawnbrokers from becoming the receivers of stolen goods, they should be liable to penalties for making advances to any individual unable to give a satisfactory account of the mode in which he became possessed of the property he is desirous to pawn; the officers of police should at all times have free access to their premises; and they should be obliged carefully to describe and advertise the property they offer for sale.

3. *Law as to Pawnbrokers.* — It may appear singular that pawnbrokers should hardly have been named in any legislative enactment till after the middle of last century. It was enacted by the 30 Geo. 2. c. 24., that a *duplicate* or receipt should be given for goods pawned; and that such as were pawned for any sum less than 10*l.* might be recovered any time within *two* years, on payment of the principal and interest; but the rate of interest was not fixed. This defect was supplied by the 25 Geo. 3. c. 48.; but the act 39 & 40 Geo. 3. c. 99. contains the latest and most complete regulations on the subject.

Every person exercising the trade of a pawnbroker must take out a licence, renewable annually, 10 days at least before the end of the year, for which he shall pay, within the cities of London and Westminster, and the limits of the twopenny post, 15*l.*, and everywhere else, 7*l.* 10*s.* No person shall keep more than 1 house by virtue of 1 licence; but persons in partnership need only take out 1 licence for 1 house. All persons receiving goods by way of pawn or pledge for the repayment of money lent thereon, at a higher rate of interest than 5 per cent., to be deemed pawnbrokers.

Upon every pledge on which there shall have been lent not exceeding 2*s.* 6*d.*, interest may be charged at the rate of ½*d.* per month;

	L.	*s.*	*d.*		*L.*	*s.*	*d.*	
If	0	5	0	-	0	0	1	per month.
	0	7	6	-	0	0	1½	—
	0	10	0	-	0	0	2	—
	0	12	6	-	0	0	2½	—
	0	15	0	-	0	0	3	—
	0	17	6	-	0	0	3½	—
	1	0	0	-	0	0	4	—
	2	0	0	and not exceeding				
	2	2	0	-	0	0	8	—

And for every sum exceeding 40*s.* and not exceeding 10*l.*, at the rate of 3*d.* in the pound, by the calendar month, including the current month; and so in proportion for any fractional sum.

Pawnbrokers are to give farthings in exchange.

Persons applying to redeem goods pawned within 7 days after the first calendar month after the same shall have been pledged, may redeem the same without paying any thing for the first 7 days; and, upon applying before the expiration of 14 days of the second calendar month, shall be at liberty to redeem such goods, upon paying the profit payable for 1 calendar month and the half of another; and in all cases where the parties so entitled, and applying as aforesaid, after the expiration of the first 14 days, and before the expiration of the second month, the pawnbroker is allowed to take the interest of the whole second month; and the same regulations and restrictions shall take place in every subsequent month.

When goods are pawned for more than 5*s.*, the pawnbroker, before advancing the money, shall immediately enter in his books a description of the pawn, the money lent thereon, the day of the month and year, the name of the person pawning, and the name of the street, and number of the house, if numbered, where such person resides, and use the letter L, if the person be a lodger, and the letters H K, if a housekeeper; and also the name and abode of the owner of the party offering such pledge; and if the money lent shall not exceed 5*s.*, such entry shall be made within 4 hours after the goods shall have been pawned; and the pawnbroker shall, at the time of taking the pawn, give to the person so pawning a duplicate, corresponding with the entry in the book, which the party pawning shall take in all cases; and the pawnbroker shall not receive any pledge, unless the party so pawning shall receive such duplicate.

Rates payable for Duplicates.

	L.	*s.*	*d.*
If under 5*s.* - - -	gratis.		
5*s.* and under 10*s.* -	0	0	0½
10*s.* and under 20*s.* -	0	0	1
20*s.* and under 5*l.* -	0	0	2
5*l.* and upwards -	0	0	4

The duplicate to be produced to the pawnbroker before he shall be compelled to redeliver the respective goods and chattels, except as herein-after excepted.

The amount of profits on duplicates shall be added on pledges redeemed, and such duplicate shall be kept by the pawnbroker for 1 year.

Persons pawning other people's goods without their consent, may be apprehended by the warrant of 1 justice, and convicted in a penalty not exceeding 5*l.* nor less than 20*s.*, and the full value of the goods pawned; and if the forfeiture be not immediately paid, the justice shall commit the party to the house of correction, to be kept to hard labour for 3 calendar months; and if within 3 days before the expiration of the commitment the forfeiture shall not be paid, the justice may order the person to be publicly whipped, and the forfeitures shall be applied towards making satisfaction to the party injured, and defraying the costs; but if the party injured shall decline to accept such satisfaction and costs, or if there be any overplus, such forfeitures or overplus shall be paid to the poor of the parish.

Persons forging or counterfeiting duplicates may be seized and delivered to a constable, who shall convey them before a justice; and, upon conviction, such person shall be committed to the house of correction for any time not exceeding 3 calendar months.

Persons offering pledges, not giving a satisfactory account of themselves, or the means by which they became possessed of such goods, or wilfully giving any false information, or if there shall be reason to suspect that such goods are stolen, or illegally obtained, or if any person not entitled to redeem goods in pawn shall endeavour to redeem the same, they may be seized and delivered to a constable, to be carried before a justice; and if there should appear ground for a second examination, they shall be committed to the common gaol or house of correction, to be dealt with according to law; or where such proceedings are not authorised by the nature of the offence, the party shall be committed for any time not exceeding 3 calendar months.

Persons buying or taking in pledge unfinished goods, linen, or apparel, intrusted to others to wash or mend, shall forfeit double the sum lent, and restore the goods.

Peace officers are empowered to search for unfinished goods which shall be come by unlawfully.

When goods are unlawfully pawned, the pawnbroker is to restore them; and their houses may be searched during the hours of business, by a warrant from a magistrate for the discovery of such property.

Persons producing notes or memorandums are to be deemed the owners of the property.

Where duplicates are lost, the pawnbroker, upon affidavit made by the owner of such loss before a magistrate, shall deliver another duplicate.

Goods pawned are deemed forfeited at the end of a year; but, on notice from persons having goods in pledge, 3 months further are to be allowed beyond the year for redemption; such notice to be given before the twelvemonth is expired.

All goods pawned may be sold at the expiration of *one* whole year; and all goods so forfeited, on which above 10*s.* and not exceeding 10*l.* shall have been lent, shall be sold by public auction, and not otherwise; notice of such sale being twice given, at least 3 days before the auction, in a public newspaper, upon pain of forfeiting to the owner of the goods not more than 5*l.* nor less than 2*l.*

All pictures, prints, books, bronzes, statues, busts, carvings in ivory and marble, cameos, intaglios, musical, mathematical, and philosophical instruments, and china, shall be sold by themselves, and without other goods, 4 times only in every year; viz. on the 1st *Monday* in *January*, *April*, *July*, and *October*, in every year.

Pawnbrokers are not to purchase goods while in their custody, nor take in pledges from persons under 12 years of age, or intoxicated; nor take in any goods before 8 in the forenoon or after 8 in the evening between *Michaelmas-day* and *Lady-day*, or before 7 in the forenoon or after 9 in the evening during the remainder of the year, excepting only until 11 on the evenings of *Saturday*, and the evenings preceding *Good Friday* and *Christmas-day*, and every fast or thanksgiving day.

An account of the sale of pledges for more than 10*s.* is to be entered by pawnbrokers in a book, and the surplus is to be paid to the owner of the goods pawned, if demanded within *three years* of the sale, under penalty of 10*l.* and treble the sum lent.

Pawnbrokers are to place in view the table of profits; and their name and business is to be placed over the door, on penalty of 10*l.*

Pawnbrokers injuring goods, or selling them before the time specified, shall, upon application to a magistrate, be compelled to make satisfaction for the same; and if the satisfaction awarded shall be equal to or exceed the principal and profit, the pawnbroker shall deliver the goods pledged to the owner, without being paid any thing for principal or profit.

Pawnbrokers shall produce their books before a magistrate; or, refusing so to do, shall forfeit a sum not exceeding 10*l.* nor less than 5*l.*

Pawnbrokers offending against this act, shall forfeit for every offence not less than 40*s.* nor more than 10*l.*

It has been held by the Court of King's Bench, that a pawnbroker has no right to sell unredeemed pledges, after the expiration of a year from the time the goods were pledged, if, while they are in his possession, the original owner tender him the principal and interest due. — (*Walter* v. *Smith*, 2d of January, 1820.) On a motion for a new trial, Lord Tenterden said, "I am of opinion, that if the pledge be not redeemed at the expiration of a year and a day, (and no notice given that 3 months further are to be allowed for its redemption,) the pawnbroker has a right to expose it to sale so soon as he can, consistently with the provisions of the act; but if at any time *before the sale has actually taken place*, the owner of the goods tender the principal and interest, and expenses incurred, he has a right to his goods, and the pawnbroker is not injured; for the power of sale is allowed him merely to secure to him the money which he has advanced, together with the high rate of interest which the law allows to him in his character of pawnbroker."

Such is the present state of the law with respect to pawnbrokers. On the whole, the regulations seem to be judiciously devised. Perhaps, however, the rate of interest on small deposits might be advantageously lowered. The law allows interest at the rate of $\frac{1}{2}d.$ per month to be charged on loans of 2*s.* 6*d.*, which is at the rate of 20 per cent.: but the same sum of $\frac{1}{2}d.$ per month is exigible from all smaller loans; and as very many do not exceed 1*s.* 6*d.*, and even 6*d.*, the interest on them is exceedingly oppressive. No doubt there is a great deal of trouble with respect to such loans; but still, considering the vast number of advances under 2*s.* 6*d.*, it would seem that the interest on them might be somewhat reduced. Perhaps, too, it might be advisable, still better to secure compliance with the statute, to enact that no one should be licensed as a pawnbroker without producing sufficient security for a certain sum to be forfeited in the event of his knowingly or wilfully breaking or evading any of its provisions. This would prevent (what Dr. Colquhoun says is not an uncommon practice) swindlers from becoming pawnbrokers, in order to get the means of selling stolen goods. — (*Treatise on the Police of the Metropolis*, 2d ed. p. 156.)

It would be a useful regulation to oblige pawnbrokers to insure against losses by fire. Much mischief has been occasioned by the neglect of this precaution.

An Account of the Number of Pawnbrokers licensed in the Metropolis, and in the Country, with the Rates respectively charged on their Licences, and the Duty received on the same, in each of the Five Years ending the 5th of January, 1830. — (*Parl. Paper*, No. 681. Sess. 1830.)

Years ending	Taken out at the Head Office, London.			Taken out in the Country.		
	Rate of Duty.	Number.	Duty.	Rate of Duty.	Number.	Duty.
	L. *s.*		*L.* *s.*	*L.* *s.*		*L.* *s.*
5th January - 1826	15 0	261	3,915 0	15 0	- -	7,040 0
	7 10	8	60 0	7 10		
— 1827	15 0	267	4,005 0	15 0	- -	7,223 0
	7 10	5	37 10	7 10		
— 1828	15 0	274	4,110 0	15 0	- -	7,904 10
	7 10	7	52 10	7 10		
— 1829	15 0	411	6,165 0	15 0	16	240 0
	7 10	6	75 0	7 10	1,596	11,970 0
— 1830	15 0	295	4,425 0	15 0	47	705 0
	7 10	7	52 10	7 10	1,038	7,785 0

The produce of each rate of duty not being distinguished in the distributors' accounts until the year ending the 5th of January, 1829, the number of licences cannot be given prior to that date for the country.

4. *Notices of Pawnbroking in Italy, France, &c.* — The practice of advancing money to the poor, either with or without interest, seems to have been occasionally followed in antiquity. — (*Beckmann*, vol. iii. p. 14. 1st Eng. ed.) But the first public establishments of this sort were founded in Italy, under the name of *Monti di Pietà*, in the 14th and 15th centuries. As it was soon found to be impossible to procure the means of supporting such establishments from voluntary contributions, a bull for allowing interest to be charged upon the loans made to the poor was issued by Leo X. in 1521. These establishments, though differing in many respects, have universally for their object to protect the needy from the risk of being plundered by the irresponsible individuals to whom their necessities might oblige them to resort, by accommodating them with loans on comparatively reasonable terms. And though their practice has not, in all instances, corresponded with the professions they have made, there seems no reason to doubt that they have been, speaking generally, of essential service to the poor.

From Italy these establishments have gradually spread over the Continent. The *Mont de Piété*, in Paris, was established by a royal ordinance in 1777; and after being destroyed by the Revolution, was again opened in 1797. In 1804, it obtained a monopoly of the business of pawnbroking in the capital. Loans are made, by this establishment, upon deposits of such goods as can be preserved, to the amount of *two thirds* of the estimated value of all goods other than gold and silver, and to *four fifths* of the value of the latter. No loan is for less than 3 francs (2*s.* 6*d.*). The advances are made for a year, but the borrower may renew the engagement. Interest is fixed at the rate of *one* per cent. per month.

The *Mont de Piété* receives annually about 1,200,000 articles, upon which it advances from 20,000,000 to 21,000,000 francs; it has generally from 600,000 to 650,000 articles in its possession. The expense of management amounts to from 60 to 65 *centimes* for each article; so that a loan of 3 francs never defrays the expenses it occasions, and the profits are wholly derived from those that exceed 5 francs. At an average, the profits amount to about 280,000 francs, of which only about 155,000 are derived from loans

upon deposit, about 125,000 being the produce of other funds at the disposal of the company.

The articles in pawn are returned in the proportion of	$\frac{18}{22}$ in number and	$\frac{17}{23}$ in value.
Are continued in pawn by a prolongation of the loan	$\frac{3}{22}$	$\frac{5}{23}$ —
Hence, are preserved to their proprietors, of articles pawned	$\frac{21}{22}$ in number and	$\frac{22}{23}$ in value.
Are sold, subject (as in England) to a claim for surplus any time during 3 years	$\frac{1}{22}$	$\frac{1}{23}$ —
	$\frac{22}{22}$	$\frac{23}{23}$

(*Bulletin des Sciences Géographiques*, Avril, 1830.)

There are no means of making a statement of this sort with respect to London; but, were it possible to make it, the proportion of forfeited pledges would be found, we have no doubt, much greater.

In some respects, particularly the lowness of interest upon small loans, and the greater vigilance exercised with respect to the reception of stolen goods, the *Mont de Piété* has an advantage over the pawnbroking establishments in this country. It may be doubted, however, whether it is, on the whole, so well fitted to attain its objects. The limitation of the loans to 3 francs would be felt to be a serious grievance here, and it can hardly be otherwise in France; nor is it to be supposed, that the servants of a great public establishment will be so ready to assist poor persons, having none but inferior articles to offer in security, as private individuals anxious to get business. And such, in point of fact, is found to be the case, not in Paris only, but in all those parts of the Continent where the business of pawnbroking is confined to a few establishments. And hence it would seem that, were the modifications already suggested adopted, our system would be the best of any.

PEARL-ASH. See Potash.

PEARLS (Du. *Paarlen*; Fr. *Perles*; Ger. *Perlen*; It. *Perle*; Lat. *Margaritæ*; Rus. *Shemtschug*, *Perlü*; Sp. *Perlas*; Arab. *Looloo*; Cyng. *Mootoo*; Hind. *Mootie*), are well known globular concretions found in several species of shell-fish, but particularly the mother-of-pearl oyster (*Concha margaritifera* Lin.). Pearls should be chosen round, of a bright translucent silvery whiteness, free from stains and roughness. Having these qualities, the largest are of course the most valuable. The larger ones have frequently the shape of a pear; and when these are otherwise perfect, they are in great demand for ear-rings. Ceylon pearls are most esteemed in England.

Value, &c. of Pearls. — Pearls were in the highest possible estimation in ancient Rome, and bore an enormous price. — (*Principium culmenque omnium rerum pretii, margaritæ tenent. — Plin. Hist. Nat.* lib. ix. c. 35.) Their price in modern times has very much declined; partly, no doubt, from changes of manners and fashions; but more, probably, from the admirable imitations of pearls that may be obtained at a very low price. According to Mr. Milburn, a handsome necklace of Ceylon pearls, smaller than a large pea, costs from 170*l.* to 300*l.*; but one of pearls about the size of peppercorns may be had for 15*l.*: the pearls in the former sell at a guinea each, and those in the latter at about 1*s.* 6*d.* When the pearls dwindle to the size of small shot, they are denominated *seed* pearls, and are of little value. They are mostly sent to China. One of the most remarkable pearls of which we have any authentic account was bought by Tavernier, at Catifa, in Arabia, a fishery famous in the days of Pliny, for the enormous sum of 110,000*l.*! It is pear-shaped, regular, and without blemish. The diameter is ·63 inch at the largest part, and the length from 2 to 3 inches.

Much difference of opinion has existed among naturalists with respect to the production of pearls in the oyster; but it seems now to be generally believed that it is the result of disease, and is formed in the same manner as bezoar — (see Bezoar); pearls, like it, consisting of successive coats spread with perfect regularity round a foreign *nucleus*. In fact, the Chinese throw into a species of shell-fish (*mytilus cygneus*, or swan muscle), when it opens, 5 or 6 very minute mother-of-pearl beads strung on a thread; and in the course of a year they are found covered with a pearly crust, which perfectly resembles the real pearl. — (*Milburn's Orient. Com.*; *Ainslie's Mat. Indica*, *&c.*)

Pearl Fisheries. — The pearl oyster is fished in various parts of the world, particularly on the west coast of Ceylon; at Tuticoreen, in the province of Tinnevelley, on the coast of Coromandel; at the Bahrein Islands, in the Gulf of Persia; at the Sooloo Islands; off the coast of Algiers; off St. Margarita, or Pearl Islands, in the West Indies, and other places on the coast of Colombia; and in the Bay of Panama, in the South Sea. Pearls have sometimes been found on the Scotch coast, and in various other places.

The pearl fishery of Tuticoreen is monopolised by the East India Company, and that of Ceylon by government. But these monopolies are of no value; as in neither case does the sum for which the fishery is let equal the expenses incurred in guarding, surveying, and managing the banks. It is, therefore, sufficiently obvious that this system ought to be abolished, and every one allowed to fish on paying a moderate licence duty. The fear of exhausting the banks is quite ludicrous. The fishery would be abandoned as unprofitable long before the breed of oysters had been injuriously diminished; and in a few years it would be as productive as ever. Besides giving fresh life to the fishery, the abolition of the monopoly would put an end to some very oppressive regulations, enacted by the Dutch more than a century ago.

Persian Gulf. — The most extensive pearl fisheries are those on the several banks not far distant from the island of Bahrein, on the west side of the Persian Gulf, in lat. 26° 50′ N., lon. 51° 10′ E.; but pearl

oysters are found along the whole of the Arabian coast, and round almost all the islands of the gulf. Such as are fished in the sea near the islands of Karrak and Corgo contain pearls said to be of a superior colour and description. They are formed of 8 layers or folds, whilst others have only 5, but the water is too deep to make fishing for them either very profitable or easy. Besides, the entire monopoly of the fishery is in the hands of the sheik of Bushire, who seems to consider these islands as his immediate property.

"The fishing season is divided into two portions — the one called the short and cold, the other the long and hot. In the cooler weather of the month of June, diving is practised along the coast in shallow water; but it is not until the intensely hot months of July, August and September, that the Bahrein banks are much frequented. The water on them is about 7 fathoms deep, and the divers are much inconvenienced when it is cold; indeed, they can do little when it is not as warm as the air, and it frequently becomes even more so in the hottest months of the summer. When they dive, they compress the nostrils tightly with a small piece of horn, which keeps the water out, and stuff their ears with bees'-wax for the same purpose. They attach a net to their waists, to contain the oysters; and aid their descent by means of a stone, which they hold by a rope attached to a boat, and shake it when they wish to be drawn up. From what I could learn, 2 minutes may be considered as rather above the average time of their remaining under water. Although severe labour, and very exhausting at the time, diving is not considered particularly injurious to the constitution; even old men practise it. A person usually dives from 12 to 15 times a day in favourable weather; but when otherwise, 3 or 4 times only. The work is performed on an empty stomach. When the diver becomes fatigued, he goes to sleep, and does not eat until he has slept some time.

"At Bahrein alone, the annual amount produced by the pearl fishery may be reckoned at from 200,000*l.* to 240,000*l.* If, to this, the purchases made by the Bahrein merchants or agents at Aboottabee Sharga, Ras-ul Khymack, &c. be added, which may amount to half as much more, there will be a total of about 300,000*l.* or 360,000*l.*; but this is calculated to include the whole pearl trade of the gulf; for it is believed that all the principal merchants of India, Arabia, and Persia, who deal in pearls, make their purchases, through agents, at Bahrein. I have not admitted in the above estimate much more than *one sixth* of the amount some native merchants have stated it to be, as a good deal seemed to be matter of guess or opinion, and it is difficult to get at facts. My own estimate is in some measure checked by the estimated profits of the small boats. But even the sum which I have estimated is an enormous annual value for an article found in other parts of the world as well as here, and which is never used in its best and most valuable state, except as an ornament. Large quantities of the seed pearls are used throughout Asia, in the composition of majoons, or electuaries, to form which all kinds of precious stones are occasionally mixed, after being pounded, excepting, indeed, diamonds; these, being considered, from their hardness, as utterly indigestible. The majoon, in which there is a large quantity of pearls, is much sought for and valued, on account of its supposed stimulating and restorative qualities.

"The Bahrein pearl fishery boats are reckoned to amount to about 1,500, and the trade is in the hands of merchants, some of whom possess considerable capital. They bear hard on the producers or fishers, and even those who make the greatest exertions in diving hardly have food to eat. The merchant advances some money to the fishermen at cent. per cent., and a portion of dates, rice, and other necessary articles, all at the supplier's own price; he also lets a boat to them, for which he gets 1 share of the gross profits of all that is fished; and, finally, he purchases the pearls nearly at his own price, for the unhappy fishermen are generally in his debt, and therefore at his mercy." — (*Manuscript Notes communicated by Major D. Wilson, late Political Resident at Bushire.*)

The fishery at Algiers was farmed by an English association in 1826, but we are ignorant of their success.

The pearl fisheries on the coast of Colombia were at one time of very great value. In 1587, upwards of 697 lbs. of pearls are said to have been imported into Seville. Philip II. had one from St. Margarita, which weighed 250 carats, and was valued at 150,000 dollars. But for many years past the Colombian pearl fisheries have been of comparatively little importance. During the mania for joint stock companies, in 1825, two were formed; — one, on a large scale, for prosecuting the pearl fishery on the coast of Colombia; and another, on a smaller scale, for prosecuting it in the Bay of Panama and the Pacific. Both were abandoned in 1826.

The best fishery ground is said to be in from 6 to 8 fathoms water. The divers continue under water from a minute to a minute and a half, or at most 2 minutes. They have a sack or bag fastened to the neck, in which they bring up the oysters. The exertion is extremely violent; and the divers are unhealthy and short-lived.

Pearl Shells, commonly called *Mother-of-pearl shells*, are imported from various parts of the East, and consist principally of the shells of the pearl oyster from the Gulf of Persia and other places, particularly the Sooloo Islands, situate between Borneo and the Philippines, the shores of which afford the largest and finest shells hitherto discovered. On the inside, the shell is beautifully polished, and of the whiteness and water of pearl itself: it has the same lustre on the outside, after the external laminæ have been removed. Mother-of-pearl shells are extensively used in the arts, particularly in inlaid work, and in the manufacture of handles for knives, buttons, toys, snuff boxes, &c. The Chinese manufacture them into beads, fish, counters, spoons, &c.; giving them a finish to which European artists have not been able to attain. Shells for the European market should be chosen of the largest size, of a beautiful pearly lustre, thick and even, and free from stains. Reject such as are small, cracked or broken, or have lumps on them. When stowed loose as dunnage, they are sometimes allowed to pass free of freight. — (*Milburn's Orient. Com.*) The imports during the 3 years ending with 1832 were — 1830, 465,591 lbs; 1831, 510,492 do.; 1832, 721,527 do. — (*Parl. Paper*, No. 425. Sess. 1833.)

PEAS (Ger. *Erbsen*; Fr. *Pois*; It. *Piselli, Bisi*; Sp. *Pesoles, Guisantes*; Rus. *Goroch*). The pea is one of the most esteemed of the leguminous or pulse plants. It is supposed to be indigenous to the south of Europe, and was cultivated by the Greeks and Romans, the latter of whom probably introduced it into Britain. There are many varieties; but the common garden pea (*Pisum sativum*), and the common grey or field pea (*Pisum arvense*), are the most generally cultivated; being reared in large quantities in all parts of the country, particularly in Kent. But since the introduction of the drill husbandry, the culture of the pea as a field crop has been to a considerable extent superseded by the bean. Sometimes, however, it is drilled along with the latter; for, being a climbing plant, it attaches itself to the bean, so as to admit the ground being hoed; at the same

time that the free admission of air about its roots promotes its growth. It is not possible to frame any estimate of the consumption of peas. The field pea is now hardly ever manufactured into meal for the purpose of being made into bread, as was formerly the case in many parts of the country; but there is reason to think that the garden pea is now more extensively used than ever. — (*Loudon's Ency. of Agriculture; Brown on Rural Affairs*, vol. ii. p. 72. For an account of the laws regulating the importation, &c. of peas, see CORN LAWS AND CORN TRADE.) Leguminous crops are very extensively cultivated in India. The exports of pulse from Calcutta, in 1830, exceeded 1,300 tons.

PECK, a dry measure for grain, pulse, &c. The standard, or Imperial peck, contains 2 gallons, or 554·55 cubic inches. Four pecks make a bushel, and 4 bushels a coomb. — (See WEIGHTS AND MEASURES.)

PELLITORY, the root of a perennial plant (*Anthemis pyrethrum*), a native of the Levant, Barbary, and the south of Europe. The root is long, tapering, about the thickness of the finger, with a brownish cuticle. It is imported packed in bales, sometimes mixed with other roots, from which, however, it is easily distinguished. It is inodorous. When chewed, it seems at first to be insipid, but after a few seconds it excites a glowing heat, and a pricking sensation on the tongue and lips which remains for 10 or 12 minutes. The pieces break with a short resinous fracture; the transverse section presenting a thick brown bark, studded with black shining points, and a pale yellow radiated inside. It is used in medicine as a stimulant. — (*Thomson's Dispensatory.*) The price varies, including the duty (6*d.*), from 2*s.* to 2*s.* 6*d.* per lb.

PENCILS (Ger. *Pinsel;* Du. *Pinseelen;* Fr. *Pinceaux;* It. *Pennelli;* Sp. *Pinceles*), the instruments used by painters in laying on their colours. They are of various kinds, and made of various materials; some being formed of the bristles of the boar, and others of camel's hair, the down of swans, &c.

PENCILS, BLACK LEAD. See BLACK LEAD PENCILS.

PENKNIVES (Ger. *Federmesser;* Fr. *Canifs;* It. *Temperini;* Sp. *Corta plumas*), small knives, too well known to need any particular description, used in making and mending pens. The best and most highly ornamented penknives are manufactured in London and Sheffield.

PENNY, formerly a silver, but now a copper coin. This was the first silver coin struck in England by our Saxon ancestors, being the 240th part of their pound; so that its weight was about 22½ grains Troy.

PENS (Fr. *Plumes à écrire;* Ger. *Schreibfedern;* It. *Penne da scrivere;* Rus. *Pera Stwoli*), well known instruments for writing, usually formed of the quills of the goose, swan, or some other bird. Metallic pens have been occasionally employed for a lengthened period; but it is only within these few years that they have been extensively introduced. They first began to be largely manufactured by Mr. John Perry, of London. Mr. P. having succeeded in giving to his pens a greater degree of softness and elasticity than was possessed by any metallic pens previously in use, they speedily obtained a very extensive sale. This success brought crowds of rivals into the field; so that metallic pens are now manufactured in vast quantities, and of an immense variety of forms. But though they have superseded, to a very considerable extent, the use of quills, and have some peculiar advantages, it does not appear possible to give them the elasticity of the quill, nor to fit them so well for quick and easy writing.

PENNYWEIGHT, a Troy weight, being the 20th part of an ounce, containing 24 grains.

PEPPER (Fr. *Poivre;* Ger. *Pfeffer;* Du. *Peper;* It. *Pepe;* Sp. *Pimienta;* Rus. *Perez;* Lat. *Piper*), the berry or fruit of different species of plants, having an aromatic, extremely hot, pungent taste, used in seasoning, &c. The following sorts of pepper are met with in commerce: —

I. BLACK PEPPER (Fr. *Poivre;* Ger. *Schwarzen pfeffer;* It. *Pepe negro;* Sp. *Pimienta;* Sans. *Mercha;* Hind. *Gol-mirch;* Malay, *Lada;* Jav. *Mariha*), the fruit of a creeping plant (*Piper nigrum*), one of the pepper genus, of which there are upwards of 80 species. It is cultivated extensively in India, Siam, the Eastern islands, &c. It requires the support of other trees, to which it readily adheres. It climbs to the height of 20 feet; but is said to bear best when restrained to the height of 12 feet. It begins to produce at about the 3d year, and is in perfection at the 7th; continues in this state for 3 or 4 years; and declines for about as many more, until it ceases to be worth keeping. The fruit grows abundantly from all the branches, in long small clusters of from 20 to 50 grains; when ripe, it is of a bright red colour. After being gathered, it is spread on mats in the sun, when it loses its red colour, and becomes black and shrivelled as we see it. The grains are separated from the stalks by hand rubbing. That which has been gathered at the proper period shrivels the least; but if plucked too soon, it will become broken and dusty in its removal from place to place. The vine produces two crops in the year; but the seasons are subject to great irregularities.

Pepper should be chosen of a pungent aromatic odour, an extremely hot and acrid

taste, in large grains, firm, sound, and with few wrinkles — for of these it always has some. Reject that which is shrivelled, or small grained, or which on being rubbed will break to pieces.

In point of quality, the pepper of Malabar is usually reckoned the best; but there is no material difference between it and that of Sumatra, and the other islands. In the market of Bengal, where they meet on equal terms, the produce of Malabar is generally about 2 per cent. higher than the other. In Europe, there is generally a difference of $\frac{1}{4}d.$ per lb. in favour of Malabar; but in China they are held in equal estimation.

Black pepper sold ground, is said to be often adulterated with burnt crust of bread.

II. White Pepper is made by blanching the finest grains of the common black pepper, by steeping them for a while in water, and then gently rubbing them, so as to remove the dark outer coat. It is milder than the other, and is much prized by the Chinese; but very little is imported into England.

III. Cayenne Pepper is the produce of several varieties of the *Capsicum*, an annual plant, a native of both the Indies. The best, which is brought home from the West Indies ready prepared, is made from the *Capsicum baccatum* (bird pepper). It has an aromatic, extremely pungent, acrimonious taste, setting the mouth, as it were, on fire, and the impression remaining long on the palate. It is sometimes adulterated with muriate of soda; and sometimes with a very deleterious substance, the red oxide of lead; but this fraud may be detected by its weight, and by chemical tests. — (See Chillies.)

IV. Long Pepper. — This species is the produce of a perennial (*Piper longum*), a native of Malabar and Bengal. The fruit is hottest in its immature state; and is therefore gathered while green, and dried in the sun. It is imported in entire spikes, which are about $1\frac{1}{2}$ inch long. It has a weak aromatic odour, an intensely fiery pungent taste, and a dark grey colour. The root of long pepper is a favourite medicine among the Hindoos.

The quantities of the last 3 species of pepper imported are quite inconsiderable, compared with the quantity of black pepper. — (*Milburn's Orient. Com.; Ainslie's Mat. Indica; Thomson's Dispensatory*, &c.)

Trade in Pepper. Consumption of, and Duties on, in England. — Pepper is extensively used, all over Europe and the East, as a condiment. It was originally imported into this country by way of the Levant (see *antè*, p. 522.); and for many years after the establishment of the East India Company, it formed the most important article of their imports. In nothing has the beneficial effect of opening the Indian trade been so unequivocally displayed as in the instance of pepper. The private traders have resorted to new markets, and discovered new sources of supply which had hitherto been wholly unexplored; so that there has been not only a very great increase in the quantity of pepper brought to Europe, but also a very great fall in its price, which does not now exceed a third of what it amounted to in 1814!

The quantities in the following Table are taken from the *Parl. Papers*, No. 22. Sess. 1830, and No. 425. Sess. 1833; the prices have been supplied by Mr. Cook.

Amount of the Total Quantity of Pepper imported from the East Indies into Great Britain, with its Price in Bond in London, each Year, from 1814.

Years.	Pepper.	Prices.	Years.	Pepper.	Prices.	Years.	Pepper.	Prices.
	Lbs.	*Per lb.*		*Lbs.*	*Per lb.*		*Lbs.*	*Per lb.*
1814	5,762,649	11*d.* to 13*d.*	1821	845,100	$7\frac{1}{2}d.$ to $7\frac{1}{2}d.$	1827	9,067,766	$3\frac{1}{2}d.$ to $3\frac{3}{8}d.$
1815	12,719,858	$9\frac{1}{2}$ — 9·9	1822	7,211,376	5 — $6\frac{1}{2}$	1828	4,978,102	$3\frac{7}{8}$ — 3·9
1816	11,985,014	7 — $7\frac{1}{2}$	1823	5,955,326	5 — $6\frac{1}{2}$	1829	- -	2·9 — $3\frac{1}{2}$
1817	4,087,062	8 — $8\frac{1}{2}$	1824	8,801,634	$5\frac{1}{2}$ — 6	1830	2,742,224	$2\frac{3}{4}$ — 4
1818	6,154,721	$7\frac{1}{2}$ — $7\frac{3}{4}$	1825	5,396,217	4·9 — 5·4	1831	6,128,240	3 — 0
1819	5,390,643	6·1 — $6\frac{1}{2}$	1826	13,103,416	4 — $4\frac{1}{2}$	1832	4,630,475	$3\frac{5}{8}$ — 4
1820	787,947	6·6 — $6\frac{3}{4}$						

Pepper is one of the most grossly over-taxed articles in the British tariff. Until 1823, the duty was 2*s.* 6*d.* per lb. — a duty so exorbitant, that one would be inclined to think it had been imposed in order to put a total stop to the use of the article. In 1823, the duty on pepper from a British possession was reduced to 1*s.* per lb.; but even this duty, as compared with the price of the article (3*d.* to 4*d.* per lb.), is quite enormous, amounting to no less than from 400 to 300 per cent.! It will be seen from the subjoined Table that the reduction of the duty, in 1823, has increased the consumption from about 1,400,000 lbs. to 2,225,000 lbs. a year; and were the duty reduced, as it ought to be, to 2*d.*, or at most 3*d.* per lb., so that pepper might become accessible to the lower classes, to whom its free use would be of infinite importance, we have not the slightest doubt that in a very short period the consumption would amount to 5,000,000 or 6,000,000 lbs. There would either be no loss of revenue by such a measure, or none worth mentioning; and it is not to be endured that the bulk of the people should be deprived of so useful a commodity, and the trade of the country seriously injured, by keeping up oppressive duties, which serve no purpose whatever, unless it be to keep alive the remembrance of the ignorance and rapacity of those by whom they were imposed.

We have already shown (see *antè*, p. 545.) the difficulties under which the dealers in pepper labour, in consequence of the absurd regulations as to the warehousing of commodities from India.

Account of the Quantity of all Sorts of Pepper retained for Home Consumption in the United Kingdom, the Rates of Duty thereon, and the Total Revenue derived from the same, in each Year since 1809.

Years.	Quantities retained for Home Consumption.	Nett Amount of Duty received thereon.	Rates of Duty charged thereon.				
			Common Pepper.	Cayenne Pepper.		Long Pepper.	Guinea Pepper.
			East India.	East India.	Other.		
	Lbs.	*L.* *s.* *d.*			*Per lb.*	*Per lb.*	*Per lb.*
1810	1,117,982	88,293 8 4	1*s.* 8*d.* per lb. and 2*l.* 13*s.* 4*d.* per cent. ad valorem.	4*s.* per lb., and 2*l.* 13*s.* 4*d.* per cent. ad valorem.	4*s.*	8*d.*	1*s.* 4*d.*
1811	1,132,086	90,547 1 6	ditto	ditto	ditto	ditto	ditto
1812	1,183,489	101,209 10 6	ditto	ditto	ditto	ditto	ditto
1813	Records destroyed.		From 15th April, 1*s.* 11¾*d.* per lb., and 3*l.* 3*s.* 4*d.* per cent. ad valorem.	4*s.* 9*d.* per lb., and 3*l.* 3*s.* 4*d.* per cent. ad valorem.	4*s.* 9*d.*	9½*d.*	1*s.* 7*d.*
1814	941,569	95,668 4 10	From 10th April, 1*s.* 10½*d.* per lb.	5*s.* per lb.	ditto	10*d.*	ditto
1815	1,099,423	103,025 11 10	ditto	ditto	ditto	ditto	ditto
1816	1,065,702½	99,390 19 1	ditto	ditto	ditto	ditto	ditto
1817	1,218,750¾	113,887 6 7	ditto	ditto	ditto	ditto	ditto
1818	1,457,383	125,093 15 6	ditto	ditto	ditto	ditto	ditto
1819	1,302,027	119,271 7 1	From 5th July, 2*s.* 6*d.* per lb.	2*s.* 6*d.* per lb.	2*s.* 6*d.*	2*s.*	2*s.* 6*d.*
1820	1,404,021½	174,063 2 9	ditto	ditto	ditto	ditto	ditto
1821	1,256,532½	156,208 2 3	ditto	ditto	ditto	ditto	ditto
1822	1,446,100¼	179,586 11 4	ditto	ditto	ditto	ditto	ditto
1823	1,368,983	170,627 6 8	From 10th October, 2*s.* 6*d.* per lb. on all sorts.				
1824	1,447,030½	180,816 3 5	ditto				
1825	850,087¾	106,221 15 0	ditto				
1826	2,529,027	126,517 4 8	From 5th January, 1*s.* per lb., if from British possessions.				
1827	1,949,931½	97,496 5 11	ditto				
1828	1,927,718½	96,467 12 5	ditto				
1829	1,933,641	96,725 19 2	ditto				
1830	2,009,154	100,492 0 0	ditto				
1831	2,050,082	102,639 0 0	ditto				
1832	2,225,491	111,238 0 0	ditto				

Supply of Pepper. — The following instructive details with respect to the supply of pepper are taken from the *Singapore Chronicle;* to which they were contributed by John Crawfurd, Esq. — than whom there can be no more competent authority as to such subjects.

Of all the products of the Eastern islands, and of the countries immediately in their neighbourhood, in demand among strangers, black pepper is the most important, both in value and quantity.

The pepper countries extend from about the longitude of 96° to that of 115° E., beyond which no pepper is to be found; and they reach from 5° S. latitude to about 12° N., where it again ceases. Within these limits we have Sumatra, Borneo, the Malayan peninsula, and certain countries lying on the east coast of the Gulf of Siam.

The whole produce of the island of Sumatra is estimated not to fall short of 168,000 piculs, of 133⅓ lbs. each; the south-west coast being said to produce 150,000, and the north-east coast 18,000 piculs.

The pepper ports on the north-east coast of Sumatra are Lankat and Delli, with Sardang. The first 2 produce 15,000 piculs, and the latter 3,000 annually. The cultivation is carried on by the Batta nation in the interior.

The ports on the south-west coast, and the amount of their produce, as given in a recent estimate, are as follow: viz. port and district of Trumah, 40,000; district of Pulo Dua, 4,000: ditto of Cluat, 30,000; coast from Tampat Tuan to Susu, 33,000; port of Susu, 1,000; Kualla Batta, 20,000; Analabu, 2,000; districts to the north of Analabu, 20,000; making in all, 150,000 piculs.

Here it is of importance to remark, that the culture and production are extremely fluctuating.

During the last pepper season, there obtained cargoes on the west coast of Sumatra, 27 American ships, 6 country traders, 4 large French ships, besides the ships belonging to the East India Company, which generally take away 500 tons. Nearly the whole of this trade is in the hands of Europeans or Americans; the pepper finds its way to Europe, to America, and in a small proportion to China.

The north-east coast of Sumatra, from Pedier down to the Carimons, is estimated, as already mentioned, to produce 18,000 piculs. Prince of Wales Island is the principal *depôt* for this, from whence the greatest part is exported to India and China. The produce of Prince of Wales Island itself is about 15,000 piculs.

Of the islands at the mouth of the Straits of Malacca and Singapore, Bingtang, on which Rhio is situated, and adjacent islands, produce 10,000 piculs; and Lingga about 2,000. A large proportion of this is brought to Singapore, which exported last year about 21,000 piculs; some part to Bengal and China, but principally to Europe direct, in free traders.

The west coast of the Malayan peninsula produces no pepper, with the exception of about 4,000 piculs afforded by the territory of Malacca.

On the east coast of the peninsula, the production of pepper is very considerable. The ports of Patani and Calantan — chiefly the latter — yield about 16,000 piculs annually, and Tringanu about 8,000. A portion of this is brought to Singapore and Penang; but we believe the greater proportion goes direct to China in junks, of which 3 large ones frequent Tringanu annually, and 1 Calantan. The Americans, too, occasionally visit these ports. In the year 1821, 3 vessels of considerable burden obtained cargoes.

The east coast of the Gulf of Siam, from the latitude of 10½° to that of 12½° N., affords an extensive produce of pepper. This coast is scarcely known, even by name, to the traders of Europe. The principal ports here are Chantibun, Tungyai, Pongsom, and Kampop; the first 2 being under the dominion of Siam, and the latter under that of Kamboja. The whole produce is estimated at not less than 60,000 piculs; 40,000 of which are brought at once to the capital of Siam as tribute to the king, and the whole finds its way to China in junks. It remains only to estimate the produce of the island of Borneo. The whole produce of Borneo is estimated at about 20,000 piculs; of which a large share is carried to China direct in junks, some by Portuguese vessels; and about 7,000 piculs are now annually brought by the native craft of the country itself to Singapore in the course of that free trade, which is happily flourishing at this settlement. The data which have been stated, will enable us to estimate the whole production of the Malayan Archipelago, including that of the peninsula of Malacca, and that of the east coast of the Gulf of Siam, as 308,000 piculs; and as there is no other part of the world that affords pepper, excepting the western coast of the peninsula of India, and this affords but 30,000 piculs, or less than 1-10th part of what the places we have enumerated produce, we have, accordingly, at one view, the whole production of the earth, being 338,000 piculs, or 45,066,666 lbs. avoirdupois. The average price of pepper has been lately about 9 Spanish dollars a picul; so the whole value drawn into India from Europe, China, and the

New World, on account of this single commodity, is 3,042,000 dollars. The quantity given in this statement may appear enormous; but if meted out to the whole population of the globe, or to 1,000,000,000 of people, it would be found that the average annual consumption of an individual would amount to no more than 325 grains.

Mr. Crawfurd has very recently supplied us with a revised estimate of the production of pepper as follows: —

	Lbs.		Lbs.
Sumatra (west coast) - -	20,000,000	Siam - - - -	8,000,000
Do. (east do.) - -	8,000,000	Malabar - - - -	4,000,000
Islands in the Straits of Malacca -	3,600,000		
Malay peninsula - -	3,733,333	Total -	50,000,000
Borneo - - -	2,666,667		

The localities in the previous estimate are quite correct; and we, therefore, did not think it would be right to suppress it.

But, though this may be depended upon as being a fair statement of what has been, till a comparatively late period, the average supply of pepper, the extreme depression of price has occasioned a very considerable decline in the production of some of the places mentioned above, within the last 4 or 5 years. The late advance of price will, however, probably, check any further diminution of production. But though prices were to rise still more considerably than they have done, the effect on the supply, owing to the plant requiring a few years to come to maturity, may not, at first, be so great as might be supposed.

PERCH, a long measure, 16½ feet in length. — (See Weights and Measures.)

PERMIT, a licence or instrument, granted by the officers of excise, authorising the removal of goods subject to the excise duties.

It is enacted by the 11 Geo. 3. c. 30., that no person shall demand or receive a permit for the removal of brandy, arrack, rum, spirits, and strong waters, coffee, tea, and cocoa nuts, without the special direction *in writing* of the person out of whose stock they are to come, on pain of forfeiting 50*l.*; and in default of payment, to be imprisoned 3 months. Persons taking out a permit, and not removing the goods within the prescribed period, nor returning the permit to the officer, forfeit *treble* the value of the goods mentioned in such permit. By the 57 Geo. 3. c. 123., persons selling, lending, or making use of a permit for any other purpose than that for which it was granted, forfeit 500*l.* By the 6 Geo. 4. c. 80. § 116. it is enacted, that any retailer of spirits sending out more than *one gallon* without a lawful permit; any rectifier, compounder, or dealer, receiving into his stock any spirits without a permit; or any carrier, boatman, or other person, assisting in the removal or transportation of any spirits without a permit; shall forfeit 200*l.* over and above every other penalty, together with all such spirits: the packages, carts, horses, &c. employed in the removal of such goods shall also be forfeited, and may and *shall* be seized by any officer of excise. The 9 Geo. 4. c. 44. § 5. dispenses with the necessity of a permit for the removal of coffee and cocoa. The commissioners of excise provide frames or moulds for making the paper used for permits, which has the words "Excise Office" visible in the substance of it. It is a capital offence to make such frames, or to have them in one's possession without a lawful excuse.

These regulations will, it is most probable, be speedily modified; the commissioners of excise inquiry, of whom Sir Henry Parnell is chairman, having recommended the abolition of permits in case of the removal of tea, and some other articles.

PERRY, a fermented liquor made from pears, in the same manner as cider from apples. The pears best fitted for producing this liquor are exceedingly harsh and tart; but it is itself pleasant and wholesome. — (See Cider.)

PETERSBURGH, the modern metropolis of the Russian empire, situated at the confluence of the river Neva with the eastern extremity of the Gulf of Finland, in lat. 59° 56′ 23″ N., lon. 30° 18¾′ E. Population (including military) 480,000.

This flourishing emporium was founded by Peter the Great, whose name it bears, in 1703. In the same year, the first merchant ship that ever appeared on the Neva arrived from Holland; and the czar, to mark his sense of the value of such visiters, treated the captain and crew with the greatest hospitality, and loaded them with presents. In 1714, 16 ships arrived at Petersburgh; in 1730, the number had increased to 180; and so rapid has been the progress of commerce and civilisation in Russia since that period, that, at present, from 1,200 to 1,500 ships annually enter and clear out from Petersburgh!

It is much to be regretted, that, although favourable to commerce, the situation of Petersburgh is, in other respects, far from being good. The ground on which it stands is low and swampy; it has, on different occasions, sustained great injury from inundations; and the country round is, generally speaking, a morass and forest, so that almost every thing required for the subsistence of the inhabitants must be brought from a distance. No one less bold and daring than Peter the Great would have thought of selecting such a situation for the metropolis of his empire; and none possessed of less power and resolution could have succeeded in overcoming the all but insuperable obstacles which the nature of the country opposed to the completion of his gigantic schemes.

Cronstadt, situated on a small island about 20 miles W. of Petersburgh, may, in some measure, be considered as the port of the latter. Almost all vessels bound for Petersburgh touch here; and those drawing above 8 feet water load and unload at Cronstadt; the goods being conveyed from and to the city in lighters, the charges of which vary according to the demand at the time. The merchants' harbour at Cronstadt is fitted to contain about 600 ships; but it is exposed to the westerly winds. Cronstadt is strongly fortified, and is the principal station of the Russian fleet. Vessels bound for Petersburgh must pass by the narrow channel to the south of the island, commanded by the fortifications of Cronstadt on the one side, and of Cronslot on the other. The woodcut on the next page, taken from the official survey published by the Russian govern-

ment, gives a better idea of the situation of Petersburgh, Cronstadt, &c. than could be derived from any description.

References to Plan. — A, Cronslot; B, Men-of-war haven; C, Tolboken light-house, 88 feet high, furnished with a fixed light. Soundings in fathoms. It appears from the above plan, that the depth of water between Cronstadt and Petersburgh does not, in some places, exceed 6 or 7 feet; but it is increased about a foot by continued westerly, and is diminished about as much by continued easterly, winds. Cronstadt is, therefore, as already observed, in reality, the port of Petersburgh; and has, indeed, no separate Custom-house or jurisdiction. The transfer of goods between the two places by means of lighters has of late years been materially facilitated by the employment of steam tugs.

Trade, &c. — Petersburgh has the most extensive foreign trade of any city in the north of Europe. This arises from its being the only great maritime outlet on the Gulf of Finland, and from its vast and various communications with the interior of the country. Few countries have such an extent of internal navigation as Russia. By means partly of rivers, and partly of canals, Petersburgh is connected with the Caspian Sea. Goods are conveyed from the latter to the capital, through a distance of 1,434 miles, without once landing them! The iron and furs of Siberia, and the teas of China, are received at Petersburgh in the same way; but owing to the great distance of those countries, and the short period of the year during which the rivers and canals are navigable, they take 3 years in their transit. Immense quantities of goods are also conveyed during winter upon the ice, in sledges, to the different ports, and to the nearest *pristans*, or places in the interior where barks are built for river or canal navigation. They are put on board in anticipation of the period of sailing, that the barks may be ready to take advantage of the high water, by floating down with the current as soon as the snow and ice begin to melt. The cargoes carried up the river into the interior during summer are principally conveyed to their ultimate destinations by the sledge roads during winter. The conveyance by the latter is generally the most expeditious; and it, as well as the internal conveyance by water, is performed at a very moderate expense.

The barks that come from the interior are mostly of a very rude construction, flat-bottomed, and seldom drawing more than 20 or 30 inches water. When they arrive at their destination, they are sold or broken up for fire-wood. Those that leave the ports for the interior are of a superior description, and are comparatively few in number; the commodities imported being, at an average, of much greater value relatively to their bulk and weight than those that are exported.

Principal Articles of Export and Import. — The principal articles of export are tallow, hemp and flax, iron, copper; grain, particularly wheat; deals and masts, potashes, bristles, linseed and hemp seed, linseed and hemp seed oils, furs, leather; fox, hare, and squirrel skins; canvass and coarse linen, cordage, caviare, wax, isinglass, tar, &c. Tallow, both for candles and soap, is more largely exported from this than from any other port in the Baltic, and is an article of great commercial importance. — (See Tallow.) The hemp is of good quality, though inferior to that of Riga: it is assorted, according to its quality, into *clean hemp*, or firsts; *outshot hemp*, or seconds; and *half-clean hemp*, or thirds. The first sort should be quite clean, and free from spills; the second is less so; and the third, or *half-clean*, contains a still greater portion of spills, and is, besides, of mixed qualities and colours. Russian flax is much esteemed for the length of its fibre; it is naturally brownish, but becomes very white after the first bleaching. Three qualities are distinguished; viz. 12 head, 9 head, and 6 head. — (See Hemp, and Flax.) Iron is of very good quality, and is preferable to that from the other Russian ports: there are two kinds, old and new sable; the former is the best. Leather is largely exported; it is divided into many different sorts. — (See the details with respect to it in the art. Russia Leather.) The grain trade between this country and Petersburgh has, within the last 7 years, become of very considerable importance; and Russia will, probably, continue henceforth to be one of the principal sources of supply to this country. The *Russian wheat*, so called to distinguish it from the *azemaia*, or soft wheat, and the *kubanka*, or hard wheat, is the lowest description of wheat shipped from Petersburgh. It is very small-grained, and dingy coloured; being, though sound, unfit for the manufacture of fine bread. The azemaia is of a larger, though still not a large grain, and better colour, and has of late been extensively imported into England. The kubanka, or hard wheat, is a large semi-transparent grain. Its hardness has nothing of the flinty character of the Spanish hard wheat, which it most resembles. When first brought to London, the millers objected to it, on account of the difficulty experienced in grinding it; but it is now much esteemed. All the Russian wheats are well calculated for keeping, either in granary, or when made into bread: but the kubanka has this quality in a peculiar degree; and is in great demand for mixing with other wheats that are old, stale, or out of condition. A shipment of 100 chetwerts of wheat in Petersburgh is found, when delivered here, to yield about 72 Imperial quarters. The principal imports are sugar, especially from the Havannah (the importation of refined sugar was prohibited in 1822); coffee, but not in large quantities; madder, indigo, cochineal, and dye woods; cotton stuffs and yarn, — the latter being by far the principal article sent from this country to Russia; woollens, oils, spices, salt, wine, lead, tin, coal, fine linen from Holland and Silesia, &c.

Rapid as has been the increase of Russian commerce, its progress has been materially retarded by restrictions on importation. Considering the immense variety of valuable natural productions with which Russia abounds, the thinness of the population, and the slavery and ignorance of the great bulk of the people, nothing can be more absurd than the attempt to render them, by dint of Custom-house regulations, rivals of the English and Germans in manufacturing industry! However, it must be confessed, that in enacting prohibitions and restrictions, they are only following a line of policy which we have not

yet entirely abandoned, though it has been quite as injurious to us as it can be to them. We had hoped that sound commercial principles were beginning to get an ascendancy at Petersburgh, inasmuch as the ukase of the 26th of March, 1830, materially modified several of the previous restrictions. But more recently a new ukase made its appearance, enacting a considerable increase of duties on several articles. It is, we are afraid, pretty clear, that the Russian government has profited little by the admirable work of M. Storch (*Cours d'Economie Politique*), though written for the special use of the present emperor of Russia, and his brother the Grand Duke Michael, and published by order of the late emperor.

Inspection of Goods. — At Petersburgh, Riga, and other Baltic ports, when goods are brought from the interior to be shipped, they are inspected and classified according to their qualities, by officers (*brackers*) appointed by government for that purpose, and sworn to the faithful performance of their duty. All sorts of timber, linen and canvass, flax and hemp, linseed and hemp seed, ashes, wax, &c. are subject to such inspection. They are generally divided into three qualities: *Krohn* (crown), or superior; *Brack*, or middling; and *Bracks-Brack*, or inferior. This classification is said to be, in most cases, made with considerable fairness. A factor or commission agent in Russia, instructed to buy, on account of his correspondent in England or Holland, a specified quantity of any description of produce subject to the official visit, is not liable to any action in the event of the article being found upon delivery to be of inferior quality, provided he produce a certificate to show that it had been officially inspected, or *bracked*. But a factor is at liberty, should any article delivered to him be manifestly defective, to name 1 or 2 other *brackers* to decide whether the article be merchantable or not.

Native and Foreign Merchants, &c. — Every Russian carrying on trade must be a burgher, and have his name registered in the burghers' book; he thus acquires an unlimited freedom of trade. All whose names are in the burghers' books, are either townsmen who have property within the city, or members of a guild. There are three guilds. Those belonging to the first must possess from 10,000 to 50,000 roubles: these may follow foreign trade, are not liable to corporal punishment, and may drive about the city in a carriage drawn by 2 horses. Those belonging to the second guild declare themselves possessed of from 5,000 to 10,000 roubles; they are confined to inland trade. A capital of from 1,000 to 5,000 roubles entitles its owner to admission into the third guild, which comprises shopkeepers and petty dealers. The rates paid by the members of these guilds amount to 1 per cent. upon their declared capital, the "statement of which is left to the conscience of every individual." Burghers are not obliged to serve in the army, but may provide a substitute, or pay a fine. The *guests*, or foreign merchants, who enrol themselves in the city register on account of their commercial affairs, enjoy privileges nearly similar to those enjoyed by the members of the first guild.

None but native Russians are allowed to engage in the internal trade of the country; and hence a foreigner, who imports goods into Russia, must sell them to Russians only, and at the port where they arrive. A few foreigners, indeed, settled in Russia, and having connections with the natives, do carry on a trade with the interior; but it is contrary to law, and the goods are liable to be seized.

The merchants engaged in foreign trade are mostly foreigners, of whom the English are the principal. The peculiar privileges formerly enjoyed by the latter are now nearly obsolete; and their rights, in common with those of other foreigners, are merely those of *guests*. The English factory is, at present, little more than a society formed of some of the principal English merchants, several of whom, however, do not belong to it: its power extends to little else than the management of certain funds under its control.

Purchase and Sale of Commodities, &c. — Owing to the scarcity of capital in Russia, goods, the produce of the country, are frequently paid in advance; and foreign goods are most commonly sold upon credit. From the month of November till the shipping season in May, the Russians who trade in flax, hemp, tallow, bristles, iron, &c. either come themselves to Petersburgh, or employ agents to sell their goods to foreigners, to be delivered, according to agreement, in May, June, July, or August. The payments are made according to the circumstances of the sellers and buyers; sometimes the buyer pays the whole amount, in the winter months, for the goods which are to be delivered in the summer or autumn; and sometimes he pays a part on concluding the contract, and the remainder on delivery of the goods. The manufacturers and dealers in linen usually come to Petersburgh in March, and sell their goods for ready money.

Foreign goods were formerly almost entirely sold at a twelvemonth's credit, and some at a still longer term; but of late years several articles, as coffee and sugar, are sold for ready money: still, however, the great bulk of foreign goods for the supply of the interior is sold on credit. Most of the Russians who buy goods on credit of foreigners, for the use of the interior, have no other connection or trade with Petersburgh, than merely coming there once or twice a year to make purchases: which having accomplished, they set off with the goods, and the foreigner neither sees nor hears of them again till the bills become due.

It is obvious, from this statement, that experience and sagacity are nowhere more requisite in a merchant than here. He has nothing, in fact, but his own knowledge of the native dealers to depend upon: and it is highly creditable to the Russians, that foreigners do not hesitate to trust them with immense

sums on such a guaranty. A foreign merchant, carrying on business in Russia, must also be acquainted with the customary forms and obligations of contracts; the mode of making payments; the many formalities that encumber, and sometimes turn aside, the course of justice; the spirit, still more than the letter, of the tariff and the Custom-house regulations; the privileges claimed by the Crown, and the different orders; with a variety of other particulars, which attentive and able men may learn on the spot, and nowhere else.

"Another circumstance connected with the British trade is too curious to be passed in silence. Every mercantile house in Petersburgh employs certain men, called in the language of the country *artelschicks*, who are the counting-house men, and employed by every merchant to collect payment on bills, and to receive money, as well as, in many instances, to pay it in very considerable sums. This is an important part of their trust. There being no bankers in Russia, every mercantile house keeps its own cash; and as the payments between merchants, and for bills of exchange, are made entirely in bank notes of no higher value than 5, 10, 25, 50, and 100 roubles — most of them in so tattered a state as to require several hours to count over a sum of 2,000*l.* or 3,000*l.* — this business is performed by artelschicks; and very few instances have occurred of loss by their inattention, either in miscounting the notes, in taking false notes, or, where they are much torn, in receiving parts of different bank notes.

"These artelschicks are also employed to superintend the loading and unloading the different cargoes: they receive the most valuable into the warehouse, where they are left solely under their care; and in these warehouses not merely merchandise, but often large quantities of dollars, are deposited. These Russians are mostly natives of Archangel and the adjacent governments, of the lowest class; are often slaves, generally of the Crown: and the only security of the merchant arises in some degree from the natural reluctance of the Russian to betray confidence reposed in him; but in a much greater from their association, which is called an artel.

"An artel consists of a certain number of labourers, who voluntarily become responsible, as a body, for the honesty of each individual. The separate earnings of each man are put into the common stock; a monthly allowance is made for his support; and at the end of the year the surplus is equally divided. The number varies in different associations from 50 to 100; and so advantageous is it considered to belong to one of these societies, that 500 and even 1,000 roubles are paid for admission. These societies are not bound by any law of the empire, or even written agreement; nor does the merchant restrain them under any legal obligation; yet there has been no instance of their objecting to any just claim, or of protecting an individual whose conduct had brought a demand on the society." — (*Coxe's Travels in Russia*, vol. iii. p. 315.)

Few Russian merchants engage in foreign trade. It is carried on principally in foreign bottoms, of which by far the larger proportion are English. Marine insurances are generally effected in London or Amsterdam; there being no establishment for that department of business in Russia. An insurance company against fire has been established in Petersburgh, and enjoys several privileges It is a joint stock company, divided into actions, or shares. It has been very successful; and its shares are at a very high premium. No insurance on houses or goods in Russia, made in a foreign country, can be legally recovered; no official documents of loss being allowed to be furnished for such a purpose.

Money. — Accounts are kept at Petersburgh, and throughout Russia, in bank roubles of 100 copecks: formerly, accounts were kept in silver money; but, by an order of government, the practice of keeping accounts in bank note roubles has been enforced since 1811, to the exclusion of the other.

The only gold coin at present struck is the ½ Imperial, or 5 rouble piece, = 19*s.* 8*d.* sterling very nearly. The silver rouble is worth 3*s.* 2¾*d.* sterling very nearly; and is declared, by a ukase issued in 1829, to be worth 360 copecks: this would give the value of the paper rouble at nearly 11*d.*; but it fluctuates with the exchange. — (For an account of the Commercial Bank of Russia, see *ante*, p. 105.)

Weights and Measures. — The Russian weights are the same for gold, silver, and merchandise, viz. —

3 Soltnicks = 1 Loth.	40 Pounds = 1 Pood.
32 Loths = 1 Pound.	10 Poods = 1 Berkovitz.

The Russian pound contains, according to Dr. Kelly, 6318·5 English grains. Hence, 100 lbs. Russian = 90·26 lbs. avoirdupois = 40·93 kilog. The pood = 36 lbs. 1 oz. 11 drs., but among merchants it is reckoned = 36 lbs. According to Nelkenbrecher, 100 lbs. Russian = 90·19 lbs. avoirdupois = 40·9 kilog. = 82·8 lbs. of Amsterdam = 84·444 of Hamburgh.

The principal measure for corn is the chetwert, divided into 2 osmins, 4 pajocks, 8 chetwericks, or 64 garnitz. The chetwert = 5·952 Winchester bushels. Hence, 100 chetwerts = 74·4 English quarters.

In liquid measure,	3 Wedros = 1 Anker.
11 Tsharky = 1 Krashka.	6 Ankers = 1 Oxhoft.
8 Krashka = 1 Wedro.	2 Oxhoft = 1 Pipe.
40 Wedros = 1 Sorokovy.	In long measure,
The wedro = 3½ English wine gallons.	16 Wershok = 1 Arsheen.
13 1/3 Bottles = 1 Wedro.	3 Arsheen = 1 Sashen.
	500 Sashen = 1 Verst.

1 sashen = 7 English feet; 1 arsheen = 28 English inches. 100 Russian feet = 114½ English feet. The verst, or Russian mile, = 5 furlongs 12 poles. The English inch and foot are used throughout Russia, chiefly, however, in the measuring of timber. — (*Kelly's Cambist*, art. *Russia*; *Nelkenbrecher, Manuel Universel.*)

In fixing freight to England, a ton is 63 poods of hemp, flax, tallow, iron, copper, and ashes; 44 poods of bristles, isinglass, leather, and wax; 5 dozen of deals; 3,500 hare skins; 8 chetwerts of wheat or linseed; and 60 pieces of sail-cloth.

The following regulations for the importation of foreign goods are strictly enforced: —

All goods imported must be accompanied by the following documents: —

1. The declaration of the captain, according to the form ordered by the Custom-house.

2. An attestation from the Russian consul, and, where there is no consul, from the Custom-house of the place, of the quantity and quality of the goods, and a declaration that they are not the produce, manufacture, or property of an enemy's country.

3. Bills of lading of all goods, in which the weight, measure, or quantity of each package must be specified. In case the bills of lading are not exactly after this regulation, the goods pay double duty as a fine. In case more is found than specified in the bill of lading, the surplus is confiscated; if less is found, the duty must be paid on the quantity specified. Of wine, it is not sufficient to specify the number of pipes or hogsheads only, but also their contents in gallons, &c. Of lemons, the number in each box must be specified. Of manufactured goods, the measure of each piece must be specified, and the number of pieces in each bale. It is indifferent whether the gross or the nett weight be specified. If the packages be all of the same weight, measure, or contents, a general specification will do, as for example, 100 casks alum, of 17 lispound each. Of dye woods, the weight of the whole need only be mentioned. Of goods of small bulk, as pepper, &c., it is sufficient to state the weight of every 5 or 10 bales, but with specification of the numbers. There must not be any erasures or blots in the bill of lading. All goods not accompanied by these documents, or where the documents are not according to the above regulations, will be sent back.

Bills of lading may be made out either to some house, or to order.

The following charges have been fixed by the merchants of Petersburgh: —

	Per cent.
Commission on sales and purchases	2
Extra charges on all goods	1
Commission and extra charges for goods delivered up	2
Brokerage on sales and purchases	¼
Ditto on bills	¼
Ditto on freight, per ton, 60 copecks.	
Stamps	⅜

	Per cent.
Charges on duty, paid inwards	4
Ditto, paid outwards	4
Commission for collecting freight, or average inwards	3
Commission for procuring freight outwards	2
For clearances, 40 roubles.	

Dues to be paid to the church, 10 roubles each vessel.

Clearing of ships, of or under

25 lasts each, 40 roubles each vessel.	
25 to 50 do.	60 —
50 — 75	80 —
75 — 100	100 —
100 — 150	150 —
150 or above,	200 —

Tare on Goods exported, as fixed by the Custom-house.

Dry Goods.	Per cent.
In barrels or chests	10
In sacks	2
In mats, or sacks made of mats	3
Except Muscovy leather, of which is deducted	5

Moist Goods.	Per cent.
Pressed caviare	15
Soap	3
Meat and salt fish	20
Tallow	10

Moist Goods.	Per cent.
Honey	17
Treacle	10
All other moist goods	17

Tare on Goods imported.

Dry Goods.	Per cent.
In barrels or chests	10
In vessels of glass or earthenware	20
In sacks	2

Dry Goods.	Per cent.
In double sacks	4
In mats	3

Dry Goods.	Per cent.
In sacks and mats together	5
In baskets	5

Moist Goods imported.—The following are some of the tares specified in the tariff:—

Olive oil in casks	-	17	per cent.
of Italy, in flasks and straw	-	20	—
of France, in flasks and earthenware	-	40	—
Salt fish in barrels	-	36	—
And generally on all moist goods in barrels	-	17	—
in glass and earthenware	-	20	—
Miscellaneous Goods.			
Cotton twist in bales	-	6	—
in chests and barrels	-	15	—

Cochineal must be weighed in the sacks after being taken from the casks; for every sack of from 4 to 7 poods	-	2 lbs.
sacks of from 2 to 3½ poods	-	1 —
Indigo in serons; every seron of from 5½ to 7 poods	-	34 —
in ½ serons, 2½ to 4 poods	-	20 —
of Guatemala	-	20 per cent.
in boxes	-	20 —

Bills drawn in Russia, and payable after date, are allowed 10 days' grace: but if payable at sight, 3 days only: Sundays and holidays are included in both cases. The Julian calendar, or old style, is still retained throughout Russia. This is 12 days later than the new style; and in leap-years, 13 days, after the month of February.

Port Charges payable on British Ships at the Port of Petersburgh.

Lasts - from / to	- 30	31 40	41 50	51 60	61 70	71 80	81 90	91 100	101 110	111 120	121 130	131 140	141 150	151 160	161 170	171 180	181 190	191 200	201 210	211 220	221 230	231 240	241 250	251 260	261 270
	R.	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*	*R.*
Lastage - -	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84	88	92	96	100	104	108
Passes - -	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Clearing passes in Cronstadt -	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Address money -	40	50	50	50	60	60	60	70	70	70	80	80	90	90	100	100	110	110	120	120	130	130	140	140	150
Church - -	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135
Cronstadt church	5	7	9	11	12	14	16	17	19	21	23	24	26	28	29	31	33	34	36	38	40	41	43	45	46
Do. expedition -	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
Company's agent	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54
Total - *Roubles*	168	196	214	232	259	277	295	322	340	358	386	403	431	449	476	494	522	539	567	585	613	630	658	676	703

Ships cleared out from Petersburgh during the Nine Years ending with 1833.

Years.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	1833.
Flags.	*Ships.*	*Ships.*	*Ships.*	*Ships.*	*Ships.*	*Ships.*	*Ships.*	*Ships.*	*Ships.*
British - - -	801	483	753	749	831	753	910	710	696
American - - -	76	57	64	66	62	46	58	69	62
Other nations - -	411	405	415	475	605	684	630	602	481
Total - -	1,288	945	1,232	1,290	1,498	1,483	1,598	1,381	1,239

The trade of Petersburgh is exhibited in the following Tables:—

I. Official Statement of the Trade of Petersburgh in 1833.

Imports. Principal Articles.	Duty paid. Quantity.		Value.		Exports. Principal Articles.	Duty paid. Quantity.		Value.		Total. Valuation.	
	Poods.	*lbs.*	*Roubles.*	*c.*		*Poods.*	*lbs.*	*Roubles.*	*c.*	*Roubles.*	*c.*
Gold and silver - -	-	-	27,581,954	35	Hemp - - -	1,990,334	10	16,067,003	21		
Cotton twist - -	476,584	8	39,235,804	45	Flax - - -	247,511	23	2,133,258	36		
raw - -	81,731	16	2,127,491	0	Potashes - - -	464,873	5	2,917,415	20		
Coffee - - -	104,367	25	4,829,616	52	Tallow - - -	4,069,926	37	41,761,031	91		
Sugar, raw - -	1,279,213	6	29,914,482	23	candles - -	36,607	33	498,957	22		
Spices - - -	13,441	35	561,745	25	Leather, unwrought -	96,189	13	2,005,279	93		
Silken manufactures -	1,707	25	3,962,568	0	Juffs - - -	32,009	16	1,283,191	70		
Woollen do. - -	10,913	22	6,163,212	50	Iron - - -	897,723	3	5,481,721	68		
Cotton do. - -	10,467	4	3,521,841	90	Copper - - -	218,698	10	8,386,879	0		
Flaxen do. - -	509	25	466,555	0	Bristles - - -	60,328	0	5,926,665	94		
Wine in casks - -	111,136	0	5,829,925	25	Cordage and cables -	251,488	14	1,991,148	68		
in bottles -	395,808	0	2,220,324	60	Linens - -	205,736	0	8,068,195	0		
Spirituous liquors -	6,914	0	788,629	50	Grain - - -	17,015	0	473,495	99		
Apothecaries' drugs -	-	-	1,534,476	45	Other articles - -	-	-	19,960,705	77		
Other articles - -	-	-	40,410,226	84							
Total -	-	-	169,148,853	84	Total -	-	-	116,954,950	29	286,103,804	13
Of the above were entered by Russian merchants - -	-	-	129,565,130	88	- - -	-	-	71,385,444	67	200,950,575	55
by foreign guests -	-	-	39,172,525	42	- - -	-	-	45,083,812	73	84,256,338	15
by passengers and captains - -	-	-	411,197	54	- - -	-	-	485,692	89	896,890	43
Value of exports fall short of that of imports	-	-	-	-	- - -	-	-	-	-	52,193,903	55
In 1832 they amounted to	-	-	156,976,657	80	- - -	-	-	113,543,825	82		
In 1833 they increased by	-	-	12,172,196	4	- - -	-	-	3,411,124	47		

II. Official Account of the Values of the Imports into and Exports from Petersburgh, with the Produce of the Customs Duty thereon, in each Year since 1800.

Years.	Imports.	Exports.	Duties.	Years.	Imports.	Exports.	Duties.
	Roubles.	*Roubles.*	*Roubles.*		*Roubles.*	*Roubles.*	*Roubles.*
1800	20,070,935	32,255,354	4,931,506	1817	118,743,838	100,704,113	20,986,305
1801	27,074,118	31,110,996	5,684,229	1818	151,258,904	100,675,732	23,163,291
1802	24,735,783	30,695,561	6,312,509	1819	111,106,315	84,998,642	20,623,839
1803	22,846,472	31,893,082	7,079,395	1820	168,256,897	105,085,920	29,747,994
1804	21,008,478	29,565,661	6,972,520	1821	135,420,718	100,631,673	25,707,705
1805	20,478,047	30,151,653	6,085,222	1822	104,166,738	97,932,490	21,656,056
1806	18,710,234	28,997,388	5,230,300	1823	105,969,720	104,070,326	22,386,579
1807	18,114,443	28,945,545	4,982,461	1824	120,423,890	97,729,518	27,012,661
1808	1,452,223	5,875,896	918,056	1825	115,164,068	121,174,898	30,056,764
1809	5,159,798	20,314,406	2,277,908	1826	120,188,634	91,591,514	31,633,413
1810	10,058,485	25,798,279	3,204,847	1827	126,666,415	116,794,217	34,503,722
1811	25,472,332	39,838,862	5,562,382	1828	131,480,572	107,207,647	36,658,514
1812	41,739,114	59,626,165	10,023,966	1829	149,135,403	107,428,928	41,184,831
1813	80,613,958	55,173,681	15,475,972	1830	144,899,905	111,255,171	37,597,566
1814	75,169,453	92,768,886	11,905,177	1831	150,303,541	115,958,678	43,118,367
1815	65,961,238	107,989,493	10,684,924	1832	156,976,657	113,543,825	48,267,378
1816	90,204,829	77,766,729	13,908,416	1833	169,148,853	116,954,950	50,098,914

III. Official List of Goods cleared for Exportation at the Petersburgh Custom-house, during the Six Years ending with 1833.

Articles.	1828.	1829.	1830.	1831.	1832.	1833.
Bristles, cut - - poods	- -	- -	855	608	464	947
Okatka - - - —	-	25	3,776	4,580	5,764	6,613
1st sort - - - —	33,837	31,033	26,925	30,130	23,454	29,490
2d sort - - - —	29,115	21,065	16,886	16,115	13,165	11,440
Suchoi - - - —	- -	- -	13,074	15,619	15,071	11,855
Cantharides - - - —	841	371	670	921	594	852
Caviar - - - —	5,627	2,872	608	319	584	465
Copper - - - —	85,350	207,300	180,581	77,374	143,343	212,588
Cordage, new - - —	120,682	81,495	55,551	34,129	87,601	189,580
old - - - —	42,374	66,354	56,036	55,605	42,325	61,907
Down, eider - - - lbs.	16	46	-	156	14	
goose - - - poods	110	123	183	41	264	228
goats' - - - —	2,950	1,810	5,414	590	3,887	4,160
Feathers - - - —	11,929	10,500	9,281	10,791	18,505	21,077
* Flax, 12 head - - —	486,091	165,470	126,519	10,656	20,307	7,521
9 head - - —	108,344	158,701	252,265	103,911	265,993	137,164
6 head - - —		73,396	120,149	59,290	185,075	104,826
codilla - - —	73,180	82,423	94,663	123,089	59,081	106,139
yarn - - - —	16,770	17,950	18,269	17,280	16,857	8,862
Furs: Ermine - - pcs.	12	2	2	4	- -	1
Squirrel - - —	1,547	1,999	1,455	1,783	2,621	765
Galls - - - poods	25	421	469	486	384	154
Glue - - - —	2,980	2,908	1,690	4,596	4,124	3,112
Grain: Barley - - chtwts.		6,558	1,513	6,507	- -	
Oats - - - —	10,092	12,216	8,609	79,198	- -	10
Rye - - - —	55,310	29,909	126,091	176,649	59,800	3,226
Wheat - - - —	37,756	300,630	243,556	397,945	142,560	15,531
Gum, ammoniac - - poods	134	49	61	178	29	22
galbanum - - —	15	5	42	22	22	1
Hair, camel - - —	254	- -	7	- -	23	10
goats' - - - —	-	1,016	1,033	138	76	
ox and cow - - —	140	691	2,176	- -	- -	496
* Hemp, clean - - —	1,287,429	416,846	533,563	803,791	907,254	1,050,454
outshot - - —	303,480	414,258	532,731	454,274	382,802	371,696
half-clean - - —	244,658	209,677	303,716	281,315	547,013	568,185
codilla - - —	7,674	5,349	26,032	58,499	46,526	11,519
yarn - - - —	743	998	191	- -	242	1,822
Hides, raw, cow - - —	72,573	57,511	71,965	95,924	107,462	63,156
horse - - —	4,194	24,385	59,742	8,014	9,488	6,187
ox - - - —	53,982	23,993	27,014	41,046	14,900	3,597
red - - - —	51,081	35,117	22,905	14,197	19,494	30,049
white - - - —	1,040	928	1,370	2,501	2,591	1,947
black - - - —	- -	- -	26	96	63	12
dressed - - - pcs.	23	52	285	150	5	128
Horse manes - - poods	14,508	13,495	10,901	5,150	9,796	12,170
tails - - - —	10,336	10,810	8,496	5,129	6,055	11,585
Iron, in bars - - —	820,035	1,062,439	658,783	901,611	1,203,786	828,315
blocks - - —	13,875	6,996	2,223	1,152	1,775	4,886
sheets - - —	33,096	2,999	1,856	19,395	36,304	64,521
old - - - —	33,944	40,199	22,133	26,890	29,247	26,375
Isinglass - - - —	3,634	4,473	3,175	4,303	3,963	3,619
Samovy - - —	1,834	2,075	1,041	1,228	2,052	1,910
Liquorice - - - —	2,111	2,224	1,923	1,216	2,443	4,790
Manufactures: Flems - - pcs.	71,263	39,712	65,327	76,425	61,802	68,121
Ravens-duck - —	55,577	30,096	43,506	46,497	66,897	75,465
Sail-cloth - —	62,150	38,408	40,868	59,953	50,298	62,150
Diaper, broad - arsh.	1,725,008	1,565,161	1,465,229	2,355,866	1,262,950	1,762,450
narrow - —	27,542	8,326	57,650	252,501	370,658	154,081
Linen, broad - —	648	26,091	60	70,025	110,558	57,261
narrow - —	10,315	60,087	- -	1,000	112,500	
Drillings - —	263,765	227,455	338,487	17,452	189,496	114,813
Crash - - —	707,758	834,288	1,111,301	1,125,726	1,240,101	1,694,806
Meal, rye - - chtwts.	340	403	10,007	8,205	20	5
wheat - - —	363	10,985	2,055	1,720	226	201
Oil, aniseed - - poods	131	110	57	19	39	
hemp-seed - —	238,247	410,512	490,527	158,423	248,829	202,168
linseed - —	66	47	582	1,724	3,885	556
Potashes - - —	380,450	445,627	630,287	581,500	408,994	464,873
Quills - - - 1,000	21,745	20,851	19,507	27,221	35,776	56,757
Rhubarb - - - poods	145	1,006	482	531	158	535
Seeds: Aniseed - - —	870	5,450	8,602	3,801	2,861	3,384
Cumin-seed - - —	85	1,737	2,295	921	2,896	6,559
Hemp-seed - - chtwts.	197	119	727	570	123	135
Worm-seed - - poods	1,105	969	587	410	151,193	156,222
Linseed - - chtwts.	148,030	163,610	181,252	212,619	1,021	1,658
Skins: Calf - - - poods	2,754	2,857	5,005	6,729	1,134	23,215
dressed - - pcs.	1,697	521	688	278	1,122	1,320
Badger - - - —	385	634	1,655	3,528	711	401
Cat - - - - —	150	816	953	2,330	361	1,604
Ermine - - - —	29,480	26,200	54,590	14,880	2,190	16,757
Hare, gray - - —	175,220	43,653	108,589	1,000	81,246	95,370
white - - —		25,800	60,840	118,260	33,640	408,667
Sable - - - —	40	302	255	92	32	340
Squirrel - - —	118,750	230,200	148,744	280,500	428,945	384,016
Soap - - - poods	8,488	7,966	8,936	3,882	7,131	7,695
Sole leather - - —	884	670	2,978	3,346	3,366	911
Squirrel tails - - pcs.	610,418	771,140	1,705,580	2,143,640	1,915,600	1,500,310
* Tallow - - - poods	3,648,814	3,975,738	3,579,229	3,518,140	3,717,446	4,069,926
candles - - —	28,223	38,047	36,545	23,148	31,677	36,607
Wax, white - - - —	2,107	1,766	6,514	5,024	3,690	6,711
yellow - - —	6,834	12,724	6,894	3,428	1,658	2,490
candles - - - —	412	564	579	253	298	211
Woods: Battens - - pcs.	34,905	32,846	32,850	174,388	115,848	90,294
Beams - - - —	30	877	11	- -	151	10
Deals - - - —	815,798	996,034	669,000	657,391	514,349	608,640
Lathwood - - —	89,150	105,120	83,987	34,824	154,065	57,635
Wool, sheep - - poods	15,172	3,394	8,864	26,888	38,711	55,979
woollen yarn - - —	201	445	752	904	1,019	2,881
Sundry goods not specified in the present list, per value - - reub.	1,280,695	1,466,251	1,421,633	985,243	1,087,718	1,028,498
Total value of all the goods, *Roub.*	105,727,554	107,428,928	111,255,171	115,958,678	113,545,825	116,954,950

The navigation opened in 1832 on the 15th of April.
— — 1833 - 26th —
— closed in 1832 - 14th of November.
— — 1833 - 2d of December.

In 1833, the first ship arrived was Amer., on the 26th of April.
— — sailed - Prussian - 7th of May.
— last arrived - Prussian - 30th of Nov.
— — sailed - British - 27th —

* As to the trade in hemp, tallow, &c., see these articles.

IV. Account of the Quantities of the Principal Articles of Foreign Produce imported into Petersburgh in each of the Four Years ending with 1833.

Articles.	1830.	1813.	1832.	1833.	Articles.	1830.	1831.	1832.	1833.
Alum - - poods	63,026	41,270	15,253	63,814	Pepper - poods	11,446	2,534	5,642	8,642
Almonds - - —	7,293	13,815	17,767	10,190	Pimento - - —	1,380	583	2,004	690
Annatto - - —	1,147	780	1,443	250	Porter - - hhds.	635	593	585	735
Brandy - - ankers	509	767	859	931	bottles	4,248	5,352	4,840	2,400
Brimstone - - poods	17,795	24,564	20,085	104,986	Quercitron bark - poods	59,044	47,521	17,975	6,587
Camphor - - —	1,100	837	2,118	2,595	Quicksilver - - —	3,062	476	1,618	1,062
Cinnamon and cassia lignea - - —	1,420	534	1,996	1,453	Rice - - —	26,568	21,306	25,809	49,820
Clove - - —	505	451	734	316	Rum - - ankers	12,334	6,227	7,289	7,627
Cochineal - - —	3,810	3,256	1,661	3,768	Safflower - - poods	776	1,147	2,031	3,969
Cocoa or chocolate nuts —	3,006	350	3,036	1,628	Saffron - - lbs.	1,015	381	774	1,107
Coffee - - —	73,930	126,222	101,350	111,638	Sago - - poods	1,330	490	202	240
Cotton, raw - —	69,531	50,247	70,168	84,742	Sal ammoniac - —	4,928	2,758	2,801	3,124
Cotton goods, viz.					Salt - - —	464,246	493,116	390,894	666,411
Cambrics - pieces	134,222	64,240	155,082	99,210	Sarsaparilla - —	3,885	3,721	3,814	5,345
Muslins and handkerchiefs - - —	53,613	37,445	43,081	33,754	Shumac - - —	2,741	21,333	23,129	13,116
printed - - —	21,380	505	8,357	15,190	Skins, bear - - pieces	946	378	1,516	981
Velveteens & velvets —	16,103	8,581	1,359	8,321	racoon - - —	26,967	30,409	50,594	43,612
Fruits: Lemons - boxes	15,862	28,543	18,341	27,858	Sugar, raw, Brazil poods	198,901	8,320	21,697	29,405
Oranges, sweet —	23,949	23,876	20,234	42,581	Do. Havannah - —	1,069,714	812,636	1,357,726	1,353,167
Do. bitter - —	681	292	808	907	Do. all other kinds —	8,253	9,832	6,621	484
Raisins - - poods	7,461	5,080	3,700	3,055	Tin - - —	22,604	22,033	33,880	29,034
Gums, Arabic and Senegal - - —	7,666	14,270	10,959	5,809	Twist, dyed - —	17,058	21,797	23,889	20,495
Benjamin - —	454	488	803	795	undyed - - —	512,877	374,322	541,014	532,654
copal - - —	108	-	951	1,189	Wine, Champagne, bottles	291,114	372,713	376,587	423,927
gutti or gamboge —	9	42	170	157	French - - hhds.	9,744	9,170	13,911	9,159
Olibanum - - —	12,108	6,582	5,392	6,121	Port. and Span. pipes	1,932	4,558	4,124	6,058
Indigo - - —	23,892	25,301	30,726	24,253	Rhenish - - aams	471	541	1,365	1,031
Lead, in pigs - —	98,272	188,538	235,814	121,501	Woods, Brazil, Nicholas, and St. Martinique, poods	29,005	20,552	76,328	98,264
in sheets - —	19,142	16,455	10,367	17,866	dye, rasped - —	8,698	3,819	4,824	1,782
Mace - lbs.		-	437	249	fustic - - —	24,345	39,232	6,411	54,294
Madder - poods	52,893	35,224	75,077	36,312	logwood - - —	178,908	93,608	274,523	504,373
Manganese - —	40,433	32,717	14,751	21,873	mahogany - —	35,227	1,290	36,846	68,571
Nutmegs - - —	117	137	87	54	Woollen goods, viz.				
Oil, apothec., and scented, with the vessels —	633	786	855	737	Camlets - pieces	25,062	17,329	37,744	25,753
salad and ordinary —	53,309	207,703	125,532	110,072	Carpets - - —	520	749	502	712
					Cloth - - —	4,458	5,937	7,037	2,952
					Kerseymere - —	537	401	816	321
					Ladies' cloth - —	1,794	1,755	2,356	996

V. Official Statement of the Trade of the principal Russian Cities in 1830 and 1831.

Places.	Imports.		Exports.		Duties.	
	1830.	1831.	1830.	1831.	1830.	1831.
Petersburgh - -	131,943,177	150,305,541	111,255,172	115,958,678	37,597,567	43,118,367
Narva - -	207,642	209,570	715,740	939,408	No returns.	
Moscow - -	3,382,556	4,949,042	469,019	883,942	662,107	925,508
Reval - - -	1,838,948	1,565,622	1,062,560	1,074,744	No returns.	
Hapsal - -	9,805	32,752	193,917	255,306	12,726	18,517
Kunda - -	93,529	65,935	54,270	57,041	1,084	18,680
Riga - - -	15,883,598	14,125,895	45,059,132	56,267,269	7,491,643	7,195,081
Archangel - -	1,188,096	1,155,872	11,935,188	12,829,710	1,344,872	1,453,321
Odessa - -	23,450,121	21,169,121	27,031,960	20,065,953	3,641,073	3,520,851
Taganrog - -	4,528,854	6,410,552	8,395,647	9,403,298	1,387,123	1,938,437
Libau - -	562,543	584,318	3,455,539	5,065,115	648,127	449,078
Windau - -	69,708	65,254	461,344	465,498	No returns.	
Pernau - -	262,765	259,905	2,456,956	2,313,410	413,955	324,158
Arensburg - -	24,728	15,993	265,272	378,855	51,912	29,643
Radziviloff - -	No returns.		No returns.		1,677,604	997,348

V. Official Statement of the British and Foreign Shipping at the Port of Petersburgh, during the Year ending the 31st of December, 1833.

Of what Countries.	Wintered, 1832.	New built.	Arrived in 1833.				At the Ports				Sailed.	Lastage.		Wintering.	
			Full Cargoes.	Part Goods	In Ballast.	Total.	Petrs.	Cronstadt.	New Ships. Petrs.	New Ships. Cron.		Of Ships arrived.	Of Ships sailed.	In Petrs.	In Cronstadt.
Great Britain	4	-	372	32	290	694	30	664	-	-	696	72,164	72,107½	-	2
America	-	-	58	1	3	62	1	61	-	-	62	9,222¾	9,222¾		
Bremen	-	-	16	-	1	17	11	6		-	17	1,176½	1,176½		
Hamburgh	-	-	7	1	-	8	4	4		-	8	325½	325½		
Hanover	-	-	15	2	14	31	30	1		-	30	1,461½	1,421½	1	
Spain	-	-	2	-	-	2	-	2	-	-	2	218	218		
Holland	-	3	25	2	11	38	34	4	-	3	34	1,877	1,670	4	
Denmark	-	-	26	14	9	49	29	20	-	-	47	2,255	2,191	1	1
Lubeck	-	9	38	5	-	43	3	19	-	-	46	2,412½	2,626	6	
Mecklenburg	-	-	5	-	2	7	7			-	7	293½	293½		
Naples	-	-	2	-	-	2	-	2	-	-	2	259	259		
Norway	-	-	41	1	-	42	2	20	-	-	42	2,086	2,086		
Oldenburgh	-	-	7		1	8	7	1	-	-	7	306	274	1	
Prussia	-	7	51	10	16	77	61	16	-	-	83	4,132	4,794¾	-	1
Portugal	-	-	1	-		1		1	-	-	1	129½	129½		
Russia	-	4	7	19	5	52	16	36	10	-	48	11,163¾	10,746	1	4
Rostock	-	-	4	-	1	7	5	-	-	-	5	254½	254½		
Sardinia	-	-	1	-	-			1	-	-	1	140	140		
France	-	2	37	4	14	55	20	35	-	-	57	4,099	4,208		
Sweden	-	-	31	3	10	44	31	13	-	-	44	1,824	1,824		
Total	29	7	764	94	380	1,238*	339	899	10	3	1,239	116,099½	115,967½	14	8
In 1832	-	-	-	-		1,404		-	-		1,381				
In 1833 a decrease of	-	-	-	-		166			-	-	124				

Remarks on Tables.— It would appear from the above Tables, that the trade of Petersburgh has increased with extraordinary rapidity since 1812. But though its increase since that epoch has been very considerable, it has not been by any means so great as might be inferred from the previous statements. The reason is, that the returns are all made in *paper* roubles; and that they have borne a much lower value, as compared with silver, since 1812, than they did previously. Since 1826, however, the value of the paper rouble has been pretty constant; and in the interval there has been a considerable increase of trade. We have no doubt, indeed, that the commerce of Russia is yet only in its infancy; and that it will continue to increase according as the increase of population and the slow but gradual progress of civilisation develope the gigantic resources of this great country. It is reasonable, too, to suppose that this developement will be accelerated by the adoption of a more [illegible] commercial policy.

TRADE AND NAVIGATION OF THE RUSSIAN EMPIRE IN 1832.

Account of the Total Values, as per Price Currents, of the different Articles exported from Russia to Foreign Countries in 1832, and of those imported by her from the same; specifying the Exports to and Imports from each Country.

Countries.	Exports.	Imports.	Countries.	Exports.	Imports.	Countries.	Exports.	Imports.
	Roubles.	*Roubles.*		*Roubles.*	*Roubles.*		*Roubles.*	*Roubles.*
Sweden -	3,499,302	2,580,051	Great Britain	95,512,036	59,850,012	Turkey - -	21,669,746	11,882,182
Prussia -	17,031,663	7,922,492	France -	10,821,866	12,609,559	America -	8,585,696	20,494,417
Denmark -	16,427,634	1,570,740	Spain and Portugal -	1,337,595	4,034,567	Other places -	1,803,892	520,977
Elsinore -	7,892,736		Italy - -	10,262,708	2,579,146			
Hanse-towns -	7,622,559	28,654,600	Austria -	13,770,521	12,461,375	Total -	228,298,419	169,988,188
Holland -	12,060,165	5,510,760						

General View of the Foreign Trade of the Russian Empire in 1832.

Exports.	By Europ. Frontiers.	By Asiatic Frontiers.	Total.	Imports.	By Europ. Frontiers.	By Asiatic Frontiers.	Total.
	Roubles.	*Roubles.*	*Roubles.*		*Roubles.*	*Roubles.*	*Roubles.*
Articles for consumption	37,134,901	1,179,296	38,305,200	Articles for consumption	39,304,511	8,352,318	47,656,829
— manufacture	150,862,456	3,668,075	154,530,531	— manufacture	90,569,157	1,752,879	92,322,036
— manufactured -	14,176,294	8,125,728	22,302,022	— manufactured -	33,273,941	6,607,813	39,881,754
Sundries - -	6,126,765	4,395,696	10,522,461	Sundries - -	6,840,579	6,752,571	10,593,150
Gold and silver - -	3,492,552	1,053,546	4,546,098	Gold and silver - -	42,205,951	927,356	43,133,287
				Confiscated goods -	575,835	2,847	578,682
Value per price currents	231,790,971	18,613,341	250,404,312	Value per price currents	212,769,974	21,395,764	234,165,738
				Excess of exports -	- -	- -	16,238,574
Value per declarations -	252,727,095	18,613,341	271,340,434	Value per declarations -	242,328,424	21,395,764	263,724,188
				Excess of exports -	- -	- -	7,616,246
Average value -	242,259,032	18,613,314	260,872,373	Average value - -	227,549,199	21,395,764	248,944,963
				Excess of exports -	- -	- -	11,927,410

Account of Ships arrived in the different Ports of the Russian Empire in 1832.

Arrived at / From	Russ. Ports.	Gt. Britain.	Sweden.	Prussia.	Denmark.	Holland.	Hanse-towns.	Germany.	France.	Spain.	Portugal.	Italy.	Austria.	Malta.	Ion. Isles.	Morea.	Greece.	Turkey.	Persia.	Mangisk.	India.	Egypt.	Africa.	Canaries.	America.	Total.
Cronstadt & Petersburgh	8	581	95	139	68	108	129	25	155	12	7	15	3	-	-	-	-	-	-	-	55	1	3	4	16	1,404
Narva -	5	34	35	1	1	16	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61
Reval - -	1	14	19	2	7	13	9	7	2	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	80
Kunda -	-	2	1	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Hapsal -	1	2	2	1	3	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
Riga - -	6	344	156	101	185	394	111	119	81	2	19	1	-	-	-	-	-	-	-	-	3	-	-	-	-	1,522
Arensburg -	-	3	4	-	-	7	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
Pernau -	-	16	12	9	13	30	6	8	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96
Libau -	-	18	51	37	82	94	9	23	9	1	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	339
Windau -	-	3	10	9	15	8	7	3	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57
Total Baltic Sea -	21	1,017	336	299	372	680	273	191	229	15	43	20	3	-	-	-	-	-	-	-	58	1	3	4	16	3,601
Archangel -	-	233	105	2	3	69	32	1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	457
Onega -	-	14	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
Total White Sea -	-	247	105	2	3	70	32	1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	472
Odessa -	-	30	1	-	-	1	-	-	103	3	-	182	60	46	12	1	10	126	-	-	-	43	10	-	-	628
Theodosia -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	85	-	-	-	-	-	-	-	85
Taganrog -	1	-	-	-	-	-	-	-	-	-	-	19	2	1	1	-	-	294	-	-	-	-	-	-	-	158
Kertch -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	136	-	-	-	-	-	-	-	136
Eupatoria -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81	-	-	-	-	-	-	-	81
Ismael -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	171	-	-	-	-	-	-	-	171
Anapa -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	-	7
Redoutkale	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	20
Total Black Sea -	13	30	1	-	-	1	-	-	103	3	-	201	62	47	13	1	10	908	-	-	-	43	10	-	-	1,446
Astrakhan -	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	8	-	-	-	-	-	44
Baku -	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62	-	-	-	-	-	-	157
Total Caspian Sea	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69	8	-	-	-	-	-	201
Grand total	158	1,294	462	301	375	751	305	192	343	18	43	221	65	47	13	1	10	908	69	8	58	44	13	4	17	5,720

In compiling this article, we have consulted *Storch's Picture of Petersburgh*, c. 9.; *Schnitzler, Essai d'une Statistique Générale de la Russie*, pp. 133—157.; *Ricard, Traité Général du Commerce*, ed. 1781, tom. ii. pp. 268—317.; *Tooke's View of Russia*, book 12.; *Coxe's Travels in the North of Europe*, 8vo ed. vol. iii. pp. 283—358. &c.; *Oddy's European Commerce*, p. 69.; *Returns* from the Consuls at Petersburgh and Odessa; but we have derived our principal information from the *private communications* of eminent Russian merchants.

PEWTER (Ger. *Zinn, Zinngeisserzinn*; Fr. *Etain*; It. *Stagno*; Sp. *Estano, Peltre*; Rus. *Olowo*), a factitious metal used in making plates, dishes, and other domestic utensils. It is a compound, the basis of which is tin. The best sort consists of tin alloyed with about 1-20th or less of copper, or other metallic bodies, as the experience of the workmen has shown to be most conducive to the improvement of its hardness and colour, such as lead, zinc, bismuth, and antimony. There are 3 sorts of pewter, distinguished by the names of plate, trifle, and ley-pewter. The 1st was formerly much used for plate and dishes; of the 2d are made the pints, quarts, and other measures for beer; and of the ley-pewter, wine measures and large measures. — (*Ure.*)

PHILADELPHIA, a large city and sea-port of the United States, in Pennsylvania, near the confluence of the rivers Delaware and Schuylkill, in lat. 39° 57′ N., lon. 75° 10′ W. Population, in 1830, 168,000.

Harbour, Light-houses, Pilotage, &c. — Vessels of the largest burden ascend the river as far as Newcastle, but those drawing above 18 or 20 feet water cannot reach Philadelphia, on account of a bar a little below the city. The entrance to the magnificent bay formed by the embouchure of the Delaware, has Cape May on its north, and Cape Henlopen on its south side. The former in lat. 38° 57′ N., lon. 75° 47′ 45″

W., is a sandy headland, rising about 12 feet above the level of the sea. It has recently been surmounted by a light-house, 60 feet in height. The light revolves once a minute; an eclipse of 50 seconds being succeeded by a brilliant flash of 10 seconds. It is seen in clear weather from 20 to 25 miles off. Cape Henlopen, marking the southern boundary of the bay, is in lat. 38° 47′ N., lon. 75° 4′ 45″ W. A little south from it is a hill, elevated about 60 feet above the level of the sea; and on it is erected a light-house, 72 feet in height, furnished with a powerful *fixed* light, visible in clear weather 10 leagues off. To the N. of this principal light, and close to the extremity of the cape, a second light-house has been constructed, 36 feet above the level of the sea, which is also furnished with a *fixed* light, which may be seen at about 6 leagues off. The channel for large ships is between Cape Henlopen and the banks called the Overfalls. The navigation is, however, a little difficult, and it is compulsory on ships to take pilots. The latter frequently board them at sea; but if not, as soon as a ship comes between the capes, she must hoist the signal for a pilot, and heave to as soon as one offers to come on board. — (*Coulier sur les Phares*, 2d ed. See *post*, for regulations as to pilotage.)

Trade. — The exports principally consist of wheat and wheat flour, Indian corn, and other agricultural products, lumber, coal and iron, various species of manufactured goods, &c. The principal imports are cotton, woollen, and silk goods; sugar, coffee and tea, wines, brandies, spices, &c. In point of shipping, Philadelphia is the third port of the United States; being in this respect inferior only to New York and Boston. The registered, enrolled, and licensed tonnage belonging to Philadelphia, in 1832, amounted to 79,968 tons, of which 27,244 were employed in the coasting trade. The total value of the articles imported into Pennsylvania, in the year ended the 30th of September, 1832, was 10,678,358 dollars; the total value of the exports during the same year being 3,516,066 dollars.

Banks. — There were, in 1830, in Philadelphia, 12 joint stock banks, exclusive of the Bank of the United States. Allowing for the share of the capital of the latter employed in banking speculations in the city, the total capital engaged in bank business in Philadelphia that year may be taken at 10,667,000 dollars, on which a dividend accrued of 693,075 dollars, being at the rate of 6·497 per cent. The bank of the late Mr. Girard, being a private establishment, is not included in this estimate. — (Statement by J. H. Goddard, Esq., *New York Daily Advertiser*, 29th Jan. 1831.) None of the Philadelphia banks issue notes for less than 5 dollars. They all discount good bills, having 60 or 90 days to run, at 6 per cent. In Philadelphia the banks have been pretty successful; but in Pennsylvania, generally, there have been many failures.

Insurance. — There were, in Philadelphia, in 1830, 9 marine insurance companies, with an aggregate capital of 3,280,000 dollars: they divided amongst them, during the same year, 275,400 dollars, being at the rate of 8·396 per cent.

There were also, in 1830, 4 fire insurance companies in the city, having amongst them a capital of 1,600,000 dollars. Their dividends, during the year, were 90,000 dollars; but, as one of the companies, with a capital of 200,000 dollars, paid nothing, the dividends amounted to 6·428 per cent. on the producing capital.

In Pennsylvania, the dollar is worth 7*s.* 6*d.* currency; so that 1*l.* sterling = 1*l.* 13*s.* 4*d.* currency. — (See NEW YORK.)

Weights and Measures same as those of England.

Regulations of the Port. — If any master or captain of any ship or vessel, or other person, shall refuse or neglect to comply with the directions of the harbour master, in matters within the jurisdiction of his office, such person shall, for each and every such offence, severally forfeit and pay any sum not exceeding 100 dollars. And the said harbour master, shall in full compensation for his services be entitled to have, recover, and receive from the master, captain, owner, or consignee of each and every ship or vessel arriving at the port of Philadelphia (coasting vessels not exceeding the burden of 75 tons excepted) the sum of 1 dollar for each and every voyage by such ship or vessel performed, and no more.

Every ship or vessel that may arrive in this harbour, and that shall come to anchor in the stream anywhere between Almond and Vine Streets, having previously caused her gunpowder, if any she had on board, to be landed as the law directs, may remain in that situation 24 hours, and no longer, taking care to lie as near to the island or sand bar as may be consistent with their safety. But if, from the circumstance of a vessel having servants on board, or from any other cause, it may be thought necessary or convenient to lie a longer time in the stream, then, and in every such case, the owner, master, pilot, or other person having the charge or direction of such vessel, shall remove her from opposite the city, and shall moor her, or cause her to be moored, to the northward of Vine Street, with 1 anchor and cable up and 1 anchor and cable down the stream; and in both the above-mentioned situations, the regulation contained in the next succeeding article to be duly attended to.

If any vessel properly moored in the stream shall have her anchor or cable overlaid by any other vessel in anchoring or mooring, the master or person having the care or direction of such last-mentioned vessel shall immediately, or as soon as may be after application made to him by the party aggrieved, cause the said anchor or cable so overlaying to be taken up and cleared. When any ship or vessel shall be hauled in to any wharf or dock, or alongside of another vessel that may be lying at such wharf or dock, the owner, master, pilot, or whoever may have the command, care, or direction of her, shall have her securely made fast; and if outside of another vessel, shall get one good fast from each end of the vessel to the shore, with sufficient fenders between them and the inside vessel; and shall cause the flukes of their anchors to be taken in board; and, within 24 hours thereafter, cause her jib boom, spritsail-yard, main boom, spanker and ringtail booms, if any they have, to be rigged in, and their lower yards topped up, in such a manner as least to interfere with vessels passing.

If the fasts of vessels when moored at a wharf shall extend across a dock, so as to obstruct the passing or repassing of shallops, lighter, or other craft or vessel, the master or other person having the command of such ship or vessel shall, upon the first application, immediately cause such fast or fasts to be cast off or slacked down.

No outward-bound vessel, putting off from a wharf, shall lie longer in the stream between Vine Street and Almond, in the district of Southwark, above mentioned, than 24 hours. And if vessels lying at the end of wharfs so much interlock with each other as to prevent vessels hauling in and out of docks, the master, owner, pilot, or other person having the charge of the same, shall, immediately on application from any person so wanting to haul his vessel in or out of docks aforesaid, have the vessel or vessels so interfering, moved in such a manner as to accommodate the one applied for; in which case the vessel making room for another to haul in or out shall have liberty to make her warps fast to the most convenient place adjacent, for a reasonable time; and all sea vessels, when transporting or wanting to haul into a wharf or dock, or to make sail in order to proceed to sea, shall have the same privilege.

When any ship or vessel may be lying alongside any wharf, and not taking in or discharging, she shall make way for and permit any vessel that wants to unload or load, to come inside, next the wharf, until she discharges or loads her cargo; and the said vessel, when so discharged or loaded, shall haul outside and give way to the vessel that first occupied the wharf; provided that, from the 10th of December to the 1st of March, no vessel shall be compelled to move from her berth (only those at Gloucester Point piers), excepting to let vessels in and out of docks.

No ship or vessel loading or discharging hemp at any wharf, or within any dock, shall be allowed to have any fire on board; neither shall any vessel lying outside or near her be permitted to have fire on board, while it may be considered dangerous. And no tar, turpentine, rosin, or pitch, shall be heated on the wharf, or on board any vessel lying at any wharf within the limits of the city.

Rates of Pilotage. — Inwards, up to 12 feet, at 2·67 dollars per foot; above 12 feet, at 3·33 dollars.

Outwards, up to 12 feet, at 2 dollars; above 12 feet, at 2·67 dollars.

Inwards.			Outwards.		
	Dolls.	*cents.*		*Dolls.*	*cents.*
5 feet is	13	33	5 feet is	10	0
5½ —	14	67	5½ —	11	0
6 —	16	0	6 —	12	0
6½ —	17	33	6½ —	13	0
7 —	18	67	7 —	14	0
7½ —	20	0	7½ —	15	0
8 —	21	33	8 —	16	0
8½ —	22	67	8½ —	17	0
9 —	24	0	9 —	18	0
9½ —	25	33	9½ —	19	0
10 —	26	67	10 —	20	0
10½ —	28	0	10½ —	21	0
11 —	29	33	11 —	22	0
11½ —	30	67	11½ —	23	0
12 —	32	0	12 —	24	0
12½ —	33	67	12½ —	25	33
13 —	35	33	13 —	26	67
13½ —	37	0	13½ —	28	0
14 —	38	67	14 —	29	33
14½ —	40	33	14½ —	30	67
15 —	42	0	15 —	32	0
15½ —	43	67	15½ —	33	33
16 —	45	33	16 —	34	67
16½ —	47	0	16½ —	36	0
17 —	48	67	17 —	37	33
17½ —	50	33	17½ —	38	67
18 —	52	0	18 —	40	0
18½ —	53	67	18½ —	41	33
19 —	55	33	19 —	42	67
19½ —	57	0	19½ —	44	0
20 —	58	67	20 —	45	33

Every vessel arriving from, or bound to, a foreign port, is required by law to receive a pilot, or to pay half pilotage in the warden's office, where the master of every such vessel is required, under a penalty of 10 dollars, to make report within 36 hours after his arrival, and again before his departure, signing his name to said report in the warden's book.

Every vessel of 75 tons and upwards arriving from, or bound to, any port within the United States, and the master of all such vessels, are bound as above.

The pilot of every vessel is required to inform the master of his having to report at the warden's office.

As vessels obliged to receive a pilot are required to pay 10 dollars in addition, as winter pilotage, from the 10th of November to the 10th of March, both days inclusive.

Foreign vessels, *i. e.* French, Spanish, Portuguese, Neapolitan, Danish, Russian, South American, and Haytian, to pay 2 dollars 67 cents in addition to other pilotage.

Every pilot detained more than 24 hours by any master, owner, or consignee, is entitled to 2 dollars per day for every day he is so detained.

Every pilot detained more than 48 hours by the ice, after he has conducted his vessel to a place of safety, is entitled to 2 dollars per day for every day he is so detained.

Every pilot compelled to perform quarantine is entitled to 2 dollars per day, for every day he is so detained, and cannot be discharged in less than 6 days, without his consent.

Every pilot obliged by the ice or stress of weather to proceed to another port, is, when there, entitled to his pilotage; and if there discharged, to 8 cents a mile for every mile he has to travel home.

Every pilot is required, under a penalty of 12 dollars, to make report, within 48 hours, at the warden's office, of every vessel he conducts to the city.

Rates of Commission recommended for general Adoption, and allowed by the Philadelphia Chamber of Commerce, when no Agreement subsists to the contrary, established at a stated Meeting on the 10th of March, 1823.

	Foreign.	Domestic.	
	Per Cent.	*Per Cent.*	
Merchandise, sales	5	2½	on gross amount.
Purchase and shipment, or accepting bills for purchases	2½	2½	on cost and charges.
Landing and re-shipping goods from vessels in distress	2½	2½	on current value.
Receiving and forwarding	½	½	on ditto.
Besides	2½	2½	on responsibilities incurred.
Vessels, sale or purchase	2½	2½	on gross amount.
Procuring freight or chartering to proceed to another port	2½	2½	on ditto.
Collecting freight or general average	2½	2½	on amount collected.
Paying outfits or disbursements	2½	2½	on aggregate amount.
Marine insurances, effecting, when the premium does not exceed 10 per cent.	½	½	on amount insured.
When the premium exceeds 10 per cent.	5	5	on amount of premium.
Adjusting and collecting losses without litigation	2½	2½	on amount recovered.
Fire insurances, effecting	5	5	on amount of premium.
Adjusting and collecting losses	1	1	on amount recovered.
Foreign and inland bills of exchange and notes of hand, drawing or indorsing and negotiating, in all cases	2½	2½	on the proceeds.
Purchase without indorsing	½	½	on cost and charges.
Sale ditto	½	½	on the proceeds.
Collecting	½	½	on amount collected.
Paying over the amount	½	½	on amount paid over.
Remitting	½	½	on amount remitted.
Public stocks, specie, bank notes, or drafts not current, sale	½	½	on proceeds.
Purchase	½	½	on cost and charges.
Collecting dividends on public stock	½	½	on amount collected.
Advances in money, or by coming under acceptance, in all cases	2½	2½	on amount advanced.
Accounts, collecting disputed or litigated accounts, or claims on insolvent estates	5	5	on amount recovered.
Monies, receiving, from which no other commission is derived	½	½	on amount received.
Paying ditto	½	½	on amount paid.
Paying and receiving ditto	1	1	on amount received.
Guarantee, in all cases	2½	2½	on the amount guaranteed.

On bills remitted for collection under protest for non-acceptance or non-payment, ½ commission to be charged.

On consignment of merchandise withdrawn or re-shipped, full commission to be charged to the extent of advances or responsibilities incurred, and ½ commission on the current value of the residue.

On sales of merchandise originally consigned to another house, but withdrawn, and where no responsibilities are incurred, only ½ commission to be charged on the current value.

The current value in all cases to be settled by certificates of 2 respectable merchants, auctioneers, or brokers.

The above commissions to be exclusive of guarantee, brokerage, storage, and every other charge actually incurred.

The risk of loss by fire, unless insurance be ordered, and of robbery, theft, and other unavoidable occurrences, if the usual care be taken to secure the property, is, in all cases, to be borne by the proprietor of the goods.

PHOSPHORUS, a substance of a light amber colour, and semi-transparent; but, when carefully prepared, nearly colourless and transparent. When kept some time, it becomes opaque externally, and has then a great resemblance to white wax. It may be cut with a knife, or twisted to pieces with the fingers. It is insoluble in water; its specific gravity is 1·77. When exposed to the atmosphere, it emits a white smoke, and is luminous in the dark. When heated to 148° it takes fire, and burns with a very bright flame. When phosphorus is inflamed in oxygen, the light and heat are incomparably more intense; the former dazzling the eye, and the latter cracking the glass vessel.—(*Thomson's Chemistry.*)

PIASTRES, OR DOLLARS, Spanish and American silver coins in very extensive circulation. Value, at an average, about 4*s.* 3*d.* sterling.—(See COINS.)

PILCHARDS (Ger. *Sardellan*; Du. *Sardynen*; Fr. *Sardines*; It. *Sardine*; Sp. *Sardinas*; Rus. *Sardelü*; Lat. *Sardinæ*), fishes closely resembling the common herring, but smaller, and at the same time thicker and rounder. They are rarely found on the British shores except on the coasts of Cornwall and Devon, particularly the former, where they are taken in great numbers from the month of July to September, both inclusive. It is a saying of the Cornish fishermen, that the pilchard is the least fish in size, most in number, and greatest for gain, taken from the sea.

Pilchard Fishery.—This is carried on along the coasts of Cornwall and Devon, from the Bolt Head in the latter, round by the Land's End to Padstow and Bossiney in the former. Its principal seats are St. Ives, Mount's Bay, and Mevagissey. The fish usually make their appearance in vast shoals in the early part of July, and disappear about the middle of October; but they sometimes reappear in large quantities in December. They are taken either by *seans* or by drift nets, but principally by the former. A sean is a net, varying from 200 to 300 fathoms in length, and from 10 to 14½ do. in depth, having cork buoys on one edge and lead weights on the other. Three boats are attached to each sean, viz. a boat (*sean boat*), of about 15 tons burden, for carrying the sean; another (*follower*), of about the same size, to assist in mooring it; and a smaller boat (*lurker*), for general purposes. The number of hands employed in these 3 boats varies from about 13 to 18, but may be taken, at an average, at about 16. When the shoals of fish come so near the shore that the water is about the depth of the sean, it is employed to encircle them; the fishermen being directed to the proper places for casting or shooting the nets by persons (*huers*) stationed for that purpose on the cliffs.* The practice is to row the boat with the sean on board gently round the

* The tunny fish in the Archipelago was caught in a similar way:—"Ascendebat quidam (Anglicè *huer*

shoal; and the sean being, at the same time, thrown gradually into the water, assumes, by means of its buoys and weights, a vertical position, its loaded edge being at the bottom, and the other floating on the surface. Its 2 ends are then fastened together; and, being brought into a convenient situation, it is moored by small anchors or grapnels. At low water, the enclosed fish are taken out by a small sean or *tuck net*, and carried to the shore. A single sean has been known to enclose at once as many as 3,000 hogsheads of fish! But the quantity taken depends on so many accidental circumstances, that while one sean may catch and cure in a season from 1,000 to 2,000 hogsheads, others in the neighbourhood will not get a single pilchard. In some places, the tides are so strong as to break the seans and set the fish at liberty. When the quantity enclosed is large, it requires several days to take them out, as they must not be removed in greater numbers than those who salt them can conveniently manage.

Drift nets are usually about a mile long, by about 4½ fathoms deep; they are shot in the open sea, and entangle the fish in their meshes in the same way as the herring nets. The fish thus taken are said to be superior to those taken by the seans.

As soon as the fish are brought to shore, they are carried to cellars or warehouses, where they are piled in large heaps, having a sufficient quantity of salt interspersed between the layers. Having remained in this state for about 35 days, they are, after being carefully washed and cleaned, packed in hogsheads, each containing, at an average, about 2,600 fish *; they are then subjected to a pressure sufficient to extract the oil, of which each hogshead yields about 3 gallons. This oil usually sells for from 12 to 15 per cent. under the price of brown seal oil. The oil, blood, and dirty pickle that drain from the fish while they are piled up, are collected in reservoirs, and sold to the curriers. The broken and refuse fish and salt are sold to the farmers, and are used as manure with excellent effect. The skimmings which float on the water in which the pilchards are washed, are called *garbage*, and are sold to the soap-boilers.

The pilchard fishery has been rather declining of late years. This has been ascribed partly to the failure of the catch, partly to the withdrawal of the high bounty of 8*s.* 6*d.* per hhd. formerly paid on exportation, and partly to the relaxed observance of Lent in the Mediterranean, and the imposition of a heavy duty on the importation of the fish into Naples, which has long been their principal market. The following is

An Account of the Exports of Pilchards during the Three Years ending with 1832; specifying the Places to which they were exported, the Quantity shipped for each, and their Price at the Port of Shipment.

Years.	Leghorn.	Naples.	Genoa.	Ancona.	Venice.	Trieste.	Malta.	Messina.	C.Vecchia.	Total.	Prices.
	Hhds.	*Hhds.*	*Hhds.*	*Hhds.*	*Hhds.*	*Hhds.*	*Hhds.*	*Hhds.*	*Hhds.*	*Hhds.*	*s. s.*
1830	2,473	9,751	1,665	1,587	4,562	1,652	- -	304	- -	21,194	35 to 40
1831	4,031	10,276	2,100	5,286	4,905	520	94	- -	618	27,112	35 - 40
1832	3,784	11,612	3,116	5,078	5,781	1,000	237	- -	510	31,618	25 - 45

Of the 27,112 hhds. exported in 1831, St. Ives furnished 12,141, and Mount's Bay 9,013; the remainder being furnished by Mevagissey, St. Austle's Bay, St. Mawes, Fowey, &c.

Pilchards are not used in England, except in Cornwall and Devon, where about 3,000 hhds. a year may at present be made use of. We believe, however, that their consumption in these counties has begun to increase with considerable rapidity.

The sean fishery employs from 2,700 to 3,000 hands, and about 180 or 190 seans; but exclusive of these, there are a considerable number of seans unemployed, in consequence of the failure of the fishery since 1814, and other causes. The first cost of each sean, with its boats, may be about 750*l.* The drift fishery employs, during the season, from 900 to 1,000 men, and about 230 boats; the cost of each boat and nets amounting to about 200*l.* The labour in the cure of the fish may be taken at about 4*s.* a hogshead. The total capital embarked in the fishery, in 1832, was estimated by those engaged in it at from 200,000*l.* to 250,000*l.*

The drift fishermen employ themselves, when not engaged in the pilchard fishery, in the mackarel, herring, and hook-line fisheries. The sean fishermen consist principally of agricultural labourers, miners, &c. attracted to the business in the expectation, (in which, however, they are not unfrequently disappointed,) of making a comparatively large sum by a few weeks' exertion. But there are always 3 or 4 individuals of the crew of each sean that are regularly bred, expert fishermen.

Four fifths of the persons employed on shore in the salting, curing, packing, &c. of the fish, are women.

The wages of those employed in the fishery are made sometimes to depend on the number of fish taken; but in other instances they are independent of any such contingency.

The fishery at St. Ives is carried on under a particular act of parliament, which is said to occasion the employment of a third more seans than are necessary. The exaction of a tithe of the fish is a very serious burden on the fishery; sometimes it is taken in kind, but is more generally compounded for. — (*Dr. Paris's Guide to Mount's Bay and the Land's End*, 2d ed. pp. 146—156.; *Beauties of England and Wales*, vol. ii. p. 471., and *private information* obtained from authentic sources, and obligingly communicated, by Mr. Coulson, of Penzance.)

PILOTS AND PILOTAGE. The name of pilot or steersman is applied either to a particular officer, serving on board a ship during the course of a voyage, and having the charge of the helm and the ship's route; or to a person taken on board at any particular place, for the purpose of conducting a ship through a river, road, or channel, or from or into a port.

It is to the latter description of persons that the term pilot is now usually applied; and pilots of this sort are established in various parts of the country by ancient charters of incorporation, or by particular statutes. The most important of these corporations are those of the Trinity House, Deptford Strond; the fellowship of the pilots of Dover, Deal, and the Isle of Thanet, commonly called the *Cinque Port pilots*; and the Trinity houses of Hull and Newcastle. The 5 Geo. 4. c. 73. established a corporation for the regulation and licensing of pilots in Liverpool.

The principle of the law with respect to pilots seems to be, that where the master is bound by act of parliament to place his ship in charge of a pilot, and does so accordingly,

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Græcè *thunoscopos*) in altum promontorium, unde thunnorum gregem specularetur, quo viso, signum piscatoribus dabat, qui retibus totum gregem includebant."— (*Bishop of London's Notes on the Persæ of Æschylus*, quoted by Dr. Paris, in his *Guide to Mount's Bay*, p. 150.)

* Mr. Pennant inadvertently states the number of fish in a hogshead at 35,000. — (*British Zoology*, vol. iii. p. 344. ed. 1776.). Trusting to his authority, we fell into the same error in the 1st edition of this work.

the ship is not to be considered as under the management of the owners or their servants, and they are not to be liable for any damage occasioned by the mismanagement of the ship, unless it be proved that it arose from the negligence or misconduct of the master or men: but when it is in the election or discretion of the master to take a pilot or not, and he thinks fit to take one, the pilot so taken is to be considered as the servant of the owners, who are to be responsible for his conduct. — (*Abbott on the Law of Shipping*, part ii. c. 5.)

The statute of 6 Geo. 4. c. 125. has consolidated the laws with respect to the licensing, employment, &c. of pilots. It is of great length; but all its provisions of any material importance may be embraced under the following heads: —

1. *Appointment of Pilots.* — The corporation of the Trinity House of Deptford Strond are required to appoint and license fit and competent persons, duly skilled, to act as pilots for the purpose of conducting all ships or vessels navigating the Thames, the Medway, and the several channels, creeks, and docks thereof, between Orfordness and London Bridge, as also from London Bridge to the Downs, and from the Downs westward as far as the Isle of Wight, and in the English Channel from the Isle of Wight up to London Bridge; and all ships and vessels sailing as aforesaid (except as herein-after mentioned) shall be conducted and piloted within the aforesaid limits by such pilots, and by no other persons whomsoever.

No person shall be licensed by the said corporation as a pilot, who has not served as mate for 3 years on board of, or been for 1 year in the actual command of, a square-rigged vessel of not less than 80 tons register tonnage, as to licences for the *North Channel* upwards; and not less than 150 tons register tonnage, as to licences for the *North Channel*, *Queen's Channel*, *South Channel*, or other channels downwards; or who shall not have been employed in the pilotage or buoyage service of the said corporation for 7 years, or who shall not have served an apprenticeship of 5 years to some pilot vessel licensed under the act passed in the 52d year of the reign of George III., or under this act; and no person so licensed shall take charge as a pilot of any ship or vessel drawing more than 14 feet water, in the river Thames or Medway, or any of the channels leading thereto or thereupon, until such person shall have acted as a licensed pilot for 3 years, and shall have been, after such 3 years, on re-examination, approved of in that behalf by the said corporation, on pain of forfeiting 10*l.* for every such offence; and the person employing or permitting such pilot to take charge of such ship or vessel is also to forfeit 10*l.* — § 3.

Every pilot licensed by the corporation of the Trinity House of Deptford Strond is to pay an annual licence of 3*l.* 3*s.*, and 6*d.* in the pound upon his earnings; which sums are to be applied to the uses of the pilots' fund of the said corporation. — § 4.

The said corporation are further authorised to appoint competent persons, not more than *five*, nor less than *three*, at such ports and places as they may think fit (except within the liberty of the Cinque Ports, and such other ports and places as may have been specially provided for by act of parliament, or by charter, for the appointment of pilots), to be called sub-commissioners of pilotage, who are to take the following oath: —

"I, *A. B.*, do swear, that I will diligently and impartially examine into the capacity and skill of in the art of piloting ships and vessels into the roadstead, port, or harbour, and upon the coasts following; *videlicet* [here describe the limits within which the person examined is intended to act as pilot], and will make true and speedy return thereof to the corporation of Trinity House of Deptford Strond, without favour, affection, fee, or reward, other than such fee or reward as is allowed by the by-laws or regulations duly established in that behalf. So help me God."

And upon the recommendation of such sub-commissioners, the Trinity House Corporation may grant licences to pilots. — § 5.

Notices of the appointment of pilots are to be put up in writing at the Trinity House and Custom-house, London, and at the Custom-houses of the ports for which they are licensed, and are to be published in the *London Gazette*. — § 7.

No person shall take charge of any ship or vessel as a pilot belonging to the *Cinque Ports*, before he be examined by the master and two fellows, or by four wardens of the society or fellowship of pilots of Dover, Deal, and the Isle of Thanet, touching his abilities, and shall be approved and admitted into the said society by the Lord Warden of the Cinque Ports, or his lieutenant; and any person presuming to act as a pilot belonging to the said society or fellowship, without having been so examined, approved, and admitted, shall for the first offence forfeit 10*l.*, for the second 20*l.*, and for every other offence 40*l.* — § 15.

No person licensed by the aforesaid society or fellowship is to take charge of any ship or vessel drawing more than 11 feet 6 inches water, until he has acted as a pilot for 3 years; nor of a vessel drawing more than 14 feet water, till he has acted as a pilot for 5 years; nor of a vessel drawing more than 17 feet water, till he has acted as a pilot for 7 years; when he is to be again examined; and if he shall be approved of and licensed upon such second examination, he may take charge of ships of any draught of water. — § 16.

The number of *Cinque Port* pilots used to be fixed at 140; but during peace, no more than each alternate vacancy is to be filled up, unless the number be reduced below 120. — § 24.

All bodies politic and corporate, and all persons authorised to appoint or license pilots for any port or place in England, shall, upon any such appointment being made, forthwith transmit to the Trinity House, London, and to the commissioners of customs, London, the Christian name and surname, age, and place of residence, of every pilot so appointed, distinguishing the limits in which he is to act, and by whom appointed. And the said bodies politic, &c. are to transmit lists, corrected up to the 31st day of December in each year, either on that day, or within a month after, to the said Trinity House and commissioners of the customs, of the names and residences of all the pilots within their respective jurisdictions; stating all the alterations that may have been made within the year in the rates of pilotage charged, and in the rules and regulations for governing pilots within their respective districts. — § 35.

The commissioners of the customs are to transmit to their principal officers, at the different ports, the names and places of residence of all the pilots residing within the limits of each port, as far as they are acquainted with the same; and every pilot is to be furnished with copies of all proclamations and orders in council respecting the performance of quarantine. — § 36.

A particular description of the person of every pilot is to be written upon the back of his licence: and no person shall take charge of any ship or vessel, or in any manner act as a pilot, or receive any compensation for acting as a pilot, until his licence shall have been registered by the principal officers of the Custom-house of the place at or nearest to which such pilot shall reside (which officers are hereby required to register the same without fee or reward), nor without having his licence at the time of his so acting in his personal custody, and producing the same to the master of any ship or vessel, or other person, who shall be desirous of employing him as a pilot, or to whom he shall offer his services, on pain of forfeiting a sum not exceeding 30*l.*, nor less than 10*l.*, for the first offence; and for the second or any subsequent offence, a sum not exceeding 50*l.* nor less than 30*l.*; and upon further pain, as to any person licensed as aforesaid, of forfeiting his licence, or being suspended from acting as a pilot, by and at the discretion of the corporation or other authority from which such pilot's licence was derived, either for the first, second, or any subsequent offence. — §§ 65, 66.

2. *Government of Pilots.* — All persons licensed to act as pilots by the Trinity House, are subject to the

government of the said corporation, which is empowered to make by-laws, rules, &c. specifying what sums shall be paid by such pilots to the sub-commissioners of pilotage for their examination, and for granting, or renewing, or confirming their licences from time to time, and annexing such reasonable penalties and forfeitures for the breach of such by-laws as to them shall seem expedient. But no such by-laws, regulations, &c. shall have any force till they have been examined, sanctioned, and approved by the chief justice of the Court of King's Bench, or the chief justice of the Court of Common Pleas.—§ 11. (*N.B.*—The by-laws of the Trinity House, Deptford Strond, sanctioned by Lord Tenterden, are annexed to this article.)

Copies of any proposed by-laws are to be transmitted to the privy council and the commissioners of customs, 3 months before they are submitted to any chief justice for approval; and the commissioners of the customs are to cause such proposed by-laws to be hung up in the several Custom-houses of the principal ports of Great Britain, for the inspection of all parties having an interest therein. And when such by-laws shall have been sanctioned, they shall be hung up in the several Custom-houses within the limits of which the pilots respectively shall be licensed, and also at the Trinity House in London. — §§ 12, 13.

The *Cinque Port* pilots are to be subject to the rules and regulations framed by the Lord Warden of the said ports, or his deputy, with the assent of the majority of the commissioners of *Loadmanage* (master and wardens of the fellowship of pilots of Dover, Deal, and the Isle of Thanet). The privy council may, however, amend, correct, or enlarge such rules or regulations, if they shall appear to them, upon the representation of any person having an interest therein, to be in any material point erroneous, insufficient, or defective. — §§ 21, 22.

The Trinity House Corporation are authorised and required to establish, vary, and alter, from time to time, as circumstances may require, the rates of pilotage performed by pilots licensed by the said corporation, according to the size and draught of water of the vessels, the distance piloted, the detention and responsibility of the pilot, and such other circumstances as they may think fit to take into account. Tables of these rates are to be hung up at the several Custom-houses of the ports to which they apply; and no greater or less rates, or other reward or emolument for such pilotage, shall, under any pretence whatever, be demanded, solicited, paid, received, or offered, on pain of forfeiting 10*l.* for every such offence, as well by the party offering as by the party accepting or soliciting the same. Ships returning by stress of weather, contrary winds, or on account of accident, into ports in the district of the Isle of Wight, Plymouth, and Falmouth, shall be subject to pay half the common pilotage in such ports. — § 8.

If the majority of the pilots licensed by the Trinity House Corporation in any port or place, or any ship owner in the same, be dissatisfied with the rates, they may appeal to the privy council, who may decide upon the matter as they think fit. — § 9.

Every person applying for a licence to act as a pilot, shall, before any such licence be granted to him, execute a bond in a penal sum, at the discretion of the Trinity House Corporation, or of the Lord Warden of the Cinque Ports, to an amount not exceeding 100*l.*, for the better securing his due obedience to the by-laws, rules, regulations, &c. to be made by competent authority. — § 27.

Licences may be annulled, suspended, or adjudged forfeited, at the pleasure of the foresaid corporation and Lord Warden; but pilots, whose licences are so annulled, suspended, &c. may appeal to the privy council, who are authorised to make such adjudication in the premises as they may think fit. — §§ 29, 30.

3. *Licensing of Pilot Boats.*—The Trinity Corporation and the fellowship of the Cinque Port pilots are authorised to license pilot vessels of such size and description as may appear to them to be proper for having pilots constantly in attendance in such vessels at sea; and the licensed pilots are authorised to form themselves into companies, with consent of the corporations aforesaid, for providing and maintaining such pilot vessels, such companies and vessels being at all times subject to such rules and regulations as shall from time to time be sanctioned by the said corporate bodies. — § 31.

Pilot boats or vessels are to be distinguished by being at all times and on every station fitted with black sides, and having the upper streak next the gunwale painted white; they are, while afloat, to carry a flag of large dimensions, proportioned to the size of the vessel, at the mast head, or on a sprit or staff in some conspicuous situation, which flag shall be half red and half white, in horizontal stripes, the white uppermost. The name of the pilot on board is to be painted in large white letters (3 inches long) on a black ground on the stern, and on each bow the number of the licence of such pilot; and the concealment of such name or number, or the evasion of any of the before-mentioned provisions, incurs a penalty of 20*l.*, to be paid by the senior pilot on board, who is answerable for their observance. Any pilot carried off in a boat other than a pilot boat, is to hoist a flag as previously ordered, on pain of forfeiting 20*l.* unless he show reasonable cause for having omitted it. — § 32.

The owners or master of any boat or vessel carrying a pilot's flag, without having a licensed pilot on board, shall for every such offence forfeit 100*l.* — § 33.

The Trinity House Corporation, the Court of *Loadmanage* of the Cinque Ports, and all other corporations and persons authorised to manage or direct pilots in any part of England, shall, on the 1st of January in each year, or within the month next following, transmit to the officer of the sixpenny duty in the port of London, a list of all the vessels of every description employed by them or by those under them, for the purposes of pilotage, with the number of men and boys belonging to or serving in such vessels. — § 37.

4. *Duties of Pilots.* — In order to secure the due performance of his important duties by the pilot, it is enacted, that every pilot, duly licensed, who shall, without sufficient cause, refuse or decline going off to any vessel wanting a pilot, upon signal being made by the same, or upon being required to do so by the master of such ship, or by any person interested therein as principal or agent, or by any officer of the corporation to which such pilot shall belong, or by any principal officer of the customs; or who shall, on any frivolous pretext, quit any ship or vessel, or decline piloting thereof, after he has been engaged to pilot the same, or after going alongside thereof, without leave of the master; shall, for every such offence, forfeit not more than 100*l.* not less than 10*l.* — § 72.

Any licensed pilot employing or making use of, or compelling or requiring any person having the charge of any ship or vessel to employ or make use of, any boat, anchor, cable, &c. beyond what is actually necessary, shall forfeit and pay for every such offence not more than 50*l.* and not less than 10*l.*, and shall also be deprived of his licence, or suspended, at the discretion of those by whom he was licensed. — § 73.

If any licensed pilot shall lend his licence to an unlicensed person, to assist him in acting or claiming to act as pilot, and if such unlicensed person shall by drunkenness render himself incapable of conducting any ship or vessel, or negligently or wilfully lead, decoy, or betray any ship into danger, or shall unnecessarily or improperly cut any cable or cables belonging to any vessel; or if any such person shall, by wilful misrepresentation of any circumstances upon which the safety of the vessel shall appear naturally to depend, obtain or endeavour to obtain the conduct of such vessel, then, and in every such case, the person so offending, or who shall aid in, procure, abet, or connive at the committing any such offence or offences, shall, *besides being liable to damages at the suit of the party grieved*, forfeit and pay a sum of not more than 100*l.* and not less than 20*l.*; and if the person offending be a pilot, he shall be liable to be deprived of his licence, at the discretion of those by whom he was appointed. — § 74.

Pilots keeping public-houses, or selling wine, spirituous liquors, tobacco, or tea (unless authorised by the competent authorities), or being concerned in any fraud or offence against the revenue laws, or in relation to any branch of their duty, shall, over and above all mulcts, penalties, &c. for such offences, be adjudged to forfeit their licence, or be suspended, at the discretion of those by whom they are licensed. — § 68.

A pilot, when taken on board, shall enter his name in the log-book of every ship entering the port of London requiring to be piloted under this act, and if any pilot or other person insert a false name, he is

to forfeit 20*l.*; and the name or names of the pilot or pilots so entered in the log-book and employed in piloting the vessel, are to be inserted in the *entry* or *report* of such vessel inwards; and this insertion is to be made (without fee or reward) by the proper officer of the customs, who shall report the same daily to the Trinity House, and monthly to the Lord Warden of the Cinque Ports. The principal searcher or officer of the customs at Gravesend is to demand and take the name or names of the pilot or pilots of all vessels clearing outwards, and shall transmit monthly lists thereof to the Trinity House, on pain of forfeiting a sum not more than 10*l.*, nor less than 5*l.*, to be paid by each and every of the persons foresaid who shall neglect to comply with any of the foresaid regulations. — § 43.

Pilots quitting any vessel in the Thames or Medway before she has arrived at the place to which she was bound, without the consent of the captain or other person in command, and unless some other duly qualified person shall with such consent come on board and take charge of the ship, shall forfeit for such offence all pay or reward they might be entitled to, and shall also be subject to such other penalty or punishment as may legally affect them in consequence of any by-law, &c. — § 42.

Pilots neglecting or refusing to obey the orders of the different dock masters within their respective jurisdictions incur a penalty of not more than 50*l.* and not less than 20*l.* for each offence, and may be dismissed or suspended. — § 75.

Licensed pilots may supersede unlicensed ones. And if any unlicensed person shall act after a duly licensed pilot has offered to come on board and take charge of the ship, she being at the time within the limits for which he is qualified, such unlicensed person shall forfeit not more than 50*l.* and not less than 20*l.* — § 70.

But unlicensed persons may act so long as no licensed pilot offers to take charge of the ship, or makes a signal for that purpose, or where and so long as the ship shall be in distress. — § 71.

Licensed pilots who have executed the bond before mentioned shall not be liable to any action for damages on account of neglect or want of skill, at the suit of the party grieved, in any greater sum than the amount which shall have been specified by way of penalty in such bond, and the pilotage payable to him in respect of the voyage during which the neglect or want of skill are alleged to have been exhibited. — § 57.

5. *Fees of Pilotage.* — The charge on account of pilotage is regulated in various places by usage or statute, and generally increases in proportion to the depth of water which the vessel draws. The Trinity House Corporation and the Lord Warden of the Cinque Ports have authority, as before mentioned, to fix the rates on account of pilotage to be charged by all pilots licensed by them. — (Subjoined to this article are Tables of the present rates.)

Any pilot carried to sea beyond the limits of his district without his free consent, except in cases of absolute necessity, shall, over and above his pilotage, receive 10*s.* 6*d.* a day, to be computed from and inclusive of the day next after the day on which the vessel shall pass the limit to which the pilot was engaged to conduct her, and until he shall be returned to the port or place where he was taken on board, or be discharged for a sufficient time to enable him to return there. — § 38.

Pilots are to qualify themselves for conducting vessels in and out of Ramsgate harbour, and the harbours of Dover, Sandwich, and Margate, and shall be entitled to and receive for such pilotage at the rate of 5*s.* for every foot of the draught of water of every vessel so piloted. — §§ 39, 40.

Ships bound to the Thames, repairing to Standgate Creek, or other place appointed for the performance of *quarantine*, are to pay the full charges of pilotage to such place, and a further sum of 8*s.* a day for the days the pilot shall be obliged to remain on quarantine.

Any boat or vessel running before a ship or vessel, not having a licensed pilot on board, when such ship or vessel cannot be boarded, for the purpose of directing her course, the pilot on board such boat or vessel, or, if no pilot be on board, the person having the command thereof, and who shall run before such ship at the request or by direction of the master, shall be entitled to full pilotage for the distance run. — § 34.

All the sums which shall become due to any licensed pilot for the pilotage of foreign ships or vessels trading to or from the port of *London* may be recovered from the owners or masters of such ships or vessels, or from the consignees or agents thereof, who shall have paid, or made themselves liable to pay, any other charge for the ship or vessel in the port of her arrival or delivery as to pilotage inwards, and in the port whence she shall clear out or sail as to pilotage outwards; and may be levied in like manner, according to the amount, as any penalty may be recovered and levied by virtue of the act, demand thereof being made in writing at least *fourteen* days before such levy. And the master or other person having the charge of ships or vessels, *not having British registers*, which shall enter into or sail from the port of *London*, and which are by law required to be piloted by persons licensed by the corporation of the Trinity House, or the consignees or agents thereof, are to pay at the Trinity House, in *London*, to persons appointed by the corporation of the Trinity House, the full pilotage inwards and outwards; viz. as to pilotage outwards, the amount for the distance which the ship is by law required to be piloted; as to pilotage inwards, where a pilot shall have been on board, the amount for the distance piloted by him, if greater than that which she shall be required to be piloted; if less, or if no pilot shall have been on board, the amount for the distance which she was by law required to be piloted: the pilotage inwards may be levied, &c. upon the master or other person in charge, consignee, or agent, in the same manner as in the case of ships *having British registers*, if such pilotage inwards be not paid within *fourteen* days from the day of the ship's reporting inwards. — §§ 44. 46.

The pilotage outward upon foreign vessels is to be calculated according to the scale or amount of tonnage upon which such ships or vessels are rated in the port of London for payment of light and other dues, or according to the draught of water thereof, as the Trinity House may think most proper. — § 49.

In order to prevent controversies with respect to the draught of water of ships not having British registers, the Trinity House is empowered to appoint an officer to measure the draught of water of ships with respect to which there is any controversy, such officer receiving 1*l.* 1*s.* for his trouble if the ship be below the entrance to the London Docks, and 10*s.* 6*d.* if above such entrance, from the party against whom he may decide. If arriving inwards, application for such officer must be made within 12 hours after the ship has come to her moorings, and before she begin to unlade; and before quitting her moorings, if clearing outwards. — § 50.

The Trinity House are empowered to take measures for the relief of foreign vessels coming to the port of London with fish, corn, and other provisions on board, either from the whole or a part of the charges on account of pilotage that would fall upon them under this act. — § 51.

No foreign vessel shall be cleared outwards until a certificate, signed by the person appointed for that purpose by the Trinity House, that the pilotage has been paid, has been produced; the corporation pay the pilot employed, on proof that he has duly performed his service, the pilotage, after deducting the 6*d.* duty. — § 47.

The consignees or agents of any ship or vessel are authorised and empowered to retain in their hands respectively, out of any monies which they may have received or shall thereafter receive for or on account of such ship or vessel, or the owner or owners thereof, so much as shall be sufficient to pay and discharge such pilotage, and any expenses attending the same. — § 45.

6. *Responsibility, &c. of Masters.* — Ships coming from the westward, bound to any place in the Thames or Medway, not having a duly qualified Cinque Port pilot on board, shall, on arriving at *Dungeness*, and until they have passed the south buoy of the *Brake*, display and keep flying the usual signal for a pilot to come on board; and the master shall heave to and shorten sail, so as to facilitate the entry of the pilot. Persons not displaying such signal, &c. shall forfeit and pay double the amount of the sum that the charge

for pilotage would have amounted to. And it is further provided, that all masters of vessels acting themselves as pilots, or employing any unlicensed person as such, or any licensed person out of the limit of his qualification, after any licensed and qualified pilot shall have offered to come on board, or made a signal for that purpose, shall forfeit double the sum that would have been legally demandable as pilotage, and an additional penalty of 5*l.* for every 50 tons burden of the ship, if the Trinity House or Lord Warden of the Cinque Ports, as the case may be, shall think it proper to certify the same.

But the master of any of the following vessels may pilot the same, *so long as he is not assisted by any unlicensed pilot or other person than the ordinary crew:* viz. the master of any collier, or of any ship or vessel trading to *Norway*, or to the *Cattegat* or *Baltic*, or round the *North Cape*, or into the *White Sea*, on their inward or outward voyages, or of any constant trader inwards, from the ports between *Boulogne* inclusive, and the *Baltic* (all such ships or vessels having *British* registers, and coming up by the *North Channel*, but not otherwise), or of any *Irish* trader using the navigation of the rivers *Thames* and *Medway*, or of any ship or vessel employed in the regular coasting trade of the kingdom, or of any ship or vessel wholly laden with stone from *Guernsey*, *Jersey*, *Alderney*, *Sark*, or *Man*, and being the production thereof, or of any ship or vessel, not exceeding the burden of 60 tons, and *having a British register* (or not exceeding the burden of 60 tons, and *not having a British register*, if authorised so to do by an order of the privy council), or of any other ship or vessel whatsoever, whilst the same is within the limits of the port or place to which she belongs, the same not being a port or place in relation to which particular provision hath heretofore been made by any act or acts of parliament, or by any charter or charters for the appointment of pilots. — § § 59, 60.

The master or mate of any vessel, being the owner or part owner thereof, and residing at Dover, Deal, or the Isle of Thanet, shall not be liable to any penalty for conducting or piloting his own ship or vessel up or down the rivers Thames or Medway, or into or out of any place within the jurisdiction of the Cinque Ports. — § 62.

This act shall not extend, or be construed to extend, to subject the master or owner of any ship or vessel to any of the penalties of this act, for employing any person or persons whomsoever, as a pilot or pilots, in and for the assistance of such ship or vessel, whilst the same shall be in distress, or in consequence thereof, or under any circumstances which shall have rendered it necessary for such owner or master to avail himself of the best assistance which at the time could be procured. — § 61.

No owner or master of any ship or vessel shall be answerable for any loss or damage which shall happen to any person or persons whatsoever, from or by reason or means of no licensed pilot or of no duly qualified pilot being on board thereof, unless it shall be proved that the want of such licensed or of such duly qualified pilot respectively shall have arisen from any refusal to take such licensed or qualified pilot on board, or from the wilful neglect of the master of such ship or vessel in not heaving to, or using all practicable means, consistently with her safety, for the purpose of taking on board thereof any pilot who shall be ready, and offer to take charge of the same. — § 53.

Nothing in this act shall extend, or be construed to extend, to make the owner of any ship or vessel liable in any such case, for any loss or damage beyond the value of such ship or vessel and her appurtenances, and the freight due, or to grow due, for and during the voyage wherein such loss or damage may happen or arise. — § 54.

No owner or master of any ship or vessel shall be answerable for any loss or damage which shall happen to any person or persons whomsoever, from or by reason or means of any neglect, default, incompetency, or incapacity of any licensed pilot acting in the charge of any such ship or vessel, under or in pursuance of any of the provisions of this act, where and so long as such pilot shall be duly qualified to have the charge of such ship or vessel, or where and so long as no duly qualified pilot shall have offered to take charge thereof. — § 55.

Nothing in this act shall be construed to extend to deprive any person or persons of any remedy or remedies upon any contract of insurance, or of any other remedy whatsoever, which he or they might have had if this act had not been passed, by reason or on account of the neglect, default, incompetency, or incapacity of any pilot duly acting in the charge of any ship or vessel, under or in pursuance of any of the provisions of this act, or by reason or on account of no pilot or of no duly qualified pilot being on board of any such ship or vessel, unless it shall be proved that the want of a pilot arises from a refusal on the part of the master to take such pilot on board, or to heave to for him. — § 56.

All masters or other persons having the command of any ship, who shall report, or be privy to any one reporting, a false account of the draught of water of such ship, shall, besides the full pilotage, forfeit double the amount thereof; and any master or other person having any interest, share, or property in any vessel, who shall fraudulently alter any marks on the stem or stern post thereof, diminishing the draught of water, or shall be privy or consent thereto, shall for every such offence forfeit and pay the sum of 500*l.*

7. *Recovery of Penalties.* — Penalties incurred under this act, not exceeding 20*l.*, are to be recovered before a justice by prosecution within *six* months; and penalties *above* 20*l.* by action of debt in any of the courts of record at *Westminster*, to be commenced within *twelve* months; but if it shall be made to appear, as soon after as the circumstances of the case will admit, that the commencement of the prosecution or action has been delayed by reason of the absence of any party or parties, whether offending or complaining, or of any necessary witness, then, upon such circumstances being stated by affidavit, made before any judge of any of his Majesty's courts of record at *Westminster*, any such judge may order or authorise the commencement of the prosecution or action within such further time as he shall think fit to limit.

It is, however, provided that nothing therein contained shall affect or impair the jurisdiction of the Court of Loadmanage, or High Court of Admiralty, nor the right of the city of London, nor (in general) any separate jurisdiction established under any act of parliament or charter. — § § 76, 77. 87, 88, 89.

By-Laws, Regulations, and Ordinances as to Pilots, framed by the Trinity Corporation, and sanctioned by Lord Tenterden, 19th of April, 1826.

I. Annuls the previous regulations.

II. It is ordained, that every pilot who shall be ordered to proceed on his Majesty's service, by any order signed by the deputy master or secretary of the said corporation, or by the officer for the time being for the said corporation at Yarmouth, or elsewhere, duly authorised to act in matters of pilotage, or who shall be so ordered, in writing or otherwise, by any officer in his Majesty's service, shall immediately proceed thereon; and every pilot who shall fail so to do, or shall evade the receipt of any such order, or who shall quit or decline such service, shall for the first offence forfeit 5*l.*, and for the second and every subsequent offence 10*l.* each.

III. It is ordained, that every pilot engaged in the charge of any ship employed by government in the transport service, shall observe particularly if any unnecessary delay take place on the part of the master in proceeding towards his destination; and if any delay does takes place, such pilot shall, on his return, report the same to the secretary of the said corporation, and upon going on board, such pilot shall give notice to the master that he has orders so to do.

IV. It is ordained, that no pilot having the charge of a merchant ship shall stop the same alongside the moorings of his Majesty's ships at Deptford, or elsewhere, or between the Round Tree and Bathing-house, Gravesend (except in either of such cases there be an extreme necessity for so doing, or leave be obtained for that purpose from the proper officer or officers in that behalf), and all pilots licensed by the said corporation are at all times to be particularly careful to steer clear of the king's ships in passing them.

V. It is ordained, that every pilot, when called upon or required to pilot any ship or vessel, shall, if

under engagement to any other ship, forthwith make known such engagement, and specify the particulars thereof truly and faithfully to the person calling for or requiring such pilot's service; and in case of any concealment, misrepresentation, or falsehood, in respect of such alleged previous engagement, the pilot offending shall forfeit 10*l.*

VI. It is ordained, that every pilot who shall have taken charge of any ship from the river Thames to the Downs, or elsewhere, shall, without any additional compensation in that behalf, wait on board for the space of 3 complete days while such ship may be detained at Gravesend, or elsewhere, for want of seamen, or by any other casualty; nor shall he at the end of 3 complete days be at liberty to quit such ship, or receive any additional compensation, if she shall be further detained by winds, weather, or tides; and should the ship be detained beyond 3 complete days on any other account except winds, weather, or tides, the pilot having the charge thereof shall nevertheless still (if required so to do) remain in the charge of her, provided a compensation of 6*s.* per day be offered to him in that behalf by the master or owner.

VII. It is ordained, that every pilot shall in all cases demean himself civilly and respectfully towards all persons who may require his service, and towards all officers in his Majesty's navy, and shall maintain a strict temperance and sobriety in the exercise of his office, and shall use his utmost care and diligence for the safe conduct of every ship which he shall be intrusted with the charge of, and to prevent her doing damage to others.

VIII. It is ordained, that every pilot who shall undertake the charge of any ship downwards, shall, before his departure, leave, or cause to be left, notice thereof, in writing, at the proper office at the Trinity House in London, with one of the clerks there attending, and shall be considered as disengaged until he shall have done so; and upon such pilot's return, he shall immediately, in his own person, attend at the said office, and make and sign such entry, in a book there kept for that purpose, as the said corporation shall from time to time direct or require.

IX. It is ordained, that every pilot licensed by the said corporation shall, from time to time, and at all times, in obedience to the order or summons of the said corporation, under the hand of the secretary thereof for the time being, duly delivered or offered to such pilot, or left a reasonable time at the usual or last known place of residence of such pilot, attend the said corporation, at their courts, by-boards, or committees, or their secretary for the time being, at the Trinity House in London; and that every pilot licensed by the said corporation, upon a certificate of qualification from sub-commissioners of pilotage, shall, in like manner, attend the sub-commissioners of the port or place for which such pilot shall be so licensed, in obedience to the order or summons of the said sub-commissioners, under their hands, or the hands of the major part of them, duly delivered, offered, or left as aforesaid, to answer to any charges brought against such pilots respectively, or for the performance of any public service, or for any other purpose whatsoever; and in default of such attendance, every pilot so offending shall forfeit for the first offence 40*s.*, and for the second and every subsequent offence 5*l.* each.

X. It is ordered, and hereby directed, that every pilot licensed or to be licensed by the said corporation, upon their receiving a certificate of examination by any sub-commissioners of pilotage, shall, for such examination, and for granting the licence thereon, pay the sum of 2 guineas to the said sub-commissioners of pilotage by whom he shall be examined, or to one of them; and shall also, for the renewing or confirming such licence from time to time, pay to the sub-commissioners of pilotage for the time being, at or for the port or place specified in such licence, or to 1 of them, the annual sums following; (that is to say,) every pilot so licensed or to be licensed as aforesaid, for the ports of Plymouth, Portsmouth, or Cowes respectively, the annual sum of 2 guineas; and every pilot licensed or to be licensed as aforesaid, for any other port or place, the annual sum of 1 guinea, unless the pilots at or for such port or place shall be divided into 2 classes; and, in that case the pilots of the 1st class are to pay the annual sum of 2 guineas each, and pilots not of the 1st class the annual sum of 1 guinea each.

XI. It is ordained, that no pilot shall add to or in any way alter his licence, or make or alter any endorsement thereon, nor shall he be privy to any such licence or endorsement being altered.

XII. It is ordained, that every pilot who shall observe any alteration in any of the sands or channels, or that any of the buoys or beacons of the said corporation are driven away, broken down, or out of place, shall forthwith deliver or send a correct statement thereof, in writing, to the secretary of the said corporation for the time being.

XIII. It is ordained, that every pilot shall, whenever he comes to an anchor, carefully observe the settings of the tide, and the force of the stream; and if it shall happen that he comes near to a sand or other object or cause of danger, and there be any other ships or ship in company likely to fall in therewith, such pilot shall immediately give notice thereof to the captain or principal officer of the ship under his care, that he may make a signal to such other ship or ships for avoiding the same.

XIV. It is ordained, that no pilot shall, on any pretence, aid or assist, either in his own person or with his boat or servants, or by any other means whatever, the landing, removing, or secreting any seaman from any merchant ship or vessel, to avoid serving in his Majesty's navy, or escape the impress for the same.

XV. It is ordained, that every pilot shall from time to time conform himself strictly to all directions which shall be given to him by any of the harbour masters authorised by act of parliament, under the corporation of the city of London, touching the mooring, unmooring, placing, or removing of any ship or vessel under his charge, as long as such ship or vessel shall be lying and situate within the limits of the authority of such harbour master.

XVI. It is ordained, that each and every pilot belonging to a licensed pilot vessel shall be at liberty to entertain one apprentice and no more.

XVII. It is ordained, that for any work done on the rivers Thames or Medway by men in boats, being less than the work for the whole tide, the pay shall be, for half a tide's work, 4*s.* to each man, and so in proportion for any time less than a whole tide, the pay for which is settled by the said act of the 6th year of the reign of his present Majesty at 8*s.*

XVIII. It is ordained, that in all cases where pecuniary penalties and forfeitures are annexed to the breach of the foregoing by-laws, rules, orders, regulations, and ordinances, the said corporation of Trinity House may mitigate and reduce the same to 1-4th part at their discretion.

XIX. It is ordained, that every pilot who shall offend against any or either of the foregoing by-laws, orders, regulations, and ordinances, shall, for every such offence (whether the same shall subject him to any pecuniary penalty or not, and in addition to such penalty if any), be liable to have his licence annulled and forfeited, or suspended, at the discretion of the said corporation.

N. B.—Besides conforming themselves diligently to the above by-laws, rules, orders, regulations, and ordinances, the pilots licensed by the corporation of Trinity House are, of course, in all things to observe and obey the same enactments and provisions relating to such pilots contained in the said act of parliament made and passed in the 6th year of the reign of his Majesty King George the Fourth, a copy of which act has been delivered to each of the said pilots.

*** The following Tables of the charges on account of pilotage, &c. are the most complete that have hitherto been published. They have all been derived from official sources, so that their accuracy may be depended upon.

Table of the Rates of Pilotage to be demanded and received by Pilots licensed by the Corporation of Trinity House of Deptford Strond, for piloting Ships and Vessels within the Limits in the said Table mentioned.

From	To	7 Feet and under.	8 Feet.	9 Feet.	10 Feet.	11 Feet.	12 Feet.	13 Feet.	14 Feet.	15 Feet.	16 Feet.	17 Feet.	18 Feet.	19 Feet.	20 Feet.	21 Feet.	22 Feet.	23 Feet and upwards.
		L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
The Sea, Orfordness, the Downs, Hosely Bay, and *vice versâ*	Nore or Warps	3 13 6	4 2 9	4 12 0	5 1 3	5 5 9	6 5 0	6 13 6	7 7 3	7 16 6	8 14 9	9 8 6	10 17 0	11 10 0	12 17 6	14 5 3	16 11 3	18 8 0
	Gravesend, Chatham, Standgate Creek, or Blackstakes	4 12 0	5 7 9	6 3 3	6 18 0	7 11 9	8 5 6	8 19 6	9 13 3	10 7 0	11 0 9	11 14 6	14 1 6	16 13 0	19 6 6	21 5 0	23 3 9	25 2 3
	Long Reach	4 16 6	5 12 3	6 8 0	7 2 6	7 18 3	8 14 9	9 8 6	10 0 0	10 16 3	11 10 0	13 3 6	15 9 0	18 11 9	21 5 0	23 0 0	24 16 9	26 13 6
	Woolwich or Blackwall	5 5 9	6 1 6	6 17 0	7 11 9	8 10 3	9 4 0	10 2 6	11 0 9	11 14 6	12 8 6	14 3 6	16 5 9	19 11 0	22 1 6	24 16 9	27 12 0	
	Moorings or London Docks	5 16 0	6 9 9	7 3 6	7 17 3	8 19 6	9 13 3	10 11 6	11 10 0	12 8 6	13 2 3	14 14 6	17 0 6	20 10 3	23 4 6			
The Nore or Warps, and *vice versâ*	Gravesend, Standgate Creek, or Blackstakes	1 18 9	2 3 3	2 7 0	2 10 6	2 19 9	3 6 3	3 11 9	3 15 6	4 2 9	4 10 3	5 1 3	5 16 0	6 8 9	7 14 6	8 14 0	9 13 3	10 12 6
	Long Reach or Chatham	2 6 0	2 10 6	2 15 3	2 19 9	3 9 0	3 18 3	4 2 9	4 7 0	4 13 9	5 5 0	5 16 0	6 15 3	8 5 6	9 13 3	10 12 6	11 11 9	12 15 3
	Woolwich or Blackwall	2 15 3	3 1 9	3 8 0	3 13 6	4 2 9	4 10 3	4 19 0	5 8 6	5 16 0	6 4 3	7 2 6	8 3 9	9 4 0	11 11 9	12 11 3	13 16 0	
	Moorings or London Docks	3 4 6	3 10 9	3 17 3	4 2 9	4 16 6	5 5 9	5 15 0	6 4 3	6 13 6	7 2 6	8 1 0	9 4 0	11 0 9	12 17 6	13 16 1		
Gravesend Reach, and *vice versâ*	Long Reach	0 9 3	0 14 9	1 0 3	1 5 3	1 10 0	1 14 6	1 19 0	2 3 9	2 8 3	2 13 0	2 17 6	3 2 0	3 6 9	3 11 3	4 12 0	5 10 6	
	Woolwich or Blackwall	1 3 0	1 7 6	1 12 3	1 16 9	2 4 3	2 13 6	3 2 6	3 11 9	3 18 3	4 5 6	4 13 9	5 1 3	6 4 3	7 11 9	8 16 6	9 13 3	
	Moorings or London Docks	1 7 6	1 14 0	2 0 6	2 6 0	2 15 3	3 4 6	3 13 6	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	7 7 3	8 14 9			
	Sheerness, Standgate Creek, or Blackstakes	2 15 3	2 19 0	3 1 9	3 4 6	3 13 6	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 5			
	Chatham	3 4 6	3 8 0	3 10 9	3 13 6	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 5	8 5 6			
Long Reach, and *vice versâ*	Woolwich or Blackwall	0 18 6	1 2 0	1 4 9	1 7 6	1 16 9	2 6 0	2 15 3	3 4 6	3 13 6	4 2 9	4 12 0	5 3 6	5 16 0	6 8 9	8 5 6	9 4 0	
	Moorings or London Docks	1 7 6	1 11 3	1 14 0	1 16 9	2 6 0	2 15 3	3 4 6	3 13 6	4 2 9	4 12 0	5 3 6	5 16 0	6 8 9	7 7 3	9 4 0		
	Sheerness, Standgate Creek, or Blackstakes	3 4 6	3 8 0	3 10 9	3 13 6	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 17 6	8 5 6	8 14 9		
	Chatham	3 13 6	3 17 3	4 0 0	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 6	8 5 6	8 14 9	9 4 0		
Woolwich, or Blackwall, and *vice versâ*	Moorings or London Docks	0 18 6	1 2 0	1 4 9	1 7 6	1 10 0	1 12 3	1 16 9	2 1 6	2 6 0	2 10 6	2 15 3	2 19 9	3 4 6	3 9 0			
	Sheerness, Standgate Creek, or Blackstakes	3 13 6	3 17 3	4 0 0	4 2 9	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 6	8 5 6	8 14 9			
	Chatham	4 2 9	4 6 6	4 9 3	4 12 0	5 1 3	5 10 6	5 19 6	6 8 9	6 18 0	7 7 3	7 16 6	8 5 6	8 14 9	9 4 0			

Ships not having British registers are to pay 1-4th more than ships having British registers, except when such first-mentioned ships shall be chiefly laden with corn or other provisions, or shall, by any order of his Majesty's most honourable privy council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships; in which case such ships and vessels not having British registers shall pay the like rates of pilotage only as are payable by ships having British registers.

For ½ foot exceeding the above draughts of water, the medium price between the two limits.

For intermediate distances a proportionate rate.

For removing a ship or vessel from moorings into a dry or wet dock, for a ship under 300 tons, 15*s.*; 300 to 600 tons, 1*l.* 1*s.*; 600 to 1,000 tons, 1*l.* 11*s.* 6*d.*; above 1,000 tons, 2*l.* 2*s.* — In the river Thames, above Gravesend, for a boat of a class carrying an anchor of above 4 cwt. with a corresponding tow-line, 2*l.* 2*s.*; ditto, ditto, above 2 cwt. 1*l.* 1*s.*; ditto, ditto, under 2 cwt. 15*s.*, per trip for the whole distance from Gravesend to London; and in proportion for any part of that distance. — And for each man's service in those boats, 8*s.* per tide.

Table of the Rates of Pilotage to be demanded and received by Pilots licensed by the Lord Warden of the Cinque Ports and Constable of Dover Castle, or his Lieutenant for the time being, for piloting Ships and Vessels within the Limits in the said Table mentioned.

From	To	Under 7 Feet.	From 7 Feet to 10 Feet.	11 Feet.	12 Feet.	13 Feet.	14 Feet.	15 Feet.	16 Feet.	17 Feet.	18 Feet.	19 Feet.	20 Feet.	21 Feet.	22 Feet.	23 Feet and upwards.
		L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
The Downs	Nore, Sheerness, Standgate Creek, Gravesend	5 5 0	7 17 6	8 13 3	9 9 0	10 4 9	11 0 6	11 16 3	12 12 0	13 7 9	16 1 3	19 0 0	22 1 0	24 5 0	26 9 2	28 13 3
	Long Reach	5 16 0	8 8 6	9 9 0	10 4 9	11 3 0	11 18 10	12 18 3	13 14 0	15 0 9	17 14 4	21 4 2	24 5 1	26 9 2	28 13 3	30 17 4
	Blackwall or London	6 12 3	8 19 6	10 4 9	11 0 6	12 1 6	12 17 3	14 0 4	14 16 0	16 13 9	19 7 5	23 8 3	26 9 2	28 13 3		
Standgate Creek	Gravesend	3 6 2	3 17 0	4 8 2	4 19 0	5 10 3	6 1 3	6 12 3	7 3 3	7 14 4	8 5 4	8 16 4	9 7 4			

From the several rates mentioned in this Table there shall be deducted 5 per cent. when the number of Cinque Port pilots shall be reduced to 120.

Ships not having British registers are to pay 1-4th more than ships having British registers, except when such first-mentioned ships shall be chiefly laden with corn or other provisions, or shall, by any order of his Majesty's most honourable privy council, be privileged to enter the ports of this kingdom, upon paying the same duties of tonnage as are paid by British ships; in which case such ships and vessels, not having British registers, shall pay the like rates of pilotage only as are payable by ships having British registers.

For ½ a foot exceeding the above draughts of water, the medium price between the two limits.

For intermediate distances, a proportionate rate.

For putting a Pilot on Board, and for Pilotage of Ships and Vessels to the Anchorage in the Downs.*	60 Tons, and under 150.	150 Tons, and under 250.	250 Tons, and under 400.	400 Tons, and under 600.	600 Tons, and upwards.
	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.
From off Dungeness to off Folkestone; the church bearing N. N.W. by compass - -	2 0 0	3 0 0	3 10 0	4 0 0	5 5 0
From off Folkestone to the South Foreland, the lights in one -	1 10 0	2 0 0	2 10 0	3 0 0	4 4 0
From off the South Foreland to the Downs - - -	1 5 0	1 5 0	1 10 0	2 0 0	3 3 0

In the River Thames above Gravesend -

	L. s. d.	
For a boat of a class carrying an anchor of above 4 cwt. with a corresponding tow-line - -	2 2 0	Per trip for the whole distance from Gravesend to London; and in proportion for any part of that distance.
Do. do. 2 cwt. - - - -	1 1 0	
Do. do. under 2 cwt. - - - -	0 15 0	

And for each man's service in those boats, 8*s.* per tide.

Rates charged for the Pilotage of Vessels, with an Account of other Charges affecting them in some of the undermentioned Ports.

Beaumaris *District, viz.* — From Bangor to a line drawn from Great Ormes Head to Point Linas; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, unless coming into or going out of port; but if he do take a pilot, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Beaumaris District.

Inwards.		L. s. d.
From the outside of the Sound - into the Bay	Under 100 tons -	0 15 0
	100 to 200 - -	1 1 0
	200 — 300 - -	1 11 6
	300 and upwards	2 2 0
From the inside of the Sound - into the Bay	Under 100 tons -	0 10 6
	100 to 200 - -	0 15 0
	200 — 300 - -	1 1 0
	300 and upwards	1 11 6

Outwards.	L. s. d.
Under 100 tons - - - -	0 10 6
100 to 200 - - - -	0 15 0
200 — 300 - - - -	1 1 0
300 and upwards - - -	1 11 6

Ships not having British registers are to pay ½ more than is stated in the above Table.

	L. s. d.
Should the pilot be landed at Great Ormes Head — extra - - - -	2 2 0
If taken out of the limits of his licence, to Chester or Liverpool - - - -	3 3 0
In case the pilot should happen to have *charge of the vessel* to either of the said places - -	5 5 0

The sum of 7*s.* 6*d.* per day is to be allowed to the pilot for every day such pilot may be detained on board in consequence of the ship or vessel performing quarantine, or detained under any other restrictions or circumstances such ship may be liable to.

Belfast.

	Foreign Rate.			British Rate.		
	L.	s.	d.	L.	s.	d.
Tonnage dues - -	0	0	3 per ton	0	0	2 per ton
and never to exceed	3	0	0 per ves.	2	0	0 per ves.
Ballast delivered at the Quay - -	0	2	8 per ton	0	2	0 per ton
Stones —	0	4	0 —	0	3	0 —
delivered at Garmoyle	0	3	4 —	0	2	6 —
Stones —	0	4	6 —	0	3	6 —
Pilotage from Whitehouse Roads to Garmoyle, and *vice versâ* - 9 feet	0	14	0 per ves.	0	10	6 per ves.
10 —	1	0	0 —	0	15	0 —
12 —	1	8	0 —	1	1	0 —
14 —	2	16	0 —	2	2	0 —
From Garmoyle to the Quay, & *vice versâ*, 4 feet	0	6	7 —	0	5	0 —
6 —	0	10	8 —	0	8	0 —
7 —	0	13	4 —	0	10	0 —
8 —	0	16	0 —	0	12	0 —
9 —	1	1	0 —	0	15	0 —
10 —	1	10	0 —	1	2	6 —
12 —	2	2	0 —	1	11	6 —
14 —	4	4	0 —	3	3	0 —
From Whitehouse Roads to the Quay, and *vice versâ*, 9 feet	1	15	0 —	1	7	6 —
10 —	2	10	0 —	1	17	6 —
12 —	3	10	0 —	2	12	6 —
14 —	7	0	0 —	5	5	0 —

Brighton. — *Pilotage for the Beaches at Brighthelmstone, Hastings, or Bexhill.*

8 Feet and under.	8 to 10 Feet.	Above 10 Feet.
1*s.* 3*d.* per foot.	1*s.* 9*d.* per foot.	2*s.* per foot.

The above rates for the harbours and beaches are due both inwards and outwards; but no charge whatever is to be made for the use of pilot boats.

Ships going into the harbours of Rye and Shoreham, and unloading near the harbour's mouth, are subject to ½ pilotage only; but if such ships are afterwards removed by pilots to any dock or wharf near the town, where such ships may be for the purpose of taking in a cargo, in that case the full pilotage is due.

Ships taken charge of in distress are to pay according to circumstances, to be settled by the sub-commissioners.

Ships not having British registers are to pay ½ more of the rates of pilotage for the harbours and beaches, than stated in the above Tables.

Bristol.

	Foreign Rate.			British Rate.		
	Per Ves. L.	s.	d.	*Per Ves.* L.	s.	d.
Pilotage from Lundy Island or the westward thereof to Kingroad, under 100 tons	3	18	9	3	3	0
100 and under 200 —	5	5	0	4	4	0
200 — 300 —	6	11	3	5	5	0
300 and upwards -	7	17	6	6	6	0
From Coombe to Kingroad, under 100 tons	2	12	6	2	2	0
100 and under 200 —	3	10	0	2	16	0
200 — 300 —	4	7	6	3	10	0
300 and upwards -	5	5	0	4	4	0
From Minehead to Kingroad, under 100 tons	1	6	3	1	1	0
100 and under 200 —	1	15	0	1	8	0
200 — 300 —	2	3	9	1	15	0
300 and upwards -	2	12	6	2	2	0
From the Holms to Kingroad, under 100 tons	0	13	1½	0	10	6
100 and under 200 —	0	17	6	0	14	0
200 — 300 —	1	1	10½	0	17	6
300 and upwards -	1	6	3	1	1	0
From Portishead, Kingroad, Hungroad, or Broad Pill, to Cumberland or Bathurst Basin, or *vice versâ*, under 40 tons	0	5	0	0	4	0
40 and under 60 —	0	6	3	0	5	0
60 — 80 —	0	9	4½	0	7	6
80 — 100 —	0	12	6	0	10	0
100 — 200 —	0	18	9	0	15	0
200 — 300 —	1	5	0	1	0	0
300 and upwards -	1	11	3	1	5	0
From Portishead, Kingroad, Hungroad, or Broad Pill, to either of them, under 100 tons	0	12	6	0	10	0
100 and under 200 —	0	18	9	0	15	0
200 — 300 —	1	5	0	1	0	0
300 and upwards -	1	11	3	1	5	0

Dartmouth *District.* — From Bob's Nose to the Start, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, unless going into or coming out of port, within a line drawn from the Mewstone to the Blackstone; but if he do take a pilot between Bob's Nose and the Start, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Dartmouth District. — All British ships, if boarded without the run of the Mewstone East, or the Blackstone West, are to pay as follows; viz. —

	Per Foot. s.	d.
Drawing 10 feet of water and under - -	2	6
10 to 12 feet - - - -	3	0
12 to 14 — - - - -	3	6
14 to 16 — - - - -	4	0
16 feet and upwards - - -	5	0

All British ships, if boarded within that line, are to pay ½ part less.

All British ships, boarded within the Castle, are to pay only half pilotage; subject to the consideration of the weather, which is to be settled by the sub-commissioners.

In carrying ships out of the harbour, the pilotage is to be in all cases 1-3d less than the inward pilotage.

All ships not having British registers are to pay ½ more than the rates above stated.

Masters of ships taking a pilot at sea; viz. 2 leagues or more from the harbour's mouth, are to pay according to circumstances attending the hazard run, assistance required, &c., which is to be regulated, in case of dispute, by the sub-commissioners. The pilot is to provide a proper tow-boat and crew consisting of at least 4 men; for whose services he shall be entitled to charge 2*s.* 6*d.* per man per day, in addition to the rate of pilotage; and, in case of dispute, to be settled by the sub-commissioners, and the assistants rewarded according to the risk, time, and trouble.

Downs to the Isle of Wight. — *Rates of Pilotage.*

	L. s. d.
Ships drawing 7 feet and under - - -	3 15 0
8 — - - - - -	4 7 6
9 — - - - - -	5 0 0
10 — - - - - -	5 12 6
11 — - - - -	6 4 0
12 — - - - - -	6 15 0
13 — - - - -	7 6 0

* When the pilot is put on board by a boat from the shore, one seventh to the pilot, and the remaining six sevenths to the boat and crew.

PILOTS AND PILOTAGE.

	L.	s.	d.
Ships drawing 14 feet	7	17	6
15 —	8	8	0
16 —	9	0	0
17 —	9	9	0
18 —	11	0	0
19 —	13	0	0
20 —	15	0	0
21 —	17	0	0
Above 21 —	18	0	0

DUBLIN.

	Foreign Rate.			British Rate.		
	L.	s.	d.	L.	s.	d.
Ballast dues. Taken on board within the harbour	0	2	6 per ton	0	1	8 per ton
thrown out —	0	0	10 —	0	0	8 —
Tonnage dues - -	0	1	6 —	0	0	9 —
Inwards.						
Pilotage over the Bar from without the Banks -	0	6	0 per foot	0	3	0 per foot
within — -	0	4	0 —	0	2	0 —
within the Heads -	0	5	0 —	0	1	6 —
From Poolbeg to the Quays	0	1	6 —	0	1	0 —
Outwards.						
From the Quays to Poolbeg laden	0	1	6 —	0	1	0 —
From Poolbeg over the Bar - - laden	0	1	6 —	0	1	0 —

DUNDEE.

	Foreign Rate.			British Rate.		
	L.	s.	d.	L.	s.	d.
Harbour dues. Vessels from India or China - -	0	5	0 per ton	0	2	6 per ton
West Indies, Azores, Madeira, Teneriffe, Cape de Verd Isles, Greenland, and Davis's Straits	0	1	4 —	0	0	8 —
America, Mediterranean, or any part north of Drontheim - -	0	1	0 —	0	0	6 —
Any port between Dunkirk and Gibraltar (including Dunkirk), and from any part in the Baltic -	0	0	8 —	0	0	4 —
N. B.—British vessels navigated by non-freemen pay ½ more - - -						

EXETER *District, viz.*— From Lyme to Bob's Nose, and *vice versâ*; and to and from, and into and out of, all ports, and places within those limits.

N. B.— No master of a ship is compelled to take a pilot within this district, until he comes off the ports of Exmouth and Teignmouth; but if he do take a pilot between Lyme and Bob's Nose, it must be one of the district pilots, if one offer.

Rates of Pilotage for Vessels in and over Exmouth Bar, to the Moorings in the Bight at Exmouth, and out again over the Bar.

Coasters.

If above per register		and not exceeding		s.	d.	
60	tons	80	tons	3	6	Per foot draught of water.
80	—	90	—	4	0	
90	—	100	—	4	6	
100	—	125	—	5	6	
125	—	150	—	6	0	
150	—	175	—	7	0	
175	—	200	—	7	6	
200	—	250	—	9	6	
250	—	300	—	11	6	
300	—	400	—	12	6	
500	—					

And if carried up to Topsham Quay and back, 1 guinea extra.

Ships from Foreign Parts.

If above per register or measurement		and not exceeding		L.	s.	d.	
60	tons	80	tons	6	6		Per foot draught of water.
80	—	100	—	7	6		
100	—	150	—	9	6		
150	—	200	—	10	6		
200	—	250	—	12	6		
250	—	300	—	13	6		
300	—	350	—	15	6		
500	—						

And if carried up to Topsham Quay and back, 1 guinea extra.

For Vessels in and out, over Teignmouth Bar.

Coasters.

If above per register		and not exceeding		s.	d.	
60	tons	100	tons	3	0	Per foot draught of water.
100	—	150	—	3	6	
150	—	200	—	4	0	
200	—	250	—	4	6	
250	—	300	—	5	0	
300	—	400	—	5	6	
500	—					

Ships from Foreign Parts.

If above per register or measurement		and not exceeding		s.	d.	
60	tons	80	tons	3	0	Per foot draught of water.
80	—	100	—	3	6	
100	—	150	—	4	0	
150	—	200	—	4	6	
200	—	250	—	5	0	
250	—	300	—	6	0	
300	—	400	—	7	0	
500	—					

Ships not having British registers, nor being privileged as British, to pay ½ more than the above rates.

Pilots to provide a boat and crew to assist over the bar to a mooring berth; for which they shall be paid, over and above the pilotage, 2*s.* 6*d.* for each man or oar employed for that purpose.

Masters of ships taking a pilot off the Bill of Portland, or the Start (which is optional to them), are to pay, beyond the pilotage from Bob's Nose, or Lyme, as follows, viz.:— Colliers and coasters, 2 guineas; ships from foreign ports, 3 guineas; and proportionately for intermediate distances.

FALMOUTH *District, viz.*— From the Dodman to the Lizard, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B.— No master of a vessel is compelled to take a pilot, within this district, unless going into or coming out of a port within a line drawn from the Manacles to the Dodman; but if he do take a pilot between the Dodman and the Lizard, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Falmouth District.

From	To	8 Feet & under.	8 to 10	11	12	13	14	15	16	17	18	19	20
		s.	s.	s.	s.	s.	s.	s.	s.	s.	s.	s.	s.
Sea, & *vice versâ*	Carrick Road, Falmouth, & St Mawes' Harbours, & St. Just Pool	24	30	35	42	46	50	55	60	67	75	84	94
Do. do.	Helford Harbour - -	21	24	27	30	34	38	42	47	52	60		
Carrick Roads, & *vice versâ*	Falmouth, & St. Mawes' Harbours, & St. Just Pool	1*s.* 6*d.* per foot of the draught of water.											

Masters of vessels taking a pilot at sea, are to pay —

	L.	s.	d.
For putting a pilot on board without a line drawn from the Manacles to the Dodman - -	2	2	0
Ditto, from the entrance of Helford Harbour to the Gull Rock - - - - -	1	1	0
Ditto, a mile without the Shag Rock or Pendennis Point - - - -	0	10	6
Ditto, off the Lizard, or in the parallel of the Lizard, or meeting a vessel there, and running before her, not being able to put a pilot on board, provided the master of the vessel consents to receive a pilot at that distance - - - -	3	3	0

Ships not having British registers are to pay ¼ more of the rates of pilotage than stated in the above Table.

N. B.— No allowance for a pilot going on board a ship in the harbour to take her out, except in extremely bad weather, or when ships are on shore or making signals of distress, in which cases a reasonable compensation is to be made.

All vessels belonging to the port of Truro, bound to or from foreign parts, including Guernsey, Jersey, Alderney or Sark, are to pay no more than ½ the above rates of pilotage, when navigating within the limits of the Falmouth district on their passage to or from Truro. The rate of 1*s.* 6*d.* per foot for subsequent removal remaining unaltered.

FOWEY *District, viz.*— From Looe, inclusive, to the Dodman, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B.— No master of a vessel is compelled to take a pilot within this district till he comes off the port of Looe; or within a line drawn from Looe to the Gribben Head, for the port of Fowey; or from the Gribben Head to Blackhead, for Polkerris Bay; or from the Gribben Head to the Dodman, for Mevagissey; but if he do take a pilot between Looe and the Dodman, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Fowey District.— All British ships of 14 feet water and upwards, if boarded without the land, off Looe or the Dodman, which must be known by the western land, called the Gray, being open off the Dodman, shall pay 5*s.* per foot pilotage, if carried into the harbour of Fowey, Mevagissey Pier, Charlestown Basin, or Looe.

British ships under 14 feet water, boarded as above stated, to pay 4*s.* per foot for the like service.

British ships above 14 feet, within that line, to pay only 4*s.* per foot; and ships under 14 feet, boarded as above, only 3*s.* per foot for the like service.

All ships not having a British register to pay ¼ more than the rates above stated.

All the above rates to be paid in proportion for every ½ foot of water, but no allowance to be made for any draught of water above, or under, ½ a foot.

In carrying ships to sea from the said harbour, the pilotage to be in all cases 1-3d less than the inward pilotage, as mentioned in the third article.

All ships which may anchor on their arrival either in Mevagissey Bay, or the sands off Fowey, to pay only ½ of the before-mentioned rates of pilotage.

All pilots employed to carry ships from any one of the harbours to another, to be paid the same pilotage as if the said ships had been boarded within the headlands coming from sea.

Masters of ships taking a pilot at sea (which is optional with them) —

	L.	s.	d.
3 leagues without a line drawn from the Looe to the Dodman, are to pay - - -	3	3	0
6 leagues ditto - - - - -	4	4	0
10 leagues ditto - - - - -	6	6	0

and proportionately for intermediate distances.

GALWAY.

	Foreign Rate.			British Rate.		
	L.	s.	d.	L.	s.	d.
Pilotage from Sea to the Roads, and *vice versâ*						
20 to 60 tons	0	10	0 per ves.	0	5	0 per ves.
60 — 100 —	0	14	0 —	0	7	0 —
100 — 150 —	1	0	0 —	0	10	0 —
150 — 200 —	1	8	0 —	0	14	0 —
200 and upwards	1	14	8 —	0	17	4 —
From the Roads to the Dock, and *vice versâ*						
20 to 60 tons	0	15	0 —	0	7	6 —
60 — 100 —	1	1	0 —	0	10	6 —
100 — 150 —	1	10	0 —	0	15	0 —
150 — 200 —	2	2	0 —	1	1	0 —
200 and upwards	2	12	0 —	1	6	0 —

GREENOCK.

	Foreign Rate.	British Rate.
	L. s. d.	*L. s. d.*
Harbour dues - oversea	0 1 4 per ton	0 0 8 per ton
coastwise	0 0 8 —	0 0 4 —
Anchorage - -	0 0 1 —	0 0 0½ —
Pilotage - - -	0 0 2½ —	0 0 1½ —

HARWICH. — *Rates of Pilotage, for piloting Ships into and out of Harwich Harbour.*

From	To	Under 10 Feet.	10 to 15 Feet.	13 Feet and upwards.
		L. s. d.	*L. s. d.*	*L. s. d.*
Sea or Orfordness - -	Harwich Harbour - -	2 2 0	3 3 0	4 4 0
The Rolling Grounds -	Harwich Harbour -	1 1 0	1 11 6	2 2 0
Harwich Harbour - -	Sea or Orfordness - -	1 11 6	2 2 0	3 3 0
	The Rolling Grounds -	two thirds of the above.		

Ships not having British registers are to pay ½ more of the rates of pilotage than stated in the above Table, to be paid at the Custom-house, Harwich.

HOLYHEAD *District, viz.* — To and from the anchorages at Great Ormes Head, along the coast of the Isle of Anglesea and Wales, as far as Bardsey Island, and to and from, and into and out of, all ports and places within those limits (except the bar and harbour of Caernarvon, and the Swellies).

N.B. — No master of a vessel is compelled to take a pilot within this district, till he comes to the North Stack, bound to Holyhead Harbour; but if he do take a pilot between Great Ormes Head and Bardsey Island, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships into and out of the Harbour of Holyhead.

Vessels per Register to pay, for

300 and less than 400 Tons.	200 and less than 300 Tons.	120 and less than 200 Tons.	80 and less than 120 Tons.	60 and less than 80 Tons.	Under 60 Tons.
L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
3 3 0	2 2 0	1 11 6	1 1 0	0 15 0	0 10 6

Ships not having British registers are to pay ½ more than stated in the above Table.

All ships and vessels, under any circumstances of distress, are to pay such pilot a further sum of money, to be calculated according to the extent and circumstances of such distress, and the service afforded.

Ships and vessels which shall be boarded by pilots, at the distance of 3 leagues or farther to the southward and westward of Holyhead (where it is optional to masters of vessels to take pilots), are to pay the several rates following; viz.

	L. s. d.
On having a Liverpool pilot on board, off Point Linas, and landing the Holyhead pilot there -	3 3 0
On landing the pilot at the Great Ormes Head -	4 4 0
If a pilot is taken beyond the limits of his licence to Chester Water or to Liverpool - - -	5 5 0

With the sum of 7*s.* 6*d.* per day for every day such pilot may be detained on board in consequence of the ship or vessel performing quarantine, or detained under any other restrictions such ships may be liable to.

Pilots boarding ships and vessels at a less distance than 3 leagues from the Head, as above, are to receive 10*s.* 6*d.* less for pilotage than the above rates.

It is particularly requested that commanders of ships, on discharging their pilots off Point Linas, or the Ormes Head, should be certain that such pilots will be taken on shore without being delayed on board such vessels or boats as may receive them; as a pilot will be entitled to 7*s.* 6*d.* per day for every day he shall be kept out from landing, after the day he is discharged from the ship or vessel he may have piloted, unless it can be proved that such delay had unavoidably happened from the violence of the wind and weather.

HULL. *Town Dues for Alien Vessels.*

	L. s. d.
Anchorage, under 100 tons - - -	0 1 6
100 and not 200 tons -	0 2 0
200 and upwards - -	0 3 0
Jettage, under 100 tons - - -	0 13 6
if loads out more - -	0 3 6
100 and not 200 tons - -	0 17 0
if loads out more - -	0 5 0
200 and upwards - -	1 0 0
if loads out more - -	0 7 0
Hostage, per each 1*l.* sterling of the freight inwards - - - - -	0 0 2
Amongst the officers, per ship - -	0 3 0
Ballast, per each ton taken on board, outwards	0 0 2

HULL — *continued.*

	Foreign Rate.	British Rate.
	L. s. d.	*L. s. d.*
Sea pilotage. From the Humber to Lyme or Boston Deeps - -	0 12 0 per foot	0 8 0 per foot
Trinity House Dues.		
Buoyage - under 20 tons	0 11 0 per ves.	0 2 0 per ves.
30	0 11 0 —	0 2 6 —
40	0 11 0 —	0 3 0 —
50	0 11 0 —	0 3 6 —
60	0 11 0 —	0 4 0 —
65	0 11 0 —	0 4 0 —
70	0 14 0 —	0 4 6 —
80	0 14 0 —	0 5 0 —
90	0 14 0 —	0 5 6 —
100	0 14 0 —	0 6 0 —
110	0 14 0 —	0 6 6 —
120	0 14 0 —	0 7 0 —
130	0 14 0 —	0 7 6 —
135	0 14 0 —	0 7 6 —
140	0 17 0 —	0 8 0 —
150	0 17 0 —	0 8 6 —
160	0 17 0 —	0 9 0 —
170	0 17 0 —	0 9 6 —
180	1 0 0 —	0 10 0 —
for every additional 10	0 1 0 —	0 0 6 —
Fine on importing a cargo	1 0 0 —	Nil.
Do. exporting —	6 13 4 —	—
Harbour master's dues -	0 2 8 —	—

Town Dues for British Vessels.

	Anchorage.	Jettage.	
		Inwards.	Outwards.
	L. s. d.	*L. s. d.*	*L. s. d.*
Under 40 tons - -	0 1 0	0 1 6	0 1 0
40 and not 45 tons	0 1 0	0 2 0	0 1 0
45 — 50	0 1 6	0 2 0	0 1 6
50 — 100	0 1 6	0 2 6	0 2 6
100 — 150	0 2 0	0 3 6	0 3 6
150 — 200	0 2 0	0 4 6	0 4 0
200 — 250	0 2 6	0 5 0	0 5 0
250 — 300	0 2 6	0 6 0	0 6 0
300 and upwards -	0 2 6	0 7 0	0 6 6
	Exempt if belonging to freemen.	Not due unless with goods landed at, or taken in at, Hull, or within the harbour.	

	Foreign Rate.	British Rate.
	L. s. d.	*L. s. d.*
Inwards.		
River pilotage. From the Northness of Dimlington seen open, or clear of the land to the southward thereof - -	0 7 0 per foot	0 5 0 per foot
From the same, for vessels coming from the southward - -	0 7 0 —	0 5 0 —
From the same, for vessels coming from the northward and eastward - - -	0 7 0 —	0 5 0 —
From the floating light until Spurn lights at north-east -	0 5 3 —	0 3 6 —
From Spurn lights at north-east, to the buoy of the Burcome or Grimsby - - -	0 3 6 —	0 2 6 —
Outwards.		
With goods - -	0 6 0 —	0 4 0 —
ballast - -	0 4 0 —	0 2 8 —
goods from Grimsby	0 3 0 —	0 2 0 —
ballast - -	0 2 0 —	0 1 4 —
Pilots attending on vessels	0 10 6 per day	0 7 0 per day
Dock dues. Vessels coming to, or going between, Hull and the West Indies, North or South America, Africa, Greenland, or any place east of the North Cape of Norway, within the Straits of Gibraltar, and south of Cape St. Vincent - -	0 3 6 per ton	0 1 9 per ton
Between Hull, and all places above the Sound, and westward of Ushant in Europe, without the Straits of Gibraltar -	0 2 6 —	0 1 3 —
Between Hull, and any port in Sweden, Denmark, or Norway, below Elsineur, Germany, Holland, Flanders, or France, to the eastward of Ushant - -	0 1 8 —	0 0 10 —

IPSWICH.

	Foreign Rate.			British Rate.		
	L.	s.	d.	L.	s.	d.
Water bailiff's dues -	0	3	4 per ves.	0	1	8 per ves.
River dues, under 40 tons	0	0	2 per ton	0	0	1 per ton
40 to 50	0	0	3 —	0	0	2 —
50 — 60	0	0	4 —	0	0	3 —
60 — 70	0	0	6 —	0	0	4 —
70 — 80	0	0	8 —	0	0	5 —
80 — 90	0	1	0 —	0	0	6½ —
90 — 100	0	1	4 —	0	0	8 —
100 — 180	0	1	8 —	0	0	10 —
180 and upwards	0	1	8 —			
If delivering or taking in a cargo, at or below Downham Reach -	-	-	-	0	0	5 —
Pilotage from Downham Reach to Levington Creek, and *vice versâ* -	0	1	6 per foot	0	0	9 per foot
From Levington Creek to Harwich Harbour, and *vice versâ* - -	0	1	0 —	0	0	6 —
From Downham Reach to Harwich Harbour, and *vice versâ* - -	0	2	6 —	0	1	3 —
From Ipswich Quay to Downham Reach, and *vice versâ*. — Vessels with 1 mast - -	0	2	6 —	0	1	3 —
With 2 or more -	0	3	6 —	0	1	6 —

LIVERPOOL.

Rates of Pilotage for British Vessels trading to Foreign Parts.

	Per Foot. L.	s.	d.
Inward. — From the length of the west end of Great Ormes Head, bearing S. by W., or before Penman Bachan be shut in with Great Ormes Head, at the rate of - - - - -	0	9	0
From the eastward of Great Ormes Head, as above	0	8	0
From the only house now on Great Hilbra Island, bearing S.S.W. by the compass, or shall be piloted from the Road of Hoylake only, or from the buoy of the Fair-Way in Formby Channel -	0	4	0
Outward. — Whether through the Rock or Formby Channel - - - - -	0	4	0

No British vessel, trading to foreign parts, inward and outward bound, is to refuse a pilot; but if such vessel have passed the Brazil buoy in the Rock Channel, or the Middle Patch buoy in Formby Channel, or if a pilot boat fall in with a vessel in the narrows of the channels in stormy weather, that she cannot board her without imminent danger, the pilot shall then lead the way, and, in either case, be entitled to such pilotage as shall be awarded by the committee at their next meeting.

For Alien Ships and Vessels.

	Per Foot. L.	s.	d.
Inward. — From the length of Great Ormes Head, as above, at the rate of - - - -	0	12	0
From the eastward of Great Ormes Head, as above	0	11	0
From the only house now on Great Hilbra Island, bearing S.S.W. by the compass, or shall be piloted from the Road of Hoylake only, or from the buoy of the Fair-Way in Formby Channel -	0	5	6
Outward. — Whether through the Rock or Formby Channel - - - - -	0	7	0

An alien vessel, inward or outward bound, is not to refuse a pilot, as circumstances are described for English foreign vessels as above.

For Coasting Vessels, and those trading to and from Ireland, the Islands of Faro or Ferro, Jersey, Guernsey, Alderney, Sark, and Man.

	Per Foot. L.	s.	d.
Inward. — From the length of Great Ormes Head, as above, at the rate of - - - -	0	4	6
From the eastward of Great Ormes Head, as above	0	4	0
From the only house now on Great Hilbra Island, bearing S.S.W. by the compass, or shall be piloted from the Road of Hoylake only, or from the buoy of the Fair-Way in Formby Channel	0	2	0
Outward. — Whether through the Rock or Formby Channel - - - - -	0	2	0

No coasting vessel to pay for less than 8 feet of water, nor any vessel to pay for odd inches under ½ a foot. No coasting vessel, inward or outward bound, of the burden of 100 tons or upwards, (unless she be in ballast,) is to refuse a pilot, as the master or owner, &c. must pay the full pilotage if one be offered. No vessel to be deemed a coaster unless she has been 6 months in that trade.

Extra Pay.

	Per Day. L.	s.	d.
In the river, exclusive of the day coming from sea, the day of docking, and the day of going to sea, for the pilot's attendance, if required by the master or owner, &c. - - - - -	0	5	0
And if the attendance of a pilot boat be requested as above - - - - - -	2	2	0

The pilotage from sea into Hoylake is ½ inward, and from Hoylake out to sea ½ outwards.

*** Notwithstanding the pilot or the boat be not employed whole day, to be paid for a day.

So far includes all the rates and prices for pilotage and extra pay.

The Pilots' Committee beg leave to recommend to the merchants of Liverpool, &c. that when a pilot conducts a ship or vessel into port to their satisfaction, to employ the same pilot to take the vessel out again; and if he should be absent on duty, that one belonging to the same boat be employed.

Pilots' Rules and Regulations. — Any person acting as a pilot in the port of Liverpool, without a licence, to forfeit 20*l.*

Pilots refusing to conduct ships, or assist ships in distress, to forfeit 10*l.*, and lose their licence.

Masters in coasting trade in ballast, or under the burden of 100 tons, may pilot their own vessels.

Masters of vessels forcibly taking pilots beyond the limits of the port, shall forfeit not exceeding 20*l.*, nor less than 5*l.*

Pilots misbehaving to have their licences recalled, and if they act afterwards, to be liable to the same penalties as if they were not pilots.

Vessels liable to pay pilotage coming into port, to display a signal for a pilot, under a penalty of 5*l.*

Reward for pilots assisting ships in distress to be settled by the committee.

Compensation to be made to pilots for taking vessels out of the port which have been forced back, to be fixed by the committee.

Ships forced back after parting with the pilot, and piloted out again from Hoylake, to pay ½ the prices.

Every master to give the pilot a true account of the draught of water of his ship, and pilots authorised to admeasure.

Pilots to obey the orders of the harbour and dock masters.

No vessels to be brought round the Rock, or into the docks, in the night-time.

LONDONDERRY.

	Foreign Rate.			British Rate.		
	L.	s.	d.	L.	s.	d.
Quay dues (except French) oversea	0	0	6 per ton	0	0	3 per ton
coasting	-	-	-	0	0	2 —
Harbour dues - oversea	0	0	6 —	0	0	3 —
coasting	-	-	-	0	0	2 —
Inwards.						
Pilotage. 7 feet and under	1	1	0 per ves.	0	14	0 per ves.
Above 7 ft. and under 8 ft.	0	3	0 per foot	0	2	0 per foot
8 — 9	0	3	4 —	0	2	2 —
9 — 10	0	3	8 —	0	2	4 —
10 — 11	0	4	0 —	0	2	8 —
11 — 12	0	4	4 —	0	3	0 —
12 — 13	0	4	8 —	0	3	4 —
13 — 14	0	5	0 —	0	3	8 —
14 — 15	0	5	4 —	0	4	0 —
15 and upwards -	0	5	8 —	0	4	4 —
Outwards.						
7 feet and under - -	0	17	6 per ves.	0	10	6 per ves.
Above 7 ft. and under 8 ft.	0	2	6 per foot	0	1	6 per foot
8 — 9	0	2	9 —	0	1	9 —
9 — 10	0	3	0 —	0	2	0 —
10 — 11	0	3	3 —	0	2	3 —
11 — 12	0	3	6 —	0	2	6 —
12 — 13	0	3	9 —	0	2	9 —
13 — 14	0	4	0 —	0	3	0 —
14 — 15	0	4	4 —	0	3	3 —
15 and upwards -	0	4	4 —	0	3	6 —
N.B. — All British ships from foreign parts to pay 4*d.* per foot extra; or if bound to foreign ports, having on board ½ a cargo, or with passengers, to pay 4*d.* per foot extra, in addition to the above charges.						

LYNN.

	Foreign Rate.			British Rate.		
	L.	s.	d.	L.	s.	d.
Town dues. Beaconage -	0	0	1½ per ton	0	0	1 per ton
Stakage -	0	0	0¾ —	0	0	0½ —
and 1-5th of the beaconage, if at the Boal.						
Ballast - - -	0	0	8 pr 3 tns.	0	0	4 pr. 3 tns
Mooring dues - -	0	0	1½ per ton goods	0	0	0¾ pr. ton goods
which may be increased to - -	0	0	2 —	0	0	1 —
Pilotage, 10 feet and under	0	3	0 per foot	0	1	6 per foot
10½ to 12 - -	0	3	6 —	0	1	9 —
12½ to 14½ -	0	4	0 —	0	2	0 —
14½ and upwards	0	5	0 —	0	2	6 —

MILFORD *District, viz.* — From Caldy Island, along the coast to St. David's Head, and from thence to Cardigan Island, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, unless going into or coming out of port, within a line drawn from Lenny Point to Skokam Island; but if he do take a pilot between Caldy Island and Cardigan Island, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships into the Harbour of Milford, and up and down the said Harbour.

From	To	Rates per Foot. Under 14 Ft. L.	s.	d.	14 Ft. & upwds. L.	s.	d.
A line drawn from St. Anne's Point to Sheep's Island	Any part of the harbour below a line drawn from Newton Nose Point to Martin's Haven	0	2	6	0	3	6
A line drawn from St. Anne's Point to Sheep's Island, or from Hubberstone Road	Any place above a line drawn from Newton Nose Point to Martin's Haven, in addition	0	2	0	0	2	6

Additional Rates for Ships boarded without the Entrance of the Harbour.

	L.	s.	d.
From a line drawn from Lenny Point to Skokam Island, in addition, per foot - - -	0	2	0
If to the southward of St. Gowen's Head, ditto -	0	1	0
Or from Caldy Island eastward, or from the westward of the Grassholm, or 3 leagues without Lenny Point, in addition to the harbour pilotage	3	3	0
6 leagues ditto - - - -	4	4	0
10 leagues ditto - - - -	6	6	0

One fourth part is to be added to the harbour rates for ships not having British registers.

Rates for Services and Assistance performed in the Harbour.

For a boat carrying an anchor of above 6 cwt., with a corresponding hawser —

	L.	s.	d.	
If in Hubberstone Roads - -	2	2	0	Not exceeding; at the discretion of the sub-commissioners.
Each man in the boat, each tide -	0	5	0	
If below Hubberstone Roads, a line drawn from the E. point of Gilliswick, to the E. point of Angle Bay and above the Stack Rock -	2	12	6	
Each man in the boat, each tide -	0	5	0	
If in Dale Road, and the anchor is brought from Milford - -	4	4	0	
Or if carried off from Dale - -	2	12	6	
Each man in the boat, each tide -	0	5	0	

For a boat carrying off an anchor of 3 cwt. and not exceeding 6 cwt., with a corresponding hawser, the boat and men to have ¾ of the sums above specified.

For a boat with an anchor of 2 cwt. and not exceeding 3 cwt., with a corresponding hawser, the boat and men to have ½ of the said above specified sums.

For unmooring a ship drawing 14 feet water, and upwards, and bringing her alongside the quay, or into Hubberstone Pill—

From the situation, 1st or 2d, before mentioned —

	L.	s.	d.	
For the pilot - - -	1	1	0	
If with a boat an additional sum of	0	10	6	Not exceeding; at the discretion of the sub-commissioners.
Each person employed - -	0	5	0	

From the 3d station specified —

For the pilot - - -	1	11	6	
If with a boat, an additional sum of	0	10	6	Not exceeding; at the discretion of the sub-commissioners.
Each person employed - -	0	5	0	

And for taking a ship of 14 feet draught of water and upwards, from the quays, or Hubberstone Pill, to moorings in any of the situations before mentioned, the like sums above specified.

Ships under 14 feet draught of water, to or from the situations before mentioned, ¾ of the sums for the pilot; the boats and men as above specified.

For new mooring a ship drawing 14 feet water, in either of the situations before described —

	L.	s.	d.	
For the pilot - - -	0	10	6	
If with a boat, an additional sum of	0	10	6	
Each person employed - -	0	5	0	Not exceeding.

NEWCASTLE.

	Foreign Rate.				British Rate.			
	L.	s.	d.		L.	s.	d.	
Pilotage into or out of the port, or into or out of any of the creeks or members thereof, from								
1st April - - -	0	1	9	per foot	0	1	3	per foot
1st October - -	0	2	0	—	0	1	6	—
Up or down the Tyne between North and South Shields, and any part of the river above Bill Point - - -	0	2	0	—	0	1	6	—
Up or down the river below Bill Point - -	0	1	6	—	0	1	0	—
	N. B. — 5*s.* per vessel extra, if with leeboards.							
Buoyage and beaconage. Vessels loaded 50 tons and under - -	0	1	6	per ves.	0	0	4	per ves.
51 to 100 -	0	1	6	—	0	0	9	—
101 — 200 -	0	1	6	—	0	0	11	—
201 — 300 -	0	1	6	—	0	1	1	—
301 and above	0	1	6	—	0	1	3	—
Town dues. On coals and grindstones exported -	0	1	4	pr. chal.	0	0	2	pr. chal.
Harbour dues - laden	0	6	10	per ves.	0	4	6	per ves.
ballast	0	5	10	—	0	4	2	—
Some particular kind of do.	0	8	4	—	0	7	0	—
without ballast or goods	0	4	10	—	0	3	2	—
Hostmen's dues. Grindstones - - -	0	0	8	pr. chal.	0	0	4	pr. chal.
Anchorage - -	0	1	0	per ves.	Nil.			

NEWHAVEN *and* SHOREHAM *District, viz.* — From Dungeness to the Owers, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, until he comes to the entrance of Rye, Shoreham, or Newhaven, and is bound to one of those ports; but if he does take a pilot between Dungeness and the Owers, it must be a district pilot, if one offers.

Rates of Pilotage, for piloting Ships within the Newhaven District. — Coast pilotage from Dungeness to the west end of the Owers: 7 feet draught and under, 2*l.* 16*s.* 6*d.*; 7 to 10 feet, 4*l.* 4*s.* 6*d.*; 11 feet, 4*l.* 13*s.*; 12 feet, 5*l.* 1*s.* 6*d.*; 13 feet, 5*l.* 9*s.* 6*d.*; 14 feet, 5*l.* 18*s.*; 15 feet, 6*l.* 6*s.*; 16 feet, 6*l.* 15*s.*; 17 feet, 7*l.* 2*s.*; 18 feet, 8*l.* 5*s.*; 19 feet, 9*l.* 15*s.*; 20 feet, 11*l.* 5*s.*; 21 feet, 12*l.* 15*s.*; above 21 feet, 13*l.* 10*s.*

Harbour Pilotage. — *Newhaven.* — 8 feet draught and under, per foot, 1*s.* 6*d.*; 8 to 10 feet, 1*s.* 9*d.*; above 10 feet, 3*s.*

Rye. — 8 feet draught and under, per foot, 2*s.* 6*d.*; 8 to 10 feet, 3*s.*; above 10 feet, 4*s.*

Shoreham. — 8 feet draught and under, per foot, 2*s.* 6*d.*; 8 to 10 feet, 3*s.*; above 10 feet, 4*s.*

NORTH CHANNEL, *&c. upwards from Orfordness to London.* — Of the pilots within this district, some are licensed from the Dudgeon light-vessel to Orfordness, and thence to the Downs; others are further licensed from Smith's Knoll to Orfordness. But the taking of pilots along the coast, to the northward of Orfordness, is optional to masters of vessels; though, if a pilot be employed, he must be licensed as above, if one offers.

Licences granted for the northward of Orfordness do not authorise the pilotage into or out of Yarmouth Roads or Harbour, except as may be requisite in the passage to the Downs or river.

PENZANCE *District, viz.* — From the Lizard to Cape Cornwall, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, until he comes within a line drawn from St. Clement's Isle to Trewavas Head, for Mount's Bay and Penzance; but if he does take a pilot between the Lizard and Cape Cornwall, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Penzance District.

From	To	7 Feet & under.	8 to 10	11	12	13	14	15	16	17	18	19	20
		s.	*s.*	*s.*	*s.*	*s.*	*s.*	*s.*	*s.*	*s.*	*s.*	*s.*	*s.*
Sea, and *vice versâ*	Either of the roadsteads or piers in Mount's Bay	10	16	24	30	35	10	45	50	55	60	67	77
All roadsteads, & *vice versâ*	Either of the different piers in Mount's Bay - -	1*s.* 6*d.* per foot of the draught of water.											

Ships not having British registers are to pay ¼ more than stated in the above Table.

Boats and vessels boarded by pilots at a distance southward of the bay —

	L.	s.	d.
For putting a pilot on board without a line drawn from the Lizard to Tol Pedan Penwith - -	2	2	0
Ditto, within a line drawn from the Lizard to Tol Pedan Penwith, and without a line drawn from Carn Dew to Pengwinion Point - -	1	1	0
Ditto, within a line drawn from Carn Dew to Pengwinion Point, and without a line drawn from St. Clement's Isle to Trewavas Head - -	0	10	
And within those limits to be charged inwards			

PLYMOUTH *District, viz.* — To the westward as far as Looe, and eastward as far as the Start; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, except going in or coming out of the port, within a line drawn from the Ram Head to the Mewstone; but if he do take a pilot between the Start and Looe, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Plymouth District. — 1. All British ships of 14 feet water and upwards, except East Indiamen, if boarded without the land off Penlee Point or the Mewstone, which must be known by the western land being open off the Ram Head, shall pay 5*s.* per foot pilotage, if carried into the harbour of Hamoaze, Catwater, or Sutton Pool.

2. British ships under 14 feet water, down to 8 feet, boarded as above stated, are to pay 4*s.* per foot for the like service.

3. Ships above 14 feet, within that line, are to pay only 4*s.* per foot; and ships under 14 feet, boarded as above, only 3*s.* per foot, for the like service.

4. All ships under 8 feet water, are to pay as above stated, as if the vessel was of that draught.

5. All the above rates are to be paid in proportion for every ½ foot of water, but no allowance is to be made for any draught of water less than ½ foot.

6. In carrying ships to sea from the said harbours, the pilotage is to be, in all cases, the same as the inward pilotage.

7. All ships which may anchor on their arrival, either in Cawsand Bay or Plymouth Sound, are to pay only ½ of the before-mentioned rates of pilotage.

8. All pilots employed to carry ships from any one of the harbours to another, are to be paid the same pilotage as if the said ship had been boarded within the headlands coming from sea.

9. Should any ship above 17 feet water be boarded while the western land is open off the Ram Head by one of the 2d class pilots, and he runs the ship as far in as either of the buoys on the Panther or Shovel, and is there superseded by one of the 1st class, he shall be entitled to 1-3d of the pilotage.

10. Masters of ships taking a pilot at sea —

	L.	s.	d.
3 leagues without a line drawn from the Ram Head to the Mewstone, are to pay - - -	3	3	0
6 leagues ditto - - - -	4	4	0
10 leagues ditto - - - - -	6	6	0

and proportionately for intermediate distances.

11. Ships not having British registers are to pay ¼ more of the rates of pilotage than is stated in the above Table.

12. If a master choose to retain or employ a pilot whilst at anchor, the rate for the lay days is to be 7*s.* 6*d.* a day, not including the day coming in or going out.

Poole *District, viz.*—From Christchurch, inclusive, to St. Alban's Head, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B.—No master of a vessel is compelled to take a pilot within this district until he comes to the entrance of Poole, Studland Bay, or Christchurch, bound to one of those places; but if he do take a pilot between Christchurch and St. Alban's Head, it must be one of the district pilots, if one offer.

Rates of Pilotage for piloting Ships within the Poole District.—For the pilotage of any vessel from Studland Bay to Poole Quay, 3*s.* per foot.

For the pilotage of any vessel from Studland Bay to Brownsea, 2-3ds of the above.

For the pilotage of any vessel from St. Alban's or Christchurch Head, to Poole Quay, 4*s.* per foot, and in proportion from those heads to Brownsea, &c.

For the pilotage of any vessel from any place between either of those heads and Studland Bay, to Poole Quay, 3*s.* 6*d.* per foot; and in proportion from the same places to Brownsea, &c.

For the pilotage of any vessel outwards; the same as for a vessel inwards.

Ships not having British registers are to pay ¼ more of the rates of pilotage than above stated.

The pilot having charge of any ship or vessel, either inwards or outwards, and being required by the master or owner to remain on board any such ship or vessel, shall be paid 4*s.* per day in addition to the limited pilotage, for every day after the first.

The pilot of any vessel shall, if required by the owner or master only, provide a boat, with 4 men to attend her, from Stakes to the Quay, or from the Quay to Stakes, to tow her in or out, or to carry ropes on shore or to the buoys, as may be necessary; for which service there shall be paid the sum of 10*s.*

The pilots shall at all times, when required by the master or owner, lend their assistance to work any vessel to or from the quay, into or out of the harbour; for which service they shall be paid as follows, viz.—For working a vessel to or from the bay, 5*s.* per man; to or from Brownsea, 3*s.* ditto; and to or from Stakes, 2*s.* ditto; and the same for the boat they attend in; and 4*s.* per day each man, if detained on board after the first day.

Coasting vessels to pay 2-3ds of the above rates of pilotage.

Port Glasgow.

	Foreign Rate.	British Rate.
	L. s. d.	*L. s. d.*
Harbour dues. If a foreign voyage - -	0 1 0 per ton	0 0 6 per ton
Above 30 tons coasting	0 0 6 —	0 0 3 —
Pilotage. From any place between Cumray Light & the Clough Light, or from the anchorage at Fairlee Roads, Rothsay Bay, or Quarantine Station, Holy Lock, to Greenock Roads, mooring and berthing, or *vice versâ* -	0 0 2½ —	0 0 1½ —
From any place inside the Clough Light, or from the anchorage at Gourock Roads, or the Tail of the Bank - -	0 0 1½ —	0 0 1 —
Vessels inward bound, not boarded until nearer Gourock than the Bay of Quirk - -	0 0 0¾ —	0 0 0½ —
From Greenock to Port Glasgow, which rate is to be added to above for vessels from any of those stations for that port -	0 0 1½ —	0 0 1 —

Portsmouth *and* Cowes *District, viz.*—From the Owers, within and without the Isle of Wight, to Peverel, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B.—The pilots of this district have authority to supersede such of the London or Cinque Port pilots as are licensed for the charge of vessels to the Isle of Wight, when they arrive near the channels leading into the ports and harbours within the Isle of Wight; but no master of a vessel is compelled to take a Portsmouth or Cowes pilot, till within 5 miles of Bembridge Ledge, or 3 miles of Dunnose, St. Catherine's, or the Needles, (or till at St. Helen's, if he is piloted thereto by a duly licensed London or Cinque Port pilot,) but if he do take on board a pilot between the Owers and Peverel, it must be one of the district pilots.

Rates of Pilotage, for piloting Ships within the Portsmouth and Cowes District.—From 5 miles without Bembridge Ledge, or 3 miles without Dunnose or St. Catharine's, or 3 miles from the Needles' Point, coming in at that passage.

To Spithead, Motherbank, Stokes Bay, or Cowes Road.

	Per Foot. *s. d.*
For ships of every draught, as far as 17 feet inclusive -	5 0
From 17 feet to 20 feet draught inclusive -	6 0
Above 20 feet draught - - -	7 0

But if the ship be boarded within 2 miles of the buoys off Bembridge, or within 3 miles of the Needles Point, the rate to be 1*s.* per foot less than the above for each foot the ship draws. And the same rates as the above for pilotage outwards.

Ships inward bound, boarded between the Needles and Hurst Castle, to pay 2*s.* per foot. Between Hurst Castle and Newtown Creek, 1*s.* per foot.

Ships anchoring and remaining at St. Helen's, Yarmouth, or Lymington, either inward or outward bound, to pay ½ the rate of pilotage.

Pilots taken on board by the captain without the above limits, to receive the following pay; viz.

	L. s. d.
If at 3 leagues from the Wight -	3 3 0
6 ditto ditto - -	4 4 0
10 ditto ditto -	6 6 0

and proportionately for any intermediate distances.

Ships coming into Cowes Harbour to pay 1*s.* 6*d.* per foot, and the same on going out, as harbour pilotage.

Pilots of ships drawing 17 feet water and under, are to have 2*s.* per foot in addition to the pilotage from sea, from any place within the Isle of Wight to Portsmouth Harbour, or to Southampton, or to Buckler's Hard, or to Langstone Harbour and Lymington; and for all vessels drawing above 17 feet water, 3*s.* per foot.

Ships coming from the Downs with a London or Cinque Port pilot, to the Isle of Wight, and he continuing the charge into any of the places within the said island, no duly licensed pilot offering, is to be allowed ½ pilotage from St. Helen's to the anchorage, but not otherwise.

For transporting vessels from one berth to another in Portsmouth harbour—

As far as 200 tons - - - -	10*s.* 6*d.*
200 to 300 — - - - -	15*s.*
Above 300 — - - - -	21*s.*

For the pilotage of vessels from Southampton to Redbridge, Eling, Fortham, or Chapel, and *vice versâ*, 1*s.* per foot; and from Southampton to Hamble, Bursledon, Leap, Buckler's Hard, or Beaulieu, and *vice versâ*, 1*s.* 6*d.* per foot; and for any intermediate distance, a proportionate rate.

Ships not having British registers are to pay ¼ more of the rates of pilotage than stated in the above Table.

If a master choose to retain or employ a pilot while at anchor, the rate for the lay days is to be 7*s.* 6*d.* per day, not including the day coming in or going out.

For every 10 leagues beyond the meridian of Peverel Point, for ships not exceeding 14 feet water, 3*l.* 3*s*; for the same distance for ships of more than 14 feet water, 4*l.* 4*s.*; and proportionately for intermediate distances.

All vessels belonging to the port of Southampton bound to or from foreign parts, are to pay no more than ½ the foregoing rates of pilotage, when navigating within the limits of either the Cowes or Portsmouth districts, provided such vessels shall at the time be actually bound to or from the port of Southampton.

All vessels trading to or from the islands of Guernsey, Jersey, Alderney or Sark, are to pay no more than ½ the foregoing rates of pilotage when navigating within the limits of the Portsmouth or Cowes districts.

Scilly *District, viz.*—To and from, and into and out of, all ports and places in and about the Scilly Islands.

Rates of Pilotage, for piloting Vessels within the Scilly District, in and out.

	L. s. d.
Coasting vessels of 60 — - - -	1 1 0
60 to 75 - -	1 11 6
75 to 100 - -	2 2 0
100 to 200 - -	2 12 6
200 tons - -	3 3 0
Vessels from foreign ports —	
60 tons -	2 2 0
100 — - -	2 12 6
200 — - -	4 4 0
300 — - - -	5 15 6
400 — - -	6 6 6

and in proportion for greater tonnage.

Ships not having British registers are to pay ¼ more than is above stated.

Sligo.

	Foreign Rate.		British Rate.	
Harbour dues - -	*L. s. d.* 0 0 9 per ton		*L. s. d.* 0 0 6 per ton	
	From April 1. to Sept. 30.	From Oct. 1. to Mar. 31.	From April 1. to Sept. 30.	From Oct. 1. to Mar. 31.
	s. d.	*s. d.*	*s. d.*	*s. d.*
Inward.				
Pilotage from the Wheaten Rock to the Oyster Island - -	2 0	2 6	1 6	2 0
Roghley Point to do. -	1 6	2 0	1 2	1 6
Outside the Bar to do. -	1 1	1 3	0 10	1 0
Sligo side the Bar to do.	0 5	0 7	0 4	0 6
The Island to the Quay	1 6	1 6	1 0	1 0
Do. to the Pool - -	0 9	0 9	0 6	0 6
Outward.				
From any place to the sea - - -	3 0	3 6	2 0	2 6
	per foot draught of water.			

Stockton.

	Foreign Rate.	British Rate.
	L. s. d.	*L. s. d.*
Tees Navigation dues. Vessels trading to or from the river Tees from or to any foreign port (except laden with Norway timber only) -	0 1 6 per ton	0 0 9 per ton
If laden with Norway timber only - -	0 1 0 —	0 0 6 —
Town dues - -	0 5 0 per ves.	0 2 6 per ves.
Pilotage from Sea to the eighth buoy -	0 1 9 per foot	0 1 3 per foot.
From Sea to Cargo Fleet	0 3 0 —	0 2 0 —
From Cargo Fleet to Middleburg -	0 1 0 —	0 0 9 —
From Cargo Fleet to Newport or Portrack	0 2 6 —	0 1 3 —
From Cargo Fleet to Stockton - -	0 3 0 —	0 2 0 —

and *vice versâ*.

N. B.—5*s.* per vessel extra, if with lee-boards.

WATERFORD

Pilotage. Taking pilots at the following distances.		12 Feet and upwards, between 25th March and 29th September, per Foot.							
		Above Creden Head, and no further than Passage.		To Check Point or Glasshouse Reach, and no further.		Glasshouse Reach, up to Waterford.			
Westward.	*Eastward.*	Brit.		For.		Brit.		For.	
		s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
Grt. Newtown Head	Saltees	1	8	3	0	2	7	4	5
Foilskirt	Bag & Bun Hd.	1	4	2	7	2	3	4	0
Below Duncannon, and nearer than Foilskirt or Bag and Bun		1	0	2	1	2	0	3	6

		Between 25th September and 25th March, per Foot.							
Grt. Newtown Head	Saltees	2	1	3	6	3	0	4	11
Foilskirt	Bag & Bun Hd.	1	8	3	9	2	7	4	5
Below Duncannon, and nearer than Foilskirt or Bag and Bun		1	4	2	7	2	3	4	0

		More than 6 and less than 12 Feet, between 25th March and 29th Sept., per Foot.							
Grt. Newtown Head	Saltees	1	2	2	7	1	11	3	6
Foilskirt	Bag & Bun Hd.	1	0	2	1	1	9	3	0
Below Duncannon, and nearer than Foilskirt or Bag and Bun		0	9	1	8	1	2	2	7

		Between 29th September and 25th March, per Foot.							
Grt. Newtown Head	Saltees	1	8	3	0	2	4	4	0
Foilskirt	Bag & Bun Hd.	1	6	2	7	2	1	3	6
Below Duncannon, and nearer than Foilskirt or Bag and Bun		1	2	2	1	1	10	3	0

2	1	3	6	3	0	4	11	4	5
1	8	3	9	2	7	4	5	4	0
1	4	2	7	2	3	4	0	3	8

6	6	3	0	4	11	4	5	6	3
5	0	3	9	2	7	4	5	4	0
4	6	3	2	3	4	0	3	3	8

3	6	3	0	4	4	0	3	3	5
2	7	2	1	3	6	3	0	4	11
2	2	1	1	3	0	3	2	4	3

Pilotage outwards, the same as Foilskirt, or Bag and Bun Head.

	Foreign Rate.	British Rate.
	L. s. d.	*L. s. d.*
Tonnage dues. Vessels reporting at the Custom-house, (vessels, two thirds of whose cargo shall be coals, or *from* any port of Ireland, excepted)	0 0 5 per ton	0 0 2½ per ton
Vessels, two thirds of whose cargo shall be coals	0 0 3 —	0 0 1½ —
Vessels arriving from any port in Ireland	0 0 2 —	0 0 1 —

		If above the River or Pill of Kilmacow, and below the Cove.	If between the River or Pill of Kilmacow and the Cove.	
			If by Lighters.	If at Ballast Quay.
		Per Ton. L. s. d.	*Per Ton. L. s. d.*	*Per Ton. L. s. d.*
Ballast dues. Taken on board	British	0 3 3	0 1 10	0 1 4
	foreign	0 4 6	0 2 8	0 2 2
Thrown out	British	0 1 10	0 0 11	0 0 9
	foreign	0 2 9	0 1 7	0 1 5

WEYMOUTH *District.*—From St. Alban's Head to Lyme, and *vice versâ*; and to and from, and into and out of, all ports and places within those limits.

N. B. — No master of a vessel is compelled to take a pilot within this district, until he comes within a line drawn from Lulworth Cove to the Shambles, or within the Race, into the ports of Portland and Weymouth, and off those of Bridport and Lyme; but if he do take a pilot between St. Alban's Head and Lyme, it must be one of the district pilots, if one offer.

Rates of Pilotage, for piloting Ships within the Weymouth District.

From	To	Under 8 Feet.	From 8 Feet to 10 Feet.	Above 10 Feet.
		Per Foot.	*Per Foot.*	*Per Foot.*
		s. d.	*s. d.*	*s. d.*
A line drawn from Lulworth to the outer part of the Race or Shambles	Weymouth or Portland Roads or Bay	2 0	2 6	3 0
Weymouth or Portland Roads or Bay	Weymouth Harbour	2 0	2 6	3 0
Sea	Bridport Harbour	2 0	2 6	3 0
Ditto	Lyme Harbour	2 0	2 6	3 0

The same rates of pilotage to be paid outwards.

Ships not having British registers to pay ⅓ more of the rates of pilotage than is stated in the above Table.

The pilot of any vessel shall, if required by the owner or master only, provide a boat with 4 men to attend her, from the roads to the quay, or from the quay to the roads, to tow her in or out, or carry ropes on shore or to the posts, &c., as may be necessary, for which service each man is to be paid 4*s.* per tide; the owner of the boat to be paid the same as a man.

Masters of ships taking a pilot at sea (which is optional to them) to pay as follows, viz. —

	L. s. d.
From St. Alban's Head or Bill of Portland, to off Bridport or Lyme	2 2 0
If 3 leagues from the limits of Weymouth, Bridport, or Lyme	3 3 0
If 6 ditto - ditto	4 4 0
If 10 ditto - ditto	6 6 0

YARMOUTH. — *Rates of Pilotage for piloting Ships within the Yarmouth District.* — For ships above 14 feet draught of water

From	To	Amt.
		L. s.
The Dudgeon Light, its parallel of latitude, or the northward thereof, and *vice versâ*	Orfordness	10 10
	Yarmouth Road, within or without the sands	7 7
	Downs	21 0
Yarmouth, and *vice versâ*	Orfordness	5 5
	Downs	16 16
Yarmouth Roads	Sea, through the Cockle, St. Nicholas, or over the Stanford	3 3
Sea	Yarmouth Roads, through any of the channels	5 5
	Orfordness	5 5
Smith's Knoll, and *vice versâ*	The entrance of the Gatways leading into Yarmouth Roads	3 3
Orfordness	The entrance of the Gatways leading into Yarmouth Roads	3 3

For ships of 14 feet draught of water, and under, 2-3ds of the above rate.

Into and out of the Harbours of Yarmouth or Southwold.—For all laden ships,

			L.	*s.*	*d.*
Of above 50 and not exceeding	60	tons	1	1	0
60	—	70 —	1	4	0
70	—	80 —	1	6	0
80	—	90 —	1	8	0
90	—	100 —	1	10	0
100	—	110 —	1	13	0
110	—	120 —	1	16	0
120	—	130 —	2	0	0
130	—	140 —	2	4	0
140	—	150 —	2	8	0
150	—	175 —	2	15	0
175	—	200 —	3	0	0

The pilotage for ships in ballast is to be 1-3d part of the pilotage of laden ships; and ships returning into port by distress of weather, contrary winds, or on account of accident, are to pay 2-3ds of their common pilotage. Ships not having British registers are to pay ⅓ more of the rates of pilotage than stated in the above Table.

PIMENTO, ALLSPICE, OR JAMAICA PEPPER (Fr. *Poivre de Jamaïque*; Ger. *Nelkenpfeffer*; It. *Pimenti*), the fruit of the *Myrtus pimenta*, a beautiful tree which grows in great plenty on the hills on the north side of Jamaica. The berries are spherical, and, when ripe, of a black or dark purple colour. But, as the pulp is in this state moist and glutinous, the berries are plucked when green; and being exposed in the sun to dry, they lose their green colour, and become of a reddish brown. They are packed in bags and hogsheads for the European market. The more fragrant and smaller they are, the better are they accounted. They have an aromatic, agreeable odour, resembling that of a mixture of cinnamon, cloves, and nutmegs, with the warm, pungent taste of the cloves. Pimento is used in medicine; but its principal use is in the seasoning of soups and other dishes.

"The returns," says Mr. Bryan Edwards, "from a pimento walk in a favourable season are prodigious. A single tree has been known to yield 150 lbs. of the raw fruit, or 100 lbs. of the dried spice; there being commonly a loss in weight of ⅓ in curing; but this, like many other of the minor productions, is exceedingly uncertain, and perhaps a very plenteous crop occurs but once in 5 years. The price in the British market, as may be supposed, fluctuates accordingly; but I believe its average for some years past may be set down at 7*d.* per lb., exclusive of the duty (3*d.*)." — (Vol. ii. p. 372. ed. 1819.) The price of pimento in bond, in the London market, has varied of late years from 4*d.* to 5½*d.* per lb.

At the period when Mr. Edwards's work was published, the annual imports of pimento from Jamaica amounted to about 672,000 lbs., and were decreasing every year — (*loc. cit.*). But at an average of the 3 years ending with 1832, the annual imports were 2,349,893 lbs., the annual exports 1,927,731 lbs., and the annual entries for home consumption 316,348 lbs. There has been, however, a considerable falling off in the imports of 1831 and 1832, which do not amount to much more than the half of those of the previous 4 years. The duty of 5*d.* per lb., being more than 100 per cent. on the price of the article, produces, at a medium, about 7,000*l.* a year. It ought to be repealed altogether. Jamaica furnishes more than 9-10ths of the pimento brought to England.

PINCHBECK (Ger. *Tomback;* Du. *Tombak;* Fr. *Tambac, Similor;* It. *Tombacco;* Sp. *Tambac, Tumbaga*), a name given to one of the many imitations of gold. By melting zinc in various proportions with copper or brass, some alloys result, the colours of which approach more or less to that of gold. This composition is frequently employed as a substitute for gold, in the formation of watch-cases, and various other articles of a like description. Pinchbeck is sometimes called *Tambac,* and sometimes *Similor,* and *Petit-or.*

PINE, or FIR, a species of forest tree, next, if not superior, to the oak, in point of utility and value. There are above 20 species of pines. They do not bear flat leaves, but a species of spines, which, however, are real leaves. They are mostly, though not all, evergreens; but the appearance of the tree, as well as the quality of the timber, varies with the species, and also with the situation in which it grows. Generally speaking, the timber is hardest and best in exposed cold situations, and where its growth is slow. We shall only notice those species, the timber of which is most in use in this country.

1. Scotch Pine (*Pinus sylvestris*), is a native of the Scotch mountains, and of most northern parts of Europe; being common in Russia, Denmark, Sweden, Norway, and Lapland. It is straight, abruptly branched, rising in favourable situations to the height of 80 or 90 feet, and being from 3 to 4 feet in diameter. It is at perfection when 70 or 80 years old. The colour of the wood differs considerably; it is generally of a reddish yellow, or of a honey yellow, of various degrees of brightness. It has no larger transverse septa, and it has a strong resinous odour and taste. In the best timber, the annual rings are thin, not exceeding $\frac{1}{10}$th of an inch in thickness; the dark parts of the rings of a bright reddish colour; the wood hard and dry to the feel, neither leaving a woolly surface after the saw, nor filling its teeth with resin. The best Norway is the finest of this kind, and the best Riga and Memel are not much inferior. The inferior sorts have thick annual rings; in some, the dark parts of the rings are of a honey yellow, the wood heavy, and filled with a soft resinous matter, feels clammy, and chokes the saw. Timber of this kind is not durable, nor fit for bearing strains. In some inferior species, the wood is spongy, contains less resinous matter, and presents a woolly surface after the saw. Swedish timber is often of this kind.

Scotch fir is the most durable of the pine species. It was the opinion of the celebrated Mr. Brindley, "that red Riga deal, or pine wood, would endure as long as oak in all situations." Its lightness and stiffness render it superior to any other material for beams, girders, joists, rafters, &c. It is much used in joiners' work, as it is more easily wrought, stands better, is much cheaper, and is nearly, if not quite, as durable as oak.

Scotch fir is exported from Norway and Sweden, under the name of *redwood.* Norway exports no trees above 18 inches' diameter, consequently there is much sap wood; but the heart wood is both stronger and more durable than that of larger trees from other situations. Riga exports a considerable quantity under the name of masts and spars: pieces from 18 to 25 inches' diameter are called *masts,* and are usually 70 or 80 feet in length; those of less than 18 inches' diameter are called *spars.* — (See Riga.) Yellow deals and planks are imported from various ports of Norway, Sweden, Prussia, Russia, &c. Tar, pitch, and turpentine, are obtained from the Scotch fir. — (See these titles.) When the tree has attained to a proper age, it is not injured by the extraction of these products.

2. Spruce Pine. — Of this there are 3 species: the Norway spruce, or *Pinus abies;* white spruce, or *Pinus alba;* and black spruce, or *Pinus nigra.* These are noble trees, rising in straight stems from 150 to 200 feet in height. They yield the timber known by the name of *white fir,* or *deal,* from its always being imported in deals or planks.

Deals imported from Christiania are in the highest estimation. — (See Christiania.) The trees are usually cut into 3 lengths, generally of about 12 feet each; and are afterwards cut into deals by saw-mills, each length yielding 3 deals. The Norway spruce thrives very well in Britain, and produces timber little inferior to the foreign: it is somewhat softer, and the knots are extremely hard.

The white spruce, or *Pinus alba,* is brought from British North America. The wood

is not so resinous as the Norway spruce: it is tougher, lighter, and more liable to twist in drying.

The black spruce, or *Pinus nigra*, is also an American tree; but it is not much imported into this country. The black and white spruce derive their names from the colour of the bark; the wood of both being of the same colour.

The colour of spruce fir, or white deal, is yellowish or brownish white; the hard part of the annual ring a darker shade of the same colour; it often has a silky lustre, especially in the American and British grown kinds. Each annual ring consists of two parts; the one hard, the other softer. The knots are generally very hard. The clear and straight-grained kinds are often tough, but not very difficult to work, and stand extremely well when properly seasoned. White deal, as imported, shrinks about $\frac{1}{70}$th part in becoming quite dry.

3. Weymouth Pine, or White Pine (*Pinus strobus*), is a native of North America, and is imported in large logs, often more than 2 feet square and 30 feet in length. It is one of the largest and most useful of the American trees, and makes excellent masts; but it is not durable, nor fit for large timbers, being very subject to dry rot. It has a peculiar odour.

4. Silver Fir (*Pinus picea*), is a native of the mountains of Siberia, Germany, and Switzerland, and is common in British plantations. It is a large tree, and yields the Strasburgh turpentine. The wood is of good quality, and much used on the Continent both for carpentry and ship building. The harder fibres are of a yellow colour, compact, and resinous; the softer nearly white. Like the other kinds of fir, it is light and stiff, and does not bend much under a considerable load; consequently, floors constructed of it remain permanently level. It is subject to the worm. It has been said to last longer in the air than in the water; and, therefore, to be fitter for the upper parts of bridges than for piles and piers.

5. Larch (*Pinus larix*). There are 3 species of this valuable tree; 1 European, and 2 American. The variety from the Italian Alps is the most esteemed, and has lately been extensively introduced into plantations in Great Britain. It is a straight and lofty tree, of rapid growth. A tree 79 years of age was cut down at Blair Athol, in 1817, which contained 252 cubic feet of timber; and one of 80 years of age, at Dunkeld, measured 300 cubic feet. The mean size of the trunk of the larch may be taken at 45 feet in length, and 33 inches' diameter. The wood of the European larch is generally of a honey yellow colour, the hard part of the annual rings of a redder cast; sometimes it is brownish white. In common with the other species of pine, each annual ring consists of a hard and a soft part. It generally has a silky lustre; its colour is browner than that of the Scotch pine, and it is much tougher. It is more difficult to work than Riga or Memel timber; but the surface is better when once it is obtained. It bears driving bolts and nails better than any other species of resinous wood. When perfectly dry, it stands well; but it warps much in seasoning.

It is in all situations extremely durable. It is useful for every purpose of building, whether external or internal; it makes excellent ship timber, masts, boats, posts, rails, and furniture. It is peculiarly adapted for flooring boards, in situations where there is much wear, and for staircases: in the latter, its fine colour, when rubbed with oil, is much preferable to that of the black oaken staircases to be seen in some old mansions. It is well adapted for doors, shutters, and the like; and, from the beautiful colour of its wood when varnished, painting is not necessary. — (We have abstracted these particulars from *Mr. Tredgold's* excellent work, *The Principles of Carpentry*, pp. 209—217.)

PINE-APPLE, or ANANAS, though a tropical fruit, is now extensively cultivated in hothouses in this country, and is well known to every one. When of a good sort and healthy, it is the most luscious, and, perhaps, the best fruit that this country produces; and when carefully cultivated, is equal in point of quality to that produced in the West Indies. A pine-apple raised at Stackpool Court, Pembrokeshire, and served up at the coronation dinner of George IV., weighed 10 lbs. 8 oz. — (*Vegetable Substances*, p. 379., *Lib. Entert. Knowledge.*)

PINT, a measure used chiefly in the measuring of liquids. The word is High Dutch, and signifies a little measure of wine. The English pint used to be of 2 sorts; the one for wine, the other for beer and ale. Two pints make a quart; 2 quarts a pottle; 2 pottles a gallon, &c. The pint, Imperial liquid measure, contains 34·659 cubic inches.

PIPE, a wine measure, usually containing 105 (very nearly) Imperial, or 126 wine gallons. Two pipes, or 210 Imperial gallons, make a tun. But, in practice, the size of the pipe varies according to the description of wine it contains. Thus, a pipe of port contains 138 wine gallons, of sherry 130, of Lisbon and Bucellas 140, of Madeira 110, and of Vidonia 120. The pipe of port, it is to be observed, is seldom accurately 138 gallons, and it is usual to charge what the vessel actually contains.

PIPE-CLAY, a species of clay abounding in Devonshire, and other parts of England, employed in the manufacture of various sorts of earthenware, and in bleaching.

PIRACY, consists in committing those acts of robbery and violence upon the seas, that, if committed upon land, would amount to felony.

Pirates hold no commission or delegated authority from any sovereign or state, empowering them to attack others. They can, therefore, be only regarded in the light of robbers or assassins. They are, as Cicero has truly stated, the common enemies of all (*communes hostes omnium*); and the law of nations gives to every one the right to pursue and exterminate them without any previous declaration of war; but it is not allowed to kill them without trial, except in battle. Those who surrender, or are taken prisoners, must be brought before the proper magistrates, and dealt with according to law.

By the ancient common law of England, piracy, if committed by a *subject*, was held to be a species of treason, being contrary to his natural allegiance; and, by an *alien*, to be felony only: but since the statute of treasons (25 Edw. 3. c. 2.), it is held to be only felony in a subject. Formerly this offence was only cognisable by the admiralty courts, which proceed by the rules of the civil law; but it being inconsistent with the liberties of the nation that any man's life should be taken away, unless by the judgment of his peers, the statute 28 Hen. 8. c. 15. established a new jurisdiction for this purpose, which proceeds according to the course of common law.

It was formerly a question whether the Algerines, and other African states, should be considered pirates: but, however exceptionable their conduct might have been on many occasions, and however hostile their policy might be to the interests of humanity, still, as they had been subjected to what may be called regular governments, and had been admitted to enter into treaties with other powers, they could not be treated as pirates.

Pirates having no right to make conquests, or to seize upon what belongs to others, capture by them does not divest the owner of his property. At a very early period of our history, a law was made for the restitution of property taken by pirates, if found within the realm, whether belonging to strangers or Englishmen: but any foreigner suing upon this statute must prove that, at the time of the capture, his own sovereign and the sovereign of the captor were in mutual amity; for it is held that piracy cannot be committed by the subjects of states at war with each other.

Piracy was almost universally practised in the heroic ages. Instead of being esteemed infamous, it was supposed to be honourable. — (*Latrocinium maris gloriæ habebatur.* — *Justin.* lib. xliii. c. 3.) Menelaus, in the Odyssey, does not hesitate to inform his guests, who admired his riches, that they were the fruit of his piratical expeditions — (lib. iv. ver. 90.); and such, indeed, was the way in which most of the Greek princes amassed great wealth. — (*Goguet, Origin of Laws*, vol. i. p. 383. Eng. trans.)

The prevalence of this piratical spirit in these early ages may, perhaps, be explained by the infinite number of small independent states into which the country was divided, and the violent animosity constantly subsisting amongst them. In this way ferocious and predatory habits were universally diffused and kept alive; and it is not to be supposed that those who were at all times liable to be attacked by hosts of enemies, should very accurately examine the grounds upon which they attacked others. According, however, as a more improved system of government grew up Greece, and a few states, as Athens, Corinth, &c., had attained to distinction by their naval power, piracy was made a capital offence: but though repressed, it was never entirely put down. Cilicia was at all times the great stronghold of the pirates of antiquity: and in consequence of the decline of the maritime forces of Athens, Rhodes, &c., which had kept them in check, they increased so much in numbers and audacity as to insult the majesty of Rome herself; so that it became necessary to send Pompey against them, with a large fleet and army, and more extensive powers than had been ever previously conferred on any Roman general.

During the anarchy of the middle ages, when every baron considered himself a sort of independent prince, entitled to make war on others, piracy was universally practised. The famous Hanseatic League was formed chiefly for the purpose of protecting the ships of the confederated cities from the attacks of the pirates by which the Baltic was then infested. The nuisance was not finally abated in Europe till the feudal system had been subverted, and the ascendancy of the law everywhere secured. In more modern times, some of the smaller West India islands have been the great resort of pirates: latterly, however, they have been driven from most of their haunts in that quarter. They are still not unfrequently met with in the Indian seas east of Sumatra.

Besides those acts of robbery and depredation upon the high seas, which, at common law, constitute piracy, some other offences have been included under that term. Thus, by the stat. 11 & 12 Will. 3. c. 7., if any natural-born subject commits any act of hostility upon the high seas against others of his Majesty's subjects, under colour of a commission from any foreign power, this, though it would only be an act of war in an alien, shall be construed piracy in a subject. And further, any commander or other seafaring person betraying his trust, and running away with any ship, boat, ordnance, ammunition, or goods, or *yielding them up voluntarily to a pirate*, or conspiring to do these acts; or any person assaulting the com-

mander of a vessel, to hinder him from fighting in defence of his ship, or confining him, or causing or endeavouring to cause a revolt on board, shall for each of these offences be adjudged a pirate, felon, and robber, and shall suffer death, whether he be principal, or merely accessory by setting forth such pirates, or abetting them before the fact, or receiving them, or concealing them or their goods after it; and the stat. 4 Geo. 1. c. 2. expressly excludes the principals from the benefit of clergy. By the stat. 8 Geo. 1. c. 24., the trading with known pirates, or furnishing them with stores or ammunition, or fitting out any vessel for that purpose, or in any wise consulting, combining, confederating, or corresponding with them; or the forcibly boarding any merchant vessel, though without seizing or carrying her off, and destroying or throwing any of the goods overboard, shall be deemed piracy; and such accessories to piracy as are described by the statute of King William are declared to be principal pirates, and all pirates convicted by virtue of this act are made felons without benefit of clergy. To encourage the defence of merchant vessels against pirates, the commanders and seamen wounded, and the widows of such seamen as are slain in any engagement with pirates, are entitled to a bounty, to be divided among them, not exceeding the *one fiftieth* part of the value of the cargo saved; and the wounded seamen are entitled to the pension of Greenwich Hospital.—(11 & 12 *Will.* 3. c. 7.; 8 *Geo.* 1. c. 24.) The first of these statutes also enacts, that if any mariner or inferior officer of any English ship decline or refuse to fight when commanded by the master, or shall utter any words to discourage the other mariners from defending the same, he shall lose all the wages due to him, together with such goods as he hath in the ship, and be imprisoned and kept to hard labour for 6 months.

The 6 Geo. 4. c. 49. enacts that a bounty shall be paid to the officers and crews of such of his Majesty's ships of war as may be engaged in the actual taking, sinking, burning, or otherwise destroying any vessel or boat manned by pirates, of 20*l.* for each pirate taken or killed during the attack, and of 5*l.* for every other man of the crew not taken or killed, who shall have been alive on board the said piratical vessel at the attack thereof.

The same statute (§ 3) enacts that vessels and other property taken from pirates, proved to have belonged to any of his Majesty's subjects, are to be delivered up to them, on their paying a sum of money, as salvage, equal to 1-8th part of the true value of the same.

PISTACHIA OR PISTACHIO NUTS (Ger. *Pistaschen*; Du. *Pistasjes*; Fr. *Pistaches*; It. *Pistacchi*, *Fastucchi*; Sp. *Alfocigos*; Lat. *Pistaciæ*), the fruit of the *Pistachia vera*, a kind of turpentine tree. It grows naturally in Arabia, Persia, and Syria; also in Sicily, whence the nuts are annually brought to us. They are oblong and pointed, about the size and shape of a filbert, including a kernel of a pale greenish colour, covered with a yellowish or reddish skin. They have a pleasant, sweetish, unctuous taste, resembling that of sweet almonds; their principal difference from which consists in their having a greater degree of sweetness, accompanied with a light grateful flavour, and in being more oily. Pistachias imported from the East are superior to those raised in Europe.—(*Lewis's Mat. Med.*)

PITCH (Ger. *Pech*; Fr. *Poix*, *Brai*; It. *Pece*; Sp. *Pez*; Rus. *Smola gustaja*), the residuum which remains on inspissating tar, or boiling it down to dryness. It is extensively used in ship building, and for other purposes. Large quantities are manufactured in Great Britain. The duty on pitch, which is 10*d.* a cwt., produced, in 1829, 448*l.*, so that 10,752 cwt. must have been entered for home consumption.

An allowance is to be made for tare on pitch, of 93 lbs. each on Archangel casks, 36 lbs. each on Swedish do., and 56 lbs. each on American do.

PLANE, a forest tree, of which there are 2 species; the Oriental plane (*Platanus Orientalis*), and the Occidental plane (*Platanus Occidentalis*).

The Oriental plane is a native of the Levant, and other Eastern countries, and is considered one of the finest of trees. It grows to about 60 feet in height, and has been known to exceed 8 feet in diameter. Its wood is much like beech, but more figured, and is used for furniture and such like articles. The Occidental plane is a native of North America, and is one of the largest of the American trees, being sometimes more than 12 feet in diameter. The wood of the Occidental plane is harder than that of the Oriental. It is very durable in water.

The tree known by the name of plane in England is the sycamore, or great maple (*Acer pseudo-platanus*). It is a large tree, grows quickly, and stands the sea spray better than most trees. The timber is very close and compact, easily wrought, and not liable either to splinter or warp. It is generally of a brownish white or yellowish white colour, and sometimes it is very beautifully curled and mottled. In this state it takes a fine polish, and bears varnishing well. It is chiefly used in the manufacture of saddle trees, wooden dishes, and a variety of articles both of furniture and machinery. When kept dry, and protected from worms, it is pretty durable; but it is quite as liable as beech to be attacked by them.—(*Tredgold*, p. 196.)

PLANKS (Ger. and Du. *Planken*; Da. *Planker*; Sw. *Plankor*; Fr. *Planches*, *Bordages*; Rus. *Tolstüle olosku*), thick strong boards, cut from various kinds of wood, especially oak and pine. Planks are usually of the thickness of from 1 inch to 4. They are imported in large quantities from the northern parts of Europe, particularly from the ports of Christiania, Dantzic, Archangel, Petersburgh, Narva, Revel, Riga, and Memel, as well as from several parts of North America.

PLANTAIN, OR BANANA, the pulpy fruit of the *Musa paradisiaca*, an herbaceous plant, extensively cultivated in most intertropical countries, but especially in Mexico. It is not, like most other fruits, used merely as an occasional luxury, but is rather an established article of subsistence. Being long and extensively cultivated, it has diverged into numerous varieties, the fruit of which differs materially in size, flavour, and colour. That

of some is not above 2 or 3 inches long, while that of others is not much short of a foot; some sorts are sweet, and of a flavour not unlike nor inferior to that of a good mellow pear; but the larger kind are, for the most part, coarse and farinaceous. The latter are either used fresh or dried in the sun, in which latter state they are occasionally ground into meal and made into bread. In Mexico, the sweeter sorts are frequently pressed and dried, as figs are in Europe; and, while they are not very inferior to the last mentioned fruit, they are infinitely cheaper.

"I doubt," says M. Humboldt, "whether there be any other plant that produces so great a quantity of nutritive substance in so small a space. Eight or 9 months after the sucker is planted, it begins to develope its cluster. The fruit may be gathered in the 10th or 11th month. When the stalk is cut, there is always found, among the numerous shoots that have taken root, a sprout (*pimpollo*), which, being 2-3ds the height of its parent plant, bears fruit 3 months later. Thus a plantation of bananas perpetuates itself, without requiring any care on the part of man, further than to cut the stalks when the fruit has ripened, and to stir the earth gently once or twice a year about the roots. A piece of ground of 100 square metres of surface will contain from 30 to 40 plants. During the course of a year this same piece of ground, reckoning the weight of the cluster at from 15 to 20 kilog. only, will yield 2,000 kilog., or more than 4,000 lbs., of nutritive substance. What a difference between this product and that of the cereal grasses in most parts of Europe! The same extent of land planted with wheat would not produce above 30 lbs.; and not more than 90 lbs. of potatoes. Hence the product of the banana is to that of wheat as 133 to 1, and to that of potatoes as 44 to 1."—(*Essai sur la Nouvelle Espagne*, tom. ii. p. 388. 2d ed.)

The banana forms a principal part of the food of the people of Mexico; and the apathy and indolence of the natives in the *tierras calientes*, or hot regions, has been ascribed, and probably with good reason, to the facility with which it supplies them with subsistence. It is by no means in such extensive use in tropical Asia; and comes nowhere in it into competition with corn as an article of food.

PLATE, the denomination usually given to gold and silver wrought into articles of household furniture.

In order partly to prevent fraud, and partly for the purpose of collecting a revenue, the manufacture of plate is placed under certain regulations. Those who carry it on are obliged to take out a licence, renewable annually on the 31st of July. — (See *antè*, p. 755.) Assay offices are established in different places; and any one selling any article previously to its having been assayed and marked, forfeits 50*l.* — (24 *Geo.* 3. c. 53.) No plate is passed at the assay offices, unless it be of the fineness of the old standard, or 11 oz. and 2 dwts., or of the new standard of 11 oz. and 10 dwts. Gold plate, with the exception of gold watch-cases, is to pay a duty of 17*s.* an oz., and silver plate a duty of 1*s.* 6*d.*; but watch-cases, chains, tippings, mountings, collars, bottle tickets, teaspoons, &c. are exempted. The 52 Geo. 3. c. 143. made the counterfeiting, or the transference from one piece of plate to another, of the marks, stamps, &c. impressed on plate by the assayers, felony without the benefit of clergy. But the offence is now punishable by transportation or imprisonment only. — (1 *Will.* 4. c. 66.)

In his able speech on the state of the country, 18th of March, 1830, Mr. Huskisson said, "The rate of duty upon silver wrought plate, in 1804, was 1*s.* 3*d.*, upon gold 16*s.* an ounce; it was afterwards raised to 1*s.* 6*d.* upon silver, and 17*s.* on gold. But what has been the increase in the nett produce of the duty? It has risen from less than 5,000*l.* in 1804, to 105,000*l.* in 1828; a rise of more than twenty-fold, notwithstanding the greatly diminished supply from the mines, and the consequent increasing value of the precious metals. It may be further remarked, that this augmentation shows how large a portion of gold and silver is annually diverted from the purposes of coin to those of ornament and luxury."

A Return, showing the Annual Nett Produce of the Duty levied on wrought Gold and Silver Plate, in each Year from 1805 to 1832, both inclusive; distinguishing, as far as possible, Gold from Silver, and also the Rate of Duty in each Year. — (*Parl. Paper*, No. 246. Sess. 1833.)

Years ending 5th of January.	Rate of Duty.		Gold.			Silver.			Duty not distinguishable.		
	Gold.	Silver.									
	Per oz.	*Per oz.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
1806	16*s.*	1*s.* 3*d.*	4,298	11	10	55,289	1	8	9,882	9	8
1807	—	—	4,244	16	2	56,806	10	11	10,761	11	3½
1808	—	—	4,798	1	5½	59,057	7	2½	10,849	18	7½
1809	—	—	4,906	1	2¾	63,759	18	6¾	11,042	8	5½
1810	—	—	5,033	9	8¼	69,452	2	10¾	12,333	12	11½
1811	—	—	5,840	15	9	74,028	18	11	14,251	14	0½
1812	—	—	4,902	7	8	62,677	8	0	12,192	5	7½
1813	—	—	4,652	14	9	55,171	10	10	11,357	4	7½
1814	—	—	4,859	7	0	50,600	12	11	10,755	12	5½
1815	—	—	5,361	12	10	53,545	11	5	12,403	1	11
1816	16*s.* & 17*s.*	1*s.* 3*d.* & 1*s.* 6*d.*	5,574	14	0	55,816	17	2	15,602	13	6¾
1817	17*s.*	1*s.* 6*d.*	5,174	4	8	57,416	15	10	12,564	8	9½
1818	—	—	2,971	5	7	60,150	12	6	13,028	15	6¾
1819	—	—	2,869	4	6½	89,610	14	6½			
1820	—	—	3,766	0	8¾	83,519	15	5½			
1821	—	—	2,478	17	6½	72,531	7	0½			
1822	—	—	3,398	1	0	67,664	14	5½			
1823	—	—	4,783	15	6½	71,220	9	5½			
1824	—	—	5,522	18	6¼	73,267	0	5			
1825	—	—	6,481	0	7½	89,113	4	6½			
1826	—	—	7,051	1	10½	105,218	11	6½			
1827	—	—	5,859	6	8½	80,512	12	5½			
1828	—	—	6,037	0	5¾	78,236	0	5¾			
1829	—	—	5,969	8	7½	86,526	0	1½			
1830	—	—	5,390	13	5½	78,589	1	5¾			
1831	—	—	4,853	19	3½	74,439	18	4½			
1832	—	—	3,880	6	7½	52,473	15	5			
1833	—	—	4,398	5	6	62,582	16	10¾			

Note. — The produce of the duties on gold and silver plate cannot be distinguished for the country prior to the year ended 5th of January, 1819, the same not having been distinguished in the accounts of the distributors.

We endeavoured to show, in the former edition of this work, that Mr. Huskisson had been deceived by trusting to false or defective information; and that, instead of the increase of the duties, and, consequently, of the consumption of plate, being nearly so great as he had represented, it fell far short of what might have been fairly expected from the increasing wealth and population of the country. The preceding Table shows that our criticism was well founded. The stationary amount of duty may, perhaps, be accounted for by the facility with which the duties are evaded. The increase of duty in 1825 is a curious phenomenon.

PLATINA, a metal which, in respect of scarcity, beauty, ductility, and indestructibility, is hardly inferior to gold, was unknown in Europe till about the middle of last century, when it began to be imported in small quantities from South America. It has since been discovered in Estremadura in Spain, and, more recently, in the Ural Mountains in Asiatic Russia, where it is now raised in very considerable quantities.

Platina is of a white colour, like silver, but not so bright, and has no taste or smell. Its hardness is intermediate between copper and iron. Its specific gravity is about 21·5, that of gold being 19·3; so that it is the heaviest body with which we are acquainted. It is exceedingly ductile and malleable; it may be hammered out into very thin plates, and drawn into wires not exceeding 1-1940th of an inch in diameter. In these properties it is probably inferior to gold, but it seems to surpass all the other metals. Its tenacity is such, that a wire of platina 0·078 inch in diameter is capable of supporting a weight of 274·31 lbs. avoirdupois without breaking. It is one of the most infusible of all metals; but pieces of it may be welded together without difficulty when heated to whiteness. It is not in the smallest degree altered by the action of air or water. — (*Thomson's Chemistry.*)

The late Dr. Wollaston discovered a method of fusing platina, and, consequently, of rendering it easily available in the arts. The Russians have, within these few years, issued platina coins of the value of 3, 6, and 20 silver roubles. Platina first began to be an object of attention in Russia in 1824, when 1 pood 33 lbs. were collected. In 1830, the produce amounted to 303 poods 14 lbs. In 1831, a piece of native platina was discovered at Demidoff's gold mines, weighing 20 lbs. 2⅓ zolt. — (*Official Statements* published by the Russian Government.)

PLATTING, slips of bast, cane, straw, &c. woven or plaited for making into hats, &c. — (See HATS, STRAW.)

PLUMS, the fruit of the *Prunus domestica*, are too well known to require any description. They were introduced into England in the 15th century, and are cultivated in all parts of the country. There are said to be nearly 300 varieties of plums.

PLUMBAGO. See BLACK LEAD.

POMEGRANATE, POMEGRANATES (Ger. *Granatäpfel*; Fr. *Grenades*; It. *Granati*, *Melagrani*; Sp. *Granadas*), the fruit of the pomegranate tree (*Punica granatum*). This tree, which grows to the height of 15 or 20 feet, appears to be a native of Persia, whence it has been conveyed, on the one side, to Southern Europe, and on the other, to the tropical parts of Asia, and eventually to the New World. The fruit is a pulpy, many-seeded berry, the size of an orange, covered with a thick, brown, coriaceous rind. The pulp has a reddish colour, and a pleasant subacid taste. The value of the fruit depends on the smallness of the seed and the largeness of the pulp. The finest, called by the Persians *badana*, or seedless, is imported into India from Caubul and Candahar, where the pomegranate grows in perfection. The tree thrives all the way to the equator; but, within the tropics, the fruit is hardly fit for use. The pomegranates brought to England from the south of Europe and the West Indies are very inferior to those of Persia. — (*Private information.*)

POPLAR (Ger. *Pappel*, *Pappelhaum*; Du. *Popelier*; Fr. *Peuplier*; It. *Pioppa*; Sp. *Alamo*; Lat. *Populus*). Of the poplar (*Populus* of botanists), there are about 15 species described; of these, 5 are common in England; viz. the common or *White*, the *Black*, the *Aspen* or trembling poplar, the *Abele* or great white poplar, and the Lombardy poplar. In most favourable situations, the white poplar grows with great rapidity, sometimes sending forth shoots 16 feet long in a single season. The wood is soft, and not very durable, unless kept dry; but it is light, not apt either to swell or shrink, and easily wrought. The Lombardy poplar grows rapidly, and shoots in a complete spire to a great height; its timber does not differ materially from that of the white poplar. It is very light; and is, therefore, well adapted for the manufacture of packing-cases. None of the species is fit for large timbers. — (*Tredgold's Principles of Carpentry*; *Veget. Sub.*, *Lib. of Entert. Knowledge.*)

POPULATION. To attempt giving in this place any explanation of the laws which regulate the progress of population, would be quite inconsistent with the objects and limits of this work. It may, indeed, be thought that the word has no business here. However, as it is frequently of importance in commercial questions, and in others materially affecting commercial interests, to be able to compare the consumption of an article with the population, we believe we shall gratify our readers by laying before them the following Tables, showing the results of the different censuses that have been taken of the population of Great Britain and Ireland.

I. Population of Great Britain in 1801, 1811, 1821, and 1831, showing its Amount at each Period in each County of England and Scotland, and in the entire Principality of Wales; with the Ratio of Increase.

Counties.	1801.	Increase per Cent.	1811.	Increase per Cent.	1821.	Increase per Cent.	1831.	
England.								
Bedford	63,393	11	70,213	19	83,716	14	95,383	
Berks	109,215	8	118,277	11	131,977	10	145,289	
Buckingham	107,444	9	117,650	14	134,068	9	146,529	
Cambridge	89,346	13	101,109	20	121,909	18	143,955	
Chester	191,751	18	227,031	19	270,098	24	334,410	
Cornwall	188,269	15	216,667	19	257,447	17	302,440	
Cumberland	117,230	14	133,744	17	156,124	10	169,681	
Derby	161,142	15	185,487	15	213,333	11	237,170	
Devon	343,001	12	383,308	15	439,040	13	494,168	
Dorset	115,319	8	124,693	16	144,499	10	159,252	
Durham	160,361	11	177,625	17	207,673	22	253,827	
Essex	226,437	11	252,473	15	289,424	10	317,233	
Gloucester	250,809	12	285,514	18	335,843	15	386,904	
Hereford	89,191	5	94,073	10	103,243	7	110,976	
Hertford	97,577	14	111,654	16	129,714	10	143,341	
Huntingdon	37,568	12	42,208	15	48,771	9	53,149	
Kent	307,624	21	373,095	14	426,016	12	479,155	
Lancaster	672,731	23	828,309	27	1,052,859	27	1,336,854	
Leicester	130,081	16	150,419	16	174,571	13	197,003	
Lincoln	208,557	14	237,891	19	283,058	12	317,244	
Middlesex	818,129	17	953,276	20	1,144,531	19	1,358,541	
Monmouth	45,582	36	62,127	15	71,833	36	98,130	
Norfolk	273,371	7	291,999	18	344,368	13	390,054	
Northampton	131,757	7	141,353	15	162,483	10	179,276	
Northumberland	157,101	9	172,161	15	198,965	12	222,912	
Nottingham	140,350	16	162,900	15	186,873	20	225,320	
Oxford	109,620	9	119,191	15	136,971	11	151,726	
Rutland	16,356	-	16,380	13	18,487	5	19,385	
Salop	167,639	16	194,298	6	206,153	8	222,503	
Somerset	273,750	12	303,180	17	355,314	13	403,908	
Southampton	219,656	12	245,080	15½	283,298	11	314,313	
Stafford	239,153	21	295,153	17	345,895	19	410,485	
Suffolk	210,431	11	234,211	15	270,542	9	296,304	
Surrey	269,043	20	323,851	23	398,658	22	486,326	
Sussex	159,311	19	190,083	22	233,019	17	272,328	
Warwick	208,190	10	228,735	20	274,392	23	336,988	
Westmoreland	41,617	10	45,922	12	51,359	7	55,041	
Wilts	185,107	5	193,828	15	222,157	8	239,181	
Worcester	139,333	15	160,546	15	184,424	15	211,556	
York (East Riding)	110,992	16	134,437	14	154,010	10	168,646	1,157,296
City of York and Ainstey	21,393	12	27,304	12	30,451	17	35,362	
York (North Riding)	158,225	7	169,391	11	187,452	2	190,873	
(West Riding)	565,282	16	655,042	22	801,274	22	976,415	
	8,331,434	14⅔	9,538,827	17⅞	11,261,437	16	13,089,338	
Wales	541,546	13	611,788	17	717,438	12	805,236	
Scotland.								
Aberdeen	123,082	10	135,075	15	155,387	14	177,651	
Argyle	71,850	19	85,585	14	97,516	4	101,425	
Ayr	84,306	23	103,954	22	127,299	14	145,055	
Banff	35,807	2	36,668	19	43,561	12	48,604	
Berwick	30,621	1	30,779	8	33,385	2	34,048	
Bute	11,791	2	12,033	15	13,797	3	14,151	
Caithness	22,609	4	23,419	29	30,238	14	34,529	
Clackmannan	10,858	11	12,010	10	13,263	11	14,729	
Dumbarton	20,710	17	24,189	13	27,317	22	33,211	
Dumfries	54,597	15	62,960	13	70,878	4	73,770	
Edinburgh	122,954	21	148,607	29	191,514	15	219,592	
Elgin	26,705	5	28,108	11	31,162	10	34,231	
Fife	93,743	8	101,272	13	114,556	12	128,839	
Forfar	99,127	8	107,264	6	113,430	23	139,606	
Haddington	29,986	4	31,164	13	35,127	3	36,145	
Inverness	74,292	5	78,336	15	90,157	5	94,797	
Kincardine	26,349	4	27,439	6	29,118	8	31,431	
Kinross	6,725	8	7,245	7	7,762	17	9,072	
Kirkcudbright	29,211	15	33,684	15	38,903	4	40,590	
Lanark	146,699	31	191,752	27	244,387	30	316,819	
Linlithgow	17,844	9	19,451	17	22,685	3	23,291	
Nairn	8,257	-	8,251	9	9,006	4	9,354	
Orkney and Shetland	46,824	-	46,153	15	53,124	10	58,239	
Peebles	8,735	14	9,935	1	10,046	5	10,578	
Perth	126,366	7	135,093	3	139,050	3	142,894	
Renfrew	78,056	19	92,596	21	112,175	19	133,443	
Ross and Cromarty	55,543	10	68,853	13	68,828	9	74,820	
Roxburgh	33,682	11	37,230	10	40,892	7	43,663	
Selkirk	5,070	16	5,889	13	6,637	2	6,833	
Stirling	50,825	14	58,174	12	65,376	11	72,621	
Sutherland	23,117	2	23,629	-	23,840	7	25,518	
Wigton	22,918	17	26,891	23	33,240	9	36,258	
	1,599,068	14	1,805,688	16	2,093,456	13	2,365,807	

Summary of Great Britain.

England	8,331,434	14⅔	9,551,888	17⅞	11,261,437	16	13,089,338
Wales	541,546	13	611,788	17	717,438	12	805,236
Scotland	1,599,068	14	1,805,688	16	2,093,456	13	2,365,807
Army, Navy, &c.	470,598	-	640,500	-	319,300	-	277,017
	10,942,646	15½	12,609,864	14	14,391,631	15	16,537,398

II. Population of Ireland, as determined by the Censuses taken in 1813, 1821, and 1831, showing its Amount at each Period in each County, with the Rates of Increase.

Counties, &c.	1813.	Increase per Cent.	1821.	Increase per Cent.	1831.
Province of Leinster.					
Carlow	69,566	13	78,952	3	81,576
Drogheda Town	16,123	12	18,118	4 decrease / increase	17,565
Dublin County	110,437	35	150,011	22	183,042
City	176,610	5	185,881	9	203,652
Kildare	85,138	16	99,065	9	108,401
Kilkenny County	134,664	17	158,716	6	169,283
City	*	-	23,330	2	23,741
King's County	113,226	15	131,088	9	144,029
Longford	93,817	12	107,570	4	112,391
Louth	*	-	101,011	7	108,168
Meath	142,479	11	159,185	11	177,023
Queen's County	113,557	17	134,275	8	145,815
Westmeath	*	-	128,819	6	136,799
Wexford	*	-	170,806	7	182,991
Wicklow	83,109	22	110,767	10	122,501
Total	-	-	1,757,492	9	1,927,967
Province of Munster.					
Clare	160,603	29	208,089	24	258,262
Cork County	525,936	20	629,786	12	705,926
City	64,294	56	100,658	6	107,011
Kerry	178,622	21	216,185	22	264,559
Limerick County	105,865	110	218,432	6	233,505
City	*	-	59,045	12	66,575
Tipperary	290,531	19	346,896	16	402,598
Waterford County	119,157	7	127,842	15	148,077
City	25,467	12	28,679	-	28,821
Total	-	-	1,935,612	14	2,215,364
Province of Ulster.					
Antrim	231,548	13	262,860	19	314,668
Armagh	121,449	62	197,127	11	220,651
Carrickfergus Town	6,156	30	8,023	8	8,698
Cavan	*	-	195,076	16	228,059
Donegal	*	-	248,270	20	298,104
Down	287,220	13	325,410	8	352,571
Fermanagh	111,250	17	130,997	14	149,555
Londonderry	186,181	4	193,869	14	222,416
Monaghan	140,433	24	174,697	11	195,532
Tyrone	250,746	4	261,865	15	302,943
Total	-	-	1,998,494	14	2,293,128
Province of Connaught.					
Galway	140,235	119	309,599	27	391,287
Town	24,684	12	27,775	19	33,120
Leitrim	94,095	32	124,785	12	141,303
Mayo	237,571	23	293,112	25	367,956
Roscommon	138,110	32	208,729	14	239,903
Sligo	*	-	146,249	17	171,508
Total	-	-	1,110,229	22	1,348,077

Summary.

Provinces.	1813.	1821.	1831.	Increase per Cent. on 1821.
Leinster	-	1,757,492	1,927,967	9
Munster	-	1,935,612	2,215,364	14
Ulster	-	1,998,494	2,293,128	14
Connaught	-	1,110,229	1,348,077	22
Total	-	6,801,827	7,784,536	14½

PORCELAIN, or CHINA WARE, a very fine species of earthenware. The first specimens of this fabric were brought to Europe from China and Japan. The best Chinese porcelain is of a very fine texture, white, semi-transparent, and sometimes beautifully coloured and gilt; is infusible, and not subject to break by the sudden application of heat or cold. The Chinese term for the article is *tse-ki*. But the Portuguese, by whom it was first brought in considerable quantities into Europe, bestowed on it the name of porcelain, from *porcella*, a cup.

Common earthenware, sometimes of a very good quality, is manufactured in Canton, Fokien, and several other provinces of China. But it is a curious fact, that the beautiful porcelain imported into Europe is made only in the town of Kingtesing, in the province of Kyangsi. Its manufacture is fully described by Duhalde, in his account of China, under the head "Porcelain and China ware." The porcelain of Japan is decidedly inferior to that of China; very little is imported, and it is valued only as a curiosity.

After porcelain began to be imported, its beauty soon brought it into great request, notwithstanding its high price, as an ornament for the houses and tables of the rich and the great. The emulation of European artists was in consequence excited. Very little information was, however, obtained as to the mode of manufacturing porcelain till the early part of last century, when the process was developed in a letter from a French Jesuit in China, who had found means to make himself pretty well acquainted with the subject. The knowledge that thus transpired, and the investigations of Reaumur and other chemists, prepared the way for the establishment of the manufacture in Europe. It was first commenced at Dresden, which has been famous ever since for the beauty of its productions; but the finest and most magnificent specimens of European china have been produced at Sèvres, in France, in the factory carried on at the expense of the French government.

British Porcelain Manufacture.— This, though unable to boast of such fine specimens of costly workmanship as have been produced at Sèvres and Dresden, is of much greater national importance. Instead of exclusively applying themselves to the manufacture of articles fitted only for the consumption of the

* *N. B.* — Not enumerated in 1813

rich, the artists of England have exerted themselves in preference to produce China ware suitable for the middle classes; and have succeeded in producing articles at once excellent in quality, elegant in form, and cheap. We are principally indebted for the improvements made in this important manufacture to the genius and enterprise of the late Mr. Josiah Wedgwood. This extraordinary man owed none of his success to fortuitous circumstances. Devoting his mind to patient investigation, and sparing neither pains nor expense in accomplishing his aims, he gathered round him artists of talent from different countries, and drew upon the stores of science for aid in pursuing the objects of his praiseworthy ambition. The early and signal prosperity that attended his efforts served only as an incentive to urge him forward to new exertions, and as means for calling forth and encouraging talent in others, in a manner calculated to promote the welfare of his country. Previously to his time, the potteries of Staffordshire produced only inferior fabrics, flimsy as to their materials, and void of taste in their forms and ornaments; the best among them being only wretched imitations of the grotesque and unmeaning scenes and figures portrayed on the porcelain of China. But such have been the effects resulting from the exertions and example of this one individual, that the wares of that district are now not only brought into general use in this country, to the exclusion of all foreign goods, which had been largely imported, but English pottery has since been sought for and celebrated throughout the civilised world, and adopted even in places where the art was previously practised. An intelligent foreigner, M. Faujas de St. Fond, writing on this subject, says, — "Its excellent workmanship, its solidity, the advantage which it possesses of sustaining the action of fire, its fine glaze impenetrable to acids, the beauty and convenience of its form, and the cheapness of its price, have given rise to a commerce so active and so universal, that, in travelling from Paris to Petersburgh, from Amsterdam to the farthest part of Sweden, and from Dunkirk to the extremity of the south of France, one is served at every inn upon English ware. Spain, Portugal, and Italy are supplied with it; and vessels are loaded with it for both the Indies and the continent of America." — (See the quotation in the *Account of the Porcelain Manufacture*, p. 16., in *Dr. Lardner's Cyclopædia*; for the statistical details with respect to the manufacture, see the article EARTHENWARE, in this work.)

The British porcelain manufacture is principally carried on at the potteries in Staffordshire, and at Worcester, Derby, Colebrook Dale, and other places.

Murrhine Cups. — It was long a prevalent opinion among modern critics, that the *vasa murrhina*, so famous in Roman history, were formed of porcelain. Pompey was the first who brought them to Rome from the East, about 64 years before the Christian era. They were used as drinking cups, and fetched enormous prices; Nero having given, according to the common method of interpreting, 58,000*l.* for a single cup! The extravagance of the purchaser may, in this instance, be supposed to have increased the price; so that the degree of estimation in which these cups were held may be more accurately inferred from the fact, that, of all the rich spoils of Alexandria, Augustus was content to select one for his share. — (*Sueton.* lib. ii. c. 71.) Pliny (lib. xxxvii. c. 2.) says they were made in Persia, particularly in Karamania. But those who contend they were China ware, chiefly found on the following line of Propertius: —

Murrheaque in Parthis pocula COCTA FOCIS. — (Lib. iv. Eleg. 5. lin. 26.)

In despite, however, of this apparently decisive authority, M. Le Bland and M. Larcher have, in two very learned dissertations (*Mémoires de Littérat.* tom. xliii.), which Dr. Robertson has declared are quite satisfactory, endeavoured to prove that the *vasa murrhina* were formed of transparent stone, dug out of the earth in some Eastern provinces, and that they were imitated in vessels of coloured glass. — (*Robertson's Disquisition on India*, note 39.) Dr. Vincent (*Commerce and Navigation of the Ancients*, vol. ii. p. 723.) inclines to the opposite opinion; but the weight of authority is evidently on the other side. At all events, it is plain that if the murrhine cups were really porcelain, it had been exceedingly scarce at Rome, as their price would otherwise have been comparatively moderate. But it is most probable that the ancients were wholly unacquainted with this article; which, indeed, was but little known in Europe till after the discovery of the route to India by the Cape of Good Hope. — (For some further details on this question, see *Kippingii Antiq. Rom.* lib. iv. c. 3.)

PORK, the flesh of the hog. Salted and pickled pork forms a considerable article of export from Ireland to the West Indies and other places.

Pork and Bacon exported from Ireland in the under-mentioned Years.

Years.	Pork.		Bacon.		Years.	Pork.		Bacon.	
	Quantity.	Official Value.	Quantity.	Official Value.		Quantity.	Official Value.	Quantity.	Official Value.
	Cwt.	£	*Cwt.*	£		*Cwt.*	£	*Cwt.*	£
1815	154,719	214,226	236,349	327,252	1821	141,211	195,559	366,209	507,059
1816	103,585	143,425	227,668	315,205	1822	115,936	160,527	241,865	334,890
1817	133,095	184,285	191,025	264,496	1823	120,046	166,218	343,675	475,858
1818	118,345	163,862	214,956	297,631	1824	106,543	147,521	313,788	434,475
1819	120,334	166,616	224,134	310,340	1825	108,141	149,734	362,278	501,615
1820	142,431	197,212	262,736	363,797					

Most part of the bacon is exported to England — (see BACON), — and also a good deal of the pork. The account cannot be brought further down than 1825, the trade between Great Britain and Ireland having since then been placed on the footing of a coasting trade.

PORT. See WINE.

PORT-AU-PRINCE, the capital of Hayti, or St. Domingo, in lat. 18° 33′ 42″ N., lon. 72° 27′ 11″ W. Population variously estimated, probably from 18,000 to 20,000. It is situated on the west coast of the island, at the bottom of a large and deep gulf. It was founded in 1749; since which, with few intervals, it has been the capital of French St. Domingo, as it is now of the entire island. It is partially fortified; the harbour being protected by a battery on a small island at a little distance from the shore. The country round is low and marshy; and the heat in the summer months being excessive, the climate is then exceedingly unhealthy. The buildings are principally of wood, and seldom exceed 2 stories in height.

Harbour. — The entrance to the harbour is between White Island and the southern shore. The depth of water varies from about 18 feet at ebb to about 21 do. at full tide. It is customary, but not compulsory, to employ a pilot in entering the harbour. They are always on the look-out. Ships moor head and stern, at from 100 to 500 yards from shore; loading and unloading by means of boats, as there are neither docks nor quays to assist these operations. The harbour is perfectly safe except during hurricanes, which may be expected from August to November.

Hayti is, next to Cuba, the largest of the West India islands. It was discovered by Columbus, on the 5th of December, 1492. Its greatest length is estimated at about 160 leagues, and its greatest breadth at about 40. Its superficies is estimated at about 2,450 square leagues. Three principal chains of mountains (from which emanate smaller mountain arms) run from the central group of Cibao. The whole of these are described as fertile and susceptible of cultivation, even to their summits; affording great variety of climate, which, contrary to what is the fact in the plains, is remarkably healthy. The soil of the plains is, in general, a very rich vegetable mould, exceedingly fertile, and well watered. There are several large rivers, and an immense number of smaller streams, some tributary and others independent. The ports are numerous and good. The harbour of Cape St. Nicholas, the fortifications of which are now in ruins, is one of the finest in the West Indies; being inferior only to the Havannah. Timber of the finest description is most abundant; and mines of gold, silver, copper, tin, iron, and rock salt, besides other natural productions, are said not to be wanting. The French are, therefore, fully justified in designating this magnificent island, *La Reine des Antilles*. The principal towns, besides Port-au-Prince, are Cap Haïtien, formerly Cap François, on the north coast, St. Domingo on the south, Les Cayes, and Jacmel.

Previously to the revolt of the blacks, Hayti was divided in unequal portions between the French and Spaniards; the former possessing the west, and the latter the eastern and larger portion of the island. The revolution began in 1789; and terminated, after the most dreadful massacres, and the destruction of a vast deal of property, in the total abolition of slavery, and the establishment of an independent black republic. The Spanish part of the island and the French were finally consolidated in 1822.

Population. — In 1789, the French part of Hayti was by far the most valuable and flourishing colony in the West Indies. The population was estimated at 524,000; of which 31,000 were white, 27,500 people of colour, and 465,500 slaves. The Spanish part of the island was much less densely peopled; the number in 1785 being estimated at 152,640; of which 122,640 were free people of all colours, mostly mulattoes, and the rest slaves. The population of the entire island, in 1827, was estimated by M. Humboldt at 820,000, of whom 30,000 were whites; but there are good grounds for thinking that this estimate is exaggerated.

Imports. — The principal articles of import are provisions; such as flour, rice, mess and cargo beef, fish, &c. and timber, from the United States; cotton goods of all sorts, Irish and Scotch linens, earthenware, cutlery, ammunition, &c. from England; wines, satins, liqueurs, jewellery, toys, haberdashery, &c. from France; and linens, canvass, gin, &c. from Holland and Germany.

Exports. — There has been an extraordinary decline in the quantity and value of the articles exported from Hayti since 1789. Sugar, for example, has fallen off from 141,000,000 lbs. to almost nothing; coffee from about 77,000,000 lbs. to little more than 32,000,000 lbs. in 1826; cotton from 7,000,000 lbs. to 620,000 lbs. in do.; indigo from 758,000 lbs. to nothing, &c.! Mahogany is almost the only article, the exports of which have rapidly increased of late years. The following Table illustrates what has now been stated: —

A General Table of Exports from Hayti, during the Years 1789, 1801, and from 1818 to 1826, both inclusive.

Yrs.	Clayed Sugar.	Muscovado Sugar.	Coffee.	Cotton.	Cacao.	Indigo.	Molasses.	Dye Woods.	Tobacco.	Castor Oil.	Mahogany.	Cigars.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Gal.*	*Feet.*	
1789	47,516,531	93,573,300	76,835,219	7,004,274	- -	758,628	25,749					
1801	26,540	18,518,572	43,420,270	2,480,340	648,518	804	22,419	6,768,634	- -	- -	5,217	
1818	198	5,443,567	26,065,200	474,118	434,368	- -	- -	6,812,300	19,140	121	129,962	
1819	157	3,790,143	29,240,919	216,103	370,439	- -	- -	3,094,109	39,698	711	141,577	
1820	2,787	2,514,502	35,137,759	346,839	366,421	- -	- -	1,919,748	97,600	157	129,509	
1821	- -	600,934	29,925,951	820,563	264,792	- -	- -	3,728,186	76,400	- -	55,005	
1822	- -	200,454	24,255,372	592,568	464,154	- -	211,927	8,295,080	588,957	- -	2,622,277	279,000
1823	- -	14,920	33,802,837	532,256	335,540	- -	- -	6,607,308	587,014	- -	2,369,047	393,800
1824	- -	5,106	44,269,084	1,028,045	461,694	1,240	- -	3,858,151	718,679	- -	2,181,747	175,000
1825	- -	2,020	36,034,300	815,697	359,927	- -	- -	5,948,190	503,425	- -	2,986,469	
1826	- -	32,864	32,189,784	620,972	457,592	- -	- -	5,307,745	340,588	- -	2,136,984	179,500

Gum Guaiacum, in 1822, 7,338 lbs. — 1823, 15,056 lbs. — 1824, 68,692 lbs.

The destruction caused by the deplorable excesses which accompanied the revolution explains a part of this extraordinary falling off: but the greater part is to be accounted for by the change in the condition of the inhabitants. It could not reasonably be expected that the blacks were to make the same efforts in a state of independence they made when goaded on by the lash to exertions almost beyond their powers. It may, however, be fairly anticipated that they will become more industrious, according as the population becomes denser, and as they become more civilised, and acquire a taste for conveniences and luxuries. Hitherto industry in Hayti cannot be said to be free. It is enforced and regulated by the *Code Rural*, which is, in fact, a modification of the old French regulations as to slavery embodied in the *Code Noir*. "The provisions are as despotic as those of any slave system that can be conceived. The labourer may almost

be considered *adscriptus glebæ;* he is deemed a vagabond, and liable to punishment, if he venture to move from his dwelling or farm without notice; he is prohibited from keeping a shop; and no person can build a house in the country unconnected with a farm. The code determines the mode of managing landed property; of forming contracts for cultivation between proprietor and farmer — farmer and labourer; of regulating grazing establishments, the rural police, the inspection of cultivation and cultivators; of repressing vagrancy; and of the repair and maintenance of the public roads. Lastly, it affixes the penalty of fine in some cases, and in others of indefinite imprisonment, at the option of the judge of the peace." — (*Mr. Consul Mackenzie's Despatch; Parl. Paper*, No. 18. Sess. 1829.)

Another serious obstacle to industry seems to be the enormous weight of the taxes imposed to defray the French indemnity. These are greatly beyond the means of the Haytians; so that the stipulated payments are in arrear, and will have to be abandoned.

Besides the articles specified in the above Table, hides, tortoise-shell, wax, ginger, and bullocks' horns are exported in considerable quantities. Hides are principally exported from the eastern, or, what was, the Spanish part of the island. They constitute a valuable article.

In despite, however, of these unfavourable circumstances, it appears abundantly certain that a considerable increase has taken place within these few years in the exports of coffee, cotton, mahogany, tobacco, and some other articles. But it is very difficult to arrive at the exact truth with respect either to this or any other matter connected with Hayti. During the discussions on the slave trade, both parties referred to it in support of their peculiar views; and the most contradictory statements were put forth as to the numbers and condition of the people, the extent of trade, &c. A good deal of smuggling is also carried on; so that even the official statements are not to be depended on. The subjoined account of the exports of 1832 is taken from the *Anti-Slavery Record* of the 6th of June, 1833. We do not pretend to guarantee its authenticity; but we have been assured by competent judges that it does not involve any material error: —

"Computed amount of exports for 1832, according to the Custom-house books: —

Coffee exported from	
Port-au-Prince	18,000,000 lbs.
Gonaïves	2,500,000 —
Cap Haïtien	8,000,000 —
Jérémie	3,000,000 —
Les Cayes	8,000,000 —
Jacmel	5,000,000 —
Partie de l'Est	5,500,000 —
	50,000,000 lbs.
Cotton, from all parts	1,500,000 —
Mahogany —	6,000,000 feet.
Tobacco —	500,000 lbs.
Cacao, from all parts	500,000 lbs.
Dye woods —	5,000,000 —
Hides —	80,000
Tortoise-shell —	12,000 lbs.
Cigars —	500,000

"The value of the crop of coffee is estimated at about 1,000,000*l.* sterl. The duties realised on this sum, 1st, by the imports required to purchase it, and 2dly, the exports, which are subject to a duty of 13 dollars the 1,000, are estimated at 25 per cent. on the value of the crop. This would give 250,000*l.* on the coffee. This, at 7 Haytian dollars to the pound sterling, makes 1,750,000 dollars of revenue realised by this commodity alone."

The duties on imports amount, at an average, to about 900,000 dollars a year. The total receipts of the treasury may be estimated at about 2,500,000 dollars, which is, however, exceeded by the expenditure.

The Americans, British, French, and Germans carry on almost the whole trade of Hayti. The imports from England are very decidedly larger than those from any other country; but the exports to America exceed those destined for us. As the articles carried to Hayti from the United States are, for the most part, bulky, consisting of flour, salt fish, and provisions of all sorts, timber, &c., the number of American vessels engaged in the trade very materially exceeds those trading under any other flag.

Arrivals. — The arrivals of shipping at Port-au-Prince and Cap Haïtien, in 1829, 1830, and 1831, have been as under: —

Places.		1829.	1830.	1831.
Port-au-Prince	vessels	130	157	171
	tonnage	18,268	22,823	23,686
Cap Haïtien	vessels	77	77	69
	tonnage	10,596	11,787	9,070

Port Charges. — The charges on a native and foreign ship of 300 tons are the same, and as follows: —

	Dollars.
Tonnage duty*	300
Administrator	12
Commandante de place	12
Commissaire de guerre	12
Commandante de port	12
Director of customs	12
Interpreter	12
Treasurer	12
Doctor	12
Stamps for entry and clearing	16 50
Fountain tax	20
Pilotage	2
Total, currency	434 50

Custom-house Regulations. — On arrival, the master of the vessel proceeds to the Custom-house with the interpreter, where he makes his declaration whether he discharges his cargo in the port. If he discharge, his invoices are translated, and the goods verified in the presence of the consignee, who is allowed to land and store them. On clearing outwards, the merchant pays the duties on the cargoes both ways, and exhibits a receipt at the office of the commissaire de guerre, commandante de place, and commandante de port, who sign a certificate that the vessel may depart.

Warehousing. — The warehousing and bonding system is established by law, but there are at present no buildings appropriated to the reception of bonded goods. Until very recently, goods were permitted to be bonded under this law in the merchants' stores; a late order has, however, suspended that indulgence. The rate is 1 per cent. per year, and no allowance made for waste or loss. Goods exported in the same vessel they arrive in, pay, if landed, ½ per cent. and wharfage fees.

Money. — The weight of the dollar is 216 grains; the ½ and ¼ dollar being in proportion. But nearly ½ the weight of the coin consists of tin or other alloy; so that the value of the dollar does not exceed 1*s.* 6*d.* sterling.

Weights in Hayti are divided as in avoirdupois and apothecaries' weight; but they are about 8 per cent. heavier than British weights.

Measures. — Same as those used in France.

Regulations as to Trade. — It is enacted, that all persons exercising any trade or profession, excepting that of cultivating the soil, must be provided with a patent or licence to carry on such trade or profession; that all strangers admitted as merchants into the republic must, in the first place, procure the permission of the president to take out a patent, which, when obtained, only authorises them, under heavy penalties, to carry on a wholesale business, not with each other, but with the Haytians, in the open ports, which are Port-au-Prince, Gonaïves, Cap Haïtien, Port-à-Plate, Santo Domingo, Jacmel, Les Cayes, and Jérémie. The minimum quantities of goods that may be sold are fixed by the same law. The Haytian consignee may be also a retailer, on taking out a corresponding patent.

A charge of 2,000 dollars is made for each patent to a foreigner trading to Port-au-Prince; 1,800 for Les Cayes, Cap Haïtien, and Jacmel; and 1,600 for each of the remaining ports.

Duties. — The duties on all imported commodities consigned to foreign merchants are 17½ per cent. on an established tariff, whether they be brought in native or foreign ships, with the exception of those from the United States which pay an addi-

* This is the present consul's statement. Mr. Consul Mackenzie says, that as Haytian vessels pay for a licence, they are not subject to the tonnage duty. Perhaps, however, the regulation in this respect has been changed since his "Notes" were published.

tional 10 per cent. on the amount of the duties. Goods consigned to native merchants pay only 10½ per cent.

The following articles are duty free in all bottoms:— Shot of all sizes, grenades, howitzers, bomb-shells, and other projectiles of artillery; iron and bronze cannon, mortars, muskets and bayonets, carbines, pistols, and cavalry sabres, briquets, or short swords for infantry; machines and instruments for simplifying and facilitating the cultivation of the soil, and the preparation of its products: horses and cattle, mules, asses, gold and silver coin; classical and elementary works, sewed in boards, or bound in parchment, for the instruction of youth.

The following is a list of articles absolutely prohibited, without reference to their place of growth:— Mahogany, logwood, lignum vitæ, fustic, coffee, cotton wool, cacao, raw and clayed sugar, rum, tafia, syrup, molasses; canes, whips, and umbrellas, containing swords, stilettoes, or other arms; books, and other works, opposed to good morals.

Besides the export, there is also a territorial duty levied equally on the produce of the soil, whether exported in national or foreign ships.

The export of the following articles is strictly prohibited:— Gold and silver coin, side and fire arms, munitions, and other articles of war; old or new iron and copper; horses, brood mares, mules, asses, and wood for ship building.

The coasting trade is entirely confined to Haytian citizens.

The commerce of Port-au-Prince is carried on by various classes of persons. The imports from Europe and America are principally consigned to European and North American commission houses, besides a few Haytian establishments. The capital is one of the ports to which foreign merchants are confined by the law of patents; but they are, or at least were during the time of my residence, restricted by heavy penalties to wholesale business. Of course they cannot deal with the consumers, but with the native retailers, who are chiefly women, styled "marchandes;" these employ hucksters, also women, who traverse the country, attend the markets, and give an account of their transactions to their employers, either every evening, once a week, or once a month, according to their character for integrity..

As the payments of the importer are generally in money, and there is only one important article of export — coffee — the purchases for returns can only be made after the crops have been gathered; and these are effected by brokers, who often bargain with a class of natives called coffee speculators, from their dealing for the chance of the market with the cultivators and either sell to the best advantage, or fulfil contracts previously entered into.

Among the respectable *marchandes* there is said to be much good faith; but with the great body of the customers, I believe, the merchants are obliged to use the utmost circumspection.

All the ordinary tradesmen, such as tailors and shoemakers, and even a water-proof hat manufacturer, are to be found at Port-au-Prince. And I confess I was struck with the respectable appearance of several booksellers' shops, having looked in vain for such things both in Barbadoes and Antigua. The books are generally elementary, French publications, and romances. The works of Voltaire, Rousseau, and others of the same class, abound.

There are also two printing presses; one at which the government Gazette *Le Télégraphe* is printed, and the other from which the *Feuille de Commerce* issues. The former rarely contains more than the documents issued by the government; the latter occasionally some spirited papers, and is conducted by M. Courtois, who was for a short time director of the post-office.

The apothecaries' shops are numerous, as they ought to be in such a horrible climate, and are well supplied with all the contents of the French Pharmacopœia. There are also some tanneries, in which the bark of the mangrove is used as the tanning material. As far as I could ascertain, the great bulk of the border people were either of that class of Europeans called in the French time "*petits blancs*," or people of colour. The labourers in town and country are generally black.

With the exception already referred to, we have derived these details with respect to Hayti partly from the communications to government, and the published *Notes* of Charles Mackenzie, Esq., late consul in that island; and partly from Mr. Consul Courtenay's *Answers* to the *Circular Queries*.

PORTERS AND PORTERAGE.

Porters are persons employed to carry messages or parcels, &c.

In London, they are divided into different classes. It is enacted by 39 Geo. 3. c. 58., that the following rates shall be the maximum charge upon all parcels not exceeding 56 lbs. weight, in London, Westminster, Southwark, and the suburbs; viz.—

	s.	d.
For any distance not exceeding ¼ of a mile	0	3
Not exceeding ½ a mile	0	4
Not exceeding 1 mile	0	6
Not exceeding 1½ mile	0	8
Not exceeding 2 miles	0	10

And so in like manner the additional sum of 3*d.* for every further distance not exceeding ½ a mile.

Tickets to be made out at the inns, and given to the porters, who are to deliver them with the parcels; and any innkeeper not making out such tickets to forfeit not exceeding 40*s.* nor less than 5*s.*; porters not delivering, or defacing the same, to forfeit 40*s.*, and if they make any overcharge they are to forfeit 20*s.* Parcels brought by coaches to be delivered *within six hours*, under a penalty not exceeding 20*s.* nor less than 10*s.* Parcels brought by wagons to be delivered *within twenty-four hours*, under a like penalty. Parcels directed to be left till called for, to be delivered to those to whom the same may be directed, on payment of the carriage, and 2*d.* for warehouse room, under like penalty. If parcels be not sent for till the expiration of a week, 1*d.* more for warehouse rent may be charged. Parcels not directed, to be left till called for, to be delivered on demand, under the above penalty. *Misbehaviour* of porters may be punished by a fine not exceeding 20*s.* nor less than 5*s.* The porters of London have the exclusive privilege of taking up and carrying goods within the city, and the employment of any one else may be punished by fine.

Porters (Tackle-House), are regulated by the city of London. They have the privilege of performing the labour of unshipping, landing, carrying, and housing the goods of the South Sea Company, the East India Company, and all other goods, except from the East country, the produce of the British plantations and Ireland, and goods coastwise. They give bond for 500*l.* to make restitution in case of loss or damage, and are limited to rates fixed by the corporation.

Porters (Ticket), are persons appointed by the city of London, and have granted to them the exclusive privilege of unshipping, loading, and housing pitch, tar, soap, ashes, wainscot, fir, poles, masts, deals, oars, chests, tables, flax and hemp, brought to London from the East country; also iron, cordage, and timber, and all goods of the produce of Ireland and the British plantations, and all goods coastwise, except lead. They are freemen of the city, give security in 100*l.* for fidelity, and have their names and numbers engraved on a metal badge. They are under the tackle porters; who may, in performing the business of the port, employ other labourers, if ticket porters be not at hand. — (*Montefiore's Dictionary.*)

Any person may bring goods into the city of London; but he is liable to a fine if he either take up, or carry, any within the city. It is astonishing that such absurd regulations should be still kept up: why should not the merchants of London, as well as those of Manchester, be allowed to employ any one they please in the conveyance of goods? Does any one doubt that competition would, in this, as in every thing else, be productive of the greatest advantage? The regulations in question merely tend to keep up oppressive privileges, injurious to the public interests, and disadvantageous even to those in whose favour they are enacted.

PORT LOUIS, or NORTHWEST PORT,

the capital of the Mauritius, in lat. 20° 9′ 56″ S., lon. 57° 28′ 41″ E. It is situated at the bottom of a triangular bay, the entrance to which is rather difficult. Every vessel approaching the harbour must hoist her flag and fire 2 guns; if in the night, a light must be shown; when a pilot comes on board, and steers the ship to the entrance of the port. It is a very convenient port for careening and repairing; but provisions of all sorts are dear. In the hurricane months, the anchorage in Port Louis is not good; and it can then only accommodate a very few vessels. The houses are low, and are principally built of wood. The town and harbour are pretty strongly fortified. Almost all the foreign trade of the island is carried on here.

The Mauritius was so called by the Dutch in honour of Prince Maurice; but it was first settled by the French in 1720; and is indebted for most part of its prosperity to the skilful management of its governor, the famous M. de la Bourdonnais. It was taken by the English in 1810; and was definitively ceded to us in 1814.

Exports and Imports, &c. — Mauritius is pretty fertile, a considerable part of the surface being, however, occupied by mountains. Its shape is circular, being about 150 miles in circumference. The climate is healthy, but is very subject to hurricanes. The principal product of the island is sugar, which is now cultivated to the almost total neglect of every thing else; but it also produces excellent coffee, indigo, and cotton. The blackwood or ebony of the Mauritius is very abundant, and of a superior quality. Very little corn or grain of any kind is raised in the island; most articles of provision being imported. Previously to 1825, the sugar and other articles brought to Great Britain from the Mauritius were charged with the same duties as the like articles from

India: but in the above-mentioned year this distinction was done away, and it was enacted (6 Geo. 4. c. 111. § 44.), that all goods of the growth, produce, or manufacture of the Mauritius, should, upon importation into any port of the United Kingdom, be subject to the same duties and regulations as the like goods being of the growth, produce, or manufacture of the British colonies in the West Indies; and that the trade with the Mauritius should be placed as nearly as possible on the same footing as that of the West India islands.

This was a great boon to the Mauritius, and the exports of sugar from it have since rapidly increased. According to Mr. Milburn (*Oriental Commerce*, vol. ii. p. 568.), they amounted, in 1812, to about 5,000,000 lbs. In 1818, they amounted to about 8,000,000 lbs.; and in 1824, to 23,334,553 lbs. They have since been as under: —

1826	-	42,489,416 lbs.	1830	-	54,399,520 lbs.
1827	-	40,616,254 —	1831	-	57,965,936 —
1828	-	48,638,780 —	1832	-	59,049,872 —
1829	-	33,371,296 —			

The cultivation of sugar being found more profitable than that of coffee, the exports of the latter, though of excellent quality, have declined so far, that in 1832 we only obtained from the Mauritius 26,646 lbs. The exports of cotton are also inconsiderable. The exports of ebony in 1826 amounted to 2,002,783 lbs., of the estimated value of 9,017*l.* The value of the tortoise-shell exported in the same year was also estimated at about 9,000*l.* Considerable quantities of Indian piece goods are exported. The principal imports consist of provisions, particularly grain and flour; the supply required for the use of the island being almost entirely derived from the Cape of Good Hope, Madagascar, India, Bourbon, &c. Earthenware, machinery, furniture, hardware, piece goods, wine, &c. are also largely imported. The total estimated value of the imports in 1831 amounted to 705,583*l.*; the estimated value of the exports for the same year being 666,684*l.* In 1831, 342 ships cleared outwards, of the burden of 90,462 tons; of which 22 ships, of the burden of 5,937 tons, were for Britain.

In 1826, the population of the Mauritius amounted to 94,624 souls; of which 8,111 were whites (exclusive of the king's troops), 15,444 free blacks, 69,076 slaves, 1,736 troops, and 257 resident strangers. The population of the Seychelles — small islands dependent on the Mauritius — amounted at the same time to 7,665, of whom 6,525 were slaves.

Monies, Weights, and Measures — According to the regulations of government, the franc is deemed equal to 10*d.*, and the Spanish dollar to 4*s.* 4*d.* The government accounts are kept in sterling money; but merchants, shopkeepers, &c. keep their accounts in dollars and cents, and dollars, livres, and sous.

The measures and weights are those of France previously to the Revolution. 100 lbs. French = 108 lbs. English; the French foot is to the English foot as 100 to 93·89, but in practice they are supposed to be as 16 to 15. The velte = 1 gallon 7·8 pints English; but in commercial transactions it is always taken at 2 gallons.

Duties, &c. — A duty of 6 per cent. *ad valorem* is laid on all goods imported for consumption in British vessels from all quarters of the world. The duties on the goods imported in foreign ships are, for the most part, also 6 per cent. A duty of 25 cents, or 1*s.* 1*d.*, per cwt. is laid on all sugar exported in British bottoms, to all places except Bourbon; and an additional duty of 8 per cent. *ad valorem* is laid on all goods exported in foreign bottoms. The charges for pilotage, wharfage, &c. are fixed by government, and may be learned at the Custom-house. For the most part they are very moderate.

Finance. — In a financial point of view, the Mauritius does not seem to be a very valuable acquisition. During the 15 years ending with 1825, the expenditure of government in the island exceeded the revenue by no less than 1,026,208*l.*! According to the estimate of the commissioners of inquiry, the probable future revenue of the Mauritius may be estimated at 184,233*l.* a year; but the commissioners state that the expenditure in the island in 1828 amounted to 166,509*l.*, and the expenditure in Great Britain on account of the island to 77,857*l.*; making together 244,366*l.* — (*Parl. Paper*, No. 194. Sess. 1831.) It appears from the accounts published by the Board of Trade, that the total revenue of the colony in 1831 amounted to 232,438*l.*, and the expenditure to 249,824*l.* — (Vol. i. p. 246.) We believe, however, that, by enforcing a system of unsparing retrenchment, this unfavourable balance might be considerably diminished: at present, both the number of functionaries and their salaries seem quite excessive. — (This article has been almost entirely compiled from official documents.)

PORTO-RICO, the capital of the valuable Spanish island of the same name, in lat. 18° 29′ 10″ N., lon. 66° 13′ 15″ W. It is situated on the north side of the island, on a peninsula joined to the main land by a narrow isthmus. The fortifications are very strong: the town, which stands on a pretty steep declivity, is well built, clean, and contains from 20,000 to 30,000 inhabitants.

Harbour.—The harbour of Porto-rico has a striking resemblance to that of the Havannah, to which it is but little inferior. The entrance to it, about 300 fathoms in width, has the Morro Castle on its east side, and is defended on the west side by forts erected on 2 small islands. Within, the harbour expands into a capacious basin, the depth of water varying from 5 to 6 and 7 fathoms. On the side opposite to the town there are extensive sand banks; but the entrance to the port, as well as the port itself, is unobstructed by any bar or shallow.

The island of Porto-rico lies in the same latitude as Jamaica. Though the smallest of the greater Antilles, it is of a very considerable size. Its form is that of a parallelogram; being about 115 miles in length from east to west, with a mean breadth of about 35, containing an area of 4,140 square miles. The surface is pleasantly diversified with hills and valleys, and the soil generally fertile. It has, however, suffered much from hurricanes; those of 1742 and 1825 having been particularly destructive. Since the breaking up of the old Spanish colonial system, the progress of Porto-rico has hardly been less rapid than that of Cuba. Her population, which in 1778 was estimated at 80,650, amounted, according to a census taken in 1827, to 288,473, of which only 28,408 were slaves. A large proportion of the free inhabitants are coloured: but the law knows no distinction between the white and the coloured *roturier*; and this circumstance, as well as the whites being in the habit of freely intermixing with people of colour, has prevented the growth of those prejudices and antipathies that prevail between the white and the black and coloured population in the United States, and in the English and French islands.—(*Balbi, Abrégé de la Géographie*, p. 1175.; *Poinsett's Notes on Mexico*, Lond. ed. pp. 4—11.)

Trade. — Sugar and coffee are by far the greatest articles of export. Next to them are cattle, tobacco, molasses, rum, cotton, &c. The imports consist principally of flour, fish, and other articles of provision, lumber, &c. from the United States; cottons, hardware, machinery, &c. from England; wines, silks, jewellery, perfumery, &c. from Spain and France; linen from the Hanse Towns; iron from Sweden, &c. Large quantities of rice, maize, &c. are raised in the island.

Account of the Value of the Imports into, and the Exports from, the Island of Porto-rico in 1830; specifying those made by the Spaniards, Americans, English, &c.

Flags.	Imports.	Exports.	Flags.	Imports.	Exports.
	Dollars.	*Dollars.*		*Dollars.*	*Dollars.*
Spanish (from Spain)	207,816·0·08	235,791·2·08	French	57,958·6·26	228,014·1·25
Do. (cabotage) *	1,181,445·3·25	885,916·2·18	Holland	1,288·2·15	2,015·0·27
American	602,390·1·11	1,[illegible]	Danish	8,456·2·32	73,587·0·12
English	60,720·5·00	155,[illegible]	Sardinian	594·2·00	15,302·0·10
Hamburgh, German, Bremen	27,726·7·32	156,048·5·27	Swedish	543·5·00	590·0·00
			Totals	2,208,941·5·13	3,411,845·3·14

The Quantity and Value of the principal Articles of Export in 1830 were —

	Quantity.	Value.
Cotton	4,978 quint.	59,743 dollars.
Sugar	540,163 —	1,360,655 —
Coffee	169,119 —	1,348,484 —
Molasses	2,484,739 quart.	82,215 —
Rum	873 punch.	26,218 —
Tobacco	34,902 quint.	139,609 —
Horses, cattle, &c.		202,203 —
		3,219,129 dollars.

The Customs duties collected at the different ports of the island in 1830 amounted to 584,990 dollars. The city of Porto-rico has from 1-3d to 1-4th part of the trade of the island. The other principal ports are Mayagues, Ponce, Aguadilla, Guayama, and Fajardo. — (These statements have been taken from the *Balanza Mercantil*, published at Porto-rico, 20th of June, 1831.)

Shipping. — Arrivals in 1830.

	Vessels.	Tons.
Spaniards	840	15,163
Americans	213	29,906
English	36	4,103
French	87	5,790
Danes	25	1,522
Sardinians	2	284
Swedes	4	323
Dutch	7	251
Hanse Towns	7	1,184
	1,221	58,526

Monies, Weights, and *Measures,* same as those of Havannah, which see.

PORTS. See HARBOURS.

POSTAGE AND POST-OFFICE. Postage is the duty or charge imposed on letters or parcels conveyed by post; the Post-office being the establishment by which such letters or parcels are conveyed.

1. *Establishment of Post-offices.* — Regular posts or couriers were instituted at a very early period, for the safe, regular, and speedy transmission of public intelligence. Herodotus informs us (lib. viii. c. 98.), that in Persia, men and horses, in the service of the monarch, were kept at certain stations along the public roads; and that the despatches, being given to the first courier, were by him carried to the second, and so on, with an expedition that neither snow, nor rain, nor heat, nor darkness, could check. A similar institution, under the name of *cursus publicus*, was established at Rome by Augustus, and was extended and improved by his successors. Horses and carriages were kept in readiness at the different stations along the public roads, not only for the transmission of despatches, but also for the conveyance of official personages, or others who had obtained an order from authority allowing them to travel post. By this means government was speedily apprised of whatever took place in the remotest corners of the empire; and instructions or functionaries could be sent to, or recalled from, the most distant provinces, with a celerity that would even now appear considerable. — (*Bergier, Histoire des Grands Chemins*, liv. iv. c. 4.; *Bouchaud sur la Police des Romains*, pp. 136—151.)

Posts appear to have been established, for the first time, in modern Europe, in 1477, by Louis XI. They were originally intended to serve merely, as the ancient posts, for the conveyance of public despatches, and of persons travelling by authority of government. Subsequently, however, private individuals were allowed to avail themselves of this institution; and governments, by imposing higher duties or rates of postage on the letters and parcels sent through the Post-office than are sufficient to defray the expense of the establishment, have rendered it productive of a considerable revenue. Nor, while the rates of postage are confined within due limits, or not carried so high as to form any serious obstacle to correspondence, is there, perhaps, a more unobjectionable tax.

English Post-office. — The Post-office was not established in England till the 17th century. Post-masters, indeed, existed in more ancient times; but their business was confined to the furnishing of post-horses to persons who were desirous of travelling expeditiously, and to the despatching of extraordinary packets upon special occasions. In 1635, Charles I. erected a letter office for England and Scotland; but this extended only to a few of the principal roads, the times of carriage were uncertain, and the post-masters on each road were required to furnish horses for the conveyance of the letters at the rate of $2\frac{1}{2}d.$ a mile. This establishment did not succeed; and at the breaking out of the civil war, great difficulty was experienced in the forwarding of letters. At

* This does not mean a coasting trade from port to port in the island; but the trade carried on under the Spanish flag with St. Thomas and other foreign colonies.

length a post-office, or establishment for the *weekly* conveyance of letters to all parts of the kingdom, was instituted in 1649, by Mr. Edward Prideaux, attorney-general for the Commonwealth; the immediate consequence of which was a saving to the public of 7,000*l.* a year on account of post-masters. In 1657, the Post-office was established nearly on its present footing, and the rates of postage that were then fixed were continued till the reign of Queen Anne. — (*Black. Com.* book i. c. 8.)

From the establishment of the Post-office by Cromwell, down to 1784, mails were conveyed either on horseback, or in carts made for the purpose; and instead of being the most expeditious and safest conveyance, the post had become, at the latter period, one of the slowest and most easily robbed of any in the country. In 1784, it was usual for the diligences between London and Bath to accomplish the journey in *seventeen* hours (it is now accomplished in *twelve* hours), while the post took *forty* hours; and on other roads their rate of travelling was in about the same proportion. The natural consequence of such a difference in point of despatch was, that a very great number of letters were sent by those conveyances; the law being very easily evaded, by giving them the form of small parcels.

Under these circumstances, it occurred to Mr. John Palmer, of Bath, comptroller general of the Post-office, that a very great improvement might be made in the conveyance of letters, in respect of economy, as well as of speed and safety, by contracting with the proprietors of the coaches for the carriage of the mail; the latter being bound to perform the journey in a specified time, and to take a guard with the mail for its protection. Mr. Palmer's plan encountered much opposition, but was at length carried into effect. The consequences have proved most beneficial: the use of mail-coaches has extended to every part of the empire; and while the mail is conveyed in less than half the time that was required under the old system, the coaches by which it is conveyed afford, by their regularity and speed, a most desirable mode of travelling. Mr. Palmer was the author of several other improvements in the economy of the Post-office; nor is there any other individual to whose exertions this department owes so much. — (*Macpherson's Hist. of Com.* anno 1784.)

The Scotch Post-office was established on its present footing in 1710: but, owing to the backward state of Scotland, the limited amount of its trade and population, and the extreme badness of the roads — (see Roads), — it was very defective in most parts of the country till after the American war. In proof of this, we may mention that the first mail-coach, from London to Glasgow direct, arrived at the latter on the 7th of July, 1788. Previously to that period, the course of post from London to Glasgow was five days; this, however, is not to be entirely ascribed to the slowness of the conveyance by horseback; for the mail came round by Edinburgh, and was detained there *twelve hours*, or till the usual Edinburgh despatch was made up for Glasgow in the evening!

It does not really seem, though the contrary has been sometimes contended, that the Post-office could be so well conducted by any one else as by government: the latter alone can enforce perfect regularity in all its subordinate departments; can carry it to the smallest villages, and even beyond the frontier; and can combine all its separate parts into one uniform system, on which the public may confidently rely both for security and despatch. The number of letters and newspapers conveyed by the British Post-office is quite immense. The letters only, despatched from London, may, we believe, be estimated, at an average, at about 40,000 a day! — (See *App. to 18th Report of Revenue Commissioners*, p. 299.)

Laws relating to the Post-office. — The post-master general does not come under the denomination of a carrier, for he enters into no contract, and has no hire; the postage of letters being an article of revenue, and not a mere reward for the conveyance. He is, therefore, not liable to constructive negligence.

But the safety of letters by the post is provided for by numerous statutes; and for inferior offences, which do not amount to absolute crimes, by the regulations of the General Post-office, all inferior officers are punished by dismission, on complaint to the post-master general, or his deputies.

The early statutes for the protection of letters, before mail-coaches were invented, still apply to those roads on which such coaches are not established. The first necessary to be noticed is 5 Geo. 3. c. 25., which enacts, that if post-boys conveying the mail-bag shall quit the mail, or suffer any other person to ride on the horse or carriage, or shall loiter on the road, or not, if possible, convey the mail at the rate of 6 miles an hour, they shall, on conviction before 1 justice, on oath of 1 witness, be sent to the house of correction for not exceeding 1 month, nor less than 14 days. For unlawfully collecting letters to convey them, being convicted in like manner, shall forfeit for every such letter 10*s.* to informer, and be committed for 2 months, mitigable to 1. And any persons *intrusted to take in letters, and receive the postage*, embezzling, or employing to their own use, the same; or burning or destroying said letters; or advancing the rates of postage, and not accounting for the money shall be guilty of felony.

The 7 Geo. 3. c. 5. extends the punishment to *all persons whatever employed in the business of the Post-office*, guilty of the like offences, and for stealing out of any letter, any bill, note, or other security for money, and makes the offence felony without benefit of clergy. This statute did not extend to embezzling money itself, or to *parts* of securities.

The 42 Geo. 3. c. 81. extends the punishment of felony without benefit of clergy to all *such* persons, stealing *parts* of notes, bills, and other securities, out of letters, as also to all persons buying or receiving the same; and the accessaries may be tried whether the principals be apprehended or not, and the offence may be tried either where it was committed or the offender apprehended.

And, by the same statute, if any person shall wilfully secrete, or detain, or refuse to deliver to any officer of the Post-office authorised to demand the same, any letter or bag of letters intended to be conveyed by the mail, which he shall have found or picked up, or which shall by accident or mistake have

been left with any other person, he shall be guilty of a misdemeanour, and punished by fine and imprisonment.

By 52 Geo. 3. 143, if any deputy, clerk, agent, letter-carrier, post-boy or rider, or any other officer employed by or under the Post-office, on receiving, stamping, sorting, changing, carrying, conveying, or delivering letters or packets, in any way relating to the Post-office, shall secrete, embezzle, or destroy any letter, packet, or bag or mail of letters, which shall have come into his hands in consequence of such employment, containing the whole, or any part of any bank note, bank post bill, bill of exchange, Exchequer bill, South Sea or East India bond, dividend warrant of the same, or any other company, society, or corporation; navy, or victualling, or transport bill: ordnance debenture, seaman's ticket, state lottery ticket, or debenture, bank receipt for payment on any loan, note of assignment of stock in the funds, letter of attorney for receiving dividends or selling stock in the funds, or belonging to any company; American provincial bill of credit, goldsmiths' or bankers' letter of credit, or note relating to the payment of money, or other bond, warrant, draft, bill, or promissory note whatever, for payment of money; or shall steal and take out of any letter, with which he shall have been so intrusted, or which shall have come to his hand, the whole or any part of any such bank note, bank post bill, &c.; shall be guilty of felony without benefit of clergy.

Any person stealing or taking away from any carriage, or from the possession of any person employed to convey letters sent by the post, or from any receiving-house for the Post-office, or from any bag or mail sent or to be sent by the same, any letter, packet, bag, or mail, shall suffer death without benefit of clergy.

And all persons who shall counsel, command, hire, persuade, promise, aid, or abet such persons, or shall with a fraudulent intention buy or receive any such securities, instruments, &c., shall suffer in like manner: accessaries may be tried before apprehension or trial of principals. Trials may be in the county where offenders are apprehended.

Exemptions from Postage, Franking, &c. — The statutes for regulating the rates of postage, and the exemptions from postage, from the 9th of Anne to the 53d of Geo. 3., are too numerous to be inserted, but the principal regulations are as follows: —

The king, the persons filling the principal offices of government, the public Boards, and the Post-office may send and receive letters duty free.

Also all members of either house of parliament during the sitting of the same, or within 40 days before or after any summons or prorogation, not exceeding 1 ounce in weight, on condition that the names of the member, and the post town from which sent, the day of the month at full length, and the year, shall be indorsed thereon; also that the member directing it shall be at, or within 20 miles of, the post town, on the day, or day before, the letter is put into the post-office; and also on condition that no member send more than 10, or receive more than 15, letters in one day.

Printed votes of parliament, and newspapers in covers open at the sides, &c. are exempted from postage.

But the post-masters may search to see if any thing else be contained in the cover; and if there be any such found, it shall be charged treble postage.

Persons altering the superscription of franked letters, or counterfeiting the handwriting of members on them to avoid postage, guilty of felony, and to be transported for 7 years.

But nevertheless, members who from infirmity are unable to write, may authorise and depute another to frank for them, sending notice thereof under hand and seal, attested by a witness, to the post-master general.

Bills of exchange, invoices, merchants' accounts, &c. written on the same piece of paper with a letter, or several letters written to several persons on one piece of paper, to pay as *one* letter. — (7 & 8 *Geo.* 4. c. 21.)

So writs or other legal proceedings.

Patterns and samples of goods in covers open at the sides, without any writing inside, to be charged as single letters. But, by 52 Geo. 3., if not open at the sides, and weighing only 1 oz., an additional rate of 2*d.*; but if less than 1 oz. and open at the side only, the additional rate of 1*d.*

Foreign letters suspected to contain prohibited goods may be opened in the presence of a justice, or magistrate, of the place, or district, on oath of person suspecting. If contraband goods found, to be destroyed, and the letter sent to the commissioners of customs; if none found, the letter to be forwarded with an attestation of the circumstances by the justice or magistrate.

By 9 Anne, c. 10., no person except the post-master, and persons authorised by him, shall carry or convey any letters, on pain of 5*l.* for every offence, and a penalty of 100*l.* per week besides, to be recovered in any court of record. And by 5 Geo. 4. c. 21., no person shall send or tender, or deliver to be sent, otherwise than by the authority of the post-master or his deputies, or to the nearest or most convenient post town to be forwarded by the post, any letter or packet, on pain of 5*l.* for each letter so sent, to be recovered in any court at Westminster.

Except letters *concerning goods* to be delivered *with such goods*, sent by a common carrier; letters of merchants, owners of ships or merchant vessels with cargoes to be delivered; such letters being carried without hire or reward; any commission or return thereof; process or return thereof out of any court, or any letter sent by any private friend in their way of journey; or by any messenger sent on purpose concerning private affairs.

Post-masters may make private agreements with persons living in places (not being post towns), for the receiving and sending to them respectively, letters to and from the post town; but for the delivery of letters within the limits of the post town, he is entitled to no remuneration.

Rates of Postage. — Letters containing 1 enclosure are chargeable with 2 single rates. Letters containing more than 1 enclosure, and not weighing 1 ounce, are chargeable with 3 single rates. Letters weighing 1 ounce, whatever the contents may be, are chargeable with 4 single rates; and for every ¼ of an ounce above that weight, an additional single rate is chargeable.

Letters to soldiers and sailors, if single, and in conformity to the act of parliament, are chargeable with 1 penny only.

Great Britain.				Postage of a Single Letter in Pence.
From any post-office in England or Wales to any place not exceeding 15 miles from such office				4
For any distance above				
15 miles, and not exceeding	20 miles			5
20 —	30 —			6
30 —	50 —			7
50 —	80 —			8
80 —	120 —			9
120 —	170 —			10
170 —	230 —			11
230 —	300 —			12

And so in proportion; the postage increasing progressively 1*d.* for a single letter for every 100 miles.

Ireland.				Postage of a Single Letter in Pence.
From any post-office in Ireland to any place within the same, not exceeding 7 Irish miles from such office				2
Exceeding 7 and not exceeding	15 Irish miles			3
— 15 —	25 —			4
— 25 —	35 —			6
— 35 —	45 —			7
— 45 —	55 —			8
— 55 —	65 —			9
— 65 —	95 —			10
— 95 —	120 —			11
— 120 —	150 —			12
— 150 —	200 —			13
— 200 —	250 —			14
— 250 —	300 —			15

And for every 100 miles, Irish measure, above 300 miles, a further sum of 1*d.* Double and treble letters charged according to the same scale of advance as in England.

Great Britain and Ireland.

Rates of Postage to be taken in the Currency of the United Kingdom for the Port and Conveyance of Letters and Packets by the Post from any Place in Great Britain to any Place in Ireland, or from any Place in Ireland to any Place in Great Britain.

Distance.	Single Letter.		Double Letter.		Treble Letter, or other under an Ounce Weight.		For every Ounce Weight, and for every Packet not exceeding an Ounce in Weight.	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
If the distance of such places shall not exceed 15 miles, British measure	0	4	0	8	1	0	1	4
Exceeding 15, and not exceeding 20 such miles	0	5	0	10	1	3	1	8
20 — — 30 —	0	6	1	0	1	6	2	0
30 — — 50 —	0	7	1	2	1	9	2	4
50 — — 80 —	0	8	1	4	2	0	2	8
80 — — 120 —	0	9	1	6	2	3	3	0
120 — — 170 —	0	10	1	8	2	6	3	4
170 — — 230 —	0	11	1	10	2	9	3	8
230 — — 300 —	1	0	2	0	3	0	4	0
300 — — 400 —	1	1	2	2	3	3	4	4
400 — — 500 —	1	2	2	4	3	6	4	8
500 — — 600 —	1	3	2	6	3	9	5	0
600 — — 700 —	1	4	2	8	4	0	5	4
700	1	5	2	10	4	3	5	8
Letters and packets conveyed by packet boats between the ports of Portpatrick and Donaghadee, a packet postage over and above all other rates	0	4	0	8	1	0	1	4
Letters and packets conveyed by packet boats from or to Holyhead or Milford Haven, to or from any port in Ireland, a packet postage over and above all other rates	0	2	0	4	0	6	0	8
Letters and packets conveyed by packet boats to or from Liverpool, from or to Dublin, or any other port in Ireland, a packet postage over and above all other rates	0	8	1	4	2	0	2	8
Provided that no letter sent by way of Liverpool shall be chargeable with a higher rate of postage than if it were sent by way of Holyhead.								
Letters and packets to and from any part of Great Britain or Ireland, by way of Dublin and Holyhead, in addition to all other rates (Menai Bridge)	0	1	0	2	0	3	0	4
Letters and packets to and from any part of Great Britain or Ireland, by way of Conway and Chester, in addition to all other rates (Conway Bridge)	0	1	0	2	0	3	0	4
And so in proportion in all the aforesaid cases for any other letter or packet of greater weight than an ounce.								

Foreign Parts. — *Postage of a Single Letter to and from London.*

	s.	*d.*		*s.*	*d.*		*s.*	*d.*
France	1	2	Spain	2	2	Brazils	3	6
Italy			Holland and the Netherlands	1	4	Buenos Ayres		
Ionian Isles and Turkey, *vid* France	1	11	America	2	2	Chili	3	6
Germany			West India islands	2	2	Peru		
Switzerland			St. Domingo	2	2	Colombia		
Russia			Gibraltar	2	10	La Guayra		
Prussia	1	8	Malta and the Mediterranean	3	2	Honduras	3	0
Denmark			Madeira			Mexico		
Sweden			The Azores	2	7	Tampico		
Norway			The Canaries			Cuba	3	0
			Portugal	2	6			

No letters to any of the above places and parts (except the West India colonies and British America) can be forwarded unless the postage be first paid.

Mails made up in London as follows : —

France, daily, Sunday excepted. Letters received on Tuesday and Friday till 11 P. M., and on other days till 7 P. M.
Holland, Belgium, and Hamburgh, every Tuesday and Friday. Letters received till 11 P. M.
Sweden, every Friday. Letters received till 11 P. M.
America, first Wednesday, monthly.
Jamaica, Leeward Islands, and Carthagena and La Guayra, first Wednesday in each month.
Brazils, first and third Tuesday in each month.
Madeira, Brazils, & Buenos Ayres, first Tuesday, monthly.
Portugal, every Tuesday.
Gibraltar, Malta, Patras, and Corfu, first day of every month, except when it falls on a Sunday.
Colombia, last Wednesday, monthly.
Honduras, first Wednesday, monthly.
Jamaica, St. Domingo, Mexico, and Cuba, third Wednesday, monthly.
Letters for Portugal, Brazil, and other foreign ports, will in future be received until the hour for closing the boxes for Inland Letters.

General Post-office, London. — Letters received at the general post receiving houses till 5 P. M.; by the letter carriers, ringing bells, (on payment of 1*d.* with each letter or newspaper,) from 5 to 6 P. M.; at the Branch Post-offices, at Charing Cross, Vere Street, Oxford Street, and Borough, till ½ past 6 P. M., and at the General Post-office in St. Martin's-le-Grand, and the Branch Post-office, Lombard Street, till 7 P. M.

Newspapers must be put into the receiving houses before 5 P. M., or at the General Post-office, St. Martin's-le-Grand, before 6 P. M.

Stamps. — The date shows when the letters were received at the General Post-office.

The circular stamp of black ink, when the postage is to be paid on delivery.

Ditto of red ink, with the word "Paid," when the postage has been paid at the time of posting the letter.

Ditto of red ink, with the word "Free," when letters are franked.

Overcharged Letters. — Overcharges returned on presenting the letter at the window in the hall at the Office, St. Martin's-le-Grand; or the letter may be sent to the Office by the letter-carrier, and the overcharge will be returned with the letter in 2 days. When single letters are charged double, or double letters treble, if they are opened in presence of the letter carriers who deliver them, that part having the direction and tax upon it will be sufficient to obtain return of the overcharge; but in cases of single letters being charged treble, such letters must be shown at the Post-office before return of the overcharge can be made.

Ship Letter Office. — The postage for letters forwarded through this Office, to the Cape of Good Hope, New South Wales, Isle of France, Bombay, Ceylon, Madras, Bengal, Singapore, and Prince of Wales's Island, is the full inland rate of postage, to the port where the ship may be, and 2*d.* sea postage in addition, for every letter not exceeding 2 ounces, and 1*s.* per ounce for every ounce above.

Letters from the country for the above places, are charged with the full inland postage to London, and 2*d.* sea postage in addition, for every letter not exceeding 3 ounces, and 1*s.* per ounce for every ounce above.

Newspapers and price currents that have paid the stamp duty, are forwarded to India, if made up open at the ends, for 1*d.* on each packet, not exceeding 1 ounce, and for each packet exceeding the ounce, 1*d.* per ounce.

But letters, newspapers, and price currents to the coast of Africa, St. Helena, Batavia, and all places where there are no packets, ½ the highest rate of packet postage is charged.

All letters from abroad, except the Cape of Good Hope, Isle of France, New South Wales, Bombay, Ceylon, Madras, Bengal, Singapore, and Prince of Wales's Island, are liable to a sea postage of 8*d.* single, and 1*s.* 4*d.* double, and so on over and above all inland rates whatever; but those from the Cape of Good Hope, Isle of France, Bombay, Ceylon, Madras, Bengal, Singapore, and Prince of Wales's Island, are liable to the full inland rates, and a sea postage of 4*d.* for every letter not exceeding the weight of 3 ounces, and 1*s.* per ounce for every ounce exceeding that weight.

Newspapers printed within his Majesty's colonies, and brought into the United Kingdom by any ship other than a packet, if left open at the ends, and containing no other enclosure or correspondence, are charged 3*d.* each paper.

*** All letters forwarded through this Office, must be paid for at the time they are put into the office.

Seamen's and soldiers' single letters are forwarded through this Office to the East Indies and New South Wales, on payment of 1*d.* at the time of putting in; and letters from the East Indies are chargeable with 1*d.*, or 3*d.* if the penny is not paid when the letter is put into the office; and to places abroad, to where there are no regular packets, on the payment of 5*d.*; and those received from such places are charged 3*d.*

Seamen and Soldiers, within any part of his Majesty's dominions, to and from which there are regular mails, can send and receive single letters on their own private concerns only, while they are employed on his Majesty's service, for 1*d.*

Letters coming from a Seaman, or from a Sergeant, Corporal, Trumpeter, Fifer, or private Soldier. — The penny must be paid at the time it is put into the post-office. The name of the soldier or sailor, his class or description, and the name of the ship or regiment, corps or detachment, to which he belongs, must be specified. And the officer having the command must sign his name, and specify the name of the ship or regiment, corps, or detachment, he commands.

Letters going to Seamen or Soldiers. — The penny must be paid at the time it is put into the post-office.

Newspapers for his Majesty's Colonies, and Places beyond Seas. — Every such newspaper or other printed paper *liable to the stamp* duty, *and for the conveyance of which any duty of postage is chargeable*, to be put into the post-office of the town or place in Great Britain or Ireland, on any day, within *seven* days next after the day on which the same shall be published, the day of publication to be ascertained by the date of such paper; and in case any such paper be put into any post-office after the *expiration of such seven days*, such paper to be charged as a *single* letter.

Printed votes and proceedings in parliament from Great Britain and Ireland to any of his Majesty's colonies are to be charged with a rate of *one penny half penny per ounce*, and so on in proportion, in lieu of any sum payable under any former act, *to be paid on putting the said votes and proceedings into the post-office.*

N. B. — If such printed vote, proceeding, newspaper, pamphlet, magazine, &c. be not sent *without a cover, or in a cover open at the sides*, or if *any writing be thereon*, other than the superscription, or *any other paper or thing* be enclosed therein, the packet will be liable to the full rates of postage, as a letter.

Bank Notes and Drafts. — Persons wishing to send bank notes or drafts by post, are advised to cut such notes or drafts in halves, and send them at two different times, waiting till the receipt of one half is acknowledged before the other is sent.

Money, Rings, or Lockets, &c. — When money, rings, or lockets, &c. are sent by the post from London, particular care should be taken to deliver the same to the clerk at the window at the General Post-office; and when any such letter is to be sent from the country, it should be delivered into the hands of the post-master: but it is to be observed, that this Office does not engage to insure the party from loss.

Cautions to Masters of Vessels. — Masters of vessels opening sealed bags of letters intrusted to them, or taking thereout letters, or not duly delivering the bags at the post-office of the first port of arrival, forfeit 200*l.* Masters, or others, having letters in their possession after the master's delivering the letters at the post-office, forfeit 5*l.* for every letter found on board. — (55 *Geo.* 3. c. 153.)

Masters and commanders of vessels are required to deliver their ship's letters to the person appointed by the post-master general to demand the same; and if any letters not exempted by law, not exceeding the weight therein mentioned, be found on board after any such demand, the same penalty is incurred as on masters and commanders in whose possession letters are found after delivering their letters at the post-office.

Masters and commanders of vessels are still bound to deliver at the post-office of the first port at which they arrive, all letters on board not exempted by law, if they shall not have been previously demanded by some person specially appointed for that purpose by the post-master general. — (7 & 8 *Geo.* 4. c. 21.)

Twopenny Post-office. — Besides the General Post-office, or that intended for the conveyance of letters from one part of the kingdom to another, letters are received in the metropolis and other large towns for delivery in the same. In London, these letters are charged 2*d.*; but in other towns they are only charged 1*d.* The limits of the twopenny post extend generally 7 or 8 miles round the metropolis; there are daily several deliveries, and the establishment is extremely convenient. The Twopenny Post-office is dependent upon, though in some measure distinct from, the General Post-office. Its principal offices are at the General Post-office, and Gerrard Street, Soho. There are a great number of receiving houses scattered up and down the town and the adjacent country.

The gross receipt and nett revenue derived from the twopenny post in the metropolis in the under-mentioned years, has been as follows: —

Years.	Gross Receipt.	Nett Revenue.	Rate per Cent. of Charge of Collection.
	L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
1826	118,743 15 3	71,942 12 0	35 10 4½
1827	115,800 8 11½	75,866 17 7½	34 9 8¾
1828	117,205 8 2½	77,317 7 9½	34 0 7¾

The gross number of letters collected in the two separate grand divisions, within the same period of 6 days, gives the following result: —

G. Post-office division - - 73,427 letters.
Gerrard Street division - - - 69,157 —

The number of letters delivered in the respective divisions in the same period are as follows: —

G. Post-office division - - 68,693 letters.
Gerrard Street division - - - 80,578 —

The reciprocal transfers between the two divisions of the letters collected by each, destined for delivery within the limits of the other, are as follows: —

From G. Post-office to Gerrard Street - 40,896 letters.
From Gerrard Street to the G. Post-office 25,906 —
(21*st Report of Revenue Commissioners.*)

Regulations as to the Twopenny Post-office. — There are 2 principal offices—at the General Post-office, and the other in Gerrard street, Soho; the hours of receipt and delivery, and all the regulations of which, are the same at the one as the other. There are, besides, numerous receiving houses for letters in and around London.

There are 6 collections and deliveries of letters in town daily; and 3 deliveries *at*, and 2 departures *from*, most places in the country districts of this office. General post letters are despatched to the country letter carriers the same morning of their arrival in London.

The time by which letters should be put into the receiving houses, or either of the 2 principal offices, for each delivery of the day, and that by which they are despatched for delivery, are as follows: —

Letters going from one Part of the Town to another.

If put into the receiving houses by	Or either of the 2 principal offices by	They are sent out for delivery at
8 morning	9 morning	10 morning
10 —	11 —	12 —
12 —	1 afternoon	2 afternoon
2 afternoon	3 —	4 —
5 —	6 —	7 —
8 —	9 —	8 next morning.

And each delivery should be completed generally in about 1½ hour after the despatch from the principal offices, according to distance and number of letters, &c. At some of the out parts of the town, however, 5 deliveries and collections only can be given, on account of their distance from the principal offices; and for the same reason, the deliveries are later, and the collections earlier than in the interior.

The out parts served but 5 times a day, and to which the 7 o'clock delivery at night does not extend, are (alphabetically) as follows: —

Bermondsey, beyond the Spa Road.	Mill Bank, Westminster, to Thames Bank Place.
Bethnal Green and Road.	New Kent Road.
Hackney Road.	New Grove, Mile End.
Haggerston.	Pimlico, beyond Vauxhall Bridge.
Hoxton.	Rotherhithe, beyond the Church.
Kingsland Road to the Bridge.	Tothill Fields, Vauxhall Bridge Road, Pimlico.
Lambeth, beyond Church-st.	Sloane Street.
Limehouse, beyond the Bridge.	
Mile End, beyond the 1 mile stone.	

From Mile End and other out parts letters are collected ½ of an hour earlier than the above periods. And for the 4 o'clock, or last delivery of the day, at these parts, letters must be put in at the interior receiving houses by 2 o'clock, or the principal offices by 3.

From London to the Country.

If put into the receiving houses by	Or either of the 2 principal offices by	They are despatched from the latter at
8 morning	9 morning	10 morning
2 afternoon	3 afternoon	4 afternoon
5 —	6 —	7 —

To places having but 2 deliveries a day, letters are sent off at the above hours of 10 in the morning, and 4 or 7 in the afternoon. Such as go off at 10 are delivered at noon; those at 4 are delivered the same evening; and such as go off at 7 are for delivery early next morning. To places having only 1 post a day, they go off at 10, and are delivered the same day at noon.

The deliveries in the country should be completed, generally, between the hours of 11 and 1; between 6 and 8 in the evening; and by, or about, 9 in the morning.

From the Country to London. — If put into the post in time for the morning despatch, they arrive in town between 10 and 11 o'clock, and are sent out at 12 from the principal offices, for delivery in all parts of London. If put in for the afternoon despatch, they arrive between the hours of 5 and 6, and are sent out at 7 for delivery the same evening.

From one Part of the Country to another. — If going from one part of a ride or district to another part of the same ride or district, and put in for the morning despatch, they are delivered through the means of a by-post arrangement, the same day at noon. If put in for the afternoon despatch, they are delivered the same evening, where an evening delivery is given. If going to parts not belonging to the same ride, they come to London: such letters put into the post for the morning despatch, are delivered in the country the same evening, where an evening delivery is given; if for the afternoon despatch, the next morning, where a morning delivery is given; or otherwise at noon.

Stamps. — The date stamp on letters, or, if there be more than one, that having the latest hour, shows the day and time of day they were despatched for delivery; that on returned letters excepting, which shows the time they were returned to the office as dead letters. The oval stamp is used at the chief office; the indented stamp at the Westminster; and the circular at the country offices. Persons having occasion to complain of the delay of their letters, are requested to transmit to the comptroller the covers, with a statement of the time of delivery, as the date and stamp will assist materially in tracing their course.

Postage. — The postage of each letter or packet, passing from one part of the town to another, both being within the limits of the *General Post-office delivery*, is 2*d*. To or from the country, or from one part of the country to another, 3*d*. The postage of this Office on each letter, or packet, passing to or from the General or Foreign Office, is 2*d*. in addition to the general or foreign rates. To prevent mistakes, it is recommended to persons paying the postage of letters at putting in, to see them stamped with the paid stamp before they leave the office.

Soldiers and Sailors. — *Single* letters *from* or *to* soldiers and sailors, under certain restrictions, pass throughout both this and the general post, or either, for 1*d*. only, if paid at putting in.

Newspapers. — Newspapers pass *from* London *to* the country, in covers open at the ends, for 1*d*. each; but from one part of London to another, or from the country to London, or one part of the country to another, the postage is the same as for letters.

Letters of Value. — This Office is not liable to make good the loss of property contained in letters. But, for the greater security of such property, it is recommended that notice of it be given to the office-keepers at putting into the post. This, however, with the exception of bank or other notes, or drafts payable to bearer, which should be cut in halves, and sent at twice, the first half to be acknowledged before the other is sent.

Weight. — No letters or packets exceeding the weight of 4 oz. can be sent by this post, except such as have first passed by, or are intended to pass by, the general or foreign mails.

Letters for this Post not to be put into the General Post. — Letters for the twopenny post are sometimes put into the general post, by which they are unavoidably delayed. It is, therefore, recommended that they be put into the twopenny post offices or receiving houses, that they may be regularly forwarded by their proper conveyance.

Letters not to be delivered back. — And to prevent the possibility of letters being surreptitiously obtained from the offices where put in, office-keepers are strictly forbidden returning, to any persons whatsoever, letters that may be applied for, under whatever circumstances the recovery may be urged. This is moreover forbidden by the established principle, that the instant a letter is committed to the post, it is no longer the property of the sender.

Post-office Revenue. — The progress of the post-office revenue of Great Britain has been very remarkable. Most part of its increased amount is, no doubt, to be ascribed to the greatly increased population of the country, and the growing intercourse among all classes of the community; but a good deal must also be ascribed to the efforts made in the early part of the reign of George III. to suppress the abuses that had grown out of the privilege of franking, and still more to the additions that have repeatedly been made to the rates. We believe, however, that these have been completely overdone; and, considering the vast importance of a cheap and safe conveyance of letters to commerce, it will immediately be seen that this is a subject deserving of grave consideration. In point of fact, the post-office revenue has *been about stationary since* 1814; though, from the increase of population and commerce in the intervening period, it is pretty obvious that, had the rates of postage not been so high as to force recourse to other channels, the revenue must have been decidedly greater now than at the end of the war. Were the rates moderate, the greater despatch and security of the post-office conveyance would hinder any considerable number of letters from being sent through other channels. But, in the estimation of very many persons, the present duties more than countervail these advantages: and the number of coaches that now pass between all parts of the country, and the facility with which the law may be evaded, by transmitting letters in parcels conveyed by them, renders the imposition of oppressive rates of postage quite as injurious to the revenue as to individuals.

The *gross* product of the post-office revenue of Great Britain, in the under-mentioned years, has been as follows: —

Years.	Duty.	Years.	Duty.	Years.	Duty.	Years.	Duty.
	£		£		£		£
1722	201,804	1800	1,083,950	1825	2,160,390	1830	2,053,720
1755	210,663	1810	1,675,076	1828	2,048,042	1831	2,064,334
1775	345,321	1814	2,005,987	1829	2,024,418	1832	2,034,603
1795	745,238	1820	1,993,885				

The progress of the Scotch branch of the post-office revenue has been quite extraordinary. In 1698, Sir Robert Sinclair of Stevenson had a grant from William III. of its entire produce, with an extra allowance of 300*l*. a year, on condition of his keeping

up the post; but, after trial, he abandoned the undertaking as disadvantageous. In 1709, the Scotch post-office revenue was under 2,000*l.*: its average annual amount is now about 140,000*l.* nett; having increased *seventy* fold, in little more than a century! In 1781, the Glasgow post-office produced only 4,341*l.* 4*s.* 9*d.*, while its ordinary revenue is at present about 35,500*l.*! — (*Stark's Picture of Edinburgh*, p. 144.; *Cleland's Statistics of Glasgow.*)

The expenses of collecting the post-office revenue amount, at an average, to from 24 to 30 per cent. on the gross receipt. In 1832, they were 557,313*l.*, being at the rate of about 27 per cent. After all deductions on account of collection, over-payments, drawbacks, &c., the total nett payments into the exchequer on account of the post-office revenue of Great Britain amount to about 1,350,000*l.*

The British post-office is admitted on all hands to be managed with great intelligence. But there are several departments in which it is believed that a considerable saving of expense might be effected. The packet service costs 115,000*l.* a year. The mileage to mail coaches, and the payments to guards, tolls, &c. amount to about 72,000*l.* The conveyance of mails in Canada, Nova Scotia, and Jamaica, is an item of above 12,500*l.*!

There may, in all, be about 3,000 persons employed in the carriage and distribution of letters in Great Britain only; besides about 180 coaches, and from 4,000 to 5,000 horses.

Irish Post-office. — The most gross and scandalous abuses have long been prevalent in every department of the Irish post-office. The commissioners of Revenue Inquiry exerted themselves to abate the nuisance; but, as it would appear from the evidence of the Duke of Richmond before the committee of the House of Commons on public salaries, without much effect. His Grace has, however, laboured with laudable activity and zeal to introduce something like honesty, order, and responsibility into this department. The gross revenue of the Irish post-office amounted, in 1832, to 221,693*l.*; the expenses of collection were 86,151*l.*; and the nett payments into the exchequer, 138,000*l.*

Account of the Gross Receipt of the Post-office Revenue at the following Cities and Towns in 1831 and 1832.

Places.	Total of the Year 1831.	1832.	Places.	Total of the Year 1831.	1832.
	L.	*L.*		*L.*	*L.*
London	615,448	627,178	Preston	5,247	5,198
Birmingham	[illegible]	[illegible]	Sheffield	11,163	11,026
Bristol	36,670	38,887	Edinburgh	42,621	42,758
Coventry	4,550	4,644	Aberdeen	9,079	8,584
Hull	[illegible]	[illegible]	Dundee	7,030	7,355
Leeds	20,963	20,313	Glasgow	35,611	35,754
Leicester	6,424	[illegible]	Dublin	101,529	80,610
Liverpool	70,994	70,018	Belfast	9,782	9,635
Macclesfield	2,111	[illegible]	Cork	10,769	11,514
Manchester	52,390	[illegible]	Drogheda	1,927	1,951
Norwich	[illegible]	[illegible]	Limerick	5,920	6,568
Nottingham	8,787	[illegible]	Londonderry	5,270	5,474
Potteries and Newcastle, Staffordshire	6,076	6,512	Waterford	4,731	5,377

Charges on Newspapers transmitted to and received from Foreign Parts. — A most objectionable practice has long obtained in the Post-office, of eking out the salaries of the clerks in the foreign department, by allowing them to charge heavy fees on the newspapers transmitted to and received from foreign parts. The subjoined statements, derived from the *Parl. Paper*, No. 146. Sess. 1832, show the number of British papers that go abroad through the Post-office, and the nature and amount of the charges to which they have been subject: —

	L.	*s.*	*d.*	*No.*
Newspapers sent to various places in the United Kingdom through the Post-office from London, in 1830	-	-	-	12,969,000
Average daily	-	-	-	41,412
New-papers sent to the British colonies	-	-	-	153,448
Producing, at 1½*d.* postage each	1,159	0	0	
Newspapers received from the British colonies	-	-	-	12,129
Producing, at 3*d.* postage each	157	7	3	
Total produce	1,314	7	3	
Total number of daily papers sent through the Post-office to foreign parts, in 1830	-	-	-	93,779
Ditto 3 days a week	-	-	-	17,628
Ditto twice a week	-	-	-	208
Ditto weekly	-	-	-	184

Aggregate Fees received by the Post-office Clerks.

Number of daily papers per annum	Average per Day.	*L.*	*s.*	*d.*
90,786	286 2-3 at 5*l.* each, or 55 p. cent.	1,620	13	4
Ditto 3 days per week, 17,628	116 at 3*l.* each, or 67 per cent.	339	0	0
Ditto 2 days per week, 208	2 at 3*l.* each, or 100 per cent.	6	0	0
Weekly, 184	3½ at 2*l.* 4*s.* each, or 145⅝ p. cent.	7	14	0
Amount received by the clerks in the General Post-office (Foreign Department), for transmitting British papers abroad		*L.*1,973	7	4

	L.	*s.*	*d.*
Amount of postage received on newspapers to and from the British colonies	-	-	1,314	7	3

Charge by the General Post-office Clerks for English Newspapers to the following Places: —

Places.	Daily.	Three Days a Week.	Two Days a Week.	Weekly.
	L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*
To Brazil, Buenos Ayres, and Madeira	14 19 0	8 0 0	6 8 0	3 14 6
Germany, North of Europe, and Lisbon	13 19 0	7 10 0	6 0 0	3 11 0
France, Holland, and Flanders	13 5 0	6 18 0	5 12 0	3 11 0
	3)42 3 0	3)22 8 0	3)18 0 0	3 14 0
Average	14 1 0	7 10 0	6 0 0	—
Cost of paper	9 1 0	4 10 0	3 0 0	1 10 0
Fees of clerks on each paper	5 0 0	3 0 0	3 0 0	2 4 0

Now, it appears from this statement, that while the annual cost of a daily London paper amounts to 9*l.* 1*s*, inclusive of the stamp, it has not been possible to get it even at Calais or Boulogne for less than 13*l.* 5*s.*, the clerks of the Post-office having been allowed to charge a fee of 4*l.* 4*s.* for their trouble in forwarding

it! The charges on the papers brought from abroad have been similar; a French paper costing from 3*l.* to 4*l.* a year at Calais, not being obtainable in London for less than from 7*l.* to 10*l.*, because of the fees to the Post-office clerks! In consequence of this preposterous system, a far more serious obstacle has been imposed to the diffusion of intelligence and of useful information, than any that could have grown out of the fears or caprices of the most arbitrary monarchs. It is not, perhaps, going too far, to say that the circulation of British newspapers abroad does not amount, at this moment, to the third or fourth part of what it would have amounted to had they been exempted from these oppressive charges; and the circulation of foreign newspapers in England has been proportionally narrowed.

The mischievous operation of this system has long been obvious; but the difficulties in the way of a change were so great, that it has hitherto kept its ground. But we are glad to have to state that it is now on the eve of being abolished. The Post-office clerks are to be compensated for the loss of fees by an increase of their regular salaries; so that there will no longer be any obstacle, other than their natural cost, or the impediments that foreign governments may throw in their way, to the circulation of British papers abroad.

United States. — We subjoin an account of the number of post-offices, the extent of post roads, the rates of postage, &c. in the United States.

Post-offices and Postage.

Post-offices in	1790	75; extent of post roads in miles	1,875
—	1800	903 —	20,817
—	1810	2,300 —	36,406
—	1820	4,500 —	72,492
—	1829	8,004 —	115,000

Rates of Postage.

For Single Letters, composed of One Piece of Paper —

Any distance not exceeding		30 miles,		6 cents.	
Over	30, and not exceeding	80	—	10	—
—	80	—	150	—	12½ —
—	150	—	400	—	18¾ —
—	400 miles	-	-	-	25 —

Double letters, or those composed of 2 pieces of paper, are charged with double the above rates.

Triple letters, or those composed of 3 pieces of paper, are charged with triple the above rates.

Quadruple letters, or those composed of 4 pieces of paper, are charged with quadruple the above rates.

All letters weighing 1 ounce avoirdupois, or more, are charged at the rate of single postage for each ¼ of an ounce, or quadruple postage for each ounce, according to their weight; and no letter can be charged with more than quadruple postage, unless its weight exceeds 1 ounce avoirdupois.

The postage on ship letters, if delivered at the office where the vessel arrives, is 6 cents; if conveyed by post, 2 cents addition to the ordinary postage.

Newspaper Postage. — For each newspaper, not carried out the State in which it is published, or if carried out of the State but not carried over 100 miles, 1 cent.

Over 100 miles, and out of the State in which it is published, 1½ cent.

Magazines and Pamphlets. — If published periodically, distance not exceeding 100 miles, 1½ cent per sheet.

— over 100 — 2½ —

If *not* pub. period. dist. not exceed. 100 miles, 4 cts. per sheet

— over 100 — 6 —

Small pamphlets, containing not more than a ½ sheet royal, are charged with ½ the above rates. Eight pages quarto are rated as *one sheet*, and all other sizes in the same proportion.

The number of sheets in a pamphlet sent by mail must be printed or written on one of the outer pages. When the number of sheets is not truly stated, double postage is charged.

Every thing not coming under the denomination of newspapers or pamphlets is charged with letter postage.

Account of the Postage received at the Post-offices of some of the principal Towns of the United States, during the Year ended the 31st of March, 1832.

Towns.	Dollars.	Towns.	Dollars.
New York	166,203	Richmond	18,715
Philadelphia	118,930	Cincinnati	15,899
Boston	62,270	Savannah	14,278
Baltimore	54,923	Pittsburgh	13,798
New Orleans	27,288	Albany	13,013
Charleston	26,423	Augusta	11,444

The post-master general of the United States stated, in a letter to a committee of Senate, 19th of May, 1833, that it was of almost daily occurrence, that a ton weight of newspapers was carried in one mail for hundreds of miles together. The total post-office revenue of the United States, in the year ended the 31st of March, 1832, amounted to 1,471,571 dollars; of which the newspaper postage made about 254,000 dollars. — (*American Almanac* for 1834.)

POST ENTRY. When goods are weighed or measured, and the merchant has got an account thereof at the Custom-house, and finds his entry, already made, too small, he must make a *post* or additional *entry* for the surplusage, in the same manner as the first was done. As a merchant is always in time, prior to the clearing of the vessel, to make his post, he should take care not to over-enter, to avoid as well the advance, as the trouble of getting back the overplus. However, if this be the case, and an over-entry has been made, and more paid or bonded for customs than the goods really landed amount to, the land-waiter and surveyor must signify the same, upon oath made, and subscribed by the person so over entered, that neither he nor any other person, to his knowledge, had any of the said goods over-entered on board the said ship, or anywhere landed the same without payment of custom; which oath must be attested by the collector or comptroller, or their deputies, who then compute the duties, and set down on the back of the certificate, first in words at length, and then in figures, the several sums to be paid.

POSTING, travelling along the public road with hired horses, and with or without hired carriages. Duties are charged upon the horses and carriages so hired. — (For the duties on the latter, see *ante*, p. 285.) The duties on post horses are regulated by the 4 Geo. 4. c. 62.

Duties. — Every post-master to pay 5*s.* annually for a licence. For every horse, mare, or gelding, let for hire by the mile, 1½*d.* for every mile; if let to go no greater distance than 8 miles, 1-5th part of the sum charged for such letting, or 1*s.* 9*d.*; if let to go no greater distance than 8 miles, and not to bring back any person, nor deviate from the usual line of road, 1*s.*; if let for any time less than 28 successive days, or in any other manner than by the mile, or to go no greater distance than 8 miles, in either case, 1-5th part of the sum charged on every such letting; or the sum of 2*s.* 6*d.* for each day not exceeding 3 days; and the sum of 1*s.* 9*d.* for each day exceeding 3, and not exceeding 13 days; and the sum of 1*s.* 3*d.* for each day exceeding 13, and less than 28 days. If let for 28 successive days, or for any longer period, and returned in a *less* period of time than *twenty-eight* successive days, and not exchanged for another horse, mare, or gelding, in continuation of the same hiring, 1-5th part of the sum agreed to be received for such letting, or the sum of 2*s.* 6*d.* for each day not exceeding 3 days; and the sum of 1*s.* 9*d.* for each day exceeding 3, and not exceeding 13 days; and the sum of 1*s.* 3*d.* for each day exceeding 13, and less than 28 days, during the time every such horse, &c. shall have been under the direction of the person hiring the same.

The duties imposed by the act do not extend to horses used in stage or hackney coaches duly licensed; nor to any mourning coach or hearse, where the same is hired to go no greater distance than 10 miles from Temple Bar; nor to any cart or carriage kept for the conveyance of fish.

Persons letting any horse, mare, or gelding, *for hire*, without licence from the commissioners of stamps are subject to a penalty of 10*l*. No post-master to keep more than 1 horse by virtue of 1 licence, under a penalty of 10*l*.; and the words *licensed to let horses* for hire to be painted in legible characters on the front of their houses, under a penalty of 5*l*. Postmasters are to give security by bond, renewable at the expiration of 3 years. The commissioners or collector of stamps to furnish *blank tickets* and *certificates* to postmasters, and *exchange* and *check tickets* to the toll-gate keepers: the former containing the name and abode of the post-master, the number of horses, whether let for a day or longer period; the latter, the name of the toll-keeper, the place where he lives, and the places the horses hired are going to. When horses are returned within the period for which they were hired, check tickets are to be delivered up to the collector; penalty 20*l*. Improperly using a check ticket subjects to a penalty of 50*l*. Travellers are to deliver up their tickets at the *first* toll-gate, and to *ask for* and receive the necessary exchange and check tickets in return.

Letting of Duties to farm.—The commissioners of stamps, by authority of the Lords of the Treasury, are authorised to let the post-horse duties to farm for any period not longer than 3 years, either in whole, or divided into divisions or districts. The biddings are conducted under regulations issued by the commissioners; at least a month's notice being given of the time and place of letting the duties. The highest bidder being preferred, must forthwith execute a contract, and give bond with *three* or more securities for payment of the yearly rent contracted for at the head office of stamps in equal portions by *eight* several annual payments. The commissioners have also the power to appoint a time for making a deposit, and the amount thereof; and in case any bidder fail of making such deposit, or of executing a proper contract and giving security, the duties to be again put up. Duties not to be farmed by persons licensed to let post horses.

An Account of the Produce of the Duties on Posting, in each of the Eight Years ending the 1st of January, 1833.—(*Parl. Paper*, No. 689. Sess. 1830, and *Annual Finance Accounts.*)

	£	s.	d.		£	s.	d.
Year ending 1st of Jan. 1826 -	232,651	2	4	Year ending 1st of Jan. 1830 -	252,772	2	8
—— 1827 -	226,375	19	5	—— 1831 -	220,357	12	10
—— 1828 -	225,864	5	0	—— 1832 -	231,863	3	4
—— 1829 -	238,858	0	4	—— 1833	245,063	16	5

POTASH (Da. *Potaske*; Fr. *Potasse*; Ger. *Pottasche*; It. *Potassa*; Pol. *Potasz*; Rus. *Potasch*). If vegetables be burned, the ashes lixiviated, and the solution boiled to dryness in iron vessels, the mass left behind is the *potash* of commerce—the impure carbonate of potass of chemists. It is intensely alkaline, solid, and coloured brown by the admixture of a small portion of vegetable inflammable matter, which generally becomes moist. When potash is calcined in a reverberatory furnace, the colouring matter is destroyed, it assumes a spongy texture, and a whitish pearly lustre; whence it is denominated *pearl-ash*. The latter generally contains from 60 to 83 or 84 per cent. of pure carbonate of potass.—(See *antè*, p. 25.)

The ashes of those vegetables only which grow at a distance from the sea, are employed in the manfacture of potash. Herbaceous plants yield the largest portion, and shrubs more than trees. It is principally manufactured in America, Russia, and Poland, the vast forests of which furnish an inexhaustible supply of ashes.

Potash is of great importance in the arts, being largely employed in the manufacture of flint glass and soft soap, the rectification of spirits, bleaching, making alum, scouring wool, &c. At an average of 1831 and 1832, the entries of pot and pearl ashes, for home consumption, amounted to 188,477 cwt. a year. Of 228,757 cwt. imported in 1831, 169,891 cwt. were brought from the British possessions in North America; 15,835 from the United States; the remainder being almost entirely furnished by Russia. The ashes of the United States are the purest, and bring the highest price.

The prices of pot and pearl-ash in the London market, in December, 1833, were as under:—

	£	s.	d.		£	s.	d.		£	s.	d.		£	s.	d.
Canada, pot, 1st -	1	4	6	to	0	0	0	United States, pearl, *bd.* -	1	4	0	to	0	0	0
pearl, 1st -	1	5	6	—	0	0	0	Russia, do. do. -	1	3	0	—	1	5	0
United States, pot, *bd.* -	0	0	0	—	0	0	0								

Ashes from Canada are duty free; those from Russia and the United States pay a duty of 6*s*. a cwt.

POTATOES (Ger. *Kartoffeln*; Du. *Aardappelen*; Fr. *Pommes de terre*; It. *Patate*, *Pomi di terra*; Sp. *Patatas manchegas*; Rus. *Jabloki semleniie*) the roots of the *Solanum tuberosum*, of innumerable varieties, and too well known to require any description.

1. *Historical Notice.*—The potato, which is at present to be met with everywhere in Europe, and forms the principal part of the food of a large proportion of its inhabitants, was entirely unknown in this quarter of the world till the latter part of the 16th century. It is a native of America, but whether of both divisions of that continent is doubtful.—(*Humboldt, Nouvelle Espagne*, liv. iv. c. 9.) Some authors affirm that it was first introduced into Europe by Sir John Hawkins, in 1545; others, that it was introduced by Sir Francis Drake, in 1573; and others, again, that it was for the first time brought to England from Virginia, by Sir Walter Raleigh, in 1586. But this discrepancy seems to have arisen from confounding the common, or Virginian potato (the *Solanum tuberosum* of Linnæus), with the sweet potato (*Convolvulus battatas*). The latter was introduced into Europe long before the former, and it seems most probable that it was the species brought from New Granada by Hawkins. Sweet potatoes require a warm climate, and do not succeed in this country; they were, however, imported in considerable quantities, during the 16th century, from Spain and the Canaries.

and were supposed to have some rather peculiar properties. The kissing comfits of Falstaff, and such like confections, were principally made of battatas and eringo roots. On the whole, we are inclined to think that we are really indebted for the potato (as well as for tobacco) to Sir Walter Raleigh, or the colonists he had planted in Virginia. Gerarde, an old English botanist, mentions, in his *Herbal*, published in 1597, that he had planted the potato in his garden at London about 1590; and that it succeeded there as well as in its native soil, Virginia, whence he had received it. Potatoes were at first cultivated by a very few, and were looked upon as a great delicacy. In a manuscript account of the household expenses of Queen Anne, wife of James I., who died in 1618, and which is supposed to have been written in 1613, the purchase of a very small quantity of potatoes is mentioned at the price of 2*s.* a pound. The Royal Society, in 1663, recommended the extension of their cultivation, as a means of preventing famine. Previously, however, to 1684, they were raised only in the gardens of the nobility and gentry; but in that year they were planted, for the first time, in the open fields in Lancashire, — a county in which they have long been very extensively cultivated.

Potatoes, it is commonly thought, were not introduced into Ireland till 1610, when a small quantity was sent by Sir Walter Raleigh to be planted in a garden in his estate in the vicinity of Youghal. Their cultivation extended far more rapidly than in England; and have long furnished from $\frac{3}{5}$ to $\frac{4}{5}$ of the entire food of the people of Ireland!

Potatoes were not raised in Scotland, except in gardens, till 1728, when they were planted in the open fields by a person of the name of Prentice, a day labourer at Kilsyth, who died at Edinburgh in 1792.

The extension of the potato cultivation has been particularly rapid during the last 40 years. The quantity that is now raised in Scotland is supposed to be from 10 to 12 times as great as the quantity raised in it at the end of the American war; and though the increase in England has not been nearly so great as in Scotland, it has been greater than during any previous period of equal duration. The increase on the Continent has been similar. Potatoes are now very largely cultivated in France, Italy, and Germany; and, with the exception of the Irish, the Swiss have become their greatest consumers. They were introduced into India some 60 or 70 years ago; and are now successfully cultivated in Bengal, and have been introduced into the Madras provinces, Java, the Philippines, and China. But the common potato does not thrive within the tropics unless it be raised at an elevation of 3,000 or 4,000 feet above the level of the sea, so that it can never come into very general use in these regions. This, however, is not the case with the sweet potato, which has also been introduced into tropical Asia; and with such success, that it already forms a considerable portion of the food of the people of Java, and some other countries. So rapid an extension of the taste for, and the cultivation of, an exotic, has no parallel in the history of industry; it has had, and will continue to have, the most powerful influence on the condition of mankind. — (For further details with respect to the history of the potato, see *Sir F. M. Eden on the State of the Poor*, vol. i. p. 508.; *Humboldt, Essai sur la Nouvelle Espagne*, tome iii. pp. 460—465. 2d ed.; *Sir Joseph Banks on the Introduction of the Potato; Phillips's History of Cultivated Vegetables*, vol. ii. art. *Potato.*)

2. *Influence of the Cultivation of the Potato on the Number and Condition of the People.* — There is a considerable discrepancy in the statements of the best authors as to the number of individuals that might be supported on an acre of land planted with potatoes, as compared with those that might be supported on an acre sown with wheat; some stating the proportion as high as *six* to *one*, and others at only *two* to *one*. According to Mr. Arthur Young, 1 lb. of wheat is about equal in nutritive power to 5 lbs. of potatoes. But Mr. Newenham, who has carefully investigated this subject, states that "3 lbs. of good mealy potatoes are, undoubtedly, more than equivalent to 1 lb. of bread," — (*Newenham on the Population of Ireland*, p. 340.); and his estimate is rather above Mr. Wakefield's. Supposing, however, that 1 lb. weight of wheat is fully equal to *four* pounds of potatoes, still the difference in favour of the superior quantity of food derived from a given quantity of land planted with the latter is very great. According to Mr. Young, the average produce of potatoes in Ireland may be taken at 82 barrels the Irish acre; which, at 20 stone the barrel, is equal to 22,960 lbs.; and this being divided by *four*, to bring it to the same standard, in point of nutritive power, as wheat, gives 5,740 lbs. Mr. Young further estimates the average produce of wheat, by the Irish acre, at 4 quarters; which, supposing the quarter to weigh 480 lbs., gives in all 1,920 lbs., or about $\frac{1}{3}$ part of the solid nourishment afforded by an acre of potatoes. — (*Tour in Ireland*, Appen. pp. 12. 24. &c. 4to ed.) This estimate must, however, be somewhat modified when applied to Great Britain; the soil of which, while it is better adapted to the growth of wheat, is generally supposed not to be quite so suitable for the potato as that of Ireland. But it notwithstanding admits of demonstration, that even here, "*an*

acre of potatoes will feed double the number of individuals that can be fed from an acre of wheat." — (*General Report of Scotland*, vol. i. p. 571.)

It is clear, therefore, on the most moderate estimate, that the population of a potato-feeding country may become, *other things being about equal*, from 2 to 3 times as dense as it could have been, had the inhabitants fed wholly on corn. But it is exceedingly doubtful whether an increase of population, brought about by a substitution of the potato for wheat, be desirable. Its use as a subordinate or subsidiary species of food is attended with the best effects — producing both an increase of comfort and security; but there are certain circumstances inseparable from it, which would seem to oppose the most formidable obstacles to its advantageous use as a *prime* article of subsistence. The discussion of this subject can hardly be said properly to belong to a work of this sort; but its importance may, perhaps, excuse us for making a few observations with respect to it.

It is admitted on all hands, that the rate of wages is principally determined by the species of food made use of in a country. Now, as potatoes form that species which is produced at the very least expense, it may be fairly presumed, on general grounds, that wages will be reduced to a minimum wherever the labouring classes are mainly dependent on potatoes; and the example of Ireland shows that this conclusion is as consistent with fact as with principle. It is clear, however, that when the crop of potatoes happens to be deficient in a country thus situated, the condition of its inhabitants must be in the last degree unfortunate. During a period of scarcity, men cannot go from a low to a high level: if they would elude its pressure, they must leave the dearer and resort to cheaper species of food. But to those who subsist on potatoes this is not possible; they have already reached the lowest point in the descending scale. Their wages being determined by the price of the least expensive sort of food, they cannot, when it fails, buy that which is dearer; so that it is hardly possible for them to avoid falling a sacrifice to absolute want. The history of Ireland abounds, unfortunately, in examples of this sort. Nothing is more common than to see the price of potatoes in Dublin, Limerick, &c. rise, because of a scarcity, to 5 or 6 times their ordinary price, and the people to be involved in the extreme of suffering; and yet it rarely happens, upon such occasions, that the price of corn is materially affected, or that any less quantity than usual is exported to England.

It may be said, perhaps, that, had potatoes not been introduced, wheat, or barley, or oats, would have been the lowest species of food; and that, whenever they happened to fail, the population would have been as destitute as if they had been subsisting on potatoes. It must, however, be observed, that the proportion which the price of wheat, or any species of grain, bears to the price of butcher's meat, tea, beer, &c. is always decidedly greater than the proportion which the price of potatoes bears to these articles: and it therefore follows, that a people, who have adopted wheat, or any species of corn, for the principal part of their food, are much better able to make occasional purchases of butcher's meat, &c.; and will, consequently, be more likely to have their habits elevated, so as to consider the consumption of a certain quantity of animal food, &c. as indispensable to existence. And hence it appears reasonable to conclude, that a people who chiefly subsist on corn would, in most cases, subsist partially on butcher's meat, and would enjoy a greater or less quantity of other articles; so that it would be possible for them, in a period of scarcity, to make such retrenchments as would enable them to elude the severity of its pressure.

But, though the population in corn-feeding countries were dependent on the cheapest species of grain, not for a part only, but for the whole, of their food, their situation would, notwithstanding, be less hazardous than that of a population subsisting wholly on potatoes.

In the *first* place, owing to the impossibility, as to all practical purposes at least, of preserving potatoes, the surplus produce of a luxuriant crop cannot be stored up or reserved as a stock to meet any subsequent scarcity. The whole crop must necessarily be exhausted in a single year; so that, when the inhabitants have the misfortune to be overtaken by a scarcity, its pressure cannot be alleviated, as is almost uniformly the case in corn-feeding countries, by bringing the reserves of former harvests to market. Every year is thus left to provide subsistence for itself. When, on the one hand, the crop is luxuriant, the surplus is of comparatively little use, and is wasted unprofitably; and when, on the other hand, it is deficient, famine and disease necessarily prevail.

In the *second* place, the general opinion seems to be, that the variations in the quantities of produce obtained from land planted with potatoes, are greater than the variations in the quantities of produce obtained from land on which wheat, or any other species of grain, is raised.

And *lastly*, owing to the great bulk and weight of potatoes, and the difficulty of preserving them on shipboard, the expense of conveying them from one country to another is so very great, that a scarcity can never be materially relieved by importing them from

abroad. In consequence, those who chiefly depend on potatoes are practically excluded from participating in the benevolent provision made by nature for equalising the variations in the harvests of particular countries by means of commerce, and are thrown almost wholly on their own resources.

We should, therefore, be warranted in concluding, even though we were not possessed of any direct evidence on the subject, from the circumstance of the potato being a crop that cannot be kept on hand, from its natural fickleness, and from the incapacity of importing it when deficient, or of exporting it when in excess, that the oscillations in its price must be greater than in the price of wheat; and such, in point of fact, is the case. The oscillation in wheat is thought great when its price is doubled; but in a scarce year the potato is not unfrequently *six* times as dear as in a plentiful one! — (*Minutes of Evidence taken before the Agricultural Committee of* 1821, p. 212.) And the comparatively frequent recurrence of scarcities in Ireland, and the destitution and misery in which they involve the population, afford but too convincing proofs of the accuracy of what has now been stated.

It is, therefore, of the utmost consequence to the well-being of every people, and to their protection in years of scarcity, that they should not subsist principally on the potato. In this country, the pressure of a scarcity is evaded by resorting to inferior species of food, such as potatoes, and a lower standard of comfort; but if our people were habitually fed on the potato, this would be impracticable. The chances of famine would thus be vastly increased; while, owing to the low value of the potato as compared with most other things, the labourers would have less chance of preserving or acquiring a taste for animal food, or other necessaries and luxuries; and, consequently, of changing, at any future period, their actual condition for a better.

It is not easy to form any very accurate estimate of the profit and loss attending the cultivation of potatoes to the farmer, as compared with other crops. This is a point as to which the statements of those best qualified to give an opinion differ very considerably. Mr. Loudon says, "they require a great deal of manure from the farmer; while, generally speaking, little is returned by them; they are a bulky, unhandy article, troublesome in the lifting and carrying processes, and interfering with the seed season of wheat, — the most important one to the farmer. After all, from particular circumstances, they cannot be vended unless when raised in the vicinity of large towns; hence they are in most respects an unprofitable article to the agriculturist. To him, the real criterion is the profit which potatoes will return in feeding beasts; and here we apprehend the result will be altogether in favour of turnips and *rutabaga*, as the most profitable articles for that purpose."

It seems difficult to reconcile this statement with the rapid progress of the potato cultivation: but those who assent to what has been previously advanced with respect to the mischievous consequences that arise from the mass of the population becoming dependent on the potato as a principal article of food, will not regret though it should turn out to be accurate.

Dr. Colquhoun estimated the entire value of the potatoes annually consumed in Great Britain and Ireland at the end of the late war at *sixteen millions* sterling. But it is needless to say that there are no materials by which to form an estimate of this sort with any pretensions to accuracy. The one in question has been suspected, like most of those put forth by the same learned person, of exaggeration: and we incline to think that, had he estimated the value of the yearly produce of potatoes in the empire at *twelve millions*, he would have been nearer the mark. But on a point of this sort it is not possible to speak with any thing like confidence.

POUND, the name given to a weight used as a standard to determine the gravity and quantity of bodies. — (See Weights and Measures.)

POUND, a money of account, = 20*s*.

POWDER, GUN. See Gunpowder.

PRECIOUS METALS, a designation frequently applied to gold and silver. We have given, under the articles Gold, and Silver, a short account of each metal; and we now propose laying before the reader a few details with respect to their supply and consumption.

To enter fully into this interesting and difficult subject would require a long essay, or rather a large volume. Mr. Jacob has recently published an "Historical Inquiry into the Introduction and Consumption of the Precious Metals," in which he takes up the subject at the earliest period, and continues it to the present day. This work, though neither so complete nor satisfactory as might have been expected, contains a good deal of valuable information, and deserves the attention of all who take an interest in such inquiries. We confess, however, that several of the learned author's statements and conclusions seem to us to be not a little wide of the mark. We shall notice one or two of them in the course of this article.

1. *Supply of the Precious Metals.* — Since the discovery of America, the [illegible]

part of the supplies of gold and silver have been derived from that continent. Previously to the publication of Humboldt's great work, *Essai Politique sur la Nouvelle Espagne*, several estimates, some of them framed by individuals of great intelligence, were in circulation, of the quantities of gold and silver imported from America. They, however, differed widely from each other, and were all framed from comparatively limited sources of information.* But these have been wholly superseded by the more extensive and laborious investigations of M. Humboldt. This illustrious traveller, besides being acquainted with all that had been written on the subject, and having ready access to official sources of information unknown to the writers already alluded to, was well versed in the theory and practice of mining, and critically examined several of the most celebrated mines. He was, therefore, incomparably better qualified for forming correct conclusions as to the past and present productiveness of the mines, than any of those who had hitherto speculated on the subject. His statements have, indeed, been accused of exaggeration; and we incline to think that there are grounds for believing that this charge is, in some measure, well founded, particularly as respects the accounts of the profits made by mining, and of the extent to which the supplies of the precious metals may be increased. But this criticism applies, if at all, in a very inferior degree, to the accounts M. Humboldt has given of the total produce of the mines, and the exports to Europe. And, making every allowance for the imperfection inseparable from such investigations, it is still true that the statements in question, and the inquiries on which they are founded, are among the most valuable contributions that have ever been made to statistical science.

According to M. Humboldt, the supplies of the precious metals derived from America have been as follows: —

	Dollars a Year at an Average.		Dollars a Year at an Average.
From 1492 to 1500 - - -	250,000	From 1600 to 1700 - - -	16,000,000
— 1500 — 1545 - - -	3,000,000	— 1700 — 1750 - - -	22,500,000
— 1545 — 1600 - - -	11,000,000	— 1750 — 1803 - - -	35,300,000

(*Essai sur la Nouvelle Espagne*, tome iii. p. 428. 2d ed.)

The following is M. Humboldt's estimate of the annual produce of the mines of the New World, at the beginning of the present century: —

Annual Produce of the Mines of America at the Commencement of the Nineteenth Century

Political Divisions.	Gold.		Silver.		Value of the Gold and Silver in Dollars.
	Marcs of Castile.	Kilogs.	Marcs of Castile.	Kilogs.	
Vice-royalty of New Spain -	7,000	1,609	2,338,220	537,512	23,000,000
Vice-royalty of Peru - -	3,400	782	611,000	140,478	6,240,000
Captain-generalship of Chili -	12,212	2,807	29,700	6,827	2,060,000
Vice-royalty of Buenos Ayres	2,200	506	481,850	110,764	4,850,000
Vice-royalty of New Granada -	20,595	4,714	- -	- -	2,990,000
Brazil - - -	29,900	6,873	- -	- -	4,360,000
Total - -	75,217	17,291	3,460,840	795,581	43,500,000

Taking the dollar at 4*s.* 3*d.*, this would give 9,243,750*l.* as the total annual produce of the American mines. M. Humboldt further estimated the annual produce of the European mines of Hungary, Saxony, &c., and those of Northern Asia, at the same period, at about 1,000,000*l.* more.

The *quantity* of gold produced in America at the beginning of the century, was to the quantity of silver as 1 to 46; in Europe, the proportions were as 1 to 40. The *value* of equal quantities of gold and silver were then in the proportion of 15 or 15½ to 1. Latterly, the quantity of gold produced has increased, as compared with the quantity of silver.

From 1800 to 1810, the produce of the American mines was considerably increased; but in the last-mentioned year the contest began, which terminated in the dissolution of the connection between Spain and the South American colonies. The convulsions and insecurity arising out of this struggle; the proscription of the old Spanish families, to whom the mines principally belonged, who repaired, with the wrecks of their fortunes, some to Cuba, some to Spain, and some to Bordeaux and the south of France; have caused the abandonment of several of the mines, and an extraordinary falling off in the amount of their produce. There are no means of accurately estimating the precise extent

* Humboldt has brought these estimates together as follows: —

Authors.	*Epochs.*	*Dollars.*	*Authors.*	*Epochs.*	*Dollars.*
Ustariz - -	1492—1724 -	3,536,000,000	Gerboux - -	1724—1800 -	1,600,000,000
Solorzano - -	1492—1628 -	1,500,000,000	The Author of the *Recherches sur le Commerce*, Amst. 1779.	1492—1775 -	5,072,000,000
Moncada - -	1492—1595 -	2,000,000,000			
Navarete - -	1519—1617 -	1,536,000,000			
Raynal - -	1492—1780 -	5,154,000,000			
Robertson - -	1492—1775 -	8,800,000,000			
Necker - -	1763—1777	304,000,000			

(*Essai sur la Nouvelle Espagne*, tome iii. p. 412.)

of this decline; but according to Mr. Jacob, who collected and compared all the existing information on the subject, the total average produce of the American mines, inclusive of Brazil, during the 20 years ending with 1829, may be estimated at 4,036,838*l.* a year; being less considerably than ½ of their produce at the beginning of the century! —(*Jacob*, vol. ii. p. 267.)

Since the publication of Mr. Jacob's work, some further light has been thrown on this subject, by the publication of returns obtained by the British consuls in South America, of the produce of the mines at different periods. They differ considerably from those given by Mr. Jacob. The following is an abstract of their results, comparing the 20 years ending with 1809 with the 20 years ending with 1829: —

Mines.	1790 to 1809.			1810 to 1829.		
	Gold.	Silver.	Total.	Gold.	Silver.	Total.
	L.	*L.*	*L.*	*L.*	*L.*	*L.*
Mexico	4,523,378	94,429,303	98,952,681	1,913,075	45,388,729	47,301,804
Panama	223,518	- -	223,518	23,603	- -	23,603
Chili	863,974	944,736	1,808,710	1,904,514	878,188	2,782,702
Buenos Ayres	1,862,955	19,286,831	21,149,786	2,161,940	7,895,842	10,057,782
Total of America *L.*	7,473,825	114,660,870	122,134,695	6,003,132	54,162,759	60,165,891
Russia	- -	- -	- - *L.*	3,703,743	1,502,981	5,206,724
			L.	9,706,875	55,665,740	65,372,615

There are so many sources of error attached to all investigations of this sort, that these results, though deduced from what may be reckoned good authority, cannot be altogether depended upon. The consular returns contain no account of the produce of the Peruvian mines, except in so far as they come under the head of Buenos Ayres; and in this respect they differ very widely from the statements given by Mr. Jacob, who estimates the produce of the mines of Peru and Buenos Ayres, during the 20 years ending with 1829, at about 18,500,000*l.*! We also incline to think that the mines and washings in Colombia are not quite so neglected as they are said to be by the consul. It will be observed, too, that the above account does not include the produce of the Brazilian mines. They are supposed to have yielded, since 1810, about 1,500,000 dollars a year; but this is not more than adequate for the wants of the country. The produce of the Russian mines was comparatively trifling till 1810; but it has since increased, and is continuing to increase with considerable rapidity.

Adding to the produce of the American, that of the Russian mines, and separating the gold from the silver, their total produce, according to the consular returns, during each of the 4 decennial periods ending with 1829, has been about —

	Gold.	Silver.	Both.
	L.	*L.*	*L.*
Ten years ending 1799	3,295,000	59,290,000	62,585,000
— 1809	4,180,000	55,367,000	59,547,000
— 1819	3,955,000	29,953,000	33,908,000
— 1829	5,752,000	25,712,000	31,464,000

This gives 3,146,000*l.* for the average annual supply of the American and Russian mines during the 10 years ending with 1829. But the returns show that the produce of the Mexican mines had begun materially to increase in the latter years of this period; and we have to add to the above the produce of the Hungarian and Saxon mines. Hence, allowing for the increase that has taken place since 1829 in the productiveness of the Mexican and South American mines, exclusive of Brazil, and adding to their produce that of the Russian and other European mines, we may safely estimate (assuming the consuls not to have under-rated the American returns) the present annual supply of gold and silver from these sources at considerably more than 4,000,000*l.*

Exclusive of the sources now mentioned, the United States have recently begun to afford considerable quantities of gold. It was first discovered in North Carolina, in 1804; and from that period till 1829, about 109,000 dollars had been found. It has since been discovered in other States. The following Table exhibits the value of the gold annually produced in the United States since 1829. —(*American Almanac* for 1834.)

States.	1829.	1830.	1831.	1832.
	Dollars.	*Dollars.*	*Dollars.*	*Dollars.*
Virginia	2,500	24,000	26,000	34,000
North Carolina	134,000	204,000	294,000	458,000
South Carolina	3,500	26,000	22,000	45,000
Georgia	- -	212,000	176,000	140,000
Alabama	- -	- -	1,000	- -
Tennessee	- -	- -	1,000	1,000
Total	140,000	466,000	520,000	678,000

This Table shows a considerable increase; the produce in 1832 being above 135,000*l.* It is principally obtained by washing the soil in the valleys. Taking this new supply into account, and including, as was done by M. Humboldt, the produce of

the Brazilian mines; and further adding 500,000*l.* to the sums given in the consular returns, to cover the deficiencies which they certainly involve *; we may safely estimate the entire annual produce of the American, European, and Russo-Asiatic mines, as amounting, at this moment, to about 6,000,000*l.* a year; being 6-10ths of their annual produce when greatest.

2. *Consumption of the Precious Metals.* — Gold and silver are supplied either to serve as coin, or are made use of in the arts. There are no means whatever by which to discover the proportion in which they are applied, at any given period, to these purposes; and the proportion is perpetually varying with the varying circumstances of each country; as, for example, with the greater or less abundance of paper money, and the degree in which the use of coins is saved by the various devices resorted to by means of banking and otherwise for economising currency, the greater or less wealth of the inhabitants, the fashion as to plate, the feeling of security at the moment, and a thousand other circumstances, — all of which are liable to great and sometimes sudden changes.

According to Mr. Jacob, the value of the precious metals annually applied to ornamental and luxurious purposes in Europe, may be estimated as follows: viz. Great Britain, 2,457,221*l.*; France, 1,200,000*l.*; Switzerland, 350,000*l.*; remainder of Europe, 1,205,429*l.*; making in all, 5,612,711*l.* And adding to this the sums directly applied to the same purposes in America, the whole will be about 5,900,000*l.*

The data upon which this estimate has been founded, are in the last degree vague and unsatisfactory. It can hardly, indeed, be looked upon as any thing better than a mere guess; and as such, we do not think that it is a very happy one. M. Chabrol (whose researches are far more worthy of confidence than those of M. Chaptal, to which Mr. Jacob refers) estimates the consumption of gold and silver in the arts at Paris at 14,552,000 francs a year — (*Récherches Statistiques sur la Ville de Paris*, 1823, Tab. No. 85.); which corresponds with the elaborate estimate of M. Benoiston de Châteauneuf — (*Récherches sur les Consommations de Paris en* 1817, 2de partie, p. 78.). Both these authorities agree that the consumption of the precious metals in the arts at Paris is double that of the rest of France; so that we have 21,828,000 francs, or 866,190*l.*, for the consumption of the whole kingdom, which is 333,810*l.* a year under Mr. Jacob's estimate.

We have been assured, by those who have good means of forming a correct opinion upon such a point, that the quantity assigned by Mr. Jacob for the consumption of Great Britain is over-rated in about the same proportion as the consumption of France, or about $\frac{1}{4}$ part. There has, no doubt, been a considerable increase of late years in the consumption of plate and gilt articles; but it would require far better evidence han any hitherto laid before the public, to warrant the conclusion that so large a sum as 2,457,000*l.* is appropriated to such purposes.

The consumption of Switzerland, as set down by Mr. Jacob, is probably not far from accurate. But the sum assigned for the aggregate consumption of the rest of Europe seems to be quite as much exaggerated as that allowed for France and England.

According to this view of the matter, the consumption will be, — Great Britain, 1,842,916*l.*; France, 866,190*l.*; Switzerland, 350,000*l.*; rest of Europe, 1,204,118*l.*; in all, 4,263,224*l.* To this must be added 300,000*l.* for the consumption of America making the entire consumption 4,563,224*l.*

Probably this valuation is still too high. According to M. Humboldt (*Nouvelle Espagne*, 2d edit. tome iii. p. 464.), the total consumption of the precious metals in Europe, for other purposes than those of coin, amounts to only 87,182,800 francs, equal, at the exchange of 25·20, to 3,459,714*l.*: and adding to this 300,000*l.* for the consumption of America, the grand total will be, in round numbers, 3,760,000*l.*; being 803,000*l.* under our estimate, and no less than 2,140,000*l.* under that of Mr. Jacob!

But a portion of the gold and silver annually made use of in the arts is derived from the fusion of old plate, the burning of lace, picture frames, &c. Here, however, we have to lament the impossibility of ascertaining the proportion the supply from this source bears to the total quantity wrought up. Mr. Jacob estimates it at only $\frac{1}{5}$th part, or 2½ per cent.; but so small a sum seems to be quite out of the question. Most part of the precious metals employed in plating, gilding, &c. is certainly destroyed; but the quantity of metal so made use of is admitted by every one to be decidedly less than the quantity used in the manufacture of plate, watch-cases, and other articles of that description. And these, when they either become unfashionable, or are broken or injured, are, for the most part, sent to the melting pot. According to the statement of Necker, quoted and sanctioned by Humboldt, a *half* of the gold and silver used in France by goldsmiths and others in the arts, is supposed to be obtained from the fusion of old plate, &c. — (*Nouvelle Espagne*, tome iii. p. 467.)

But, notwithstanding the high authority by which this estimate is supported, we believe that it is nearly as much above the mark as Mr. Jacob's is certainly below it. Assuming, therefore, that, at a medium, 20 per cent. or $\frac{1}{5}$th part of the precious

* Even with this addition, their produce is materially under the sum mentioned by Mr. Jacob.

metals annually made use of in the arts is obtained from the fusion of old plate, we shall have, by deducting this proportion from the 4,563,000*l.* applied to the arts in Europe and America, 3,650,000*l.* as the total annual appropriation of the new gold and silver dug from the mines to such purposes, leaving about 2,000,000*l.* a year to be manufactured into coin.

It is not much more easy to determine the consumption of the precious metals when manufactured into coin, than when in plate. Mr. Jacob has entered into some curious details (vol. ii. c. 28.) to determine the abrasion or loss of coins from wear, which he estimates at $\frac{1}{600}$th part a year for gold, and $\frac{1}{200}$th part for silver coins. This, however, does not give the total wear and tear of the coins. To determine the latter, the quantities lost by fire, shipwrecks, and other accidents, must be taken into account. The loss from these sources can only be guessed at; but adding it to the loss by abrasion, perhaps we shall not be far wrong in estimating the whole at 1 per cent.

It is singular that, in estimating the consumption of gold and silver, Mr. Jacob should not have made the slightest allusion to the practice which has uniformly prevailed in all countries harassed by intestine commotions, or exposed to foreign invasion, of burying treasure in the earth. Of the hoards so deposited, a very considerable proportion has been altogether lost; and there can be no doubt that this has been one of the principal means by which the stock of the precious metals has been kept down to its present level. Every one is aware that, during the middle ages, *treasure trove*, or money dug from the ground by chance finders, belonged to the Crown, and formed no inconsiderable part of the royal revenue of this and other countries. The practice has always prevailed to a very great extent in the East. — (*Bernier, Voyage de Mogol*, Amst. 1710, tome i. p. 209.; *Scrafton on the Government of Hindostan*, p. 16. &c.) But it is not confined to that quarter. Wherever property is insecure, it is invariably resorted to. Mr. Wakefield tells us that it is common in Ireland. — (*Account of Ireland*, vol. i. p. 593.) It has always prevailed to a considerable extent in Russia and France; and in the latter, during the revolutionary anarchy, immense sums were buried, of which it is abundantly certain a large proportion will never be resuscitated. The wars and convulsions by which Europe was desolated for more than 20 years extended the practice to all parts of the Continent; withdrawing in this way from circulation a very considerable part of the increased produce of the mines. — (*Storch, Economie Politique*, tome i. p. 221. Paris, 1823.)

3. *Exportation of the Precious Metals to the East.* — It must be well known to all our readers, that from the remotest era down to a comparatively late period bullion has always formed one of the principal and most advantageous articles of export to the East. Humboldt estimated that, of the entire produce of the American mines at the beginning of this century, amounting, as already seen, to 43,500,000 dollars, no less than 25,500,000 were sent to Asia, — 17,500,000 by the Cape of Good Hope, 4,000,000 by the Levant, and 4,000,000 through the Russian frontier. — (*Nouvelle Espagne*, tome iii. p. 443.) Latterly, however, this immense drain has not only entirely ceased; but *the current has, in fact, begun to set strongly in the opposite direction.* Thus it appears that the total imports of gold and silver from Europe and North and South America into Bengal, Madras, and Bombay, during the 3 years ending with 1830–31, amounted to 479,388*l.*; whereas the total exports of the precious metals from these 3 presidencies to Europe and America during the same 3 years were 1,119,973*l.*, being an excess of 640,585*l.*; so that India, instead of importing, as formerly, very large quantities of bullion from the Western World, supplied, during the period in question, about 213,000*l.* a year to its markets! — (*Parl. Paper*, No. 390. Sess. 1833.) The same is the case with China. During the year ended the 31st of March, 1832, silver was exported from Canton to England to the amount of 1,976,930 dollars, or 390,000*l.*, besides about as much more exported to India! — (See *antè*, p. 237.) A considerable part of this large export consists of native silver, of which there are mines in several provinces. China has also mines of gold; and in some late years her exports of that metal have been considerable: she is, however, an importer as well as an exporter of gold, having for a lengthened period drawn considerable supplies of that metal from Borneo, Celebes, and the Malay peninsula. It appears, too, that the efflux of bullion from Russia to China has ceased; and that there, also, the current is setting the opposite way. — (*Jacob*, vol. ii. p. 320.) And if there be any sums still exported by way of the Levant, which is doubtful, they are certainly quite inconsiderable.

4. *Influence of the diminished Productiveness of the Mines on Prices.* — It has been customary in this country to ascribe almost the whole fall that has taken place in the price of most commodities since the peace, to the diminished supply of bullion from the mines. But we doubt whether this circumstance has not been fully counterbalanced by others, and whether it has had any influence in the way now mentioned. The cessation of the drain to the East, even admitting that M. Humboldt has somewhat over-rated its amount, would of itself have gone far to counteract the decreased pro-

ductiveness of the mines; but we have just seen that it has not merely ceased, but that we are, in fact, deriving considerable supplies from that very quarter. In addition to this, the greater security and tranquillity enjoyed on the Continent since the peace, has not only checked that burying of money, formerly so prevalent, but has caused the bringing to light of a good many of the subterranean hoards. The institution of savings' banks, now so common every where, has also, no doubt, tended to prevent hoarding, and to bring a good deal of coin into circulation, that would otherwise have been locked up. These circumstances, coupled with others that might be mentioned, such as the cessation of the demand for military chests, the greater employment of bills in mercantile transactions, &c., afford the best grounds for doubting whether the quantity of the precious metals annually applicable to the purposes of circulation be not as great at present, as in 1809 or 1810. It is further to be observed, that the falling off in the produce of the mines has been in silver only; and that the supply of gold, instead of being diminished during the last 10 years, has been *very materially increased:* and as gold is the standard of our currency, it is obviously false to affirm that its value has been increased from its being less abundant than formerly.* It is contended, indeed, that in estimating the value of the precious metals, we cannot separate gold and silver; and that the fall that has taken place in the prices of *all* commodities since 1815, proves that the value of money has sustained a corresponding advance. But the value of gold is in no way dependent upon, or connected with, the value of silver. The exchangeable worth of each metal is wholly determined by the peculiar conditions under which it is supplied; and the circumstance of gold falling in value when silver is rising, is no more to be wondered at, than that lead should fall when iron rises, or conversely. Neither is it true that the fall in the value of commodities since 1815 has been universal. We admit it has been very general; but we venture to affirm that there is not, without any exception whatever, a single commodity that has fallen in price since 1814, the fall of which may not be satisfactorily accounted for without reference to the supply of gold and silver. — (See *antè*, p. 75.) Multiplied proofs of what is now stated, will be found in various articles throughout this work. And we have little doubt that those who investigate the matter with any degree of care, will agree with us in thinking, that, even without distinguishing between gold and silver, were the influence of the decreased productiveness of the mines on prices estimated at from 3 to 5 per cent., it would be very decidedly beyond the mark. We believe its influence has been hardly perceptible.

5. *Probable future Supply of Gold and Silver.* — Nothing but conjectural statements can be made as to the probable future supply of the precious metals. On the whole, however, we should think that a very considerable increase may be fairly anticipated. The anarchy in which the new South American States have hitherto been involved, will come to a close; and, with the increase of population and capital, renewed attention will, doubtless, be paid to the mines. It is reasonable also, we think, to anticipate that the supplies from the Russian mines will continue to increase.

PREMIUM. See Insurance.

PRICES. By the price of a commodity is meant its value estimated in money, or, simply, the quantity of money for which it will exchange. The price of a commodity rises when it fetches more, and falls when it fetches less money.

1. *Price of freely produced Commodities.* — The exchangeable value of commodities — that is, their power of exchanging for or buying other commodities — depends, at any given period, partly on the comparative facility of their production, and partly on the relation of the supply and demand. If any 2 or more commodities respectively required the same outlay of capital and labour to bring them to market, and if the supply of each were adjusted exactly according to the effectual demand — that is, were they all in sufficient abundance, and no more, to supply the wants of those able and willing to pay the outlay upon them, and the ordinary rate of profit at the time — they would each fetch the same price, or exchange for the same quantity of any other commodity. But if any single commodity should happen to require less or more capital and labour for its production, while the quantity required to produce the others continued stationary, its value, as compared with them, would, in the first case, fall, and in the second, rise; and, supposing the cost of its production not to vary, its value might be increased by a falling off in the supply, or by an increase of demand, and conversely.

But it is of importance to bear in mind, that all variations of price arising from any disproportion in the supply and demand of such commodities as may be *freely produced in indefinite quantities*, are *temporary* only; while those that are occasioned by changes in the cost of their production are *permanent*, at least as much so as the cause in which they originate. A general mourning occasions a transient rise in the price of black cloth: but supposing that the fashion of wearing black were to continue, its price would not

* This fact shows the reliance to be placed on the information and opinions of those who recommend the adoption of a silver standard as a means of diminishing the public burdens!

permanently vary; for those who previously manufactured blue and brown cloths, &c. would henceforth manufacture only black cloth; and the supply being in this way increased to the same extent as the demand, the price would settle at its old level. Hence the importance of distinguishing between a variation of price originating in a change of fashion, or other accidental circumstance — such, for example, as a deficient harvest — and a variation occasioned by some change in the cost of production. In the former case, prices will, at no distant period, revert to their old level; in the latter, the variation will be lasting.

When the *price* of a freely produced commodity rises or falls, such variation may evidently be occasioned either by something affecting its value, or by something affecting the value of money. But when the generality of commodities rise or fall, the fair presumption is that the change is not in them, but in the money with which they are compared. This conclusion does not, however, apply in all cases; and we believe that most part of that fall in the price of commodities, which has taken place since the peace, and which has been so generally ascribed to a rise in the value of money, occasioned by a decline in the productiveness of the mines, has been caused by the increased productiveness of industry, arising from the abolition of oppressive restraints on commerce, the opening of new and more abundant sources of supply, and the discovery of new means, and improved methods of production. — (See Precious Metals.)

2. *Price of monopolised Commodities.* — Exclusive, however, of the commodities now alluded to, there is a considerable class, whose producers or holders enjoy either an *absolute* or a *partial* monopoly of the supply. When such is the case, prices depend entirely or principally on the proportion between the supply and demand, and are not liable to be influenced, or only in a secondary degree, by changes in the cost of production. Antique statues and gems; the pictures of the great masters; wines of a peculiar flavour, produced in small quantities, in particular situations; and a few other articles; exist under what may be called absolute monopolies; — their supply cannot be increased; and their price must, therefore, depend entirely on the competition of those who may wish to buy them, without being in the slightest degree influenced by the cost of their production.

Monopolies are sometimes established by law; as when the power to supply the market with a particular article is made over to one individual or society of individuals, without any limitation of the price at which it may be sold; which, of course, enables those possessed of the monopoly to exact the highest price for it that the competition of the buyers will afford, though such price may exceed the cost of production in any conceivable degree. Monopolies of this sort used to be common in England, particularly in the reign of Elizabeth: but they were finally abolished by the famous act of the 21 Jac. 1. c. 3. — an act which, by establishing the freedom of competition in all businesses carried on at home, has been productive of the greatest advantage. — (See Monopoly.)

The corn laws establish a partial monopoly of the supply of Great Britain with corn in favour of the agriculturists; but, as competition is carried to as great an extent in agriculture as in any other business, this monopoly does not enable them to obtain a higher price for their produce than is sufficient to pay the expenses of its production; though, owing to the peculiar circumstances under which this country is placed, this price is higher than the price in the surrounding countries. Hence it results that the monopoly is injurious to the public, without being of any advantage to those engaged in the business of agriculture. Neither, indeed, can it be truly said to be advantageous to the landlords. — (See *antè*, p. 414.)

The rights conveyed by patents sometimes establish a valuable monopoly; for they enable the inventors of improved methods of production to maintain, during the continuance of the patent, the price of the article at a level which may be much higher than is required to afford them the ordinary rate of profit. This advantage, however, by stimulating invention, and exciting to new discoveries, of which it is the natural and appropriate reward, instead of being injurious, is beneficial to the public. — (See Patents.)

There are also partial monopolies, depending upon situation, connection, fashion, &c. These, and other inappreciable circumstances, sometimes occasion a difference of 30 per cent., or more, in the price of the same article in shops not very distant from each other.

Generally speaking, the supply of monopolised commodities is less liable to vary than those that are freely produced; and their prices are commonly more steady. But there are various exceptions to this rule, and of these the corn monopoly is one. The great variations in the harvests of particular countries, and their average equality throughout the world, exposes a nation which shuts foreign corn out of its ports to destructive vicissitudes of price, from which it would enjoy a nearly total exemption were the ports open. — (See *antè*, p. 412.) Sometimes the expiration of a monopoly — a patent, for example — has occasioned a sudden and extraordinary increase of supply, and consequent fall of price; entailing, of course, a serious loss on the holders of large stocks of goods produced under the monopoly.

3. *New Sources of Supply.* — The effects on prices produced by the opening of new markets, or new sources of supply, are familiar to every one. The fall that has taken place in the price of pepper, and of most sorts of commodities brought from the East, since the opening of the trade in 1814, is a conspicuous proof of what is now stated.

4. *Influence of War on Prices.*—The effect of war in obstructing the ordinary channels of commercial intercourse, and occasioning extreme fluctuations in the supply and price of commodities, is well known. In this respect, however, the latter part of the late war is, perhaps, entitled to a pre-eminence. We had then to deal with an enemy who had extended his sway over most part of the Continent; and who endeavoured, by every means in his power, to shut us out of the Continental markets. Mr. Tooke has given, in his elaborate and valuable work on *High and Low Prices*, a variety of details which strikingly illustrate the effect that the regulations then adopted by the belligerent powers had on prices. "Among the means," says Mr. Tooke, "devised by the ingenuity and enterprise of adventurers to elude or overcome the obstacles presented by the decrees of the enemy, one in particular, which was resorted to on an extensive scale, deserves mention, as illustrating in a striking manner the degree in which those obstacles were calculated to increase the cost to the consumer. Several vessels laden with sugar, coffee, tobacco, cotton twist, and other valuable commodities, were despatched from England at very high rates of freight and insurance to Salonica, where the goods were landed, and thence conveyed on mules and horses through Servia and Hungary to Vienna, for the purpose of being distributed over Germany, and, possibly, into France. Thus it might happen that the inhabitants of that part of the Continent most contiguous to this country could not receive their supplies from us, without an expense of conveyance equivalent to what it would be, if they were removed to the distance of a sea voyage twice round the globe, but not subject to fiscal and political regulations." And in consequence of these, and other causes of the same sort, Mr. Tooke mentions that the price of sugar in France, and other parts of the Continent, during the latter years of the war, was as high as 5*s.* and 6*s.* a pound; that coffee rose to 7*s.*; indigo to 18*s.*, and so on.

But the sums charged for freight and insurance were the most extraordinary. Mr. Tooke states, that he has known instances in which the licence, freight, and other charges on account of a vessel of about 100 tons burden, making a voyage from Calais to London and back, have amounted to the almost incredible sum of 50,000*l.*! A ship of which the whole cost and outfit did not amount to 4,000*l.*, earned, during the latter period of the war, a gross freight of 80,000*l.* on a voyage from Bordeaux to London and back! The freight of indigo from London to the Continent does not at present exceed 1*d.* a pound; whereas it amounted, at the period referred to, to about 4*s.* 6*d.* — (*High and Low Prices*, 2d ed. p. 212.)

5. *Influence of Taxes on Prices.* — It is unnecessary to dilate on a topic so familiar to every one. When a tax is laid on a commodity, its price necessarily rises in a corresponding proportion; for otherwise the producers would not obtain the ordinary rate of profit, and would, of course, withdraw from the business. The rise in the price of several of the articles in the annexed Table, is principally to be ascribed to the increase of taxation.

These statements will probably suffice to give our readers a general idea of the principles which determine the value of commodities. To go deeper into the subject would involve us in discussions that belong to political economy, and are among the most intricate in that science. The influence of speculation on prices must not, however, be passed over in a work of this sort.

6. *Influence of Speculation on Prices.* — It very rarely happens that either the actual supply of any species of produce in extensive demand, or the intensity of that demand, can be exactly measured. Every transaction in which an individual buys produce in order to sell it again, is, in fact, a speculation. The buyer anticipates that the demand for the article he has purchased will be such, at some future period, either more or less distant, that he will be able to dispose of it with a profit; and the success of the speculation depends, it is evident, on the skill with which he has estimated the circumstances that must determine the future price of the commodity. It follows, therefore, that in all highly commercial countries, where merchants are possessed of large capitals, and where they are left to be guided in the use of them by their own discretion and foresight, the prices of commodities will frequently be very much influenced, not merely by the actual occurrence of changes in the accustomed relation of the supply and demand, but by the anticipation of such changes. It is the business of the merchant to acquaint himself with every circumstance affecting the particular description of commodities in which he deals. He endeavours to obtain, by means of an extensive correspondence, the earliest and most authentic information with respect to every thing that may affect their supply or demand, or the cost of their production; and if he learned that the supply of an article had failed, or that, owing to changes of fashion, or to the opening of new channels of commerce, the

demand for it had been increased, he would most likely be disposed to become a buyer, in anticipation of profiting by the rise of price, which, under the circumstances of the case, could hardly fail of taking place; or, if he were a holder of the article, he would refuse to part with it, unless for a higher price than he would previously have accepted. If the intelligence received by the merchant had been of a contrary description — if, for example, he had learned that the article was now produced with greater facility, or that there was a falling off in the demand for it, caused by a change of fashion, or by the shutting up of some of the markets to which it had previously been admitted — he would have acted differently: in this case he would have anticipated a fall of prices, and would either have declined purchasing the article, except at a reduced rate, or have endeavoured to get rid of it, supposing him to be a holder, by offering it at a lower price. In consequence of these operations, the prices of commodities, in different places and periods, are brought comparatively near to equality. All abrupt transitions, from scarcity to abundance, and from abundance to scarcity, are avoided; an excess in one case is made to balance a deficiency in another, and the supply is distributed with a degree of steadiness and regularity that could hardly have been deemed attainable.

It is obvious, from what has now been stated, that those who indiscriminately condemn all sorts of speculative engagements, have never reflected on the circumstances incident to the prosecution of every undertaking. In truth and reality, they are all speculations. Their undertakers must look forward to periods more or less distant; and their success depends entirely on the sagacity with which they have estimated the probability of certain events occurring, and the influence which they have ascribed to them. Speculation is, therefore, really only another name for foresight; and though fortunes have sometimes been made by a lucky hit, the character of a successful speculator is, in the vast majority of instances, due to him only who has skilfully devised the means of effecting the end he had in view, and who has outstripped his competitors in the judgment with which he has looked into futurity, and appreciated the operation of causes producing distant effects. Even in the securest businesses, such as agriculture and manufactures, there is, and must be, a great deal of speculation. An unlooked for change of season frequently disappoints the apparently reasonable expectations of those who undertake the former; while the equally capricious variations of fashion have to be encountered by those engaged in the latter; and each is, besides, liable to be affected by legislative enactments, by new discoveries in the arts, and by an endless variety of circumstances which it is always very difficult, and sometimes quite impossible, to foresee. On the whole, indeed, the gains of the undertakers are so adjusted, that those who carry them on obtain, at an average, the common and ordinary rate of profit. But the inequality in the gains of individuals is most commonly very great: and while the superior tact, industry, or good fortune of some enable them to realise large fortunes; the want of discernment, the less vigilant attention, or the bad fortune of others, frequently reduces them from the situation of capitalists to that of labourers.

The great cotton speculation of 1825 took its rise partly and chiefly from a supposed deficiency in the supply of cotton, partly from an idea that there was a greatly increased demand for raw cotton in this country and the Continent, and partly from a belief that the stocks on hand were unusually low. Now it is obvious, that the success of those who embarked in this speculation depended entirely on two circumstances; viz. *first*, that they were right in the fundamental supposition on which the whole speculation rested, that the supply of cotton was no longer commensurate with the demand; and *second*, that their competition did not raise the price so high as to diminish the consumption by the manufacturers in too great a degree to enable them to take off the quantity to be actually brought to market. If the merchants had been well founded in their suppositions, and if their competition had not raised the price of cotton too high, the speculation would certainly have been successful. But, instead of being well founded, the hypothesis on which the whole thing rested was perfectly visionary. There was no deficiency in the supply of cotton, but, on the contrary, a great superabundance; and though there had been such a deficiency, the excess to which the price was carried must have checked consumption so much as to occasion a serious decline. The falling off in the imports of cotton from America, in 1824, seems to have been the source of the delusion. It was supposed that this falling off was not accidental, but that it was a consequence of the price of cotton having been for a series of years so low as to be inadequate to defray the expenses of its cultivation. The result showed that this calculation was most erroneous. And besides, in entering on the speculation, no attention was paid to Egypt and Italy, — countries from which only about 1,400,000 lbs. of cotton were obtained in 1824, but from which no less than 23,800,000 lbs. were obtained in 1825! This unlooked-for importation was of itself almost enough to overturn the combinations of the speculators; and, coupled with the increased importation from America and other countries, actually occasioned a heavy glut of the market.

The risk to which merchants are exposed, when they either sell off any commodity at a reduced price in anticipation of a fall, or buy at an advanced price in anticipation of a future rise, is a consequence principally of the extreme difficulty of ascertaining the true state of the fact with respect to the grounds on which an abundant or a deficient supply, or an increasing or decreasing demand, may be expected. Rules can here be of no service; every thing depends upon the talent, tact, and knowledge of the party. The questions to be solved are all practical ones, varying in every case from each other; the skill of the merchant being evinced by the mode in which he conducts his business under such circumstances, or by his sagacity in discovering coming events, and appreciating their character and the extent of their influence. Priority, but, above all, accuracy of intelligence, is, in such cases, of the utmost consequence. Without well authenticated data to go upon, every step taken may only lead to error. The instances, indeed, in which speculations, apparently contrived with the greatest judgment, have ended in bankruptcy and ruin, from a deficiency in this essential requisite, are so very numerous, that every one must be acquainted with them. Hence the importance of selecting acute and cautious correspondents; and hence, also, the necessity of maturely weighing their reports, and of endeavouring, by the aid of information gleaned from every authentic accessible source, to ascertain how far they may be depended upon.

When a few leading merchants purchase in anticipation of an advance, or sell in anticipation of a fall, the speculation is often pushed beyond all reasonable limits, by the operations of those who are influenced by imitation only, and who have never, perhaps, reflected for a moment on the grounds on which a variation of price is anticipated. In speculation, as in most other things, one individual derives confidence from another. Such a one purchases or sells, not because he has any really accurate information as to the state of the demand and supply, but because some one else has done so before him. The original impulse is thus rapidly extended; and even those who are satisfied that a speculation, in anticipation of a rise of prices, is unsafe, and that there will be a recoil, not unfrequently adventure, in the expectation that they will be able to withdraw before the recoil has begun.

It may, we believe, speaking generally, be laid down as a sound practical rule, to avoid having any thing to do with a speculation in which many have already engaged. The competition of the speculators seldom fails speedily to render an adventure that might have been originally safe, extremely hazardous. If a commodity happen to be at an unusually reduced price in any particular market, it will rise the moment that different buyers appear in the field; and supposing, on the other hand, that it is fetching an unusually high price, it will fall, perhaps far below the cost of production, as soon as supplies begin to be poured in by different merchants. Whatever, therefore, may be the success of those who originate a speculation, those who enter into it at an advanced period are almost sure to lose. To have been preceded by others ought not, in such matters, to inspire confidence; on the contrary, it ought, unless there be something special in the case, to induce every considerate person to decline interfering with it.

The maintenance of the freedom of intercourse between different countries, and the more general diffusion of sound instruction, seem to be the only means by which those miscalculations, that are often productive of great national as well as private loss, can be either obviated or mitigated. The effects consequent to such improvident speculations being always far more injurious to the parties engaged in them than to any other class, the presumption is that they will diminish, both in frequency and force, according as the true principles of commerce come to be better understood. But, whatever inconvenience may occasionally flow from them, it is abundantly plain, that instead of being lessened, it would be very much increased, were any restraints imposed on the freedom of adventure. When the attention of many individuals is directed to the same line of speculation; when they prosecute it as a business, and are responsible in their own private fortunes for any errors they may commit; they acquire a knowledge of the various circumstances influencing prices, and give by their combinations a steadiness to them, which it is easy to see could not be attained by any other means. It is material, too, to bear in mind, as was previously stated, that many, perhaps it might be said *most*, of those who press so eagerly into the market, when any new channel of commerce is opened, or when any considerable rise of price is anticipated, are not merchants, but persons engaged in other businesses, or living, perhaps, on fixed incomes, who speculate in the hope of suddenly increasing their fortune. This tendency to gambling seldom fails to break out upon such occasions; but, fortunately, these are only of comparatively rare occurrence; and in the ordinary course of affairs, mercantile speculations are left to be conducted by those who are familiar with business, and who, in exerting themselves to equalise the variations of price caused by variations of climate and of seasons, and to distribute the supply of produce proportionally to the effective demand, and with so much providence that it may not at any time be wholly exhausted, perform functions that are in the highest degree important and beneficial. They are, it is true,

actuated only by a desire to advance their own interests; but the results of their operations are not less advantageous than those of the agriculturist who gives greater fertility to the soil, or of the mechanist who invents new and more powerful machines.

7. *Tables of Prices.* — It is superfluous, perhaps, to observe, that the precious metals are liable to all the variations of value already alluded to. Not only, therefore, are prices, as was already remarked, affected by variations in the cost and supply of commodities, but they are also affected by changes in the cost and supply of gold and silver, whether arising from the exhaustion of old, or the discovery of new mines, improvements in the art of mining, changes of fashion, &c. Hence it is, that Tables of the prices of commodities, extending for a considerable period, communicate far less solid information than is generally supposed, and, unless the necessary allowances be made, may lead to the most unfounded conclusions. The real value of any commodity depends on the quantity of labour required for its production; but supposing that we were to set about inferring this real value, or the ultimate sacrifice required to obtain the commodity, from its price, it might happen, (had the quantity of labour required for its production declined, but in a less degree than the quantity required to produce gold and silver,) that its value would appear to rise, when it had really been diminished. When, however, the rate of wages, as well as the price of commodities, is given upon authentic data, a Table of prices is valuable, inasmuch as it shows the extent of the command over the necessaries and conveniences of life enjoyed by the bulk of the community during the period through which it extends. The following Table (pp. 952, 953.) of the prices of various commodities, and of the wages paid to different descriptions of tradesmen, at Greenwich Hospital, for the last 100 years, is the most complete of the sort that has been published; and is one of the few that are founded upon data, the accuracy of which cannot be questioned. Unfortunately, it applies only to a small part of the country. But many important conclusions may, notwithstanding, be deduced from it. The reader will find, under the more important articles described in this work, pretty ample accounts of their prices. Sometimes, as in the case of corn, these accounts go back to a very distant period.

Those desirous of detailed information as to the prices of commodities in Great Britain, in remoter ages, may consult the elaborate Tables in the 3d volume of Sir F. M. Eden's work on the *Poor;* and the 4th volume of *Macpherson's Annals of Commerce. Arbuthnot's Tables of Ancient Coins, Weights, Measures, Prices, &c.* are well known; but the statements are not much to be depended upon. The *Traité de Métrologie* of M. Paucton, 4to, Paris, 1780, is the best work on this curious and difficult subject.

PRICE CURRENT; a list or enumeration of the various articles of merchandise, with their prices, the duties (if any) payable thereon when imported or exported, with the drawbacks occasionally allowed upon their exportation, &c. Lists of this description are published periodically, generally once or twice a week, in most great commercial cities and towns. — (For examples, see the articles Canton, Genoa, Havre, Singapore &c. in this work.)

PRIMAGE, is a certain allowance paid by the shipper or consignee of goods to the mariners and master of a vessel, for loading the same. In some places it is 1*d.* in the pound; in others 6*d.* for every pack or bale; or otherwise, according to the custom of the place.

PRINTS, impressions on paper, or some other substance, of engravings on copper, steel, wood, stone, &c., representing some particular subject or composition.

Prints, like paintings, embrace every variety of subject; and differ very widely in the manner in which they are engraved. Their prices vary according to the style of the engraving, the fineness of its execution, the goodness of the impression, its rarity, &c. The art seems to have taken its rise in the 15th century. But, as a dissertation on one of the most beautiful of the fine arts would be singularly out of place in a work of this sort, we have introduced it for the purpose merely of stating the law with respect to the copyright of prints.

This is laid down in the acts 8 Geo. 2. c. 13., 7 Geo. 3. c. 38., and 17 Geo. 3. c. 57. By these acts, the copyright of all sorts of prints, including maps and charts, is secured to the engraver, or author, for *twenty-eight* years. The last mentioned act declares that every individual who shall, within the said 28 years, engrave, etch, or work, or in any other manner copy in the whole or in part, by varying, adding to, or diminishing from the main design; or shall print, reprint, or import for sale, or shall publish, sell, or otherwise dispose of any copy of any print whatever, which has been or shall be engraved, etched, drawn, or designed in Great Britain, without the express consent of the proprietor thereof first obtained in writing, signed by him with his own hand, in the presence of, and attested by, two or more credible witnesses; then every such proprietor may, by a special action upon the case to be brought against the person so offending, recover such damages as a jury, on the trial of such action, or on the execution of a writ of inquiry thereon, shall give or assess, together with double costs of suit.

In questions as to the piracy of prints, the courts proceed upon the same principles that are followed in those with respect to the piracy of books. — (See Books; see also *Mr. Godson's* excellent work on the *Law of Patents and Copyright*, pp. 287—301.)

Regulations as to Importation. — Where prints or maps are contained in, and form part of a book, and serve merely to explain or illustrate the subject of such book, they are to be deemed a part of the work, and be charged with duty, by weight, as books; but when prints or maps are bound or stitched together with

An Account of the Contract Prices of the following Articles of Provision, &c. at the Royal Hospital, *Papers published by the*

Years.	Flesh, per Cwt. £ s. d.	Bread, per Lb.	Flour, per Sack. £ s. d.	Butter, per Lb. s. d.	Cheese, per Lb. s. d.	Peas, per Bushel. s. d.	Oatmeal, per Bushel. £ s. d.	Salt, per Bushel. s. d.	Malt, per Quarter. £ s. d.	Hops, per Cwt. £ s. d.	Beer, per Barrel. £ s. d.
		Average.									
1729	1 5 8	1*d.* for 10 6/16 oz.	- -	0 4¼	0 3⅛	4 0	0 4 6	5 0	1 9 0	2 5 0	- -
1730	1 5 8	1*d.* for 14¼ oz.	- -	0 5	0 3¼	4 0	0 4 6	5 0	1 0 6	2 5 10	0 3 9
1735	0 16 11	1*d.* for 12¾ oz.	- -	0 3⅝	0 2¼	3 6	0 4 0	4 0	1 0 3	3 9 6¾	0 4 1¾
1740	1 8 0	1*d.* for 9 13/16 oz.	- -	0 5	0 3¼	3 6	0 4 0	4 0	1 7 3½	2 10 7¾	0 5 2¾
1745	1 2 2	1*d.* for 15 9/16 oz.	- -	0 3⅝	0 2¼	3 6	0 4 0	4 0	1 3 1	3 11 1	0 5 1¾
1750	1 6 6	1*d.* for 13¼ oz.	- -	0 5⅛	0 3¼	3 6	0 4 0	4 0	1 4 0	5 4 0	0 5 8¾
1755	1 7 9⅛	1*d.* for 14 6/16 oz.	- -	0 5⅛	0 3⅛	3 6	0 4 0	4 0	1 2 0	2 15 0	0 4 5¼
1760	1 11 6	1*d.* for 13¼ oz.	- -	0 5⅛	0 3⅜	3 6	0 4 0	4 0	1 4 9	4 13 4	0 5 7¾
1765	1 7 3	1*d.* for 9⅛ oz.	- -	0 5⅛	0 3¼	3 6	0 4 0	4 0	1 10 8	7 3 6	0 7 2⅛
1770	1 8 6	1*d.* for 11 3/16 oz.	- -	0 6⅛	0 3¾	4 3	0 4 9	4 8	1 8 3	5 16 4	0 5 10
1775	1 13 5	1*d.* for 9 5/16 oz.	- -	0 6¾	0 3¼	7 6	0 5 3	4 8	1 17 3	4 16 6	0 7 1¼
1780	1 12 6	1*d.* for 11 6/16 oz.	- -	0 6⅛	0 3⅜	7 6	0 5 3	4 8	1 11 1	2 14 8	0 7 3⅛
1785	1 17 6⅛	1*d.* for 10¼ oz.	- -	0 6¾	0 3¾	7 6	0 5 3	4 8	2 0 3	5 6 4	0 8 2¼
1790	1 16 10	- -	2 3 4	0 6½	0 4	7 6	0 5 3	4 8	1 15 6	6 13 9	0 8 7
1795	2 2 10	- -	3 5 8	0 8¼	0 5¼	9 6	0 6 4¾	6 1¼	2 8 3	7 7 10	0 10 4½
1800	3 4 4	- -	4 16 0	0 11⅛	0 6¼	13 5	0 14 0	14 0	4 4 0	16 15 9	1 0 4¼
1805	3 0 4	- -	4 2 3	0 11¾	0 7¼	7 9	0 12 0	16 10⅛	4 5 7	6 11 6	0 17 9½
1806	3 1 0	- -	3 9 6⅛	0 11⅛	0 7⅛	8 4⅛	0 10 3	19 9	3 16 0	6 7 9	0 16 3¼
1807	3 3 0	- -	3 3 8¾	1 0⅛	0 7⅛	14 4¼	0 9 4¾	19 9	3 13 1⅛	5 19 0	0 15 5
1808	3 3 0	- -	3 9 10⅛	1 0¼	0 7⅛	19 2¾	0 10 10	19 9	3 16 1⅛	4 12 6	0 16 5⅛
1809	3 6 6	- -	4 5 1⅛	1 1	0 8	14 10¾	0 11 9	19 9	4 4 5¼	7 6 8	0 17 0
1810	3 12 0	- -	4 8 4	1 1⅜	0 8⅛	9 5	0 11 7	19 9	4 4 5	7 6 8	0 17 10
1811	3 14 0	- -	4 11 0	1 2⅛	0 8¼	8 9	0 11 6	19 9	3 13 6	7 13 6	0 16 3¾
1812	3 18 0	- -	5 7 5	1 3⅛	0 8⅛	12 8⅛	0 13 3	19 9	4 18 6	9 17 0	1 0 9¼
1813	4 5 0	- -	4 13 0	1 3	0 8¾	13 8¼	0 13 3	19 9	4 16 6	11 11 8	1 1 10¼
1814	3 14 6	- -	3 10 6	1 2	0 8¾	9 4	0 10 4	19 9	3 17 8	9 10 0	0 17 3¼
1815	3 8 0	- -	2 4 9	1 2	0 8	6 7¼	0 10 3	19 9	3 9 7¼	9 13 7	0 15 4¾
1816	2 11 4	- -	3 4 1	0 9⅛	0 6⅛	7 0⅛	0 9 2	19 9	3 9 4⅛	14 0 0	0 15 8
1817	2 11 4	- -	4 6 4	0 8¾	0 5⅛	8 6¾	0 13 9	19 9	4 6 10⅛	22 4 0	1 0 7
		d.								Pockets.	
1818	2 17 1	Per lb. 2 6/12	3 8 5⅛	0 11	0 6	9 3¾	0 13 5⅛	19 9	4 1 8⅛	8 8 0	0 19 11⅛
1819	3 4 3	— 1¾ 11/12	2 17 5	0 11	0 8	7 8	0 12 9	19 9	3 12 11¾	4 12 0	0 15 3¾
1820	3 10 4½	— 1¾ 5/12	2 15 1	0 9⅛	0 7	7 5¾	0 13 4¼	19 9	3 8 8¼	4 0 0	0 13 10⅛
1821	2 18 10	— 1½ 1/12	2 5 3¼	0 8¾	0 6	5 9	0 8 8¼	19 4⅛	3 1 11	3 12 0	0 12 10¼
1822	1 19 5⅛	— 1¼ 8/12	1 17 5¾	0 7½	0 5	5 0⅛	0 8 6	18 0	2 12 8⅛	3 10 0	0 11 5¾
1823	2 2 7¼	— 1⅛	2 2 5	0 7¼	0 4	5 6	8*s.* 3*d.* ℔ bush. 15*s.* 6*d.* ℔ cwt.	4 10	2 19 11	9 19 0	0 12 5¼
1824	2 2 8¼	— 1⅛ 5/12	2 6 2	0 8¼	0 4¼	5 11	17*s.* ℔ cwt.	4 9	3 2 1	7 5 0	0 14 10¼
1825	2 19 6⅛	— 1¾ 5/12	2 13 4	0 10⅛	0 5¼	split peas 11*s.*	0 17 6	2 10	3 11 10¼	23 0 0	0 16 6¼
1826	2 17 8	— 1⅛ 3/12	2 5 2¾	0 9⅛	0 6⅛	11 0	0 19 0	1 10¼	3 5 1	15 5 0	0 17 5¾
1827	1 15 4⅛	— 1½ 3/12	2 3 6	0 8¼	0 5¼	10 6	1 5 0	1 8	3 4 10	4 10 0	0 13 8¼
1828	2 10 7¼	— 1⅛ 288/360	2 6 0¾	0 8⅛	0 5¼	9 6	0 18 6	1 10	3 1 7	- -	0 13 1
1829	2 6 3⅛	— 2 18/360	2 15 10⅛	0 8	0 5	8 9	0 18 6	1 8	3 1 10⅛	4 10 0 / 5 9 6	0 13 4
1830	2 3 6	— 1⅝ 330/360	2 14 11	0 6⅛	0 4	8 0	0 16 11	1 8	2 16 1¼	No receipt.	0 12 6⅛
1831	2 4 3½	— 2 261/360	3 0 5¼	0 9¾	0 4¾	9 0	0 17 6	1 8	3 10 5¼	Jan.12. 7 15 0 / Nov.11. 5 11 0	0 16 0¼
1832	2 6 2¼	— 1¾ 250/360	2 13 1	0 8¾	0 3¾	8 9	0 17 0	1 8	2 18 8	Dec.22. 6 15 0	0 13 1⅝

It may be right to observe, that in the infancy of the ... ing were coats, is

Greenwich, for the Years under-mentioned. — (From the *Parl. Papers*, Nos. 54. 72. and 87. Sess. 1830, and *Board of Trade.*)

Carpenters, per Day.	Brick-layers, per Day.	Masons, per Day.	Plumbers, per Day.	Candles, per Doz. lb.	Shoes, per Pair.	Coals, per Chaldron.	Mops, each.	Stock-ings, per Pair.	Hats, each.	Complete Suits of Bedding.	Suits of Clothes.	Coats, each.
s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	£ s. d.	£ s. d.	s. d.	s. d.	£ s. d.	£ s. d.	£ s. d.
- -	- -	- -	- -	6 5	4 0	1 8 5	0 0 10½	1 9	2 8	3 5 0	2 12 0	
							per dozen.					
Carps. 2 6 Joiners 2 6	2 6	2 6	3 0	6 4	4 0	1 4 6	0 10 0	1 6	2 8	2 13 0	2 12 0	
										Blankets each.		
- - 2 6 - - 2 8	2 6	2 6	3 0	4 2	4 0	1 5 0	0 10 6	1 6	2 3	0 4 0	2 2 6	
- - 2 6 - - 2 8	2 6	2 8	3 0	5 6	3 10	1 9 0	0 10 0	1 6	2 0	0 4 6	2 3 6	
- - 2 6 - - 2 8	2 6	2 8	2 6	6 0	3 6	1 10 0	0 11 0	1 6	2 0	0 4 6	- -	1 2 4
- - 2 6 - - 2 8	2 6	2 8	2 6	6 2	3 9	1 7 7½	0 10 9	1 6	2 0	0 4 6	- -	1 1 5
- - 2 6 - - 2 8	2 6	2 8	2 6	6 10	4 0	1 8 7¾	0 11 0	1 8	2 0	0 4 4½	- -	1 1 6
- - 2 6 - - 2 8	2 6	2 8	2 6	6 6	4 0	1 12 8	0 12 0	1 8	2 0	0 4 4½	- -	1 1 0
- - 2 6 - - 2 8	2 4	2 8	3 0	6 2	4 0	1 12 4½	0 11 3	1 8	2 6	0 4 6	- -	1 1 6
- - 2 6 - - 2 8	2 4	2 8	3 0	6 10¾	4 0	1 9 1½	0 11 0	1 6	2 6	0 4 6	- -	1 0 5
- - 2 6 - - 2 8	2 4	2 10	3 0	6 3	3 10	1 10 11¼	0 10 6	1 4	2 2	0 5 4½	- -	0 19 11
- - 2 6 - - 2 8	2 4	2 10	3 0	6 9½	3 11½	1 17 3¾	0 12 0	1 6	2 2	0 5 4½	- -	0 19 5
- - 2 6 - - 2 8	2	2 10	3 3	6 6	3 6	1 14 2½	0 11 0	1 6	2 4	0 5 4½	- -	1 0 3
- - 2 6 - - 2 10	2 4	2 10	3 3	7 9	3 11¼	1 14 4¼	0 14 0	1 6	2 6	0 5 4½	- -	1 0 8
- - 2 6 - - 2 10	3 0	2 10	3 3	9 2	4 0	1 19 9	0 15 0	1 6	2 3	0 6 6	- -	1 0 2
- - 2 10 - - 3 2	3 0	2 10	3 3	10 4	5 8	2 11 7	0 15 0	1 6	2 3	0 6 6	- -	1 0 0
4 6	4 10	5 0	4 6	10 7	5 9	2 11 8¾	0 17 0	2 2	3 0	0 8 9	- -	1 1 10
4 6	4 8	5 0	4 6	10 3	5 9	2 13 4	0 17 0	2 2	3 0	0 8 9	- -	1 1 10
5 0	4 8	5 0	4 6	9 10	5 0	2 14 0	0 17 0	2 2	3 0	0 8 9	- -	1 1 6
5 0	5 0	5 0	4 6	13 2½	5 0	2 15 9¾	0 17 0	2 2	3 0	0 8 9	- -	1 1 4
5 4	5 1	5 1	5 3	14 5½	5 6	3 0 9¾	0 17 0	2 2	3 0	0 8 9	- -	1 1 4
5 8	5 2	5 3	5 9	12 0	5 6	3 0 8	0 17 0	2 2	3 0	0 8 9	- -	1 1 4
5 6	5 5	5 9	5 9	10 9¾	4 11	3 1 6	0 17 0	2 2	3 0	0 8 9	- -	1 2 2
5 6	5 5	5 9	5 9	12 6	4 11	2 16 1	0 17 0	2 6	3 0	0 8 9	- -	1 2 2
5 6	5 5	5 9	5 9	14 2	4 8	2 16 7¼	0 18 0	2 6	3 0	0 8 9	- -	1 2 2
5 6	5 5	5 9	5 9	14 6	4 8	3 2 2¼	1 10 0	3 3	3 0	0 11 6	- -	1 4 6
5 6	5 1	5 9	5 9	11 7	4 7	2 15 6¾	1 10 0	3 3	3 0	0 11 3	- -	1 4 9
5 2	5 1	5 3	5 5	9 3	4 7	2 9 6½	1 10 0	2 9	3 0	0 9 4½	- -	1 4 9
5 2	5 1	5 3	5 9	9 10	3 10	2 6 7	1 10 0	2 9	3 0	0 9 4½	- -	1 0 7
							Each.			Suits.		
5 3	5 1	5 3	5 9	11 5½	3 10	2 8 6	0 2 6	2 10	3 0	2 19 10½	2 1 0½	1 1 7
5 3	5 1	5 3	5 9	8 6¼	4 2¾	2 6 8	0 2 6	2 11	3 0	2 19 10½	2 1 7½	1 1 10½
5 3	5 1	5 3	5 9	8 2¾	4 4½	2 5 9	0 1 10½	2 9½	3 0	2 19 10½	2 3 3¼	1 2 7
5 3	5 1	5 3	5 9	7 1¼	4 3	2 6 6	0 1 4¾	2 8	3 0	2 19 10½	2 1 9	1 1 11
5 1½	5 0	5 1½	5 7½	6 1½	4 2½	2 4 6¼	0 1 3½	2 5	3 0	2 19 10½	2 0 2¾	1 1 3
5 0	4 10	5 0	5 6	5 6	4 7¾	2 6 7	0 1 2	2 2	3 0	2 19 10½	1 19 11½	1 1 1½
5 0	4 10	5 0	5 6	5 6	4 9½	2 3 8	0 1 1¼	2 1¾	3 0	2 19 10½	1 19 11¼	1 1 2
5 0	4 10	5 0	5 6	6 0	4 6	2 3 2	0 1 2¼	2 1½	3 0	2 19 10½	2 0 8½	1 1 8
5 9	4 10	5 6	5 6	5 9½	4 5	2 0 4	0 1 1¼	2 0¼	3 0	2 19 10½	2 1 6¼	1 2 2
5 9	4 10	5 6	5 9	5 10	4 3½	2 1 5¼	0 1 1¾	1 10¼	3 0	2 8 3	1 19 10¾	1 1 4
5 8½	4 10	5 6	5 9	5 10¼	4 3	2 0 8¼	0 1 2	1 9½	3 0	2 5 9	1 18 1	1 0 7
5 8	Mar. to Sept. 4s. 10d. Sept. to Mar. 4s. 8d.	5 6	5 5	5 6¼	3 9¾	1 16 7	0 1 1½	1 9½	3 0	2 5 9	1 18 6¾	
Jan. to Aug. 5s. 8d. Sept. to Dec. 5s. 5d.	do.	Jan. to Aug. 5s. 5d. Sept. to Dec. 5s. 3d.	5 6	5 3½	3 6	1 12 11	0 0 10½	1 6½	3 0	1 17 10¾	1 18 6¾	
5 5	do.	5 3	5 6	6 0	3 6	1 7 0	0 11 8/12	1 6 5/12	3 0	1 17 10¾	2 0 11	
5 5	do.	5 3	5 6	5 2¼	3 4½	1 4 3	0 1 1½	1 7½ 5/12	3 0	1 19 3½	2 3 4	

contracted for in suits; and it is so stated in the account. It is also necessary to remark, that of a quality very inferior to the ancient pattern.

out letter-press, or when the letter-press is merely descriptive of the prints or maps, then they are to be charged with duty by tale, as prints or maps. — (*Min. Com. Cus.* 5th of Sept. 1829.) But if satisfactory proof be adduced, that prints or maps, although imported separately, do really form part of a work, they may be charged with the book duty by weight; but in other cases they are to be charged with duty by tale. — (*Treas. Order*, 2d of June, 1830.)

Pictures, sketches, and drawings, brought from the Continent, and accompanied by the proprietor, are to be admitted to entry free of duty, upon proof, by oath of the proprietor, that the same were wholly executed by him for his amusement, and not intended for sale in this country. — (*Treas. Order*, 5th of Aug. 1817.)

PRISAGE, or BUTLERAGE, was a right of taking 2 tons of wine from every ship importing into England 20 tons or more; which was changed by Edward I. into a duty of 2*s.* for every ton imported by merchant strangers, and called butlerage, because paid to the king's butler. The term is now fallen into disuse. — (*Blackstone.*)

PRIVATEERS, ships of war fitted out by private individuals, to annoy and plunder the public enemy. But before commencing their operations, it is indispensable that they obtain *letters of marque and reprisal* from the government whose subjects they are, authorising them to commit hostilities, and that they conform strictly to the rules laid down for the regulation of their conduct. All private individuals attacking others at sea, unless empowered by letters of marque, are to be considered pirates; and may be treated as such, either by those they attack, or by their own government.

1. *Policy of Privateering.* — The policy of this system is very questionable. It seems to be a remnant of that species of private war exercised by all individuals in early ages, but which gradually disappears as society advances. In wars carried on by land, the property of the peaceable inhabitants who take no part in the operations of the armies is uniformly protected; and it is difficult to discover any solid grounds why the same rule should not be followed at sea. Privateers rarely attack ships of war. Their object is merely to plunder and destroy merchantmen. They cause an infinite deal of mischief to individuals, and aggravate all the miseries of war, without having the slightest influence on the result of the contest. Experience has also shown that it is not possible, whatever precautions may be adopted, to prevent the greatest abuses from being perpetrated by privateers. The wish to amass plunder is the only principle by which they are actuated; and such being the case, it would be idle to suppose that they should be very scrupulous about abstaining from excesses. A system of this sort, if it be ever useful, can be so only to nations who have little trade, and who may expect to enrich themselves during war by fitting out privateers to plunder the merchant ships of their enemies. In all other cases it seems to be productive only of mischief; though it is, of course, most injurious to those states that have the greatest mercantile navy. Instead, therefore, of encouraging the practice of privateering, we think that a due regard to the rights and interests of humanity would suggest to the great powers the expediency of abolishing it altogether. A few efforts, have, indeed, been already made towards this desirable object. Thus, it was stipulated in the treaty between Sweden and the United Provinces, in 1675, that neither party should, in any future war, grant letters of marque against the other. In 1767, Russia abstained from licensing privateers: and in the treaty between the United States and Prussia, in 1785, a stipulation was inserted as to privateers, similar to that in the treaty between Sweden and the United Provinces in 1675. But nothing short of a convention and agreement to that effect amongst the great powers will be able to effect this desirable object. — (*Essai concernant les Armateurs, par Martens*, 1794.)

2. *Appointment of Privateers.* — The captain of a privateer is nominated by the owners, who may dismiss him at pleasure. The commission or letters of marque given to the owners, authorises them to attack and seize the ships of the power or powers specified therein; but they are not to look upon them as their property, or to appropriate them, or any part of them, to their own use, *till they have been legally condemned.* Besides the stimulus afforded by the hope of booty, government has been in the habit of allowing them 5*l.* for every man on board such enemy's ships of war or privateers as they may capture. — (33 *Geo.* 3. c. 66.) A privateer cruising under letters of marque against one state may, on obtaining authentic information of hostilities being commenced by her government against another, capture its ships with full advantage to herself. The king has in all cases the right to release any prize previously to its condemnation; this being an implied exception in the grant of prizes by the Crown. — (*Chitty on Commercial Law*, vol. i. c. 8.)

In some privateering adventures, the crew are engaged on the terms of no prize no pay; and, in such cases, the produce of whatsoever prizes may be taken goes half to the ship (for the owners), and half to the men, divided among them according to the articles of agreement; but when the men sail for wages, the captures belong entirely to the owners, except a small share, which is commonly stipulated to be given to the crew, over and above their wages, in order to stimulate their enterprise. Both ways of arming are regulated by the articles entered into between the owners and crews.

Privateers are forbidden from doing any thing contrary to the law of nations, as to assault an enemy in a port or haven, under the protection of any prince or republic, be he friend, ally, or neutral; for the peace of such place must be preserved inviolable. — (*Molloy, De Jure Maritimo*, book i. c. 3.)

When letters of marque are granted, it is usual, in most countries, to exact security that the regulations with respect to the conduct of privateers shall be observed. In Great Britain, a bond for 1,500*l.* must be given by responsible persons, not concerned in the ship, for all ships carrying less than 150 men, and 3,000*l.* for every ship carrying more, that they will give full satisfaction for any damage or injury they may commit at sea, contrary to the regulations under which they are to act, and to their duty as privateers.

If privateers wilfully commit any spoil, depredation, or other injury, on friendly or neutral ships, or on the ships or goods of their fellow subjects, they are to be punished, according to the crime, either with death, or otherwise; and the vessels are subject to forfeiture.

Whether a ship taken be lawful prize, or not, shall be tried in the admiralty; and no ship or cargo, or part of a ship or part of a cargo, is to be sold, or disposed of in any way, till after judgment has been obtained.

If 2 ships with letters of marque accidentally meet with a prize at sea, though only one attack and take her, yet the other, being in sight, shall have an equal share of the prize, though he afforded no assistance in the capture; because his presence may be presumed to have struck terror into the enemy, and made him yield; which perhaps he would not have done, had his conqueror been single: so that all ships that are in sight, though they cannot come up to assist in the engagement, are entitled by the *common law* to a distribution of the spoil. — (*Beawes*, *Lex Mercatoria*, art. *Privateers.*)

If those to whom letters of marque are granted should, instead of taking the ship and goods appertaining to that nation against which the said letters are awarded, *wilfully* take or spoil the goods of another nation in amity with us, this would amount to *piracy*; and the person so offending would, for such fault, forfeit their vessel, and the penalties in which their securities are, according to custom, bound on taking out such letters. But such penalties would not follow, unless the capture were made in a piratical manner. For if the circumstances incident to the captured vessel were such as to afford a strong presumption that she really belonged to the country against which the letters were granted, the captors would not be liable to punishment, though they might be to damages. "It being impossible," says Beawes, "always to determine an affair of this sort at sea, it is allowable to bring a dubious capture into port, in order to more nice and just scrutiny and inspection; otherwise the goods of an enemy would often escape. However, to guard against unlawful seizures, the government have wisely directed sufficient caution to be given (as before-mentioned) for the due observance of the letters according to law, before they permit their issuing; and when there is a breach committed, the penalties are inflicted." — (*Lex Mercatoria*, art. *Privateers.*)

3. *Regulations for the Government of Privateers, &c.* — The following instructions to privateers were issued under an order in council, at the commencement of the last war with France, 16th of May, 1803: —

Art. I. *Against what, and where, Letters of Marque may act hostilely.* — It shall be lawful for the commanders of ships authorised by letters of marque and reprisals for private men-of-war, to set upon by force of arms, and subdue and take the men-of-war, ships and vessels, goods, wares, and merchandises, belonging to the French republic, or to any person being subjects to the French republic, or inhabitants within any of the territories of the French republic: but so that no hostility be committed, nor prize attacked, seized, or taken within the harbours of princes or states in amity with us, or in their rivers or roads, within the shot of their cannon, unless by permission of such princes or states, or their commanders or governors in chief of such places.

Art. II. *Captures to be brought into Port.* — The commanders of the ships and vessels so authorised as aforesaid, shall bring all ships, vessels, and goods, which they shall seize and take, into such port of *England*, or some other port of our dominions, as shall be most convenient for them, in order to have the same legally adjudged by our High Court of Admiralty of *England*, or before the judge of any other admiralty court, lawfully authorised, within our dominions.

Art. III. *Conduct of the Captors after the Capture is brought into Port.* — After such ships, vessels, and goods shall be taken and brought into any port, the taker, or one of his chief officers, or some other person present at the capture, shall be obliged to bring or send, as soon as possibly may be, 3 or 4 of the principal of the company (whereof the master, supercargo, mate, or boatswain, to be always 2) of every ship or vessel so brought into port, before the judge of our High Court of Admiralty of *England*, or his surrogate, or before the judge of such other admiralty court within our dominions, lawfully authorised as aforesaid, or such as shall be lawfully commissioned in that behalf, to be sworn and examined upon such interrogatories as shall tend to the discovery of the truth, concerning the interest or property of such ship or ships, vessel or vessels, and of the goods, merchandises, and other effects found therein; and the taker shall be further obliged, at the time he produceth the company to be examined, and before any monition shall be issued, to bring in and deliver into the hands of the judge of the High Court of Admiralty of *England*, his surrogate, or the judge of such other admiralty court within our dominions, lawfully authorised, or others commissioned as aforesaid, all such papers, passes, sea-briefs, charterparties, bills of lading, cockets, letters, and other documents and writings, as shall be delivered up or found on board any ship; the taker, or one of his chief officers, or some other person who shall be present at the capture, and saw the said papers and writings delivered up, or otherwise found on board at the time of the capture, making oath that the said papers and writings are brought and delivered in as they were received and taken, without any fraud, addition, subduction, or embezzlement whatever, or otherwise to account for the same upon oath, to the satisfaction of the court.

Art. IV. *Not to break Bulk before Judgment.* — The ships, vessels, goods, wares, merchandises, and effects, taken by virtue of letters of marque and reprisals as aforesaid, shall be kept and preserved, and no part of them shall be sold, spoiled, wasted, or diminished, and the bulk thereof shall not be broken, before judgment be given in the High Court of Admiralty of *England*, or some other court of admiralty lawfully authorised in that behalf, that the ships, goods, or merchandises are lawful prize.

Art. V. *Privateers to assist Ships in Distress.* — If any ship or vessel belonging to us, or our subjects, shall be found in distress by being in fight set upon or taken by the enemy, or by reason of any other accident, the commanders, officers, and company of such merchant ships or vessels as shall have letters of marque and reprisals as aforesaid, shall use their best endeavours to give aid and succour to all such ship and ships, and shall, to the utmost of their power, labour to free the same from the enemy, or any other distress.

Art. VI. *Application to the Admiralty for Letters of Marque.* — The commanders or owners of such ships and vessels, before the taking out letters of marque and reprisals, shall make application in writing, subscribed with their hands, to our high admiral of *Great Britain*, or our commissioners for executing that office for the time being, or the lieutenant or judge of the said High Court of Admiralty, or his surrogate, and shall therein set forth a particular, true, and exact description of the ship or vessel for which such letter of marque and reprisals is requested, specifying the burden of such ship or vessel, and the number and nature of the guns, and what other warlike furniture and ammunition are on board the same, to what place the ship belongs, and the name or names of the principal owner or owners of such ship or vessel, and the number of men intended to be put on board the same, and for what time they are victualled; also the names of the commanders and officers.

Art. VII. *Correspondence with the Admiralty.* — The commanders of ships and vessels having letters of marque and reprisals as aforesaid shall hold and keep, and are hereby enjoined to hold and keep, a correspondence, by all conveniences, and upon all occasions, with our high admiral of *Great Britain*, or our commissioners for executing that office for the time being, or their secretary, so as from time to time to render or give him or them, not only an account or intelligence of their captures and proceedings by virtue of such commission, but also of whatever else shall seem unto them, or be discovered and declared to them, or found out by them, or by examination of, or conference with, any marines or passengers of or in the ships or vessels taken, or by any other ways or means whatsoever, touching or concerning the designs of the enemy, or any of their fleets, ships, vessels, or parties, and of the stations, sea-ports, and places, and of their intents therein; and what ships or vessels of the enemy bound out or home, or where cruising, as they shall hear of; and of what else material in these cases may arrive at their knowledge; to the end such course may be thereon taken, and such orders given, as may be requisite.

Art. VIII. *What Colours a Privateer is to wear.* — No commander of any ship or vessel having a letter of marque and reprisals as aforesaid shall presume, as they will answer it at their peril, to wear any jack, pendant, or other ensign or colours usually borne by our ships; but, besides the colours usually borne by merchants' ships, they shall wear a red jack, with the Union jack described in the canton, at the upper corner thereof, near the staff.

Art. IX. *Not to ransom any Capture.* — No commander of any ship or vessel, having a letter of marque and reprisal as aforesaid, shall ransom, or agree to ransom, or quit or set at liberty, any ship or vessel, or their cargoes, which shall be seized and taken.

Art. X. *To deliver their Prisoners to the proper Commissioners.* — All captains or commanding officers of ships having letters of marque and reprisals shall send an account of, and deliver over, what prisoners shall be taken on board any prizes, to the commissioners appointed, or to be appointed, for the exchange of prisoners of war, or the persons appointed in the sea-port towns to take charge of prisoners; and such prisoners shall be subject only to the orders, regulations, and directions of the said commissioners; and no commander or other officer of any ship, having a letter of marque or reprisal as aforesaid, shall presume, upon any pretence whatsoever, to ransom any prisoner.

Art. XI. *Commission forfeited for acting contrary hereto.* — In case the commander of any ship, having a letter of marque and reprisal as aforesaid, shall act contrary to these instructions, or any such further instructions of which he shall have due notice, he shall forfeit his commission to all intents and purposes, and shall, together with his bail, be proceeded against according to law, and be condemned to costs and damages.

Art. XII. *Copies of Journals.* — All commanders of ships and vessels having letters of marque and reprisals shall, by every opportunity, send exact copies of their journals to the secretary of the admiralty, and proceed to the condemnation of the prizes as soon as may be, and without delay.

Art. XIII. *To observe all Orders.* — Commanders of ships and vessels having letters of marque and reprisals shall, upon due notice being given to them, observe all such other instructions and orders as we shall think fit to direct from time to time, for the better carrying on this service.

Art. XIV. *Violating these instructions.* — All persons who shall violate these, or any other of our instructions, shall be severely punished, and also required to make full reparation to persons injured contrary to our instructions, for all damages they shall sustain by any capture, embezzlement, demurrage, or otherwise.

Art. XV. *Bail to be given.* — Before any letter of marque or reprisal for the purposes aforesaid shall issue under seal, bail shall be given with sureties, before the lieutenant and judge of our High Court of Admiralty of *England*, or his surrogate, in the sum of 3,000*l.* sterling, if the ship carries above 150 men; and if a less number, in the sum of 1,500*l.* sterling; which bail shall be to the effect and in the form following: —

Which day, time and place, personally appeared
and who,
submitting themselves to the jurisdiction of the High Court of Admiralty of *England*, obliged themselves, their heirs, executors, and administrators, unto our Sovereign Lord the King, in

the sum of pounds of lawful money of *Great Britain*, to this effect; that is to say, that whereas is duly authorised by letters of marque and reprisals, with the ship called the of the burden of about tons, whereof he the said goeth master, by force of arms to attack, surprise, seize, and take, all ships and vessels, goods, wares, and merchandises, chattels and effects, belonging to the French republic, or to any persons being subjects of the French republic, or inhabiting within any of the territories of the French republic; excepting only within the harbours or roads within shot of the cannon of princes and states in amity with his Majesty. And whereas he the said hath a copy of certain instructions, approved of and passed by his Majesty in council, as by the tenour of the said letters of marque and reprisals, and instructions thereto relating, more at large appeareth: if therefore nothing be done by the said or any of his officers, mariners, or company, contrary to the true meaning of the said instructions, and of all other instructions which may be issued in like manner hereafter, and whereof due notice shall be given him; but that such letters of marque and reprisals aforesaid, and the said instructions, shall in all particulars be well and duly observed and performed, as far as they shall the said ship, master, and company, any way concern; and if they shall give full satisfaction for any damage or injury which shall be done by them or any of them to any of his Majesty's subjects, or of foreign states in amity with his Majesty, and also shall duly and truly pay, or cause to be paid, to his Majesty, or the customers or officers appointed to receive the same for his Majesty, the usual customs due to his Majesty, of and for all ships and goods so as aforesaid taken and adjudged as prize; and moreover if the said shall not take any ship or vessel, or any goods or merchandise, belonging to the enemy, or otherwise liable to confiscation, through consent or clandestinely, or by collusion, by virtue, colour, or pretence of his said letters of marque and reprisals, that then this bail shall be void and of none effect; and unless they shall so do, they do all hereby severally consent that execution issue forth against them, their heirs, executors, and administrators, goods and chattels, wheresoever the same may be found, to the value of the sum of pounds before mentioned; and in testimony of the truth thereof they have hereunto subscribed their names.

By his Majesty's command, (Signed) PELHAM.

PROMISSORY NOTES. See Banks and Banking.

PROTECTION, in mercantile navigation, a privilege granted to certain descriptions of seamen, by which they are protected from impressment. — (See Impressment.)

PRUNES and PRUNELLOES, a species of dried plums, of which there are many varieties. The finest are imported from France, in the south of which this fruit is very abundant. The best prunes are packed in hampers or baskets made of white osiers, weighing from 6 to 10 lbs. each; the second quality in quarters, and the third in puncheons. The entries of prunes for home consumption, in 1831 and 1832, amounted, at an average, to 6,285 cwt. a year. The duty is 1*l.* 7*s.* 6*d.* a cwt., being more than 50 per cent. upon the price of the inferior qualities. There cannot be a doubt that it would be more productive were it reduced to 10*s.* or 12*s.*

Prunes, the produce of Europe, may not be imported for home consumption except in British ships, or ships of the country of which they are the produce, or from which they are exported, on penalty of the forfeiture thereof and of 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 52. §§ 2. 22.)

PRUSSIAN BLUE, or PRUSSIATE OF IRON (Ger. *Berlinerblau;* Fr. *Bleu de Prusse;* It. *Azurro Prussiano;* Sp. *Azul de Prussia;* Rus. *Lasor Bexlinskaja*), a beautiful deep blue powder, accidentally discovered at Berlin in 1710. It is of considerable importance in the arts, being extensively used by painters: it is manufactured in this country. Many attempts have been made to render Prussian blue available for the dyeing of broad cloths, but without much success. The difficulty is to diffuse the colour equally over the surface; for, from its extraordinary vivacity and lustre, the slightest inequalities strike and offend the eye. Prussian blue resists the air and sun extremely well; but it cannot be used in the dyeing of cottons, or any sort of stuff that is to be washed with soap, as the alkali contained in the soap readily dissolves and separates the colouring matter. — (*Bancroft on Colours*, vol. ii. pp. 60—94.)

Blue is a favourite colour with the Chinese, and in 1810–11, the imports of Prussian blue into Canton from England amounted to 1,399 piculs, or 253,200 lbs. But, for some years past, the Chinese have not imported a single pound weight. The cause of the cessation of the trade deserves to be mentioned. A common Chinese sailor, who came to England in an East Indiaman, having frequented a manufactory where the drug was prepared, learned the art of making it; and on his return to China, he established a similar work there, with such success that the whole empire is now amply supplied with native Prussian blue! The West has derived many important arts from the East; but we incline to think that this is the first well authenticated instance of any art having ever been carried from the West to the East, by a native of the latter. But, in all that respects industry, ingenuity, and invention, the Chinese are incomparably superior to every other people to the east of the Indus.

PUBLICANS, are persons authorised by licence to retail beer, spirits, or wines. Under the term publicans are comprised innkeepers, hotel keepers, alehouse keepers, keepers of wine vaults, &c. An inn differs from an alehouse in this, — that the former is a place intended for the lodging as well as the entertainment of guests, whereas the latter is intended for their entertainment only. If, however, ale or beer be commonly sold in an inn, as is almost invariably the case, it is also an alehouse; and if travellers be furnished with beds, lodged, and entertained in an alehouse, it also is an inn. It is not material to the character of an innkeeper that he should have any sign over his door; it is sufficient that he makes it his business to entertain passengers and travellers, providing them with lodgings and other accommodations.

1. *Licensing of Publicans.* — The provisions with respect to the licensing of public houses are embodied in the 9 Geo. 4. c. 61., of which we subjoin an abstract.

General Meetings. — There shall be annually holden in county divisions, cities, and towns, a special session of justices, to be called the "*General Annual Licensing Meeting*," for the purpose of granting licences to persons keeping or about to keep inns, alehouses, &c.; such meetings to be held, in Middlesex and Surrey, within the first 10 days of the month of March; and in every other place between the 20th of August and the 14th of September, both inclusive.

Notice of General Meeting. — Within every division, 21 days before the annual licensing meeting, a petty session of justices to be held, a majority of whom shall fix the day and hour for holding the general annual meeting; and shall direct a precept to the high constable, requiring him, within 5 days after the

receipt thereof, to order the petty constables to affix on the door of the church, chapel, or other public place, a notice of such annual meeting, and give or leave at the dwelling-house of each justice acting for the division, and of each person keeping an inn, or who shall have given notice of his intention to apply for a licence to keep an inn, a copy of such notice. — § 2.

The annual meeting may be adjourned, but the adjourned meeting is not to be held on any of the 5 days immediately following the adjournment; and every adjournment to be held in the month of March in Middlesex and Surrey, and in August or September in every other county. — § 3.

Sessions for Transfer of Licences. — At the annual meeting, justices to appoint not less than 4 nor more than 8 special sessions, to be held as near as possible at equidistant periods, for the purpose of transferring licences. — § 4.

Notice of holding any adjourned meetings, or of any special session for the transfer of licences, to be given in the same manner and to the same parties as mentioned above. — § 5.

Justices disqualified. — No justice who is a common brewer, distiller, maker of malt for sale, or retailer of malt or any exciseable liquor, shall act or be present at any annual licensing meeting, or adjournment, or special session for transferring licences, or take part in the adjudication upon any application for a licence, or upon an appeal; nor in the case of licensing any house of which he is owner, or agent of the owner, or of any house belonging to any common brewer, maker of malt, &c. to whom he shall be, either by blood or marriage, the father, son, or brother, or with whom he shall be partner in *any other trade*; in any of these cases knowingly or wilfully to act, subjects to a penalty of 100*l.* But disqualification does not arise, where a justice, having no *beneficial interest* in a house licensed or about to be licensed, holds only the legal estate therein as trustee or for a charitable or public use. — § 6.

When in any liberty, city, or town, 2 qualified justices do not attend, the county justices may act. — § 7.

The power given to county justices not to extend to the Cinque Ports. — § 8.

Questions respecting licences to be determined, and licences to be signed, by a majority of the justices present. — § 9.

Application for a Licence. — Persons intending to apply for a licence to a house *not before licensed*, to affix a notice on the door of such house, and on the door of the church or chapel of the parish, and, where there shall be no church or chapel, on some other conspicuous place within the parish, on *three several Sundays*, between the 1st of January and the last day of February in the counties of Middlesex and Surrey, and elsewhere between the 1st of June and the last day of July, at some time between the hours of 10 in the forenoon and 4 in the afternoon, and shall serve a copy of such notice upon one of the overseers of the poor, and upon one of the constables or peace-officers of the parish, within the month of February in the counties of Middlesex and Surrey, and elsewhere within the month of July, prior to the annual meeting; such notice to be in a legible hand, or printed, and signed by the applicant. The application must state the Christian and surname of the party, with the place of his residence, and his trade or calling during the 6 months previous to the serving of the notice. — § 10.

Notice to transfer Licence. — Persons desirous of transferring a licence, and intending to apply to the next special sessions, must, 5 days previously, serve a notice upon one of the overseers and one of the constables of the parish. Persons hindered, by sickness or other reasonable cause, from attending any licensing meeting, and proof thereof adduced *on oath*, may authorise another person to attend for them. — § 12.

Licences to be in force, in Middlesex and Surrey, from the 5th of April; elsewhere from the 10th of October, for one whole year. — § 13.

Provision for Death or other Contingency. — If any person licensed shall die, or become incapable, or a bankrupt or insolvent, or if he, or his heirs, executors, or assigns, shall remove, or neglect to apply for a continuation of his licence, the justices at special session may grant a licence to the heirs, executors, or assigns of such party, or to any new tenant; or if any man's house should be, or be about to be, pulled down for a public purpose, or rendered, by fire, tempest, or other unforeseen calamity, unfit for the purposes of an inn, licence may be granted to the occupier, if he intend to open another house as an inn. Such transferred licences shall continue only in force to the end of the year; and in case of removal to another house, notice must be given on some Sunday, within 6 weeks before the special session, in the manner and form before described. — § 14.

Fees for Licences. — The clerk of the justices may lawfully receive from every person to whom a licence is granted, for trouble and *all expenses*, the following sums: —

	s.	*d.*
For constable or officer serving notices	1	0
For clerk of justices for licence	5	0
For precept to the high constable, and notices to be delivered by the petty constable	1	6

Clerks demanding or receiving more than these fees, to forfeit 5*l.* — § 15.

No sheriff's officer, or officer executing the process of any court of justice, qualified to hold or use any licence under this act. — § 16.

Excise Licences. — No licence for the sale of any exciseable liquors, to be consumed on the premises, shall be granted by the excise to any person, unless such person be previously licensed under this act. — § 17.

Penalties. — Any person *without a licence* selling or exchanging, or for valuable consideration disposing of, any exciseable liquor by retail, to be consumed in his premises; or *with a licence*, and, so selling in premises other than those specified in his licence, shall for every offence, on conviction before 1 justice, forfeit not exceeding 20*l.* nor less than 5*l.* with costs; but the penalty not to attach in case of death or insolvency, and sale by the heir or assigns, prior to the next special sessions. — § 18.

Every licensed person shall, if required, sell all liquors by retail (except in quantities less than a ½ pint) by the gallon, quart, pint, or ½ pint, sized according to the standard; in default thereof to forfeit the illegal measure, and pay not exceeding 40*s.* with costs, to be recovered within 30 days before 1 justice. — § 19.

In cases of riot, or probability of riot, houses licensed in the neighbourhood may be closed by the order of 2 justices. — § 20.

Any person convicted of a *first offence*, before 2 justices, against the tenour of his licence, to forfeit not exceeding 5*l.* with costs; guilty of a *second offence* within 3 years of the first, to forfeit not exceeding 10*l.* with costs; and guilty of a *third offence* within 3 years, to forfeit not exceeding 50*l.* with costs: or the case in the last instance may be adjourned to the petty sessions, or the annual meeting, or the general quarter sessions; and if the offender is found guilty by a *jury*, he may be fined 100*l.*, or adjudged to forfeit his licence, or both, and rendered incapable of selling any exciseable liquor in any inn kept by him for 3 *years*. — § 21.

Proceedings at the session in certain cases, may be directed by the justices to be carried on by the constable, and the expenses defrayed out of the county rates. — § 22.

Witnesses refusing to attend without lawful excuse, may be fined not more than 10*l.* — § 23.

Penalties against justices may be sued for in any court in Westminster; a moiety to the king, and a moiety to the party suing. — § 24.

Penalties adjudged by justices may be recovered by distress, or the party imprisoned 1, 3, or 6 calendar months. — § 25.

The next sections relate to the mode of prosecuting actions.

The last section of the act bears that the word "*inn*" shall include any inn, alehouse, or victualling house, in which is sold by retail any exciseable liquor, to be drunk or consumed on the premises; and the

words exciseable liquor are to include all such fermented or spirituous liquors as may now or hereafter be charged with any customs or excise duty. — § 37.

The act does not affect the two Universities, nor the privileges of the Vintners' Company, except those freemen who have obtained their freedom by redemption; and it does not alter the time of granting licences in the city of London.

Innkeepers are bound, by the tenour of their licence, to keep order in their houses, to prevent drunkenness and disorderly conduct, and gambling. If they fail in these respects, they forfeit their licence, and subject themselves to the penalties mentioned before. Allowing seditious or immoral books to be read in an inn, also forfeits the licence, and subjects to penalties. — (39 *Geo.* 3. c. 79. § 31.)

2. *Duties of Innkeepers.* — Innkeepers are bound by law to receive guests coming to their inns, and they are also bound *to protect their property when there.* They have no option to reject or refuse a guest, unless their house be already full, or they are able to assign some other reasonable and sufficient cause. Neither can they impose unreasonable terms on such as frequent their houses: if they do, they may be fined, and their inns indicted and suppressed. An innkeeper who has stables attached to his premises, may be compelled to receive a horse, although the owner does not reside in his house; but he cannot, under such circumstances, be compelled to receive a trunk or other dead thing. By the annual Mutiny Act, constables, or, in their default, justices of the peace, may quarter soldiers in inns, livery-stables, alehouses, &c., under the conditions and regulations set forth in the statute.

3. *Responsibility of Innkeepers.* — An innkeeper is bound to keep safely whatever things his guests deposit in his inn, or in his custody as innkeeper; and he is civilly liable for all losses, except those arising from *irresistible force,* or what is usually termed the act of God and the king's enemies. "It has long been holden," says Sir William Jones, "that an innkeeper is bound to restitution, if the trunks or parcels of his guests, committed to him either personally or through one of his agents, be damaged in his inn, or stolen out of it by any person whatever (except the servant or companion of the guest); nor shall he discharge himself of this responsibility by a refusal to take any care of the goods, because there are suspected persons in the house, for whose conduct he cannot be answerable: it is otherwise, indeed, if he refuse admission to a traveller because he really has no room for him, and the traveller, nevertheless, insist upon entering, and place his baggage in a chamber without the keeper's consent. Add to this, that if he fail to provide honest servants and honest inmates, according to the confidence reposed in him by the public, his negligence in that respect is highly culpable, and he ought to answer civilly for their acts, even if they should rob the guests that sleep in their chambers. Rigorous as this law may seem, and hard as it may actually be in one or two particular instances, it is founded on the great principle of public utility, to which all private considerations ought to yield; for travellers, who must be numerous in a rich and commercial country, are obliged to rely almost implicitly on the good faith of innholders, whose education and morals are usually none of the best, and who might have frequent opportunities of associating with ruffians or pilferers, while the injured guest could never obtain legal proof of such combinations, or even of their negligence, if no actual fraud had been committed by them. Hence the prætor declared, according to Pomponius, his desire of securing the public from the dishonesty of such men; and by his edict gave an action against them, if the goods of travellers or passengers were lost or hurt by any means except by inevitable accident (*damno fatali*): and Ulpian intimates, that even this severity could not restrain them from knavish practices or suspicious neglect." — (*Essay on the Law of Bailments,* 2d ed. pp. 95, 96.)

Even if an innkeeper bid the guest take the key of his chamber and lock the door, telling him that he cannot undertake the charge of the goods, still, if they be stolen, he is held to be responsible. In all such cases it is not competent to the innkeeper to plead that he took *ordinary* care, or that the *force* which occasioned the loss was truly irresistible. A guest is not bound to deliver the goods in special custody to the innkeeper, nor, indeed, to acquaint him that he has any. If he have property with him, or about his person, the innkeeper must be responsible for it without communication. But the innkeeper may require that the property of his guest be delivered into his hands, in order that it may be put into a secure place; and if the guest refuse, the innkeeper is not liable for its safety. The guest exonerates the innkeeper from liability, when he takes upon himself the exclusive custody of the goods, so as to deprive the innkeeper of having any care over them: thus, if a guest demand and have exclusive possession of a room, for the purpose of a shop or warehouse, he exonerates the landlord from any loss he may sustain in the property which he keeps in that apartment; but it is otherwise if he have not *the exclusive possession of the room.* The innkeeper cannot oblige the guest to take charge of his own goods; for this, in effect, would be a refusal to admit them into the inn. And it is no excuse for an innkeeper to say that he delivered the key of the chamber whence the property was stolen to the guest, who left the door open. A case of this sort occurred very recently, at Brighton. — A lady having left the door of her bed-room, of which she had the key, open for a few minutes, 50*l.* were abstracted from her reticule. The innkeeper contended that the plaintiff, by selecting particular apart-

ments, and taking the key, had exonerated him from his liability. The jury found for the plaintiff; and upon a motion for a new trial, Lord Tenterden said, — " By the common law of this country, and also by the civil law, the principle of the liability of innkeepers was founded on two reasons: first, to compel the landlord to take care that no improper company was admitted into his house; and, secondly, to prevent collusion. — The principle, as stated in the civil law, was this — ' *Ne, quisquam putet graviter hoc in eos constitum esse; nam est in ipsorum arbitrio nequem recipient; et nisi hoc esset statutum, materia daretur cum furibus, adversus eos quos recipiunt, coeundi: cum ne nunc quidem abstinent hujusmodi fraudibus.*' It was true that, in the present state of society, it was very difficult to prevent the intrusion of improper company into inns. But still the principle was such as he had stated it to be, and it would be dangerous to relax it; and he did not think that the taking rooms in this way was sufficient to discharge the landlord. Then, as to the objection that the cases did not extend to money, it was clear that money was as much within the principle as goods, and that no substantial distinction could be made. He was therefore of opinion that the verdict was right." — Rule refused.

A landlord may exempt himself from liability, if he can show that the loss was occasioned by the misconduct of the guest; as, if his goods are stolen by his own servant or companion.

It has been decided that a man is a guest at an inn, if he leave his horse at it, though he has not gone into it himself. If a man come to an inn, and make a contract for lodging for a set time, and do not eat or drink there, he is no guest, but a lodger, and, as such, not under the innkeeper's protection; but if he eat and drink, or pay for his diet there, it is otherwise. Any innkeeper or alehouse keeper, knowingly receiving and harbouring any person convicted of an offence against the revenue laws, for which he has been in prison, or for which he has fled, shall forfeit 100*l.* and have no licence for the future.

4. *Remedy of an Innkeeper against his Guest.* — An innkeeper may, without any agreement to that effect, detain the person of a guest who has eaten in his house, until payment; and he may do the same by the horses in his stable.

An innkeeper is not entitled to recover for spirits supplied to his guests, of the value of 20*s.* and upwards, unless supplied or contracted for at one time. — (23 *Geo.* 2. c. 40.)

By the custom of London and Exeter, if a man commit a horse to an hostler, and the expense of his keep become equivalent to his price, the hostler may appropriate the horse to himself upon the appraisement of four of his neighbours, or may have him sold. But innkeepers in other parts of the country have no power to sell horses detained by them.

A horse committed to an innkeeper cannot be detained as a security for the board of his master.

It is enacted by 11 & 12 Will. 3. c. 15. that innkeepers, alehouse keepers, &c. refusing to specify in an account the number of pints or quarts for which demand is made, or selling in unmarked measures, shall have no power to detain any goods or other things belonging to the person from whom demand is made, but shall be left to their action for recovery of the same.

PUMICE STONE (Ger. *Bimstein;* Fr. *Pierre pouce;* It. *Pietra pomice;* Sp. *Piedra pomez;* Lat. *Pumex*), a light, spongy, vitreous stone, found usually in the neighbourhood of volcanoes. It is used for polishing metals and marble, and smoothing the surface of wood and pasteboard. It is said to form a good glaze for pottery. The lighter pumice stones swim on water, their specific gravity not exceeding ·914. The island of Lipari, in the Mediterranean, is chiefly formed of pumice stone, and may be said to be the magazine whence all Europe is supplied with this useful article. There are several species of pumice stones; but those only that are light and spongy are exported. The price varies in the London market from 8*l.* to 10*l.* a ton.

PUTCHOCK. An article of this name is imported in considerable quantities from the north-west coast of India into China, and is regularly quoted in the Canton price currents. It is the root of a plant that grows abundantly in Sinde. When burned, it yields a fine smoke, and a grateful and diffusive smell. The Chinese beat it into a fine powder, which they burn as incense in the temples of their gods. — (*Hamilton's New Account of the East Indies,* vol. i. p. 126.)

Q.

QUARANTINE, a regulation by which all communication with individuals, ships, or goods, arriving from places infected with the plague, or other contagious disease, or supposed to be peculiarly liable to such infection, is interdicted for a certain definite period. The term is derived from the Italian *quaranta*, forty; it being generally supposed, that if no infectious disease break out within 40 days, or 6 weeks, no danger need be apprehended from the free admission of the individuals under quarantine. During this period, too, all the goods, clothes, &c. that might be supposed capable of retaining the infection, are subjected to a process of purification. This last operation, which is a most important part of the quarantine system, is performed either on board ship, or in establishments denominated *lazarettos.* — (See *post.*)

Policy of Quarantine. — The regulations as to quarantine are entirely precautionary: they have their origin in the belief that various diseases, but especially the plague, are contagious; and supposing such to be the case, the propriety of subjecting those coming from an infected or suspected place to a probation is obvious. Indeed, no government could, until the belief in question be proved to be ill founded, abstain from enforcing precautionary measures, without rendering itself liable to the charge of having culpably neglected one of its most important duties, — that of providing, by every means in its power, for the safety of its subjects. Latterly, however, it has been contended that the plague is never imported; that it is always indigenous; originating in some peculiar state of the atmosphere, or in something peculiar in the condition of the people; and that, consequently, quarantine regulations merely impose a heavy burden on commerce, without being of any real utility. But though there does not seem to be any reason for doubting that infectious diseases have originated in the way described, the fact that they have, in innumerable instances, been carried from one place to another, seems to be established beyond all question. Even if the evidence as to the importation of infectious diseases were less decisive than it is, or the opinions of medical men more divided, it would not warrant the repeal of the restraints on the intercourse with suspected ports. This is not a matter in which innovations should be rashly introduced; wherever there is doubt, it is proper to incline to the side of security. In some cases, perhaps, quarantine regulations have been carried to a needless extent; but they have more frequently, we believe, been improperly relaxed.

Institution of Quarantine. — The notion that the plague was imported from the East into Europe, seems to have prevailed in all ages. But it would appear that the Venetians were the first who endeavoured to guard against its introduction from abroad, by obliging ships and individuals from suspected places to perform quarantine. The regulations upon this subject were, it is most probable, issued for the first time in 1484. — (*Beckmann, Hist. of Invent.* vol. ii. art. *Quarantine.*) They have since been gradually adopted in every other country. Their introduction into England was comparatively late. Various preventive regulations had been previously enacted; but quarantine was not systematically enforced till after the alarm occasioned by the dreadful plague at Marseilles in 1720. The regulations then adopted were made conformably to the suggestions of the celebrated Dr. Mead, in his famous "Discourse concerning Pestilential Contagion."

Lazarettos or Pest-houses, are establishments constructed to facilitate the performance of quarantine, and particularly the purification of goods. They have usually a port in which ships from a suspected place may anchor; and, when perfect, are provided with lodgings for the crews and passengers, where the sick may be separated from the healthy; and with warehouses where the goods may be deposited; all intercourse between the lazaretto and the surrounding country being, of course, interdicted, except by permission of the authorities. The lazarettos at Leghorn, Genoa, and Marseilles, are the most complete of any in Europe. The facilities they afford to navigation are very great; for, as ships from suspected places may discharge their cargoes in the lazaretto, they are not detained longer than they would be were there no quarantine regulations. The goods deposited in the lazaretto, being inspected by the proper officers, and purified, are then admitted into the market.

Compared with these, the quarantine establishments in this country are exceedingly defective. There is not, even in the Thames, a lazaretto where a ship from a suspected place may discharge her cargo and refit: so that she is detained frequently at an enormous expense, during the whole period of quarantine; while, if she have perishable goods on board, they may be very materially injured. It is singular that nothing should hitherto have been done to obviate such grievances. The complaints as to the oppressiveness of quarantine regulations are almost wholly occasioned by the want of proper facilities for its performance. Were these afforded, the burdens it imposes would be rendered comparatively light; and we do not know that many more important services could be rendered to the commerce of the country, than by constructing a proper quarantine establishment on the Thames.

Bills of Health. — The period of quarantine varies, as respects ships coming from the same place, according to the nature of their bills of health. These are documents, or certificates, signed by the consul or other competent authority in the place which the ship has left, describing its state of health at the time of her clearing out. A *clean* bill imports that, at the time of her sailing, no infectious disorder was known to exist. A *suspected*, or, as it is more commonly called, a *touched* bill, imports that rumours were afloat of an infectious disorder, but that it had not actually appeared. A *foul* bill, or the *absence of clean bills*, import that the place was infected when the vessel sailed. — (See Bills of Health.) The duration of the quarantine is regulated by the nature of these instruments. They seem to have been first issued in the Mediterranean ports in 1665, and are obviously of great importance.

Quarantine Regulations. — The existing quarantine regulations are embodied in the act 6 Geo. 4. c. 78., and the different orders in council issued under its authority. These orders specify what vessels are liable to perform quarantine; the places at which it is to be performed; and the various formalities and regulations to be complied with. The publication in the *Gazette* of any order in council with respect to quarantine is deemed sufficient notice to all concerned; and no excuse of ignorance is admitted for any infringement of the regulations. To obviate, as far as possible, any foundation for such plea, it is ordered that vessels clearing out for any port or place with respect to which there shall be at the time any order in council subjecting vessels from it to quarantine, are *to be furnished* with an abstract of the quarantine regulations; and are to *to furnish themselves* with quarantine signal flags and lanterns, and with materials and instruments for fumigating and immersing goods. The following are the clauses in the act as to signals: —

Every commander, master, or other person having the charge of any vessel liable to quarantine, shall, at all times, when such vessel shall meet with any other vessel at sea, or shall be within 2 leagues of the coast of the United Kingdom, or the islands of Guernsey, Jersey, Alderney, Sark, or Man, hoist a signal to denote that his vessel is liable to quarantine; which signal shall in the day time, if the vessel shall have a clean bill of health, be a large yellow flag, of 6 breadths of bunting, at the main topmast-head; and if such vessel shall not have a clean bill of health, then a like yellow flag, with a circular mark or ball, entirely black, in the middle thereof, whose diameter shall be equal to 2 breadths of bunting; and in the night time, the signal shall in both cases be a large signal lantern with a light therein (such as is used on board his Majesty's ships of war), at the same mast-head: and such commander, master, or other person, shall keep such signals hoisted during such time as the said vessel shall continue within sight of such other vessel, or within 2 leagues of the said coast or islands, and while so in sight, or within such distance, until such vessel so liable to quarantine shall have arrived at the port where it is to perform quarantine, and until it shall have been legally discharged from the performance thereof; on failure whereof, such commander, master, or other person, shall forfeit 100*l.* — § 8.

Every commander, master, or other person having the charge of any vessel on board whereof the plague or other infectious disease highly dangerous to the health of his Majesty's subjects shall actually be, shall at all times, when such vessel shall meet with any other vessel at sea, or shall be within 2 leagues of the coast of the United Kingdom, or the islands of Guernsey, Jersey, Alderney, Sark, or Man, hoist a signal, to denote that a vessel has the plague or other infectious disease; which signal shall be in the day time a flag of yellow and black, borne quarterly, of 8 breadths of bunting, at the main topmast-head; and in the night time, the signal shall be 2 large signal lanterns, commonly used on board ships of war, one over the other, at the same mast head: and such commander, master, or other person, shall keep such signal hoisted during such time as the said vessel shall continue within sight of such other vessel, or within 2 leagues of the coast or islands aforesaid, while so in sight, or within such distance, until such vessel shall have arrived at the port where it is to perform quarantine, and until it shall have been legally discharged from the performance thereof; on failure thereof, such commander, master, or other person, shall forfeit 100*l.* — § 9.

If any commander, master, or other person, knowing that the same is not liable to the performance of quarantine, shall hoist such signal, by day or night, such commander or other person shall forfeit 50*l.* — § 10.

But, instead of printing the act, and the various orders in council that have grown out of it, it will be sufficient to lay the following abstract of them before the reader. This abstract has been prepared by the Custom-house; and contains a distinct summary of the various rules and regulations to be complied with.

Abstract of Quarantine Regulations.

It is in the first place to be observed, that all persons are presumed to know, and are bound to take notice, not only of the quarantine regulations established by act of parliament (as they are of any other public act), but likewise of every order in council made for the performance of quarantine, and published in the *London Gazette;* and as it is easily in their power to inform themselves of such regulations, and particular care is taken by this and other means to promulgate such of them as apply to their respective situations, *previously to their being actually put under quarantine*, when they will receive directions for their guidance from the quarantine officers, no plea of ignorance will be admitted as an excuse for any neglect, breach, or violation thereof; but for the sake of example, and for the security of the public health, the pains, penalties, and punishments of the law will be enforced with the utmost severity.

Duty of Commanders and Masters of Vessels.

Upon arrival off the coast of the United Kingdom, or the islands of Guernsey, Jersey, Alderney, Sark, or Man,

To deliver to the pilot who shall go on board, a written paper, containing a true account of the name of the place at which his ship loaded, and of all the places at which he touched on the homeward voyage. Neglecting or refusing to deliver such papers, or making any false representation or wilful omission therein, subjects him to a penalty of 500*l.*

Upon entering or attempting to enter any port, and being spoke by any quarantine officers,

To give a true answer in writing or otherwise, and upon oath or not upon oath (according as he shall be required), to the preliminary questions put to him by such quarantine officer, for the purpose of ascertaining whether his vessel is or is not liable to quarantine. Neglecting or refusing to bring his vessel to as soon as it can be done with safety, in obedience to the requisition of the quarantine officer, subjects him to the penalty of 200*l.*

Refusing to answer such questions, or giving any false answer thereto (if not upon oath), subjects him to the penalty of 200*l.*

If upon oath, to the punishment for wilful and corrupt perjury.

If any infectious disease shall appear on board, the master is to repair to such place as his Majesty shall direct, and make known his case to the officer of customs, and he is to remain at that place until directions are given by the Lords of the Privy Council. He is not to permit any of the crew or passengers on board to go on shore, and he, his crew, and passengers, are to obey such directions as are received from the Lords of the Privy Council.

Not acting in conformity to the regulations herein directed, or acting in disobedience to such directions as shall be received from the privy council, he incurs the penalty of 100*l.*

If informed by the pilot that his vessel has become liable to quarantine, by reason of any proclamation made subsequent to his departure, to hoist and keep hoisted a like signal, under the same penalty of 100*l.*

To give to the pilot coming on board a written paper containing a true account of the different articles composing his cargo. Neglecting or refusing to do so, or making a false representation or wilful omission, subjects him to a penalty of 50*l.*

Masters of vessels liable to quarantine, and other persons on board them or having communication with them, are to repair to the appointed quarantine stations, and may be compelled to do so by force.

The master of any vessel having disease on board, on meeting with any other vessel at sea, or within 2 leagues of the coast of the United Kingdom, or the islands of Guernsey, Jersey, Alderney, Sark, or Man, is to hoist a signal to denote that his vessel has such disease on board, and is to keep such signal hoisted during such time as he shall continue within sight of such vessel, or within 2 leagues of the coast or islands aforesaid, while so in sight or within such distance, until the vessel shall arrive at the port where she is to perform quarantine, and until she shall be legally discharged from the performance thereof. Failing herein, the master incurs the penalty of 100*l.*

If he shall refuse or omit to disclose the circumstances of such infection prevailing either at any place at which he has been, or on board his vessel, in his answers to the preliminary questions put to him by the quarantine officer, or if he shall wilfully omit to hoist, and to keep hoisted, the proper quarantine signal to denote that his ship is liable to quarantine, he incurs the penalty of 300*l.*

Upon attempting to enter any port, which is not the port at which he ought to perform quarantine, he may be compelled to desist therefrom, in order that he may proceed to the proper quarantine ports, by guns being fired upon the ship, or any other kind of force being used that may be necessary for the attainment of that object.

Quitting or knowingly suffering any seamen or passenger to quit his ship, by going on shore, or by going on board any other vessel or boat, before discharged from quarantine, or,

Not repairing to the proper quarantine station within a convenient time after due notice given, incurs a penalty of 100*l.*

To repair in all cases to the proper quarantine port, as herein-after stated in the Appendix, according as he shall or shall not be furnished with a clean bill of health, and according to the port or place to which he shall be bound, as herein stated.

But if through ignorance, or by stress of weather, damage, loss, or accidents of the seas, he shall have passed the proper quarantine port, he may (having a clean bill of health on board, and upon giving satisfactory proof thereof upon oath, and by the oath of the pilot, if any on board, and that the same was not wilfully or intentionally done or occasioned) be permitted to proceed to some other quarantine port, in the discretion of the quarantine officer, keeping the proper quarantine signal hoisted during the whole time.

Upon his arrival at the proper quarantine port, to give true answers upon oath to all the quarantine questions, and to make oath to the truth of his log-book, and the times at which the entries were therein made: failing herein, he incurs the penalty of wilful and corrupt perjury.

He is also to repair to the particular station which shall be appointed by the quarantine officer for the said ship or vessel.

To deliver up to the quarantine officer his bill of health, manifest, log-book, and journal.

Wilfully refusing or neglecting so to do, subjects him to a penalty of 100*l.*

If not bound to any port of the United Kingdom, or the islands aforesaid, and attempting to enter any port thereof (except to wait for orders, or in consequence of stress of weather or accidents of the seas), he shall give satisfactory proof thereof to the quarantine officer, and give true answers upon oath to the preliminary questions, and strictly conform to all such directions as he shall receive from the quarantine officer, touching his continuance at such port, or departure from thence, or repairing to any other; and also with respect to all other quarantine regulations; in default of which, he may be compelled to proceed to sea by any means or by any kind of force that shall be necessary for that purpose.

Having performed quarantine in any foreign lazaret, the vessel is to be put under quarantine at some of the ports herein-after appointed, until the master shall produce to the quarantine officer the proper documents in proof thereof; upon production whereof the said vessel shall not be obliged to perform quarantine, but shall remain at such station until released by order in council.

Unshipping, or moving in order to unship, any goods from on board any vessel liable to quarantine, subjects to a penalty of 500*l.*

Clandestinely conveying, or secreting or concealing for the purpose of conveying, any letter, goods, or other articles, from any vessel actually performing quarantine, subjects to a penalty of 100*l.*

Note. — Every commander or master of any vessel clearing out or about to sail for any port or place in the Mediterranean, or in the West Barbary on the Atlantic Ocean, or for any port or place respecting which there shall at the time be any order of his Majesty in council in force, subjecting vessels coming from thence to quarantine, is to receive from the principal officer of the customs at such port or place, this printed Abstract of the Quarantine Regulations, which such commander or master is to cause to be affixed on some convenient and conspicuous part of his said vessel, and to remain so affixed until his return with his said vessel to some port or place in the United Kingdom or the islands aforesaid.

And every such commander and master is likewise to provide and take on board 1 at least of each of the proper quarantine signal flags and lanterns, and likewise materials and instruments for fumigation, and immersion, and to keep the same on board, to be used upon his return to the United Kingdom or the islands aforesaid.

Duty of Pilots.

Pilots are strictly to observe the following directions: —

To receive an account in writing from every commander or master of any vessel coming from foreign parts, of the places at which his vessel loaded, and at which he touched on his said homeward voyage.

To give notice to such commander or master of any proclamation, or order in council, made after the departure of such vessel from the United Kingdom or the islands aforesaid, and then in force, by which vessels coming from any place mentioned in such account shall be liable to quarantine. Neglecting or omitting to give such notice subjects them to a penalty of 100*l.*

To give a like notice of any proclamation then in force, by which vessels having on board any of the articles mentioned in the master's account shall be liable to quarantine. Neglecting or omitting to give such notice subjects them to a penalty of 100*l.*

To remain on board in the same manner as any of the officers, crew, or passengers, and not to quit the said vessel before or after the arrival, either by going on shore, or by going on board any other vessel or boat with intent to go on shore, until she is regularly discharged from quarantine; and they may be compelled by any persons whatsoever, and by any kind of necessary force, to return on board the same. If they offend herein they incur a penalty of 300*l.* and 6 months' imprisonment.

Not to bring any such vessel into any port or place other than the port or place appointed for the reception of vessels so liable to quarantine, as stated in the Appendix, unless compelled by stress of weather, adverse winds, or accidents of the seas, of which the pilot, as well as the commander or master of the vessel, is to give satisfactory proof upon oath. If they offend herein they incur a penalty of 200*l.*

To bring the ship to, as soon as it can be done with safety, in obedience to the requisition of the quarantine officer. Failing herein subjects them to a penalty of 100*l.*

Duty of other Persons.

When any infectious disease actually appears on board any vessel, all persons on board are to obey the direction of the privy council, under a penalty of 100*l.*

Not to quit such vessel, either by going on shore, or by going on board any other vessel or boat with intent to go on shore, until regularly discharged from quarantine; and if they quit the ship they may be compelled by any persons whatsoever, and by any kind of necessary force, to return on board the same; and are also liable to a penalty of 300*l.* and 6 months' imprisonment.

Whether liable to quarantine, or actually performing quarantine, or having had any intercourse or communication with any such persons so liable to or under quarantine, all persons are to obey all such orders as they shall receive from the quarantine officer, and to repair to the lazaret, vessel, or place appointed for the performance of quarantine. Wilfully refusing or neglecting to repair forthwith, when required so to do by such officers, or escaping from or out of such lazaret, vessel, or place, may be compelled to repair or return thereto by any kind of necessary force, and are subject to a penalty of 200*l.*

Landing or unshipping, or moving in order to the landing or unshipping, of any goods, packets, packages, baggage, wearing apparel, books, letters, or any other articles whatever, from vessels liable to quarantine, are liable to a penalty of 500*l.*

Clandestinely conveying, or secreting or concealing for the purpose of conveying, any goods, letters, or other articles as aforesaid, from any vessel actually performing quarantine, or from the lazaret or other place where such goods or other articles shall be performing quarantine, are liable to a penalty of 100*l.*

Having quitted or come on shore from any vessel liable to or under quarantine, or having escaped from any lazaret or other place appointed in that behalf, may be seized and apprehended by any constable or other peace officer, or by any other person whatever, and carried before a justice of the peace, who may grant his warrant for conveying such person to the vessel, lazaret, or other place from which he shall have escaped, or for confining him in any place of safe custody (not being a public gaol) until directions can be obtained from the privy council.

Knowingly and wilfully forging or counterfeiting, interlining, erasing, or altering, or procuring to be forged, &c., any certificate directed by any order in council touching quarantine, or publishing the same as true, or uttering any such certificate with intent to obtain the effect of a true certificate, knowing its contents to be false, are guilty of felony.

What Vessels are liable to Quarantine.

All vessels (as well ships of war as all others) with or without clean bills of health, coming —

From or having touched at any place in the Mediterranean, or the West Barbary on the Atlantic ocean.

From any other place from which his Majesty shall from time to time adjudge it probable (and shall so declare by proclamation or order in council) that the plague, or any other infectious disease or distemper highly dangerous to the health of his Majesty's subjects, may be brought.

Note. — They are considered as liable to quarantine from the time of their leaving any of the said places.

All vessels having communication with any of the before-mentioned ships or vessels, or receiving —

Any person whatever from or out of such vessel, whether such person shall have come from any of the said places, or shall have gone on board of such vessel, either in the course of her voyage, or upon her arrival off the coast of the United Kingdom, &c. — Or,

Any goods, wares, or merchandise, packets, packages, baggage, wearing apparel, goods, letters, or any other articles whatever, from or out of such ship or vessel.

Note. — They are liable to quarantine from the time of their receiving any such persons or goods.

All vessels coming from any port or place in Europe without the Straits of Gibraltar, or on the continent of America, and having on board —

Any of the articles enumerated (a list of which articles see in the Appendix);

And not producing a declaration upon oath, made by the owner, proprietor, shipper, or consignee, stating either that such articles are not the growth, produce, or manufacture of Turkey, or of any place in Africa within the Straits of Gibraltar, or in the West Barbary on the Atlantic Ocean, or stating of what place they are the growth, produce, or manufacture.

All vessels and boats receiving —

Any of the said goods, wares, and merchandise, or other articles enumerated.

Signals.

For vessels with the plague or other highly infectious disease actually on board —

In the day time — A flag of yellow and black, borne quarterly, of 8 breadths of bunting, at the main topmast-head.

In the night time — Two large signal lanterns, with a light therein, such as are commonly used on board his Majesty's ships of war, one over the other, at the same mast-head.

For vessels with clean bills of health —

In the day time — A large yellow flag, of 6 breadths of bunting, at the main-topmast-head.

In the night time — A large signal lantern, with a light therein, such as is commonly used on board his Majesty's ships of war, at the same mast-head.

For vessels without clean bills of health —

In the day time — A large yellow flag, with a circular mark or ball, entirely black, in the middle thereof, whose diameter shall be equal to 2 breadths of bunting, at the main topmast head.

In the night time — Same as for vessels with clean bills of health.

Note. — Every commander or master of a vessel about to sail for the Mediterranean, or for any place respecting which an order in council shall be in force, subjecting vessels coming from thence to quarantine, to be provided with the quarantine signals above mentioned, and to keep the same on board, to be used on his return to the United Kingdom.

Any commander or master hoisting either of the said quarantine signals, by day or night, knowing that his vessel is not liable to quarantine, incurs the penalty of 50*l.*

APPENDIX. — *A List of Articles enumerated considered as most liable to Infection.*

Apparel of all kinds
Artificial flowers
Bast, or any articles made thereof
Beads, bracelets, or necklaces in strings
Beds and bed ticks
Books
Brooms of all sorts
Brushes of all sorts
Burdets
Camlets
Canvass
Carmenia wool
Carpets
Cordage not tarred
Cotton wool
Cotton yarn
Cotton thread
All articles wholly made of or mixed with cotton, silk, wool, thread, or yarn
Down
Feathers
Flax
Furriers' waste
Goats' hair
Gold or silver on thread, cotton, hair, wool, or silk, or any other substance herein-before mentioned
Grogram
Hats, caps, or bonnets of straw, chip, cane, or any other material
Hemp
Hoofs
Horn and horn tips
Hair of all sorts
Leather
Linen
Lute strings, bathings, or harp strings
Maps
Mattresses
Mats and matting
Mohair yarn
Nets, new or old
Paper
Packthread
Parchment
Pelts
Platting of bast, chip, cane, straw, or horse hair
Quills
Rags
Sails and sail cloths
Silk, viz. — crapes and tiffanies, husks and knubs, raw silk, thrown and organzine silk, waste silk, wrought silk
Skins, hides, and furs, and parts or pieces of skins, hides, and furs, whether undressed, or in part or wholly tanned, tawed, or dressed
Sponges
Straw, or any article made or mixed with straw
Stockings of all sorts
Thread, tow, vellum, whisks, wool whether raw or anywise wrought
Yarn of all sorts
And all other goods whatsoever, if they shall have arrived in or with packages consisting wholly or in part of any of the said articles.

Quarantine Ports. — *For Vessels liable to Quarantine not coming from any Place actually infected, nor having any Infection actually on Board.*

Without clean Bills of Health.

All vessels, ships of war, &c. as herein-after specified, to perform quarantine at *Standgate Creek* or *Milford Haven*.

Ships of war, transports, or other ships in the actual service of government, under the command of a commissioned officer in the service of his Majesty's navy, whithersoever bound, to perform quarantine at the *Motherbank*, near *Portsmouth*, at a place marked out with yellow buoys.

With clean Bills of Health.

All ships and vessels bound to the following places, to perform quarantine at *Standgate Creek*: —

London, Rochester, Faversham, or any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Whitebooth Road*, between *Hull* and *Grimsby*: —

Leigh	Wisbeach
Maldon	Boston
Colchester	Grimsby
Harwich	Hull
Ipswich	Bridlington
Woodbridge	Scarborough
Aldborough	Whitby
Southwold	Stockton
Yarmouth	Sunderland
Blackney and Clay	Newcastle
Wells	Berwick
Lynn	

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Bamboro' Pool*, near *Liverpool*, or *Milford Haven*: —

Carlisle	Liverpool
Whitehaven	Chester
Lancaster	Beaumaris
Preston	Isle of Man

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at the *Motherbank*, near *Portsmouth*: —

Sandwich	Arundel
Deal	Chichester
Dover	Portsmouth
Rye	Southampton
Newhaven	Cowes
Shoreham	

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *St. Just's Pool*, within the mouth of the harbour of *Falmouth*: —

Poole	Fowey
Weymouth	Falmouth
Lyme	Gweek
Exeter	Penryn
Dartmouth	Truro
Plymouth	Penzance
Looe	Scilly

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *King Road* and *Portshute Pill*: —

Bridgewater	Chepstow
Minehead	Cardiff
Bristol	Swansea
Gloucester	

And any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Milford Haven*: —

St. Ives	Llanelly
Padstow	Pembroke
Bideford	Milford
Barnstaple	Cardigan
Ilfracombe	Aberystwith

Or any creeks or places belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at the *Motherbank*, near *Portsmouth*, or *St. Just's Pool*, within the mouth of the harbour of *Falmouth*: —

Jersey	Sark
Guernsey	Alderney

Or either of them, or any part of them, or either of them.

All ships and vessels bound to the following places, to perform quarantine at *Inverkeithing Bay*: —

The eastern coasts of Scotland, comprehending the ports of Leith	Anstruther
Borrowstoness	Prestonpans
Alloa	Dundee
Dunbar	Perth
Kirkaldy	Montrose
	Aberdeen

Or any member, creek, or other place belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Holy Loch*, in the *Frith of Clyde*: —

The western coast of Scotland, comprehending the ports of Glasgow	Rothsay
Greenock	Fort William
Irvine	Ayr
Campbell Town	Port Patrick
Oban	Stranraer
	Wigtown

Or any member, creek, or other place belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Inverkeithing Bay*: —

The northern ports of Scotland, comprehending the ports of Inverness	Orkney
Zetland	Caithness
	Stornaway

Or any member, creek, or other place belonging to or within any or either of the above ports.

All ships and vessels bound to the following places, to perform quarantine at *Holy Loch*, in the *Frith* of *Clyde*: —

The south-west ports of Scotland, comprehending the ports of Dumfries and Kircudbright, or any member, creek, or other place belonging to or within any or either of the above ports.

Bound to any port of Ireland, between Missen Head and Tuskard, to perform quarantine at the *Bay of Baltimore*.

Bound between Tuskard and Rathlin, to perform quarantine at *Lough Larn* and the *Bay of Carlingford*, near *Killoween Point*, opposite to the town of *Carlingford*.

Bound to Rathlin and Tory Island, to perform quarantine at *Ballymastoker Bay* or *Red Castle Road*, near *Londonderry*.

Bound to Tory Island and Blacksod Bay, to perform quarantine at the harbour of *Killy Begs*.

Bound to Loop Head and Missen Head, to perform quarantine at *Scattery Bay*, in the river of *Limerick*.

Bound to any place on the coasts of the United Kingdom, not within any of the ports or limits herein-before mentioned or described, to perform quarantine at such places herein-before appointed for performance of quarantine, as shall be nearest to the port or place to which such vessels respectively shall be so bound.

Preliminary Questions.

1. What is the name of the vessel, and the name of the commander or master?
2. Are you the commander or master? Where does she belong?
3. From whence do you come?
4. To what place are you bound?
5. At what ports have you touched since you left the port of your lading on your homeward voyage?
6. What vessels have you had intercourse or communication with on your passage, and from whence did they come?
7. Did the plague or any other infectious disease or distemper prevail in any degree at the place from whence you sailed on your homeward voyage, or at any of the places at which you have touched? If at any, say at which, and when. Are any persons on board your ship suffering under any infectious disease? or have any persons died or been ill of a disease of that nature on the homeward passage? and if any, what number? And if any have died or been ill of such disease, were heir bedding and clothes destroyed?

[If the vessel shall have sailed from any port in Europe without the Straits, or on the continent of America.]

8. Have you on board any goods enumerated in this list?

[Handing up a list of articles enumerated.]

If you have, specify the same, and whether they are of the growth, produce, or manufacture of Turkey, or of any place in Africa within the Straits of Gibraltar, or in the West Barbary on the Atlantic Ocean, or of what other place? Have you any declaration to prove of what place they are the growth, produce, or manufacture?

[If the vessel comes from the Mediterranean, or from any other place respecting which there is any order in council in force concerning quarantine.]

9. Have you any, and what bill of health?
10. What number of officers, mariners, and passengers have you on board?

[And in cases of vessels coming from or having touched at any port or place on the continent of America, or the islands adjacent thereto, or coming from or having touched at any ports in the West Indies, the following questions are to be put, in addition to the aforesaid questions:]

11. In the course of your voyage have any persons on board suffered from sickness of any kind? What was the nature of such sickness? and when did it prevail? How many persons were affected by it? and have any of them died in the course of the voyage?
12. How long after sailing from your port of lading, or having touched at any port on the continent of America or the islands adjacent thereto, or any of the ports in the West Indies, was the first appearance of disease observed?
13. How had the persons attacked been employed before they came on board?
14. Had they been employed in loading or unloading the vessel before she left the port?
15. Had the place which they inhabited before they sailed, the reputation of being healthy; or was it subject particularly to the fever incident to the country?
16. Had the fever been frequent in the place before the vessel sailed?
17. Did the persons who were ill on board your vessel fall sick nearly about the same time, or within a few days of each other? Or, did the disorder spread successively from one to another, and increase considerably? Or, did it abate gradually, and cease to multiply as the distance from the ports you sailed from or touched at as aforesaid increased?
18. What was the greatest number of persons ill at the most sickly period of your voyage?
19. What was the whole number of persons on board your vessel when you sailed?
20. What is the whole number of persons now ill on board your vessel?
21. Can you state what were the symptoms of illness with which your crew were first attacked; and what was the daily succession and change in them till their death
22. Whether any and what medicines have been used? and what methods have been adopted to prevent its spreading among the crew?
23. Whether attention has been paid to cleanliness and ventilation on board your vessel?

24. When did you sail from the port or place from whence you took on board your outward cargo? and at what place did you touch before you arrived at the port or place where you took in your present cargo?
25. Did you carry any bill of health with you to the port or place where you took in the cargo you have now on board? From what place? Were the said bills of health clean, unclean, or suspected?

Quarantine Questions.

1. What is the name of the vessel, and the name of her commander or master?
2. Are you the commander or master?
3. To what port or place does she belong?
4. When did you sail from the port or place from whence you took on board your outward cargo? and at what places did you touch before you arrived at the port or place where you took in your present cargo?
5. Did you carry any bill or bills of health with you to the port or place where you took in the cargo you have now on board? From what place? Were the said bills of health clean, unclean, or suspected?
6. From what port or place does she now come? When did you sail from such port or place? and at what place or places have you touched in the course of the voyage?
7. Have you any bill or bills of health on board? From what place or places? Are the same clean, unclean, or suspected? Produce them.

[If the vessel shall have sailed from any port or place in Europe without the Straits, or on the continent of America.]

8. Of what articles does your cargo consist? Have you on board any goods enumerated in this list?

[Handing up a list of articles enumerated.]

If you have, specify the same, and whether they are of the growth, produce, or manufacture of Turkey, or of any place in Africa, within the Straits of Gibraltar, or in the West Barbary on the Atlantic Ocean, or of what other place. Have you any declaration to prove of what place they are the growth, produce, or manufacture?
9. At what place or places was the cargo or any part thereof taken on board? On what day did you arrive at the place or places where you took in the whole, or any and what part of the cargo? And on what day did you sail from such place or places? And what part of your cargo was taken in at each place, and when?
10. Did the plague or any other infectious disease or distemper prevail in any degree at the places from whence you sailed, or at any of the places at which your cargo was taken on board, or at which you touched? If at any, say at which, and when.
11. Did you hear of any report, or are you aware of any suspicion having existed, at the time of your sailing, that the plague or any other infectious disease prevailed at the place from whence you sailed, or at any other place in the Mediterranean (or in America or the West Indies, as the case may be)?
12. What number of officers, mariners, passengers, or other persons have you on board? Describe the number of each.
13. At what port did you take on board your passengers?
14. Were they residents at that place, or had they been embarked as passengers on board any other vessel from any other places? and from what places and at what time?
15. Do the said officers, mariners, passengers, and other persons, consist of the same individuals as were on board at the port from which you sailed upon your homeward voyage? If any other persons have been taken on board, or if any of your officers, crew, or passengers, have quitted your vessel since you sailed from such port, or before your arrival at this place, or if any other alterations in that respect have taken place, specify the same, the causes and the time or times of such alterations.
16. What number of persons (if any) have died on board during the voyage outwards and homewards, or at any port at which you have touched? When, and in what part of the voyage did such person or persons die? Of what disease or distemper?
17. Have any of your officers, mariners, or other persons of your crew, who sailed with you on your outward voyage, died or left the vessel?
18. In the course of your voyage outwards or homewards, or at any port at which you have touched, have any persons on board suffered from sickness of any kind? What was the nature of such sickness? When did it prevail? How many persons were affected by it? Are there any convalescents on board? Or, are all persons on board at present in good health?
19. Were any of those who died, or who have been sick in the course of the voyage, or any port at which you have touched, affected, or suspected to have been affected, by any infectious disease or distemper? Were the bedding and clothes of such deceased and sick persons destroyed? If so, when and in what manner were any of the persons immediately employed about the sick afterwards taken ill? If so, of what disease? and in how many days after having been so employed?
20. At what precise time did such deaths happen? In how many days after being indisposed did the sick die? What were the most obvious appearances of the disease?
21. Have you spoken to or otherwise had any communication with any vessels at sea, during the voyage? What were the names of such vessels? and to what country, port, or place did they belong? From what ports or places were they coming, or at what ports or places had they touched on their voyage? and to what country, ports, or places were they bound? What was the nature of the communication held? What do you know respecting the state of health on board such vessels.
22. Have there been any letters, parcels, or other articles delivered out of or received into your vessel, from any vessel or boat met with on the voyage, or before or since your arrival at this place? And what were such letters, parcels, or articles? And where were the same delivered or received? and into or out of what vessel or boat?
23. Have you any packages or parcels which you have taken charge of? If so, what are their contents? and when and where did you take them on board?
24. What pilots or other persons from the shores of the United Kingdom, or from the islands of Scilly, Guernsey, Jersey, Alderney, Sark, or Man, have been or are now on board your vessel, or have had any communication whatever with the ship's company, or any of the passengers, during the voyage homewards, or before or since your arrival at this place? If any such pilots or other persons have come on board, and have afterwards quitted your vessel, specify the names of such persons, and the time, manner, and circumstances of their so quitting your vessel.
25. Did you leave any British vessels at any of the ports you sailed from? If you did, mention their names and the names of their commanders?
26. Were such vessels loading? were they they near their departure? and whither were they bound?
27. Did you meet with any British vessels at any of the places you touched at? If you did, say when, where, and what were the names and destinations of such vessels; and to what ports or places did they belong?
28. Do you know whether any foreign vessels loading at the port from which you sailed, were bound beyond the Straits of Gibraltar? And if so, what were they? and whither were they bound?
29. Do you know whether any person whatever employed in loading your vessel, or in bringing any articles into it, or having any communication on board thereof, was taken ill during such employment or communication? or whether, by the absence of such person or persons in the course of such employment, any suspicion was entertained of their having been ill? If so, of what disease?
30. Do you know whether or not your cargo, or any part thereof, had been long in warehouse before its being taken on board? If you do, say how long. Have you any knowledge of its being packed or handled on shore, or conveyed from shore, or stowed on board, by persons affected with the plague or any other infectious disease or distemper?

QUASSIA (Ger. *Quassienholz;* Fr. *Bois de quassie;* Sp. *Leno de quassia*), a beautiful tall tree (*Quassia amara*), growing in North and South America, and the West Indies. The wood is of a pale yellow colour, and inodorous; it, as well as the fruit and bark of the tree, has a place in the materia medica. Its taste is intensely bitter. It is said to have been sometimes used by the brewers in the preparation of beer, instead of hops; but the use of it for this purpose is prohibited, under severe penalties. — (See Ale and Beer.) The price of quassia in bond varies from 1*l.* 4*s.* to 1*l.* 6*s.* a cwt. The duty is 8*l.* 17*s.* 6*d.*; it is of course intended to be prohibitory; and is one of the few imposed for such a purpose, against which no good objection can be urged.

QUEBEC, the capital of Canada, and of the British possessions in North America, on the north-west bank of the river St. Lawrence, about 340 miles from its mouth, in lat. 46° 48′ 49″ N., lon. 71° 10′ 45″ W. Population in 1831, 27,562.

Quebec is situated on a ridge, or promontory, formed by the St. Lawrence on the S. and W., and the river St. Charles on the E. The extremity of this headland, called Cape Diamond, is about 345 feet above the level of the water, and on it the citadel is built. The town extends from the citadel, principally in a north-east direction, down to the water; and is, from the difference of elevation, divided into the upper and lower towns. The fortifications, which are very strong, extend across the peninsula; the circuit within them being about $2\frac{3}{4}$ miles. From their situation, many of the streets are uneven; they are also, for the most part, narrow; but they are either well paved or Macadamised. The greater number of the houses are built of stone, with shingle roofs. Some of the public buildings are elegant, and well adapted for their pur-

poses. The harbour, or basin, lies between the town and the island of Orleans. It is safe and commodious: the water is about 28 fathoms deep, with a tide rising from 17 to 18 feet; and at springs from 23 to 25 ditto. Quebec was founded by the French in 1608. In 1629, it was taken by the English; but was restored in 1632. It was again taken by the English under General Wolfe, who fell in the engagement, in 1759; and was finally ceded to us by the treaty of Paris in 1763.

The rapid increase of population in Upper Canada has occasioned a proportional increase of intercourse between Quebec, Montreal, &c. The first steam boat that plied on the St. Lawrence was launched in 1812. There are now above a dozen steam boats, 1 of them of 600 tons burden, employed in the conveyance of goods and passengers between Quebec and Montreal; and a steam ship of from 700 to 800 tons burden is engaged in the trade between Quebec and Halifax in Nova Scotia. Thus is formed a line of steam communication from the Atlantic to Amherstburgh, one of the remote settlements of Upper Canada, — a distance of more than 1,500 miles; which we may soon expect to see extended to the head of lake Huron, and eventually to the western extremity of lake Superior, about 700 miles beyond Amherstburgh; giving to Quebec a command of internal navigation inferior only to that of New Orleans. The navigation at Quebec closes at the end of November or beginning of December, and opens in April. Below Quebec the river is seldom frozen over; but the masses of floating ice, kept in constant agitation by the flux and reflux of the tide, render navigation impracticable. The waters of the St. Lawrence are very pure; and in point of depth and magnitude it is one of the noblest rivers in the world. — (*Bouchette's British Dominions in America*, vol. i. p. 272.) Quebec is a free warehousing port.

We have already given (see *antè*, p. 347.) an account of the aggregate value and amount of the trade and navigation of Canada, and our other possessions in North America, for three different periods; viz. 1806, 1825, and 1831. The act 3 & 4 Will. 4. c. 59., regulating the colonial trade, and the duties upon the different articles imported into Canada and the other colonies, is given *antè*, pp. 348—355. But the following statements illustrate some of these points in detail, while others refer particularly to the trade, charges, &c. peculiar to Quebec and the St. Lawrence.

Monies. — Table of Coins in Circulation.

English, Portuguese, American, Spanish, and French Coins.	Weight.	Halifax Currency.	Old Currency.	English, Portuguese, American, Spanish, and French Coins.	Weight.	Halifax Currency.	Old Currency.
Gold.	*Dwt. gr.*	*L. s. d.*	*Liv. sols.*	*Silver.*	*Dwt. gr.*	*L. s. d.*	*Liv. sols.*
A guinea	5 6	1 3 4	28 0	A crown	- -	0 5 6	6 12
Sovereign	5 3	1 2 3	26 14	English shilling	- -	0 1 1	1 6
Half guinea	2 15	0 11 8½	14 0½	Spanish and American dollar	- -	0 5 0	6 0
Third of a guinea	1 18	0 7 9⅗	9 6⅗	Pistareen	- -	0 1 0	1 4
Johannes	18 0	4 0 0	96 0	French crown, coined before 1793	- -	0 5 6	6 12
Half ditto	9 0	2 0 0	48 0	French piece, of 4 liv. 10 sols Tournois	- -	0 4 2	5 0
Moidore	6 18	1 10 0	36 0	French piece of 6 francs, since 1792	- -	0 5 6	
Eagle	11 6	2 10 0	60 0	French piece of 5 francs, do.	- -	0 4 8	
Half ditto	5 15	1 5 0	30 0				
A doubloon	17 0	3 14 6	89 8				
Half ditto	8 12	1 17 3	44 14				
Louis d'or, coined before 1793	5 4	1 2 8	27 4				
Pistole do.	4 4	0 18 3	21 18				
The forty francs, coined since 1792	8 6	1 16 2					
The twenty francs, ditto	4 3	0 18 1					

Deducting 1-10th from the currency value of these coins will give their sterling value.

Paper Currency. — There is no established government bank in the province; but there are private chartered banks, which have the following sums of paper currency in circulation, viz.

	L. s. d.
Quebec Bank	28,393 0 0
Montreal Bank	88,543 5 0
Canada Bank	8,432 10 0
	L. 125,368 15 0

N. B. — No notes or other paper money are issued on the credit of the province.

Accounts kept in Halifax currency.

Weights same as in England.

Measures. — Standard wine gallon, liquid measure of the province. The Canada minot for all grain, &c. except where specially agreed upon to the contrary; and this measure is about 1-8th larger than the Winchester bushel. The English Winchester bushel, when specially agreed for. The Paris foot, for all measures of lands granted previous to the conquest, and all measures of length, except an agreement is made to the contrary. The English foot, for measure of lands granted since the conquest, and wherever specially agreed upon. The standard English yard for measuring all cloths or stuffs, sold by the yard or measure of length. The English ell, when specially agreed upon.

TRADE OF CANADA IN 1832.

Imports.

			s. d.		s. d.	L.	L.
Wine	gallons 411,201	at	2 6	to	7 0	87,059	
Rum	— 1,089,565	-	2 9	-	3 6	166,594	
Brandy	— 183,277	-	6 0	-	-	54,983	
Gin and whisky	— 61,954	-	5 0	-	-	15,489	
							324,125
Sugar, refined	lbs. 1,051,872	-	0 6	-	-	26,296	
muscovado	— 5,755,172	-	0 4	-	-	95,918	
Coffee	— 174,899	-	1 0	-	-	8,745	
							130,959
Tea, hyson	— 63,000	-	3 6	-	-	11,182	
bohea	— 91,092	-	2 0	-	-	9,109	
green	— 627,031	-	2 6	-	-	103,379	
							123,670
Salt	barrels 260,227	-	-	-	-	13,017	
Playing cards	packs 33,900		1 3	-	-	2,431	
Tobacco, leaf	lbs. 124,213	-	0 4	-	-	2,070	
manufactured	— 147,109	-	0 8	-	-	4,903	
Cigars	— 535	-	5 0	-	-	134	
							22,555
Merchandise, British manufactures, paying 2½ per cent. *ad valorem* duty					-	-	1,338,874
					Total	- - L.	1,940,183

Exports.		Valued at.
		L.
New ships	10	28,000
Masts and spars	3,125	8,810
Oak	tons 20,804	41,608
Red pine	— 38,723	51,631
Yellow do.	— 135,628	135,628
Ash	— 1,432	1,611
Elm	— 18,658	24,870
Birch, &c.	— 936	599
Staves, heading, &c.	— 4,910,249	68,735
Deals	pieces 1,031,404	86,512
Boards and plank	— 584,176	23,641
Deal ends, oars, battens, handspikes, lathwood, puncheon shooks, treenails, shingles, shipping poles		17,285
Potash	cwt. 113,116	149,876
Pearl-ash	— 49,146	67,567
Total produce of the forest	*L.*	704,834
Fish, oil, seal, skins		8,521
Pork, beef, butter, lard, live stock, hides, castoreum, capillaire, natural curiosities, &c.		37,893
Wheat, Indian corn, barley, &c.		205,241
Furs, &c.		30,900
Exports from New Carlisle		16,558
Do. from Gaspé		23,616
Total exports, the produce of the Canadas	*L.*	1,027,563

The remaining exports consist of British fabrics, West India produce, and teas re-exported. Nine tenths of this trade is carried on from Quebec. A great proportion of the imports is, however, consumed in Upper Canada; and it also supplies a very large share of the exports; but it is impossible, owing to the inaccuracy of the returns, to discriminate the imports and exports on account of each province.

An Account of Arrivals at Quebec in the Years 1831 and 1832.

From	Vessels.	Tons.	Men.
Great Britain — with cargoes	278	80,333	3,755
Do. — in ballast	305	97,598	4,146
Ireland — with cargoes	73	21,554	974
Do. — in ballast	146	35,523	1,609
Jersey	1	111	8
Gibraltar	3	431	22
Netherlands — in ballast	3	974	43
Sweden	1	158	9
Spain	2	358	19
Portugal	4	879	37
Brit. N.A. colonies, with cargoes	117	10,316	562
Do. — in ballast	29	5,317	254
British W. Indies, with cargoes	56	7,512	425
Do. — in ballast	1	425	18
U.S. (British) — with cargoes	3	449	20
Do. do. — in ballast	1	373	17
Colombia (British), with cargoes	1	130	8
Do. (foreign) —	1	136	6
Brazil (British) — in ballast	1	457	17
China — with cargoes	1	586	45
Arrivals at Gaspé	41	6,670	379
Do. at New Carlisle	43	7,651	395
Total arrivals in Canada, in 1831	1,111	267,641	13,776
Do. departures from do.	1,101	275,775	12,586
Of the latter, 9 were built during the year, of the burden of 3,386 tons.			
Arrivals in Canada, in 1832	1,084	287,727	12,716
Do. departures in do.	1,098	292,086	12,809
Ships built in do.	10	2,800	235

N. B. — We are indebted for these details to the valuable work of *Mr. M'Gregor* on *British America*, 2d edit. vol. ii. pp. 504—515.

Population. — According to the latest census, the population of Lower Canada amounted to 539,822.

Rates of Pilotage for the River St. Lawrence.

	Per Foot. *L. s. d.*
From Bic to Quebec (153 miles distance) —	
From the 2d to the 30th April, inclusive	1 0 0
From the 1st May to the 10th Nov., inclusive	0 18 0
From the 11th to the 18th November, inclusive	1 3 0
From the 19th Nov. to the 1st March, inclusive	1 8 0
From Quebec to Bic —	
From the 2d to the 30th April, inclusive	0 18 0
From the 1st May to the 10th November, inclusive	0 15 9
From the 11th to the 18th November, inclusive	1 0 9
From the 19th Nov. to the 1st March, inclusive	1 5 9

Rates of pilot water and poundage on pilot money are payable at the Naval Office, by masters and commanders of vessels, viz. —

For every foot of water for which masters or commanders of vessels are bound to pay their pilots, from Bic to Quebec, and from Quebec to Bic, 2*s.* 6*d.* currency per foot —

For vessels going to Three Rivers or Montreal,	
Of 100 to 150 tons, inclusive	*L.* 2 currency.
Of 151 to 200 tons, inclusive	3 —
Of 201 to 250 tons, inclusive	4 —
Of 251 tons and upwards	5 —

On settling with pilots, masters or commanders of vessels, or the consignees of such vessels, are to deduct 1*s.* in the pound for the amount of the sums to be paid for pilotage, which will be exacted by the naval officer at clearing out; the same being funded by law, under the direction of the Trinity House, for the relief of decayed pilots, their widows and children.

Regulations for the Payment of Pilotage above Bic to Quebec.

At or above the anchorage of the Brandy Pots, 2-3ds of the present rate for a full pilotage.

Above the point of St. Roc, 1-3d do.

Above the Point aux Pins, on the Ile aux Grues, and below Patrick's Hole, 1-4th do.

	L. s. d.
At and above Patrick's Hole	1 3 4
For shifting a vessel from one wharf to another, between Bréhaut's wharf and Point à Carcis; or from or to the stream, from or to any of the above wharfs	0 11 8
For shifting a vessel from the stream, or from either of the above wharfs to St. Patrick's Hole, or to the basin of Montmorency, or to the ballast-ground, the basin of the Chaudière, Wolfe's Cove, and as far as the River Cap Rouge	1 3 4

Rates above the Harbour of Quebec.

From Quebec to Port Neuf, 4*l.* currency.	For vessels of registered measurement not exceeding 200 tons	To Quebec from Port Neuf, 2*l.* 10*s.* currency.	
—	5*l.* If above 200 and not exceeding 250 tons	—	3*l.* 10*s.*
—	6*l.* If above 250 tons	—	4*l.*
To Three Rivers, or above Port Neuf, 6*l.* currency	For vessels not exceeding 200 tons	From Three Rivers, and above Port Neuf, 4*l.* currency.	
—	7*l.* If above 200 tons and not exceeding 250 tons	—	4*l.* 10*s.*
—	8*l.* If above 250 tons	—	5*l.* 10*s.*
To Montreal, and above Three Rivers, 11*l.* currency	For vessels not exceeding 200 tons	From Montreal, and above Three Rivers, 7*l.* 10*s.* currency.	
—	13*l.* If above 200 tons and not exceeding 250 tons	—	8*l.* 15*s.*
—	16*l.* If above 250 tons	—	10*l.* 13*s.*

Pilots are at liberty to leave vessels 48 hours after they arrive at the place of their destination.

Quebec Almanac, for 1833.

Exports to British America.

Quantity and Declared Value of the different Articles of British and Irish Produce and Manufacture exported to the North American Colonies in 1831. — (*Parl. Paper*, No. 550. Sess. 1833.)

Articles.	Quantities.	Value.
		L.
Apparel, slops, &c.		168,752
Arms and ammunition		16,941
Bacon and hams — cwt.	145	428
Beef and pork — barrels	8,534	2,4092
Beer and ale — tuns	272	4,904
Books, printed — cwt.	446	9,807
Brass and copper manufactures —	1,758	8,722
Butter and cheese —	2,572	9,330
Coals, culm, and cinders — tons	31,134	15,529
Cordage — cwt.	20,188	45,116
Cotton manufactures — yards	15,618,106	413,737
Hosiery, lace, &c.		25,536
Cotton twist and yarn — lbs.	307,997	10,376
Earthenware — pieces	2,253,851	29,359
Fish — barrels	62	66
Glass — cwt.	17,883	81,819
at value		1,380
Hardwares and cutlery —		29,482
Hats, beaver and felt — dozen	7,465	26,734
Iron & steel, wrought & unwr., tons	12,400	135,527
Lead and shot —	320	5,541
Leather, wrought and unwr. lbs.	429,236	66,021
Saddlery and harness		5,339
Linen manufactures — yards	3,309,165	117,333
Thread, tapes, &c.		5,116
Machinery and mill work		4,290
Painters' colours		12,987
Plate, plated ware, jewellery, and watches		7,694
Salt — bushels	1,559,684	25,422
Silk manufactures		93,013
Soap and candles — lbs.	1,267,683	32,139
Stationery of all sorts		35,285
Sugar, refined — cwt.	16,513	34,877
Tin, unwrought — —	39	147
Do. and pewter wares		12,570
Wool, sheep's and lambs' lbs.	11,337	611
Woollen and worsted yarn —	5,553	717
Do. manufactures; viz.		
entered by the piece — pieces	89,203	271,484
do. by the yard — yards	900,124	58,229
Hosiery and small wares		19,281
All other articles		127,761
Total declared value — *L.*		2,089,327

Immigrants. — The number of immigrants arrived at Quebec, in 1829, was 15,945; in 1830, 28,000; in 1831, 50,254; and in 1832, 51,746.

MONTREAL, the second town of Canada, is situated on the south side of an island of the same name, in the St. Lawrence, about 180 miles above Quebec, in lat. 45° 31′ N., lon. 73° 35′ W. Population 27,000. The harbour is not large, but it is safe and commodious; the facilities for navigation afforded by the noble river on which it is situated being such, that vessels of 600 tons burden may ascend thus far without difficulty. The North American fur trade principally centres in Montreal; which also enjoys the principal share of the commerce between Canada and the United States. It is increasing faster than Quebec, or than any city in British America. Imports and exports included in those of Quebec.

QUERCITRON BARK, the bark of a species of oak growing in many parts of North America. It is used in dyeing yellow colours. — (See BARK.)

QUILLS (Fr. *Plumes à écrire*; Ger. *Posen, Federkiel*; It. *Penne da scrivere*; Rus. *Stivoli*; Sp. *Canones para escribir*), the hard and strong feathers of the wings of geese, ostriches, swans, turkeys, crows, &c. used in writing. They are classified according to the order in which they are fixed in the wing; the second and third quills being the best. Crow quills are chiefly used for drawing. The goodness of quills is judged partly by the size of the barrels, but more by the weight; hence the denomination of quills of 14, 15, &c. loths, per *mille*, each mille consisting of 1,200 quills. The duty on goose quills produced, in 1832, 4,202*l.* 11*s.*; which, as the duty is at the rate of 2*s.* 6*d.* the 1,000, shows that the number of quills entered for home consumption that year must have amounted to 33,668,000. Quills are principally imported from the Netherlands and Germany; but those from Riga are the finest. The price of Riga quills in London, in February, 1834, duty paid, was as under: —

	£ s. d.	£ s. d.		£ s. d.	£ s. d.
Quills, goose, 17 loth per *mille*			Quills, goose, 13 loth per *mille*	0 13 0	to 0 14 9
16	2 15 0	to 3 0 0	12	0 9 6	- 0 10 0
15	1 12 0	- 1 15 0	11	0 6 0	- 0 12 0
14	1 2 0	- 1 4 0	Pinions	0 5 6	- 0 6 6

Hamburgh quills are about 40 per cent. lower.

R

RAGS (Du. *Lompen, Vodden*; Fr. *Chiffes, Chiffons, Drapeaux, Drilles*; Ger. *Lumpen*; It. *Strasci, Strazze*; Rus. *Trepje*; Sp. *Tropos, Harapos*), shreds or fragments of (generally decayed) linen, woollen, or cotton cloth. Though commonly held in little estimation, rags are of great importance in the arts, being used for various purposes, but especially in the manufacture of paper, most of which is entirely prepared from them. As the mode in which British rags are collected must be well known to every one, the following statements apply only to the trade in foreign rags.

Woollen Rags. — Woollen and linen rags are imported in considerable quantities from the continent of Europe, and from Sicily. The woollen rags are chiefly used for manure, especially in the culture of hops; but rags of loose texture, and not too much worn or decayed, are unravelled and mixed up with fresh wool in the making of yarn; a practice more favourable to the cheapness than to the strength and durability of the fabrics into which this old wool is introduced. Woollen rags are also used for making flocks or stuffing for beds, &c.: this process is performed chiefly by the aid of the same kind of engines that prepare pulp for paper; these wash the rags thoroughly, at the same time that they grind and tear them out into separate threads and fibres. The chief importation of woollen rags is from Hamburgh and Bremen; and there are some got from Rostock, but the quantity is trifling. The total average importation varies from 300 to 500 tons; and the price ranges from 6*l.* to 7*l.* per ton, duty (7*s.* 6*d.*) and freight paid on such as are used for manure; and from 13*l.* to 15*l.* for coloured woollens of loose texture, and 18*l.* to 20*l.* for white of the same description.

Linen Rags are principally imported from Rostock, Bremen, Hamburgh, Leghorn, Ancona, Messina, Palermo, and Trieste. Their export from Holland, Belgium, France, Spain, and Portugal, is strictly prohibited. The imports usually amount to about 10,000 tons; worth, at an average, from 21*l.* to 22*l.* per ton, duty (5*s.*) and freight included. Exclusive of the very large quantity collected at home, all the rags imported were, until very recently, employed in the manufacture of paper; but the Americans, who have for some years been large importers from the Mediterranean and Hamburgh, have lately come into the London market, and purchased several cargoes: a circumstance sufficiently indicative of the languid state of the paper manufacture in this country, occasioned by the oppressive amount of the duties with which it is burdened, and of the duty on advertisements. — (See PAPER.)

The imported rags are coarser and inferior in appearance to the English; but, being almost exclusively linen, they are stronger, and bear a price disproportioned to the apparent difference in quality: this disproportion has been materially augmented since the introduction of the process of boiling the rags in ley, and afterwards bleaching them with chlorine, has rendered foreign rags fit for making fine paper, and, indeed, in some

respects preferable for that purpose, by their affording greater strength of texture combined with equal whiteness of colour

There is considerable variety in the appearance of rags from different ports; but, in general, those from the north of Europe are darker and stronger than those from the Mediterranean ports. The latter are chiefly the remains of outer garments, and have become whitened by exposure to the sun and air; but since the improvements in bleaching, this does not much enhance their value in the British market. The rags shipped from Trieste are chiefly collected in Hungary. It is only within these few years that we have brought rags from this port, which now furnishes us with considerable supplies. Most part of the rags collected in the Tuscan states, to the extent of 10,000 or 12,000 bags a year, goes to America.

Freights are, at an average, about—Hamburgh and Bremen, linen 20*s.* per ton, woollen, 25*s.*; Rostock, 40*s.*; Ancona and Leghorn, 38*s.* to 40*s.*; Trieste and Sicily, 45*s.* to 46*s.* Linen rags are almost all selected and assorted previously to their shipment from the foreign port. Their distinguishing marks and prices per cwt. in the London market, January, 1832, were as follow: viz.

	Rostock.			Hamburgh.			Bremen.			Trieste.					
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
S P F F - -	1	15	0	1	12	6	1	12	0	1	9	0 to	1	13	0
S P F - - -	1	10	0	1	8	0	1	7	6	1	5	0 -	1	8	0
F F - - -	1	6	0	1	3	6	1	3	0	1	2	0 -	1	5	0
F X *or* F M - -	0	17	6	0	17	0	0	17	0	0	16	0 -	0	19	0
F B - - -	0	17	0	0	17	0	0	17	0	0	15	0 -	0	18	0

RAIL-ROAD, TRAM OR WAGON ROAD, a species of road having tracks or ways formed of iron, stone, or other solid material, on which the wheels of the carriages passing along it run. The object in constructing such roads is, by diminishing the friction, to make a less amount of power adequate either to impel a carriage with a greater velocity, or to urge forward a greater load.

Construction of Rail-roads. — The friction on a perfectly level rail-road, properly constructed, is estimated to amount to from $\frac{1}{10}$th to $\frac{1}{7}$th only of the friction on an ordinary level road; so that, supposing the same force to be applied in both cases, it would move a weight from 10 to 7 times as great on the former as on the latter. But if there be a very moderate ascent, such as 1 foot in 50, which in an ordinary road would hardly be perceived, a great increase of power on the rail-road is required to overcome the resistance that is thus occasioned. The reason is, that the ordinary load on a *level* rail-road is about *seven times as great* as on a common turnpike road; so that when the force of gravity is brought into operation by an ascending plane, its opposing power, being *proportioned to the load*, is 7 times as great as on a common road. Hence the vast importance of having rail-roads either level, or as nearly so as possible.

It is also of great importance that rail-roads should be straight, or, at least, free from any abrupt curves. Carriages being kept on the road by *flanges* on the wheels, it is obvious, that where the curves are quick, the friction on the sides of the rails, and consequent retardation, must be very great. In the Manchester and Liverpool rail-road, the curves form segments of a circle which, if extended, would embrace a circumference of 15 miles.

Iron rail-roads, the kind now generally used, are of 2 descriptions. The *flat rail*, or *tram road*, consists of cast-iron plates about 3 feet long, 4 inches broad, and $\frac{1}{2}$ an inch or 1 inch thick, with a flaunch, or turned up edge, on the inside, to guide the wheels of the carriage. The plates rest at each end on stone *sleepers* of 3 or 4 cwt. sunk into the earth, and they are joined to each other so as to form a continuous horizontal pathway. They are, of course, double; and the distance between the opposite rails is from 3 to $4\frac{1}{2}$ feet, according to the breadth of the carriage or wagon to be employed. The *edge rail*, which is found to be superior to the tram rail, is made either of wrought or cast iron; if the latter be used, the rails are about 3 feet long, 3 or 4 inches broad, and from 1 to 2 inches thick, being joined at the ends by cast metal sockets attached to the sleepers. The upper edge of the rail is generally made with a convex surface, to which the wheel of the carriage is attached by a groove made somewhat wider. When wrought iron is used, which is in many respects preferable, the bars are made of a smaller size, of a wedge shape, and from 12 to 18 feet long; but they are supported by sleepers, at the distance of every 3 feet. In the Liverpool rail-road the bars are 15 feet long, and weigh 35 lbs. per lineal yard. The wagons in common use run upon 4 wheels of from 2 to 3 feet in diameter. Rail-roads are either made double, 1 for going and 1 for returning; or they are made with *sidings*, where the carriages may pass each other. — (See the able and original *Essays on Rail-roads, by Charles Maclaren, Esq.*, in the *Scotsman* for 1824, Nos. 511, 512. and 514.; see also *Mr. Booth's Pamphlet on the Liverpool and Manchester Rail-road.*)

Speed of Carriages on Rail-roads, &c. — The effect of rail-roads in diminishing friction is familiar to every one; and they have long been used in various places of this and other

countries, particularly in the vicinity of mines, for facilitating the transport of heavy loads. But it is only since the application of locomotive engines as a moving power, that they have begun to attract the public attention, and to be regarded as of the highest national importance. These engines were first brought into use on the Darlington and Stockton rail-road, opened on the 27th of December, 1825. But the rail-road between Liverpool and Manchester is by far the greatest undertaking of this sort that has hitherto been completed. This splendid work, which is executed in the most approved manner, cost between 800,000*l.* and 900,000*l.*; and, as far as speed is concerned, has completely verified, and, indeed, far surpassed, the most sanguine anticipations. The road has the advantage of being nearly level; for, with the exception of a short space at Rainhill, where it is inclined at the rate of 1 foot in 96, there is no greater inclination than in the ratio of 1 foot in 880. The length of the rail-road is 31 miles; and it is usual to perform this journey in handsome carriages attached to the locomotive engines, in an hour and a half, and sometimes less! So wonderful a result has gone far to strike space and time out of the calculations of the traveller: it has brought, in so far, at least, as respects the facility of passing from the one to the other, Liverpool as near to Manchester as the western part of London is to the eastern part!

The extraordinary speed of carriages on rail-roads depends on the fact, that the *friction*, which on a perfectly level rail-road is the only resistance to be overcome, is *the same for all velocities*; so that, abstracting from the resistance of the air, which is so trifling as not to require to be taken into account, we have merely, in order to double or treble the velocity, to double or treble the power. But in vessels at sea, or in canals, which have to make their way through a comparatively dense medium, the resistance to be overcome increases as the *square of the velocity*; so that, to double the speed, the power must be multiplied by 4, and to treble it, it must be multiplied by 9, and so on.

Comparative Advantages of Rail-roads and Canals. — Astonishing, however, as are the results of the performances on the Manchester and Liverpool rail-road, we doubt much whether there be many more situations in the kingdom where it would be prudent to establish one. That carriages with passengers may be safely impelled along a perfectly level rail-road at a speed of 20 or 30 miles an hour, is a fact that is now proved experimentally; but before deciding at to the expediency of opening such a mode of communication between any two places, it is necessary to look carefully into the expense attending the formation of a rail-road with a suitable establishment of carriages, at the expense of keeping it and them in repair, and at the probable returns. The outlay, judging from what has taken place between Liverpool and Manchester, is quite enormous; the wear and tear of the engines, which is great under all circumstances, is increased in an extraordinary degree with every considerable increase of speed. We do not, therefore, consider the success that has hitherto attended the Liverpool and Manchester rail-road as at all warranting the construction of similar roads in most other places. The great size of these two towns, and still more their intimate connection, — Liverpool being, in fact, the port of Manchester and of the entire cotton district — occasions a very great intercourse between them: the number of passengers and the quantity of goods that are always in the course of being conveyed from the one to the other, is far greater than between any two equally distant places in the empire. If a rail-road had not succeeded in such a situation, it would have been madness to attempt the formation of one, at least as a mercantile speculation, anywhere else; and the fact that the dividend upon this very road has never hitherto exceeded 8½ per cent., affords but a slender presumption in favour of the success of several of the rail-road projects now afloat.

No general estimate can be formed of the comparative cost of canals and rail-roads; as it must, in every given instance, depend on special circumstances. It is, however, certain, that the cost of rail-roads, and particularly of keeping up the locomotive engines, is far greater than it was supposed it would be a short time since. It is reasonable, indeed, inasmuch as these engines are only in their infancy, to suppose that they will be gradually improved, and that ultimately their expense will be materially reduced; but at present it is a heavy drawback from the other advantages of rail-roads.

In as far as respects the conveyance of heavy goods, we believe that, even between Manchester and Liverpool, canals are generally preferred. It is not very material whether a ton of lime, or coal, or of manure, be moved with a velocity of 3 to 10 miles an hour; at least, the advantage of superior speed would, in such a case, be effectually overbalanced by a small additional charge.

The wonderful performances of the engines between Liverpool and Manchester struck, in the first instance, every one with astonishment, and led to the most extravagant speculations. It was supposed that the whole country would be forthwith intersected by rail-roads; that locomotive engines would be as common as stage coaches; and that the only way in which the canal proprietors could escape ruin, would be by converting canals into rail-roads! Soberer and sounder views are now entertained. The price of canal stock has recovered from the depression which it suffered in 1826. And it seems

to be admitted by every one not expecting to profit by the prosecution of some scheme, that rail-roads between distant places, at least where a canal has already been constructed, must depend for returns chiefly on the conveyance of passengers and light goods; and that it would not be prudent to undertake their construction, except between places that have a very extensive intercourse together.

Steam Carriages on common Roads. — A late committee of the House of Commons collected a good deal of evidence as to the probability of advantageously using locomotive engines or steam carriages on common roads. Most of the witnesses seem to have been very sanguine in their expectations. Mr. Farey, a very eminent practical engineer, declares that "what has been done proves to his satisfaction the practicability of impelling stage coaches by steam on good common roads, in tolerably level parts of the country, without horses, at a speed of 8 or 10 miles an hour." Mr. Farey further states, that he believes "that steam coaches will, very soon after their first establishment, be *run for one third of the cost of the present stage coaches.*" We suspect that the latter part of this statement is a good deal more problematical than the first; but since there is nothing better than conjecture on which to found an opinion, it would be useless to indulge in further speculations. We may, however remark, that though 3 years have elapsed since this evidence was given, there does not appear to be any material progress made towards realising the anticipations of the witnesses.

The subjoined list of the principal existing and projected rail-roads, showing the number and amount of the shares in each, the sum paid up, the selling price of the shares, &c., is taken from the *Share List*, for the 12th of October, 1833, published by Mr. Edmunds, Broker, No. 9. Exchange Alley, Cornhill.

No. of Shares.	Railways.	Shares.	Amount paid.	Sale Price.	Dividends.	Time of Payment.
		£	£ s. d.	£ s. d.	£ s. d.	
5,100	Liverpool and Manchester	100	100 0 0	210 0 0	8 8 0	Jan. July.
1,600	Cromford and High Peak	100	100 0 0	20 0 0	- -	
500	Canterbury	50	50 0 0	36 0 0	- -	
350	Cheltenham	100	- -	78 0 0	- -	
1,000	Croydon	65	- -	- -	- -	July.
1,000	Surrey	60	- -	- -	- -	July.
3,762	Severn and Wye	50	- -	16 0 0	0 16 0	Mar. Sept.
2,500	Forest of Dean	50	50 0 0	24 0 0	1 6 0	June, Dec.
1,000	Stockton and Darlington	100	100 0 0	295 0 0	8 0 0	May, Nov.
553	Monmouth	50	- -	- -	- -	Ap. 1. Oct. 1.
2,000	Clarance (Durham)	100	100 0 0	113 0 0		
1,500	Leicester and Swannington	50	50 0 0	57 0 0		
	Newcastle-upon-Tyne & Carlisle	100	100 0 0	- -		
660	Bolton and Leigh	100	- -	107 0 0		
	Grand Junction	-	10 0 0	19 0 0		
	Greenwich	20	1 0 0	1 2 6		
25,000	London and Birmingham	100	5 0 0	8 15 0		
	Bolton, Bury, &c.	100	15 0 0			

RAISINS (Fr. *Raisins secs, ou passés*; Ger. *Rosinen*; It. *Uve passe*; Por. *Passas*; Rus. *Issum*; Sp. *Pasas*), the dried fruit of the vine. They are produced from various species of vines; deriving their names partly from the place where they grow, as Smyrnas, Valencias, &c.; and partly from the species of grape of which they are made, as muscatels, blooms, sultanas, &c. Their quality appears, however, to depend more on the method of their cure than on any thing else. The finest raisins are cured in two methods; — either by cutting the stalk of the bunches half through, when the grapes are nearly ripe, and leaving them suspended on the vine till the watery part be evaporated, and the sun dries and candies them; or by gathering the grapes when they are fully ripe, and dipping them in a ley made of the ashes of the burnt tendrils; after which they are exposed to the sun to dry. Those cured in the first way are most esteemed, and are denominated raisins of the sun. The inferior sorts are very often dried in ovens. — (*Thomson's Dispensatory.*)

Raisins are imported in casks, barrels, boxes, and jars. The finest come in jars and ¼ boxes weighing about 25 lbs. Some of the inferior sorts are brought to us in mats.

Of 216,283 cwt. of raisins imported in 1831, 105,066 came from Spain, 100,458 from Turkey, and 7,036 from Italy. Malaga raisins are in the highest estimation. The muscatels from Malaga fetch fully a third more than any other description of raisins. The Smyrna black is the cheapest variety, and may average from 32*s.* to 35*s.* a cwt., duty included; muscatels vary from 80*s.* to 130*s.*, duty included. But the price depends much on the season, and the period of the year. — (See MALAGA.)

The duty on raisins varies, according to the species, from 20*s.* to 42*s.* 6*d.* a cwt.; that is, it varies from about 130 per cent. on the cheapest sorts, to from 50 to 35 per cent. on the dearest. This exorbitant duty has confined the demand for raisins within very narrow limits, the entries for home consumption being, at an average of 1831 and 1832, only 150,254 cwt. a year. The fact, is that raisins are, at present, a luxury that can be enjoyed only by the rich: but were the duty reduced, as it ought to be, to 5*s.* a cwt. on the cheapest sorts, and 10*s.* or 12*s.* on the dearest, we are well assured that they would be very largely consumed by the middle classes; and that they would not unfrequently be used even by the lower. Nothing but the magnitude of the duties prevents them from becoming of very considerable importance as an article of food: and it is really quite monstrous, that the public should be debarred from the use of a desirable article, on the stale and stupid pretence of its being necessary, in order to keep up the revenue, that it should be loaded with an oppressive duty. We admit the importance of keeping up the revenue; but so far from exorbitant duties having such an effect, they contribute more than any thing else to its reduction. They either limit the consumption of the articles on which they are laid to the very richest

classes, or they cause them to be clandestinely supplied; reducing the revenue as well as the consumption far below the level to which it would attain were the duties moderate. But it is needless to reason speculatively on such a point. Have we not seen the revenue derived from spirits increased, by reducing the duty from 5*s.* 6*d.* a gallon to 2*s.* 6*d.*? and the revenue derived from coffee trebled, by reducing the duty from 1*s.* 7*d.* per lb. to 6*d.*? And, as neither of these articles was more grossly overtaxed than raisins, have we not every reason to expect that a like effect would be produced by an adequate reduction of the duties by which they are burdened?

Exclusive of raisins, a considerable quantity of undried grapes is annually imported from Spain and Portugal, in jars, packed in sawdust. The duty on these grapes, which is 20 per cent. *ad valorem*, produced, in 1832, 1,720*l.*

Raisins, the produce of Europe, may not be imported for home consumption, except in British ships, or in ships of the country of which they are the produce, or from which they are imported, on forfeiture of the goods, and of 100*l.* by the captain of the ship. — (3 & 4 *Will.* 4. c. 54. §§ 2. 22.)

No abatement of duty is made on account of any damage received by raisins. — (3 & 4 *Will.* 4. c. 52. § 32.)

RANGOON, a commercial port and town of the Burmese dominions, situated about 26 miles from the sea, on the left bank of the eastern branch of the river Irawaddy, in lat. 16° 42′ N., lon. 96° 20′ E. The town and suburbs extend lengthwise about 1 mile along the bank of the river, being about ¾ of a mile in depth; but the houses are very unequally scattered over this area. The fort, or rather wooden stockade, which contains the town, properly so called, is a regular square about 14 feet high, composed of heavy beams of teak timber. It appears from a census, taken a short time previously to the commencement of the war in 1824, that the population was 18,000, which, probably, is not far from its present amount.

Rangoon is the chief, and, indeed, almost the only, port of foreign trade in the Burmese dominions, which extend from between the 15th and 16th, up to the 26th and 27th degrees of N. lat., and from the 93d to the 98th degree of E. lon., containing an area of about 184,000 square miles, with a population of about 4,000,000. Its situation is extremely convenient for commercial purposes, being situated so near the sea, and commanding the navigation of the Irawaddy, which extends to Ava, the capital, a distance of nearly 500 miles. Rangoon is accessible to ships of even 1,200 tons burden; the navigation, although somewhat intricate, being safe and practicable with the assistance of the ordinary native pilots.

The town has many advantages for ship building. At neaps the tide rises and falls about 18 feet; and at springs from 25 to 30 feet. The principal teak forests are, at the same time, at a comparatively short distance, and there is a water conveyance for the timber nearly the whole way. Ship-building has, in fact, been carried on at Rangoon since 1786, and in the 38 years which preceded our capture of it, there had been built 111 square-rigged vessels of European construction, the total burden of which amounted to above 35,000 tons. Several of these were of from 800 to 1,000 tons. Under the direction of European masters, the Burmese were found to make dexterous and laborious artisans; in this respect, greatly surpassing the natives of our Indian provinces.

There are 2 considerable markets, where the ordinary necessaries of life, according to Burmese usage, are cheap and abundant: these are rice, excellent fish, and poultry.

Money.—The Burmese currency consists, for small payments, of lead; for larger ones, of gold and silver, but chiefly of the latter. There are no coins. At every payment, the metal must be weighed, and very generally assayed, — a rude and very inconvenient state of things. The weights used in the weighing of money are the same as those used on ordinary occasions; the kyat or tical, and the paiktha or vis, being by far the most frequent. Silver may be considered as the standard. Gold is generally held to be about 17 times more valuable than silver. The weighing and assaying of the metals, used as currency, gives employment to a class of persons as brokers, money changers, and assayers. Every new assay costs the owner, if the metal be silver, 2¼ per cent.; 1½ per cent. being the established commission of the assayers, while 1 per cent. is lost, or supposed to be lost, in the operation. If it be repeated 40 times, it follows that the original amount is wholly absorbed — a fact which shows the enormous waste of metal arising out of this rude substitute for coin.

Weights. — The weights in use at Rangoon, and throughout the Burman dominions, are as follow: —

2 Small Rwés (red beans)	= 1 Large Rwé.	2 Mus	= 1 Mat'h.
4 Large do.	= 1 Bai.	4 Mat'h's	= 1 Kyat, *vulgo* Tical.
2 Bais	= 1 Mu.	100 Kyats	= 1 Paiktha, *vulgo* Vis, = 3·65 lbs. avoir.

Measures of capacity are as follow: —

2 Lamyets	= 1 Lamé.	4 Salés	= 1 Pyi.	2 Sarots	= 1 Saït.
2 Lamés	= 1 Salé.	2 Pyis	= 1 Sarot.	4 Saïts	= 1 Ten.

This last measure is what is usually called by us "a basket," and ought to weigh 16 vis of clean rice, or 58·4 lbs. avoirdupois: it has commonly been reckoned at ½ a cwt. All grains, pulses, certain fruits, natron, salt, and lime, are bought and sold by measure: other commodities by weight.

Commercial Regulations. — The following commercial treaty, entered into between the government of England and the Court of Ava, in 1826, regulates the intercourse between the two countries: —

Art. 1.—Peace being made, &c. &c. — when merchants with an English certified pass from the country of the English ruler, and merchants from the kingdom of Burma pass from one country to the other, selling and buying merchandise, the sentinels at the passes and entrances, the established gate-keepers of the country, shall make inquiry as usual, but without demanding any money; and all merchants coming truly for the purpose of trade, with merchandise, shall be suffered to pass without hindrance or molestation. The governments of both countries, also, shall permit ships with cargoes to enter ports and carry on trade, giving them the utmost protection and security. And in regard to duties, there shall none be taken beside the customary duties at the landing places of trade.

Art. 2.—Ships, whose breadth of beam on the inside (opening of the hold) is 8 royal Burman cubits, of 19·1 English inches each, and all ships of smaller size, whether merchants from the Burmese country entering an English port under the Burmese flag, or merchants from the English country, with an English stamped pass, entering a Burmese port under the English flag, shall be subject to no other demands beside the payment of duties, and 10 ticals, 25 per cent. (10 sicca rupees), for a passport on leaving. Nor shall pilotage be demanded, unless the captain voluntarily requires a pilot. However, when ships arrive, information shall be given to the officer stationed at the entrance of the sea. In regard to vessels, whose breadth of beam exceeds 8 royal cubits, they shall remain, according to the 9th article of the treaty of Yandabo, without unshipping their rudders or landing their guns, and be free from trouble and molestation as Burmese vessels in British ports. Besides the royal duties, no more duties shall be given or taken than such as are customary.

Art. 3.—Merchants belonging to one country, who go to the other country and remain there, shall, when they desire to return, go to whatever country and by whatever vessel they may desire, without hindrance. Property owned by merchants they shall be allowed to sell. And property not sold, and household furniture, they shall be allowed to take away, without hindrance, or incurring any expense.

Art. 4.—English and Burmese vessels meeting with contrary winds, or sustaining damage in masts,

rigging, &c., or suffering shipwrecks on the shore, shall, according to the laws of charity, receive assistance from the inhabitants of the towns and villages that may be near, the master of the wrecked ship paying to those that assist suitable salvage, according to the circumstances of the case; and whatever property may remain, in case of shipwreck, shall be restored to the owner.

Commerce. — A considerable intercourse is carried on between the Burmese and Chinese dominions by an annual caravan, of which the merchants are all Chinese. The imports from China consist of manufactured articles, the chief export from Burma being cotton wool. The trade with foreign countries seaward is carried on with the ports of Chittagong, Dacca, and Calcutta, in Bengal; Madras and Masulipatam, on the Coromandel coast; the Nicobar Islands, in the Bay of Bengal; Penang, in the Straits of Malacca; and occasionally with the Persian and Arabian Gulfs. The largest trade is with Calcutta, owing to the great consumption of teak timber in the latter, and the facility with which she supplies the demand of the Burmese for Indian and British cotton goods. At an average of the 3 years ending with 1822-23, being those which immediately preceded the war with the British, there entered inwards at Calcutta, from the Burmese dominions, 22 ships, of the burden of 9,404 tons; and in the 3 years ending with 1829-30, 33 ships, of the burden of 8,920 tons. No direct trade has yet been carried on between Burma and any European country. The ships and tonnage which entered inwards at Madras from Burma were, in the 3 years ending with 1822-23, 5 ships, of the burden of 683 tons; and in the 3 years ending with 1829-30, 8 ships, of the burden of 1,170 tons. The articles exported to foreign countries from Rangoon are the following: — Teak wood, terra Japonica, or catechu, stick lac, bees' wax, elephants' teeth, raw cotton, orpiment, commonly called in India hurtal, gold, silver, rubies, sapphires, and horses, or rather the small, hardy pony of the country, which is much esteemed, particularly at Madras. By far the most important of these commodities is teak timber; the quantity of this wood annually exported is said to be equal to 7,500 full-sized trees, which, for the most part, consist of what India ship-builders call *shinbin*, which are planks hewn out of the log with the adze at an immense waste. The teak forests of Pegu are by far the most abundant in India. The teak is nowhere to be found in the low alluvial lands to which the tide reaches, but abounds in the high lands beyond its influence. It seems to be very generally disseminated throughout the Burmese dominions. In the territory ceded to the British in Martaban, there are some fine forests, the timber of which is cut down for exportation, and where it is believed that saw-mills have very recently been established by some European settlers. The most accessible and extensive forests of teak in the Burmese dominions are in the province of Sarawadi, about 150 miles to the north of Rangoon, with which there is a water communication. The principal imports into Burma are cotton, piece goods from India and Britain, British woollens, iron, steel, quicksilver, copper, cordage, borax, sulphur, gunpowder, saltpetre, fire-arms, coarse porcelain, English glass ware, opium, tobacco, cocoa and areca nuts, sugar, and spirits. Of these, by far the most important is cotton piece goods. The Burmese have few cotton manufactures of their own, and appear, from very early times, to have been furnished with the principal part of their supply from the Coromandel coast. To these were afterwards added the cheaper fabrics of Bengal; and both are now, in a great measure, superseded by British manufactures, the use of which has spread very rapidly since the opening of the trade in 1814. In 1826-27, the exports and imports of the port of Rangoon were estimated each at the rate of 300,000*l.* — (We are indebted for this valuable article to our esteemed friend, John Crawfurd, Esq., who ascertained the particulars on the spot.)

RAPE, a biennial plant of the turnip kind (*Brassica napus* Lin.), but with a woody fusiform root scarcely fit to be eaten. It is indigenous, flowers in May, and ripens its seeds in July. It is cultivated in many parts of England, particularly in Lincoln and Cambridge; partly on account of its seed, which is crushed for oil, and partly for its leaves as food for sheep. The culture of rape for seed has been much objected to by some, on account of its supposed great exhaustion of the land: but Mr. Loudon says that, where the soil and preparation are suitable, the after-culture properly attended to, and the straw and offal, instead of being burnt, as is the common practice, converted to the purposes of feeding and littering cattle, it may, in many instances, be the most proper and advantageous crop that can be employed by the farmer. The produce, when the plant succeeds well, and the season is favourable for securing the seed, amounts to from 40 to 50 bushels an acre. The seed is sold by the last of 10 quarters; and is crushed in mills constructed for that purpose. — (*Loudon's Ency. of Agriculture.*)

In addition to the rape-seed raised at home, we import considerable quantities, principally from Denmark. In 1831, our imports amounted to 407,275 bushels; of which 290,368 were from Denmark, 57,916 from Germany, 41,964 from France, with smaller quantities from Prussia, the Netherlands, and Italy. At an average of 1831 and 1832, the entries of foreign rape-seed for home consumption amounted to 494,798 bushels a year, producing an annual revenue of 3,105*l.* The price of English rape-seed in December, 1833, varied from 28*l.* to 29*l.* per last; the duty on foreign rape-seed is 10*s.* a last.

Rape-seed, the produce of Europe, may not be imported for home consumption, except in British ships, or in ships of the country of which it is the produce, or from which it is imported.— (3 & 4 *Will.* 4. c. 54. §§ 2. 22.)

Rape Cake, is the adhering masses of the husks of rape-seed, after the oil has been expressed. They are reduced to powder by a malt mill or other machine; and are used either as a top dressing for crops of different kinds, or are drilled along with turnip seed. Rape cakes were worth, in December, 1833, from 5*l.* to 6*l.* a ton; and rape oil from 1*l.* 15*s.* to 1*l.* 17*s.* a cwt. In 1830, we imported about 330,000 cwt. of rape and other oil cake. It is charged with a duty of 2*d.* a cwt.

RATTANS, or CANES, the long slender shoots of a prickly bush (*Calamus rotang* Lin.), one of the most useful plants of the Malay peninsula, and the Eastern islands. They are exported to Bengal, to Europe, and above all to China, where they are consumed in immense quantities. For cane work they should be chosen long, of a bright pale yellow colour, well glazed, and of a small size, not brittle, or subject to break. They are purchased by the bundle, which ought to contain 100 rattans, having their ends bent together, and tied in the middle. In China they are sold by the picul, which contains from 9 to 12 bundles. Such as are black or dark coloured, snap short, or from which the glazing flies off on their being bent, should be rejected. When stowed as dunnage, they are generally allowed to pass free of freight. — (*Milburn's Orient. Com.*, &c.) The imports into this country are very considerable. In 1830, the number imported was 2,414,562; in 1831, 3,908,423; and in 1832, 3,922,955. — (*Parl. Paper*, No. 425. Sess. 1833.)

"The rattan," says Mr Crawfurd, "is the spontaneous product of all the forests of the Archipelago; but exists in great perfection in those of the islands of Borneo, Sumatra, and of the Malayan peninsula. The finest are produced in the country of the *Bataks* of Sumatra. The wood-cutter, who is inclined to deal in this article, proceeds into the forest without any other instrument than his *parang* or cleaver, and cuts as much as he is able to carry away. The mode of performing the operation is this;—He makes a notch in the tree at the root of which the rattan is growing, and cutting the latter, strips off a small portion of the outer bark, and inserts the part that is peeled into the notch. The rattan now being pulled through as long as it continues of an equal size, is by this operation neatly and readily freed from its *epidermis*. When the wood-cutter has obtained by this means from 300 to 400 rattans,—being as many as an individual can conveniently carry in their moist and undried state,—he sits down, and ties them up in bundles of 100, each rattan being doubled before being thus tied up. After drying, they are fit for the market without further preparation. From this account of the small labour expended in bringing them to market, they can be sold at a very cheap rate. The Chinese junks obtain them in Borneo at the low rate of 5 Spanish dollars per 100 bundles, or 5 cents for each 100 rattans, or 27 for 1*d*. The natives always vend them by tale; but the resident European residents, and the Chinese, by weight, counting by piculs. According to their quantity, and the relative state of supply and demand, the European merchants dispose of them at from 1½ to 2¼ dollars the picul. In China, the price is usually about 3½ dollars per picul, or 75 per cent. above the average prime cost. In Bengal they are sold by tale, each bundle of about 100 rattans bringing about 20½*d*."—(*Indian Archipelago*, vol. iii. p. 423.)

REAL, in the Spanish monetary system, is of two sorts; viz. a *real of plate*, and a *real vellon*. The former is a silver coin, varying in value from about 6½*d*. to 5*d*.—(See COINS.) A real vellon is a money of account, worth about 2½*d*.

REAM, a quantity of paper. The ream of writing paper consists of 20 quires, each of 24 sheets; but the ream of printing paper, or, as it is sometimes called, the *printer's ream*, extends to 21½ quires, or 516 sheets. Two reams of paper make a *bundle*.

RECEIPT, is an acknowledgment in writing of having received a sum of money, or other valuable consideration. It is a voucher either of an obligation or debt discharged, or of one incurred.

The 35 Geo. 3. c. 55. enacts, that every note, memorandum, or writing whatever, given to any person on the payment of money, acknowledging such payment, on whatever account it be, and whether signed or not, shall be considered a receipt, and liable to a stamp duty.

And every person who shall write, or cause to be written, any receipt for money on unstamped paper, (except in certain excepted cases hereafter enumerated,) or on a lower stamp than the proper one, shall forfeit 10*l*. if for a sum under 100*l*.; if above, 20*l*.

Giving receipts for less than actually paid, writing off sums, or other fraudulent contrivances, penalty 50*l*.; but receipts may be stamped if brought *within fourteen days after date*, on payment of a penalty of 5*l*. over and above the duty; and if brought within one *calendar month*, on payment of a penalty of 10*l*. and the duty.

Any person refusing to give a receipt upon demand, or to pay the amount of the stamp, is liable to a penalty of 10*l*.

Scale of Stamp Duties per 55 Geo. 3. c. 184.

	L.	s.	d.
Receipt or discharge, given for or upon the payment of money, amounting to 5*l*. and under 10*l*.	0	0	3
10*l*. and under 20*l*.	0	0	6
20*l*. — 50*l*.	0	1	0
50*l*. — 100*l*.	0	1	6
100*l*. — 200*l*.	0	2	6
200*l*. — 300*l*.	0	4	0
300*l*. — 500*l*.	0	5	0
500*l*. — 1,000*l*.	0	7	6
1,000*l*. or upwards	0	10	0
And where any sum shall be therein expressed to be received in full of all demands	0	10	0

And any note, memorandum, or writing whatsoever, given to any person for or upon the payment of money, whereby any sum of money, debt, or demand, or any part of any debt or demand, therein specified, and amounting to 5*l*. or upwards, shall be expressed to have been paid, settled, balanced, or otherwise discharged or satisfied, or which shall import or signify any such acknowledgment, and whether the same shall or shall not be signed with the name of any person, shall be deemed to be a receipt for a sum of money of equal amount with the sum so expressed to have been paid, settled, balanced, or otherwise discharged or satisfied, and shall be charged with a duty accordingly.

Previously to 1833 all receipts for sums of 2*l*. and under 5*l*. were charged with a stamp duty of 2*d*.; but the act 3 & 4 Will. 4. c. 23., exempts all receipts for sums under 5*l*. from the duty.

Exemptions.—Receipts exempted from stamp duty by any act relating to the assessed taxes. Receipts given by the Treasurer of the Navy. Receipts on account of the pay of the army or ordnance. Receipts by any officer, seaman, marine, or soldier, or their representatives. Receipts for the consideration money for the purchase of any parliamentary stocks or funds, and for any dividend paid on any share of the said stocks or funds Receipts on Exchequer bills. Receipts given for money deposited in the Bank of England, or in the hands of any banker, to be accounted for on demand; provided the same be not expressed to be received of, or by the hands of, any other than the person to whom the same is to be accounted for. Receipts written upon promissory notes, bills of exchange, drafts, or orders for the payment of money. Receipts given upon bills or notes of the Bank of England. Letters by the general post acknowledging the safe arrival of any bills of exchange, promissory notes, or other securities. Receipts indorsed upon any bond, mortgage, or other security, or any conveyance whatever. Releases or discharges for money by deeds duly stamped. Receipts or discharges for drawbacks or bounties. Receipts or discharges for the return of duties of customs. Receipts indorsed upon navy bills. Receipts upon victualling and transport bills. Receipts given solely for the duty on insurances against fire.

In 1832, the nett produce of the receipt duty was as follows:—Great Britain, 194,501*l*. 10*s*.; Ireland, 17,995*l*. 7*s*. 9*d*.

REGISTRY, in commercial navigation, the registration or enrolment of ships at the Custom-house, so as to entitle them to be classed among, and to enjoy the privileges of, British built ships.

The registry of ships appears to have been first introduced into this country by the Navigation Act (12 Car. 2. c. 18. anno 1660). Several provisions were made with respect to it by the 7 & 8 Will. 3. c. 22.; and the whole was reduced into a system by the 27 Geo. 3. c. 19.

It may be laid down in general, that a vessel, in order to be admitted to registry, and consequently to enjoy the privileges and advantages that exclusively belong to a British ship, must be the property of his Majesty's subjects in the United Kingdom or some of its dependencies; and that it must have been built in the said United Kingdom, &c., or been a prize vessel legally condemned, or a vessel legally condemned for a breach of the slave laws.

The great, and, perhaps, the only original object of the registration of ships, was to facilitate the exclusion of foreign ships from those departments in which they were prohibited from engaging by the navigation laws, by affording a ready means of distinguishing such as were really British. It has also been considered advantageous to individuals, by preventing the fraudulent assignment of property in ships; but Lord Tenterden has observed, in reference to this supposed advantage, that "the instances in which fair and honest transactions are rendered unavailable through a negligent want of compliance with the forms directed by these and other statutes requiring a public register of conveyances, make the expediency of all such regulations, considered with reference

to private benefit only, a matter of question and controversy."—(*Law of Shipping*, part i. c. 2.)

The existing regulations as to the registry of ships are embodied in the act 3 & 4 Will. 4. c. 55., which, on account of its importance, is subjoined nearly entire.

Act 3 & 4 Will. 4. c. 55., for registering of British Vessels.

Commencement of Act. — From 1st of September, 1833, except where any other commencement is hereinafter particularly directed.

No Vessel to enjoy Privileges until registered. — No vessel shall be entitled to any of the privileges or advantages of a British registered ship unless the person or persons claiming property therein shall have caused the same to have been registered in virtue of the act 6 Geo. 4. c. 110., or of the act 4 Geo. 4. c. 41., or until such person or persons shall have caused the same to be registered in manner herein-after mentioned, and have obtained a certificate of such registry from the person or persons authorised to make such registry and grant such certificate as herein-after directed; the form of which certificate shall be as follows; viz. —

"This is to certify, that in pursuance of an act passed in the 4th year of the reign of King Will. 4, intituled, An Act [*here insert the title of this act, the names, occupation, and residence of the subscribing owners*], having made and subscribed the declaration required by the said act, and having declared that [he *or* they] together with [*names, occupations, and residence of non-subscribing owners*] [is *or* are] sole owner or owners, in the proportions specified on the back hereof, of the ship or vessel called the [*ship's name*] of [*place to which the vessel belongs*], which is of the burden of [*number of tons*], and whereof [*master's name*] is master, and that the said ship or vessel was [*when and where built, or condemned as prize, referring to builder's certificate, judge's certificate, or certificate of last registry, then delivered up to be cancelled*], and [*name and employment of surveying officer*] having certified to us that the said ship or vessel has [*number*] decks and [*number*] masts, that her length from the fore part of the main stem to the after part of the stern post aloft is [*number of feet and inches*], her breadth at the broadest part [*stating whether that be above or below the main wales*] is [*number of feet and inches*], her [*height between decks if more than* 1 *deck, or depth in the hold if only* 1 *deck*] is [*number of feet and inches*], and that she is [*how rigged*] rigged with a [*standing or running*] bowsprit, is [*description of stern*] sterned, [*carvel or clincher*] built, has [*whether any or no*] gallery, and [*kind of head, if any*] head; and the said subscribing owners having consented and agreed to the above description, and having caused sufficient security to be given as is required by the said act, the said ship or vessel called the [*name*] has been duly registered at the port of [*name of port*]. Certified under our hands at the Custom-house in the said port of [*name of port*] this [*date*] day of [*name of month*] in the year [*words at length*].

[*Signed*] Collector.
[*Signed*] Comptroller."

And on the back of such certificate of registry there shall be an account of the parts or shares held by each of the owners mentioned and described in such certificate, in the form and manner following.— § 2.

"Names of the several owners within mentioned.	Number of sixty-fourth shares held by each owner.
[*Name*]	*Thirty-two*
[*Name*]	*Sixteen.*
[*Name*]	*Eight.*
[*Name*]	*Eight.*

[*Signed*] Collector.
[*Signed*] Comptroller."

Persons authorised to make Registry and grant Certificates. — The persons authorised and required to make such registry and grant such certificates shall be the several persons herein-after mentioned and described; (that is to say,)

The collector and comptroller of customs in any port in the United Kingdom, and in the Isle of Man respectively, in respect of ships or vessels to be there registered:

The principal officers of customs in the island of Guernsey or Jersey, together with the governor, lieutenant-governor, or commander-in-chief of those islands respectively, in respect of ships or vessels to be there registered:

The collector and comptroller of customs of any port in the British possessions in Asia, Africa, and America, or the collector of any such port at which no appointment of a comptroller has been made, in respect of ships or vessels to be there registered:

The collector of duties at any port in the territories under the government of the East India Company, within the limits of the charter of the said company, or any other person of the rank in the said company's service of senior merchant, or of 6 years' standing in the said service, being respectively appointed to act in the execution of this act by any of the governments of the said company, in respect of ships or vessels to be there registered:

The collector of duties at any British possession within the said limits, and not under the government of the said company, and at which a Custom-house is not established, together with the governor, lieutenant-governor, or commander-in-chief of such possession, in respect of ships or vessels to be there registered:

The governor, lieutenant-governor, or commander-in-chief of Malta, Gibraltar, Heligoland, and Cape of Good Hope respectively, in respect of ships or vessels to be there registered:

Provided that no ship or vessel to be registered at Heligoland, except such as is wholly of the built of that place, and that ships or vessels, after having been registered at Malta, Gibraltar, or Heligoland, shall not be registered elsewhere; and that ships or vessels registered at Malta, Gibraltar, or Heligoland, shall not be entitled to the privileges and advantages of British ships in any trade between the said United Kingdom and any of the British possessions in America: provided also, that wherever in and by this act it is directed or provided that any act, matter, or thing shall and may be done or performed by, to, or with any collector and comptroller of his Majesty's customs, the same shall or may be done or performed by, to, or with the several persons respectively herein-before authorised and required to make registry, and to grant certificates of registry as aforesaid, and according as the same act, matter, or thing is to be done or performed at the said several and respective places, and within the jurisdiction of the said several persons respectively: provided also, that wherever in and by this act it is directed or provided that any act, matter, or thing shall or may be done or performed by, to, or with the commissioners of his Majesty's customs, the same shall or may be done or performed by, to, or with the governor, lieutenant-governor, or commander-in-chief of any place where any ship or vessel may be registered under the authority of this act, so far as such act, matter, or thing can be applicable to the registering of any ship or vessel at such place. — § 3.

Ships exercising Privileges before Registry to be forfeited. — In case any ship or vessel not being duly registered, and not having obtained such certificate of registry as aforesaid, shall exercise any of the privileges of a British ship, the same shall be subject to forfeiture, and also all the guns, furniture, ammunition, tackle, and apparel to the same ship or vessel belonging, and shall and may be seized by any officer or officers of his Majesty's customs: provided always, that nothing in this act shall extend or be construed to extend to affect the privileges of any ship or vessel which shall, prior to the commencement of this act, have been registered by virtue of an act passed in the 6th year of the reign of his late Majesty George IV., intituled "An Act for the registering of British Vessels."— § 4.

What Ships are entitled to be registered. — No ship or vessel shall be registered, or having been registered shall be deemed to be duly registered, by virtue of this act, except such as are wholly of the built of the said United Kingdom, or of the Isle of Man, or of the islands of Guernsey or Jersey, or of some of the colonies, plantations, islands, or territories in Asia, Africa, or America, or of Malta, Gibraltar, or Heligoland, which belong to his Majesty, his heirs or successors, at the time of the building of such ships or vessels, or such ships or vessels as shall have been condemned in any court of admiralty as prize of war, or such ships or vessels as shall have been condemned in any competent court as forfeited for the breach of the laws made for the prevention of the slave trade, and which shall wholly belong and continue wholly to belong to his Majesty's subjects duly entitled to be owners of ships or vessels registered by virtue of this act. — § 5.

Mediterranean Pass may be issued at Malta or Gibraltar for certain Ships only. — No Mediterranean pass shall be issued for the use of any ship, as being a ship belonging to Malta or Gibraltar, except such as be duly registered at those places respectively, or such as, not being entitled to be so registered, shall

have wholly belonged, before the 10th day of October, 1827, and shall have continued wholly to belong, to persons actually residing at those places respectively, as inhabitants thereof, and entitled to be owners of British ships there registered, or who, not being so entitled, shall have so resided upwards of 15 years prior to the said 10th day of October, 1827. — § 6.

Foreign Repairs not to exceed 20s. per Ton. — No ship or vessel shall continue to enjoy the privileges of a British ship after the same shall have been repaired in a foreign country, if such repairs shall exceed the sum of 20*s.* for every ton of the burden of the said ship or vessel, unless such repairs shall have been necessary by reason of extraordinary damage sustained by such ship or vessel during her absence from his Majesty's dominions, to enable her to perform the voyage in which she shall have been engaged, and to return to some port or place in the said dominions; and whenever any ship or vessel which has been so repaired in a foreign country shall arrive at any port in his Majesty's dominions as a British registered ship or vessel, the master or other person having the command or charge of the same shall, upon the first entry thereof, report to the collector and comptroller of his Majesty's customs at such port that such ship or vessel has been so repaired, under penalty of 20*s.* for every ton of the burden of such ship or vessel, according to the admeasurement thereof; and if it shall be proved to the satisfaction of the commissioners of his Majesty's customs that such ship or vessel was seaworthy at the time when she last departed from any port or place in his Majesty's dominions, and that no greater quantity of such repairs have been done to the said vessel than was necessary as aforesaid, it shall be lawful for the said commissioners, upon a full consideration of all the circumstances, to direct the collector and comptroller of the port where such ship or vessel shall have arrived, or where she shall then be, to certify on the certificate of the registry of such ship or vessel that it has been proved to the satisfaction of the commissioners of his Majesty's customs that the privileges of the said ship or vessel have not been forfeited, notwithstanding the repairs which have been done to the same in a foreign country. — § 7.

Ships declared unseaworthy to be deemed Ships lost or broken up. — If any ship or vessel registered under the authority of this or any other act shall be deemed or declared to be stranded or unseaworthy, and incapable of being recovered or repaired to the advantage of the owners thereof, and shall for such reasons be sold by order or decree of any competent court for the benefit of the owners of such ship or vessel, or other persons interested therein, the same shall be taken and deemed to be a ship or vessel lost or broken up to all intents and purposes within the meaning of this act, and shall never again be entitled to the privileges of a British built ship for any purposes of trade or navigation. — § 8.

British Ships captured not to be again entitled to Registry, &c. — No British ship or vessel which has been or shall hereafter be captured by and become prize to an enemy or sold to foreigners shall again be entitled to the privileges of a British ship: provided that nothing contained in this act shall extend to prevent the registering of any ship or vessel whatever which shall afterwards be condemned in any court of admiralty as prize of war, or in any competent court, for breach of laws made for the prevention of the slave trade. — § 9.

Ships shall be registered at the Port to which they belong. — No such registry shall hereafter be made, or certificate thereof granted, by any person or persons herein-before authorised to make such registry and grant such certificate, in any other port or place than the port or place to which such ship or vessel shall properly belong, except so far as relates to such ships or vessels as shall be condemned as prizes in any of the islands of Guernsey, Jersey, or Man, which ships or vessels shall be registered in manner herein-after directed; but that all and every registry and certificate made and granted in any port or place to which any such ship or vessel does not properly belong shall be utterly null and void to all intents and purposes, unless the officers aforesaid shall be specially authorised and empowered to make such registry and grant such certificate in any other port by an order in writing under the hands of the commissioners of his Majesty's customs, which order the said commissioners are hereby authorised and empowered to issue, if they shall see fit; and at every port where registry shall be made in pursuance of this act, a book shall be kept by the collector and comptroller, in which all the particulars contained in the form of the certificate of the registry herein-before directed to be used shall be duly entered; and every registry shall be numbered in progression, beginning such progressive numeration at the commencement of each and every year; and such collector and comptroller shall forthwith, or within 1 month at the farthest, transmit to the commissioners of his Majesty's customs a true and exact copy, together with the number, of every certificate which shall be by them so granted. — § 10.

Port to which Vessels shall be deemed to belong. — Every ship or vessel shall be deemed to belong to some port at or near to which some or one of the owners, who shall make and subscribe the declaration required by this act before registry be made, shall reside; and whenever such owner or owners shall have transferred all his or their share or shares in such ship or vessel, the same shall be registered *de novo* before such ship or vessel shall sail or depart from the port to which she shall then belong, or from any other port which shall be in the same part of the United Kingdom, or the same colony, plantation, island, or territory as the said port shall be in: provided always, that if the owner or owners of such ship or vessel cannot in sufficient time comply with the requisites of this act, so that registry may be made before it shall be necessary for such ship or vessel to sail or depart upon another voyage, it shall be lawful for the collector and comptroller of the port where such ship or vessel may then be to certify upon the back of the existing certificate of registry of such ship or vessel, that the same is to remain in force for the voyage upon which the said ship or vessel is then about to sail or depart: provided also, that if any ship or vessel shall be built in any of the colonies, plantations, islands, or territories in Asia, Africa, or America, to his Majesty belonging, for owners residing in the United Kingdom, and the master of such ship or vessel, or the agent for the owner or owners thereof, shall have produced to the collector and comptroller of the port at or near to which such ship or vessel was built, the certificate of the builder required by this act, and shall have made and subscribed a declaration before such collector and comptroller of the names and descriptions of the principal owners of such ship or vessel, and that she is the identical ship or vessel mentioned in such certificate of the builder, and that no foreigner, to the best of his knowledge and belief, has any interest therein; the collector and comptroller of such port shall cause such ship or vessel to be surveyed and measured in like manner as is directed for the purpose of registering any ship or vessel, and shall give the master of such ship or vessel a certificate under their hands and seals, purporting to be under the authority of this act, and stating when and where and by whom such ship or vessel was built, the description, tonnage, and other particulars required on registry of any ship or vessel, and such certificate shall have all the force and virtue of a certificate of registry under this act, during the term of 2 years, unless such ship shall sooner arrive at some place in the United Kingdom; and such collector and comptroller shall transmit a copy of such certificate to the commissioners of his Majesty's customs. — § 11.

Persons residing in foreign Countries may not be Owners. — No person who has taken the oath of allegiance to any foreign state, except under the terms of some capitulation, unless he shall afterwards become a denizen or naturalised subject of the United Kingdom by his Majesty's letters patent or by act of parliament, nor any person usually residing in any country not under the dominion of his Majesty, his heirs and successors, unless he be a member of some British factory, or agent for or partner in any house or copartnership actually carrying on trade in Great Britain or Ireland, shall be entitled to be the owner, in whole or in part, directly or indirectly, of any ship or vessel required and authorised to be registered by virtue of this act; save and except that it shall be lawful for any person who was a member of the company of merchants trading to the Levant seas at the time of its dissolution, and who was a resident at any of the factories of the said company, to continue to hold any share or shares in any British registered ship of which at the time of such residence he was an owner or part owner, although such person shall continue to reside at any of the places where such factories had existed prior to the dissolution of the said company. — § 12.

Declaration to be made by subscribing Owners previous to Registry. — No registry shall henceforth be made or certificate granted until the following declaration be made and subscribed, before the person or persons herein-before authorised to make such registry and grant such certificate respectively, by the owner of such ship or vessel if such ship or vessel is owned by or belongs to 1 person only, or in case there shall be 2 joint owners, then by both of such joint owners if both shall be resident within 20 miles of the port or place where such registry is required, or by 1 of such owners if 1 or both of them shall be resident at a greater distance from such port or place; or if the number of such owners or proprietors shall exceed 2, then by the greater part of the number of such owners or proprietors if the greater number of them shall be resident within 20 miles of such port or place as aforesaid, not in any case exceeding 3 of such owners or proprietors, unless a greater number shall be desirous to join in making and subscribing the said declaration, or by 1 of such owners if all, or all except 1, shall be resident at a greater distance: —

"I *A. B.* of [*place of residence and occupation*] do truly declare, that the ship or vessel [*name*] of [*port or place*], whereof [*master's name*] is at present master, being [*kind of built, burden, &c. as described in the certificate of the surveying officer*], was [*when and where built, or, if prize or forfeited, capture and condemnation as such*], and that I the said *A. B.* [*and the other owners' names and occupations, if any, and where they respectively reside, viz. town, place, or parish, and county, or if member of and resident in any factory in foreign parts, or in any foreign town or city, being an agent for or partner in any house or copartnership actually carrying on trade in Great Britain or Ireland, the name of such factory, foreign town, or city, and the names of such house and copartnership*] am [*or* are] sole owner [*or* owners] of the said vessel, and that no other person or persons whatever hath or have any right, title, interest, share or property therein or thereto; and that I the said *A. B.* [*and the said other owners, if any*] am [*or* are] truly and *bonâ fide* a subject [*or* subjects] of Great Britain; and that I the said *A. B.* have not [*nor have any of the other owners, to the best of my knowledge and belief*] taken the oath of allegiance to any foreign state whatever [*except under the terms of some capitulation, describing the particulars thereof*], or that since my taking [*or* his *or* their taking] the oath of allegiance to [*naming the foreign states respectively to which he or any of the said owners shall have taken the same*] I have [*or* he *or* they hath *or* have] become a denizen [*or* denizens, *or* naturalised subject or subjects, *as the case may be*] of the United Kingdom of Great Britain and Ireland by his Majesty's letters patent *or* by an act of parliament [*naming the times when such letters of denization have been granted respectively, or the year or years in which such act or acts for naturalisation have passed respectively*]; and that no foreigner, directly or indirectly, hath any share or part interest in the said ship or vessel."

Provided always, that if it shall become necessary to register any ship or vessel belonging to any corporate body in the United Kingdom, the following declaration, in lieu of the declaration herein-before directed, shall be taken and subscribed by the secretary or other proper officer of such corporate body; (that is to say,)

"I *A. B.* secretary *or* officer of [*name of company or corporation*] do truly declare, that the ship or vessel [*name*] of [*port*] whereof [*master's name*] is at present master, being [*kind of built, burden, &c. as described in the certificate of the surveying officer*], was [*when and where built, or, if prize or forfeited, capture and condemnation as such*], and that the same doth wholly and truly belong to [*name of company or corporation*]." — Sect. 13.

Addition to Declaration in case the required Number of Owners do not attend. — In case the required number of joint owners or proprietors of any ship or vessel shall not personally attend to make and subscribe the declaration herein-before directed to be made and subscribed, then and in such case such owner or owners, proprietor or proprietors, as shall personally attend and make and subscribe the declaration aforesaid, shall further declare that the part owner or part owners of such ship or vessel then absent is or are not resident within 20 miles of such port or place, and hath or have not, to the best of his or their knowledge or belief, wilfully absented himself or themselves in order to avoid the making the declaration herein-before directed to be made and subscribed, or is or are prevented by illness from attending to make and subscribe the said declaration. — § 14.

Vessels to be surveyed previous to Registry. — Previous to the registering or granting of any certificate of registry as aforesaid, some one or more person or persons appointed by the commissioners of customs (taking to his or their assistance, if he or they shall judge it necessary, one or more person or persons skilled in the building and admeasurement of ships) shall go on board of every such ship or vessel as is to be registered, and shall strictly and accurately examine and admeasure every such ship or vessel as to all and every particular contained in the form of the certificate herein-before directed, in the presence of the master, or of any other person who shall be appointed for that purpose on the part of the owner or owners, or in his or their absence by the said master; and shall deliver a true and just account in writing of all such particulars of the built, description, and admeasurement of every such ship or vessel as are specified in the form of the certificate above recited to the collector and comptroller authorised as aforesaid to make such registry and grant such certificate of registry; and the said master or other person attending on the part of the owner or owners is hereby required to sign his name also to the certificate of such surveying or examining officer, in testimony of the truth thereof, provided such master or other person shall consent and agree to the several particulars set forth and described therein. — § 15.

Mode of Admeasurement to ascertain Tonnage. — For the purpose of ascertaining the tonnage of ships or vessels, the rule for admeasurement shall be as follows; (that is to say,) the length shall be taken on a straight line along the rabbet of the keel, from the back of the main stern-post to a perpendicular line from the fore part of the main stem under the bowsprit, from which subtracting 3-5ths of the breadth, the remainder shall be esteemed the just length of the keel to find the tonnage; and the breadth shall be taken from the outside of the outside plank in the broadest part of the ship, whether that shall be above or below the main wales, exclusive of all manner of doubling planks that may be wrought upon the sides of the ship; then multiplying the length of the keel by the breadth so taken, and that product by $\frac{1}{2}$ the breadth, and dividing the whole by 94, the quotient shall be deemed the true contents of the tonnage. — § 16.

Mode of ascertaining Tonnage when Vessels are afloat. — In cases where it may be necessary to ascertain the tonnage of any ship or vessel when afloat, according to the foregoing rule, the following method shall be observed; (that is to say,) drop a plumb line over the stern of the ship, and measure the distance between such line and the after part of the stern-post at the load water-mark, then measure from the top of the plumb line, in a parallel direction with the water, to a perpendicular point immediately over the load water-mark at the fore part of the main stem, subtracting from such measurement the above distance, the remainder will be the ship's extreme, from which is to be deducted 3 inches for every foot of the load draught of water for the rake abaft, also 3-5ths of the ship's breadth for the rake forward, the remainder shall be esteemed the just length of the keel to find the tonnage; and the breadth shall be taken from outside to outside of the plank in the broadest part of the ship, whether that shall be above or below the main wales, exclusive of all manner of sheathing or doubling that may be wrought on the side of the ship; then multiplying the length of the keel for tonnage by the breadth so taken, and that product by $\frac{1}{2}$ the breadth, and dividing by 94, the quotient shall be deemed the true contents of the tonnage. — § 17.

Engine-room in Steam Vessels to be deducted. — In each of the several rules herein-before prescribed, when used for the purpose of ascertaining the tonnage of any ship or vessel propelled by steam, the length of the engine-room shall be deducted from the whole length of such ship or vessel, and the remainder shall, for such purpose, be deemed the whole length of the same. — § 18.

Tonnage when so ascertained to be ever after deemed the Tonnage. — Whenever the tonnage of any ship or vessel shall have been ascertained according to the rule herein prescribed (except in the case of ships or vessels which have been admeasured afloat), such account of tonnage shall ever after be deemed the tonnage of such ship or vessel, and shall be repeated in every subsequent registry of such ship or vessel, unless it shall happen that any alteration has been made in the form and burden of such ship or vessel, or it shall be discovered that the tonnage of such ship or vessel had been erroneously taken and computed. — § 19.

Bond to be given at the Time of Registry. — At the time of the obtaining of the certificate of registry as aforesaid, sufficient security by bond shall be given to his Majesty, his heirs and successors, by the master and such of the owners as shall personally attend, as is herein-before required, such security to be approved of and taken by the person or persons herein-before authorised to make such registry and grant such certificate of registry at the port or place in which such certificate shall be granted, in the penalties following; (that is to say,) if such ship or vessel shall be a decked vessel, or be above the burden of 15 tons, and not exceeding 50 tons, then in the penalty of 100*l.*; if exceeding the burden of 50 tons and not exceeding 100 tons, then in the penalty of 300*l.*; if exceeding the burden of 100 tons and not exceeding 200 tons, then in the penalty of 500*l.*; if exceeding the burden of 200 tons and not exceeding 300 tons, then in the penalty of 800*l.*; and if exceeding the burden of 300 tons, then in the penalty of 1,000*l.*; and the condition of every such bond shall be, that such certificate shall not be sold, lent, or otherwise disposed of to any person or persons whatever, and that the same shall be solely made use of for the service of the ship or vessel for which it is granted; and that in case such ship or vessel shall be lost, or taken by the enemy, burnt, or broken up, or otherwise prevented from returning to the port to which she belongs, or shall on any account have lost and forfeited the privileges of a British ship, or shall have been seized and legally condemned for illicit trading, or shall have been taken in execution for debt and sold by due process of law, or shall have been sold to the Crown, or shall under any circumstances have been registered *de novo*, the certificate, if preserved, shall be delivered up, within 1 month after the arrival of the master in any port or place in his Majesty's dominions, to the collector and comptroller of some port in Great Britain or of the Isle of Man, or of the British plantations, or to the governor, lieutenant-governor, or commander-in-chief for the time being of the islands of Guernsey or Jersey; and that if any foreigner, or any person or persons for the use and benefit of any foreigner, shall purchase or otherwise become entitled to the whole or to any part or share of or any interest in such ship or vessel, and the same shall be within the limits of any port of Great Britain, or of the islands of Guernsey, Jersey, or Man, or of the British colonies, plantations, islands, or territories aforesaid, then and in such case the certificate of registry shall, within 7 days after such purchase or transfer of property in such ship or vessel, be delivered up to the person or persons herein-before authorised to make registry and grant certificate of registry at such port or place respectively as aforesaid; and if such ship or vessel shall be in any foreign port when such purchase or transfer of property shall take place, then that the certificate shall be delivered up to the British consul or other chief British officer resident at or nearest to such foreign port; or if such ship or vessel shall be at sea when such purchase or transfer of property shall take place, then that the certificate shall be delivered up to the British consul or other chief British officer at the foreign port or place in or at which the master or other person having or taking the charge or command of such ship or vessel shall first arrive after such purchase or transfer of property at sea, immediately after his arrival at such foreign port; but if such master or other person who had the command thereof at the time of such purchase or transfer of property at sea shall not arrive at a foreign port, but shall arrive at some port of Great Britain, or of the islands of Guernsey, Jersey, or Man, or of his Majesty's said colonies, plantations, islands, or territories, then that the certificate shall be delivered up, in manner aforesaid, within 14 days after the arrival of such ship or vessel, or of the person who had the command thereof, in any port of Great Britain, or of the islands of Guernsey, Jersey, or Man, or of any of his Majesty's said colonies, plantations, islands, or territories: provided always, that if it shall happen that at the time of registry of any ship or vessel the same shall be at any other port than the port to which she belongs, so that the master of such ship or vessel cannot attend at the port of registry to join with the owner or owners in such bond as aforesaid, it shall be lawful for him to give a separate bond, to the like effect, at the port where such ship or vessel may then be, and the collector and comptroller of such other port shall transmit such bond to the collector and comptroller of the port where such ship or vessel is to be registered, and such bond, and the bond also given by the owner or owners, shall together be of the same effect against the master and owner or owners, or either of them, as if they had bound themselves jointly and severally in one bond. — § 20.

When Master is changed, new Master to give similar Bond. — When and so often as the master or other person having or taking the charge or command of any ship or vessel registered in manner herein directed shall be changed, the master or owner of such ship or vessel shall deliver to the person or persons herein authorised to make such registry and grant such certificates of registry at the port where such change shall take place the certificate of registry belonging to such ship or vessel, who shall thereupon indorse and subscribe a memorandum of such change, and shall forthwith give notice of the same to the proper officer of the port or place where such ship or vessel was last registered pursuant to this act, who shall likewise make a memorandum of the same in the book of registers, which is hereby directed and required to be kept, and shall forthwith give notice thereof to the commissioners of his Majesty's customs: provided always, that before the name of such new master shall be indorsed on the certificate of registry he shall be required to give and shall give a bond in the like penalties and under the same conditions as are contained in the bond herein-before required to be given at the time of registry of any ship or vessel. — § 21.

Bonds liable to same Duties of Stamps as Bonds for Customs. — All bonds required by this act shall be liable to the same duties of stamps as bonds given for or in respect of the duties of customs are or shall be liable to under any act for the time being in force for granting duties of stamps. — § 22.

Certificate of Registry to be given up by all Persons, as directed by the Bond. — If any person whatever shall at any time have possession of and wilfully detain any certificate of registry granted under this or any other act, which ought to be delivered up to be cancelled according to any of the conditions of the bond herein-before required to be given upon the registry of any ship or vessel, such person is hereby required and enjoined to deliver up such certificate of registry in manner directed by the conditions of such bond in the respective cases and under the respective penalties therein provided. — § 23.

Name of Vessel which has been registered never afterwards to be changed. — It shall not be lawful for any owner or owners of any ship or vessel to give any name to such ship or vessel other than that by which she was first registered in pursuance of this or any other act; and the owner or owners of all and every ship or vessel which shall be so registered shall, before such ship or vessel, after such registry, shall begin to take in any cargo, paint or cause to be painted, in white or yellow letters, of a length of not less than 4 inches, upon a black ground, on some conspicuous part of the stern, the name by which such ship or vessel shall have been registered pursuant to this act, and the port to which she belongs, in a distinct and legible manner, and shall so keep and preserve the same; and if such owner or owners or master or other person having or taking the charge or command of such ship or vessel shall permit such ship or vessel to begin to take in any cargo before the name of such ship or vessel has been so painted as aforesaid, or shall wilfully alter, erase, obliterate, or in anywise hide or conceal, or cause or procure or permit the same to be done (unless in the case of square-rigged vessels in time of war), or shall in any written or printed paper, or other document, describe such ship or vessel by any name other than that by which she was first registered pursuant to this act, or shall verbally describe, or cause or procure or permit such ship or vessel to be described, by any other name to any officer or officers of his Majesty's revenue in the due execution of his or their duty, then and in every such case such owner or owners or master or other person having or taking the charge or command of such ship or vessel shall forfeit the sum of 100*l.* — § 24.

Builder's Certificate of Particulars of Ship. — All and every person and persons who shall apply for a certificate of the registry of any ship or vessel shall and they are hereby required to produce to the person or persons authorised to grant such certificate a true and full account, under the hand of the builder of such ship or vessel, of the proper denomination, and of the time when and the place where

such ship or vessel was built, and also an exact account of the tonnage of such ship or vessel, together with the name of the first purchaser or purchasers thereof (which account such builder is hereby directed and required to give under his hand on the same being demanded by such person or persons so applying for a certificate as aforesaid), and shall also make and subscribe a declaration before the person or persons herein-before authorised to grant such certificate that the ship or vessel for which such certificate is required is the same with that which is so described by the builder as aforesaid. — § 25.

Certificate of Registry lost or mislaid. — If the certificate of registry of any ship or vessel shall be lost or mislaid, so that the same cannot be found or obtained for the use of such ship or vessel when needful, and proof thereof shall be made to the satisfaction of the commissioners of his Majesty's customs, such commissioners shall and may permit such ship or vessel to be registered *de novo*, and a certificate thereof to be granted: provided always, that if such ship or vessel be absent and far distant from the port to which she belongs, or by reason of the absence of the owner or owners, or of any other impediment, registry of the same cannot then be made in sufficient time, such commissioners shall and may grant a licence for the present use of such ship or vessel, which licence shall, for the time and to the extent specified therein, and no longer, be of the same force and virtue as a certificate of registry granted under this act: provided always, that before such registry *de novo* be made, the owner or owners and master shall give bond to the commissioners aforesaid, in such sum as to them shall seem fit, with a condition that if the certificate of registry shall at any time afterwards be found, the same shall be forthwith delivered to the proper officers of his Majesty's customs to be cancelled, and that no illegal use has been or shall be made thereof with his or their privity or knowledge; and further, that before any such licence shall be granted as aforesaid, the master of such ship or vessel shall also make and subscribe a declaration that the same has been registered as a British ship, naming the port where and the time when such registry was made, and all the particulars contained in the certificate thereof, to the best of his knowledge and belief, and shall also give such bond and with the same condition as is before mentioned: provided also, that before any such licence shall be granted, such ship or vessel shall be surveyed in like manner as if a registry *de novo* were about to be made thereof; and the certificate of such survey shall be preserved by the collector and comptroller of the port to which such ship or vessel shall belong; and in virtue thereof it shall be lawful for the said commissioners and they are hereby required to permit such ship or vessel to be registered after her departure, whenever the owner or owners shall personally attend to take and subscribe the declaration required by this act before registry be made, and shall also comply with all other requisites of this act, except so far as relates to the bond to be given by the master of such ship or vessel; which certificate of registry the said commissioners shall and may transmit to the collector and comptroller of any other port, to be by them given to the master of such ship or vessel, upon his giving such bond, and delivering up the licence which had been granted for the then present use of such ship or vessel. — § 26.

Persons detaining Certificate of Registry to forfeit 100*l.* — In case any person who shall have received or obtained by any means, or for any purpose whatever, the certificate of the registry of any ship or vessel (whether such person shall claim to be the master or to be the owner or one of the owners of such ship or vessel, or not), shall wilfully detain and refuse to deliver up the same to the proper officers of customs, for the purposes of such ship or vessel, as occasion shall require, or to the person or persons having the actual command, possession, and management of such ship or vessel as the ostensible and reputed master, or as the ostensible and reputed owner or owners thereof, it may and shall be lawful to and for any such last-mentioned person to make complaint on oath of such detainer and refusal to any justice of the peace residing near to the place where such detainer and refusal shall be, in Great Britain or Ireland, or to any member of the supreme court of justice or any justice of the peace in the islands of Jersey, Guernsey, or Man, or in any colony, plantation, island, or territory to his Majesty belonging in Asia, Africa, or America, or in Malta, Gibraltar, or Heligoland, where such detainer and refusal shall be in any of the places last mentioned; and on such complaint the said justice or other magistrate shall and is hereby required, by warrant under his hand and seal, to cause the person so complained against to be brought before him to be examined touching such detainer and refusal; and if it shall appear to the said justice or other magistrate, on examination of such person or otherwise, that the said certificate of registry is not lost or mislaid, but is wilfully detained by the said person, such person shall be thereof convicted, and shall forfeit and pay the sum of 100*l.*, and on failure of payment thereof he shall be committed to the common gaol, there to remain without bail or mainprize for such time as the said justice or other magistrate shall in his discretion deem proper, not being less than 3 months nor more than 12 months; and the said justice or other magistrate shall and he is hereby required to certify the aforesaid detainer, refusal, and conviction to the person or persons who granted such certificate of registry for such ship or vessel, who shall, on the terms and conditions of law being complied with, make registry of such ship or vessel *de novo*, and grant a certificate thereof conformably to law, notifying on the back of such certificate the ground upon which the ship or vessel was so registered *de novo*; and if the person who shall have detained and refused to deliver up such certificate of registry as aforesaid, or shall be verily believed to have detained the same, shall have absconded, so that the said warrant of the justice or other magistrate cannot be executed upon him, and proof thereof shall be made to the satisfaction of the commissioners of his Majesty's customs, it shall be lawful for the said commissioners to permit such ship or vessel to be registered *de novo*, or otherwise, in their discretion, to grant a licence for the present use of such ship or vessel in like manner as is herein-before provided in the case wherein the certificate of registry is lost or mislaid. — § 27.

Ship altered in certain Manner to be registered de novo. — If any ship or vessel, after she shall have been registered pursuant to the directions of this act, shall in any manner whatever be altered so as not to correspond with all the particulars contained in the certificate of her registry, in such case such ship or vessel shall be registered *de novo*, in manner herein-before required, as soon as she returns to the port to which she belongs, or to any other port which shall be in the same part of the United Kingdom, or in the same colony, plantation, island, or territory as the said port shall be in, on failure whereof such ship or vessel shall, to all intents and purposes, be considered and deemed and taken to be a ship or vessel not duly registered. — § 28.

Vessels condemned as Prize, &c. — The owner or owners of all such ships and vessels as shall be taken by any of his Majesty's ships or vessels of war, or by any private or other ship or vessel, and condemned as lawful prize in any court of admiralty, or of such ships or vessels as shall be condemned in any competent court as forfeited for breach of the laws for the prevention of the slave trade, shall, for the purpose of registering any such ship or vessel, produce to the collector and comptroller of customs a certificate of the condemnation of such ship or vessel, under the hand and seal of the judge of the court in which such ship or vessel shall have been condemned (which certificate such judge is hereby authorised and required to grant), and also a true and exact account in writing of all the particulars contained in the certificate herein-before set forth, to be made and subscribed by one or more skilful person or persons to be appointed by the court then and there to survey such ship or vessel, and shall also make and subscribe a declaration before the collector and comptroller that such ship or vessel is the same vessel which is mentioned in the certificate of the judge aforesaid. — § 29.

Prize Vessels not to be registered at Guernsey, Jersey, or Man. — No ship or vessel which shall be taken and condemned as prize or forfeiture as aforesaid shall be registered in the islands of Guernsey, Jersey, or Man, although belonging to his Majesty's subjects residing in those islands, or in some one or other of them; but the same shall be registered either at Southampton, Weymouth, Exeter, Plymouth, Falmouth, Liverpool, or Whitehaven, by the collector and comptroller at such ports respectively, who are hereby authorised and required to register such ship or vessel, and to grant a certificate thereof in the form and under the regulations and restrictions in this act contained. — § 30.

Transfers of Interest to be made by Bill of Sale. — When and so often as the property in any ship or vessel, or any part thereof, belonging to any of his Majesty's subjects, shall, after registry thereof, be sold to any other or others of his Majesty's subjects, the same shall be transferred by bill of sale or other instrument in writing, containing a recital of the certificate of registry of such ship or vessel, or the principal contents thereof, otherwise such transfer shall not be valid or effectual for any purpose whatever, either in law or in equity: provided always, that no bill of sale shall be deemed void by reason of any error in such recital, or by the recital of any former certificate of registry instead of the existing certificate, provided the identity of the ship or vessel intended in the recital be effectually proved thereby. — § 31.

Property in Ships to be divided into Sixty-four Parts or Shares. — The property in every ship or vessel of which there are more than one owner shall be taken and considered to be divided into 64 equal parts or shares, and the proportion held by each owner shall be described in the registry as being a certain number of 64th parts or shares; and no person shall be entitled to be registered as an owner of any ship or vessel in respect of any proportion of such ship or vessel which shall not be an integral 64th part or share of the same; and upon the first registry of any ship or vessel, the owner or owners who shall take and subscribe the declaration required by this act, before registry be made, shall also declare the number of such parts or shares then held by each owner, and the same shall be so registered accordingly: provided always, that if it shall at any time happen that the property of any owner or owners in any ship or vessel cannot be reduced by division into any number of integral 64th parts or shares, it shall and may be lawful for the owner or owners of such fractional parts as shall be over and above such number of integral 64th parts or shares into which such property in any ship or vessel can be reduced by division to transfer the same one to another, or jointly to any new owner, by memorandum upon their respective bills of sale, or by fresh bill of sale, without such transfer being liable to any stamp duty: provided also, that the right of any owner or owners to any such fractional parts shall not be affected by reason of the same not having been registered: provided also, that it shall be lawful for any number of such owners, named and described in such registry, being partners in any house or copartnership actually carrying on trade in any part of his Majesty's dominions, to hold any ship or vessel, or any share or shares of any ship or vessel, in the name of such house or copartnership, as joint owners thereof, without distinguishing the proportionate interest of each of such owners, and that such ship or vessel, or the share or shares thereof so held in copartnership, shall be deemed and taken to be partnership property to all intents and purposes, and shall be governed by the same rules, both in law and equity, as relate to and govern all other partnership property in any other goods, chattels, and effects whatsoever. — § 32.

Only Thirty-two Persons to be Owners of any Ship at One Time. — No greater number than 32 persons shall be entitled to be legal owners at one and the same time of any ship or vessel, as tenants in common, or to be registered as such: provided always, that nothing herein contained shall affect the equitable title of minors, heirs, legatees, creditors, or others, exceeding that number, duly represented by or holding from any of the persons within the said number, registered as legal owners of any share or shares of such ship or vessel: provided also, that if it shall be proved to the satisfaction of the commissioners of customs that any number of persons have associated themselves as a joint stock company, for the purpose of owning any ship or vessel, or any number of ships or vessels, as the joint property of such company, and that such company have duly elected or appointed any number, not less than 3, of the members of the same to be trustees of the property in such ship or vessel or ships or vessels so owned by such company, it shall be lawful for such trustees or any 3 of them, with the permission of such commissioners, to make and subscribe the declaration required by this act before registry be made, except that, instead of stating therein the names and descriptions of the other owners, they shall state the name and description of the company to which such ship or vessel or ships or vessels shall in such manner belong. — § 33.

Bills of Sale not effectual until produced to Officers of Customs. — No bill of sale or other instrument in writing shall be valid and effectual to pass the property in any ship or vessel, or in any share thereof, or for any other purpose, until such bill of sale or other instrument in writing shall have been produced to the collector and comptroller of the port at which such ship or vessel is already registered, or to the collector and comptroller of any other port at which she is about to be registered *de novo*, as the case may be, nor until such collector and comptroller respectively shall have entered in the book of such last registry, in the one case, or in the book of such registry *de novo*, after all the requisites of law for such registry *de novo* shall have been duly complied with, in the other case (and which they are respectively hereby required to do upon the production of the bill of sale or other instrument for that purpose), the name, residence, and description of the vendor or mortgagor, or of each vendor or mortgagor, if more than 1, the number of shares transferred, the name, residence, and description of the purchaser or mortgagee, or of each purchaser or mortgagee, if more than 1, and the date of the bill of sale or other instrument, and of the production of it; and further, if such ship or vessel is not about to be registered *de novo*, the collector and comptroller of the port where such ship is registered shall and they are hereby required to indorse the aforesaid particulars of such bill of sale or other instrument on the certificate of registry of the said ship or vessel, when the same shall be produced to them for that purpose, in manner and to the effect following; *viz.*

"Custom-house [*port and date; name, residence, and description of vendor or mortgagor*] has transferred by [*bill of sale or other instrument*] dated [*date; number of shares*] to [*name, residence, and description of purchaser or mortgagee.*]

A. B. Collector.
C. D. Comptroller."

And forthwith to give notice thereof to the commissioners of customs; and in case the collector and comptroller shall be desired so to do, and the bill of sale or other instrument shall be produced to them for that purpose, then the said collector and comptroller are hereby required to certify, by indorsement upon the bill of sale or other instrument, that the particulars before mentioned have been so entered in the book of registry, and indorsed upon the certificate of registry as aforesaid. — § 34.

Entry of Bill of Sale to be valid, except in certain Cases. — When and so soon as the particulars of any bill of sale or other instrument by which any ship or vessel, or any share or shares thereof, shall be transferred, shall have been so entered in the book of registry as aforesaid, the said bill of sale or other instrument shall be valid and effectual to pass the property thereby intended to be transferred as against all and every person and persons whatsoever, and to all intents and purposes, except as against such subsequent purchasers and mortgagees who shall first procure the indorsement to be made upon the certificate of registry of such ship or vessel in manner herein-after mentioned. — § 35.

When a Bill of Sale has been entered for any Shares, Thirty Days shall be allowed for indorsing the Certificate of Registry, before any other Bill of Sale for the same shall be entered. — When and after the particulars of any bill of sale or other instrument by which any ship or vessel, or any share or shares thereof, shall be transferred, shall have been so entered in the book of registry as aforesaid, the collector and comptroller shall not enter in the book of registry the particulars of any other bill of sale or instrument purporting to be a transfer by the same vendor or mortgagor or vendors or mortgagors of the same ship or vessel, share or shares thereof, to any other person or persons, unless 30 days shall elapse from the day on which the particulars of the former bill of sale or other instrument were entered in the book of registry; or in case the ship or vessel was absent from the port to which she belonged at the time when the particulars of such former bill of sale or other instrument were entered in the book of registry, then unless 30 days shall have elapsed from the day on which the ship or vessel arrived at the port to which the same belonged; and in case the particulars of 2 or more such bills of sale or other instruments as aforesaid shall at any time have been entered in the book of registry of the said ship or vessel,

the collector and comptroller shall not enter in the book of registry the particulars of any other bill of sale or other instrument as aforesaid unless 30 days shall in like manner have elapsed from the day on which the particulars of the last of such bill of sale or other instrument were entered in the books of registry, or from the day on which the ship or vessel arrived at the port to which she belonged, in case of her absence as aforesaid; and in every case where there shall at any time happen to be 2 or more transfers by the same owner or owners of the same property in any ship or vessel entered in the book of registry as aforesaid, the collector and comptroller are hereby required to indorse upon the certificate of registry of such ship or vessel the particulars of that bill of sale or other instrument under which the person or persons claims or claim property, who shall produce the certificate of registry for that purpose within 30 days next after the entry of his said bill of sale or other instrument in the book of registry as aforesaid, or within 30 days next after the return of the said ship or vessel to the port to which she belongs, in case of her absence at the time of such entry as aforesaid; and in case no person or persons shall produce the certificate of registry within either of the said spaces of 30 days, then it shall be lawful for the collector and comptroller, and they are hereby required, to indorse upon the certificate of registry the particulars of the bill of sale or other instrument to such person or persons as shall first produce the certificate of registry for that purpose, it being the true intent and meaning of this act that the several purchasers and mortgagees of such ship or vessel, share or shares thereof, when more than 1 appear to claim the same property, or to claim security on the same property, in the same rank and degree, shall have priority one over the other, not according to the respective times when the particulars of the bill of sale or other instrument by which such property was transferred to them were entered in the book of registry as aforesaid, but according to the time when the indorsement is made upon the certificate of registry as aforesaid: provided always, that if the certificate of registry shall be lost or mislaid, or shall be detained by any person whatever, so that the indorsement cannot in due time be made thereon, and proof thereof shall be made by the purchaser or mortgagee, or his known agent, to the satisfaction of the commissioners of his Majesty's customs, it shall be lawful for the said commissioners to grant such further time as to them shall appear necessary for the recovery of the certificate of registry, or for the registry *de novo* of the said ship or vessel under the provisions of this act; and thereupon the collector and comptroller shall make a memorandum in the book of registers of the further time so granted, and during such time no other bill of sale shall be entered for the transfer of the same ship or vessel, or the same share or shares thereof, or for giving the same security thereon. — § 36.

Bills of Sale may be produced after Entry at other Ports. — If the certificate of registry of such ship or vessel shall be produced to the collector and comptroller of any port where she may then be, after any such bill of sale shall have been recorded at the port to which she belongs, together with such bill of sale, containing a notification of such record, signed by the collector and comptroller of such port as before directed, it shall be lawful for the collector and comptroller of such other port to indorse on such certificate of registry (being required so to do) the transfer mentioned in such bill of sale, and such collector and comptroller shall give notice thereof to the collector and comptroller of the port to which such ship or vessel belongs, who shall record the same in like manner as if they had made such indorsement themselves, but inserting the name of the port at which such indorsement was made: provided always, that the collector and comptroller of such other port shall first give notice to the collector and comptroller of the port to which such ship or vessel belongs of such requisition made to them to indorse the certificate of registry, and the collector and comptroller of the port to which such ship or vessel belongs shall thereupon send information to the collector and comptroller of such other port, whether any and what other bill or bills of sale have been recorded in the book of the registry of such ship or vessel; and the collector and comptroller of such other port, having such information, shall proceed in manner directed by this act in all respects to the indorsing of the certificate of registry as they would do if such port were the port to which such vessel belonged. — § 37.

If upon Registry de novo *any Bill of Sale shall not have been recorded, the same shall then be produced.* — If it shall become necessary to register any ship or vessel *de novo*, and any share or shares of such ship or vessel, shall have been sold since she was last registered, and the transfer of such share or shares shall not have been recorded and indorsed in manner herein-before directed, the bill of sale thereof shall be produced to the collector and comptroller of his Majesty's customs, who are to make registry of such ship or vessel, otherwise such sale shall not be noticed in such registry *de novo*, except as hereinafter excepted: provided always, that upon the future production of such bill of sale, and of the existing certificate of registry, such transfer shall and may be recorded and indorsed as well after such registry *de novo* as before. — § 38.

Upon Change of Property, Registry de novo *may be granted.* — If upon any change of property in any ship or vessel, the owner or owners shall desire to have the same registered *de novo*, although not required by this act, and the owner or proper number of owners shall attend at the Custom-house at the port to which such ship or vessel belongs for that purpose, it shall be lawful for the collector and comptroller of his Majesty's customs at such port to make registry *de novo* of such ship or vessel at the same port, and to grant a certificate thereof, the several requisites herein-before in this act mentioned and directed being first duly observed and complied with. — § 39.

Copies of Declarations, &c., and of Extracts from Books of Registry admitted in Evidence.—The collector and comptroller of customs at any port or place, and the person or persons acting for them, respectively, shall, upon every reasonable request by any person or persons whomsoever, produce and exhibit for his, her, or their inspection and examination any oath or declaration sworn or made by any such owner or owners, proprietor or proprietors, and also any register or entry in any book or books of registry required by this act to be made or kept relative to any ship or vessel, and shall, upon every reasonable request by any person or persons whomsoever, permit him, her, or them to take a copy or copies or an extract or extracts thereof respectively; and the copy and copies of any such oath or declaration, register or entry, shall, upon being proved to be a true copy or copies thereof respectively, be allowed and received as evidence upon every trial at law, without the production of the original or originals, and without the testimony or attendance of any collector or comptroller, or other person or persons acting for them respectively, in all cases, as fully and to all intents and purposes as such original or originals, if produced by any collector or collectors, comptroller or comptrollers, or other person or persons acting for them, could or might legally be admitted or received in evidence. — § 40.

Vessels or Shares sold in the Absence of Owners without formal Powers. — If the ship or vessel, or the share or shares of any owner thereof who may be out of the kingdom, shall be sold in his absence by his known agent or correspondent, under his directions either expressed or implied, and acting for his interest in that behalf, and such agent or correspondent who shall have executed a bill of sale to the purchaser of the whole of such ship or vessel, or of any share or shares thereof, shall not have received a legal power to execute the same, it shall be lawful for the commissioners of his Majesty's customs, upon application made to them, and proof to their satisfaction of the fair dealings of the parties, to permit such transfer to be registered, if registry *de novo* be necessary, or to be recorded and indorsed, as the case may be, in manner directed by this act, as if such legal power had been produced; and also if it shall happen that any bill of sale cannot be produced, or if, by reason of distance of time, or the absence or death of parties concerned, it cannot be proved that a bill of sale for any share or shares in any ship or vessel had been executed, and registry *de novo* of such ship or vessel shall have become necessary, it shall be lawful for the commissioners of his Majesty's customs, upon proof to their satisfaction of the fair dealings of the parties, to permit such ship or vessel to be registered *de novo* in like manner as if a bill of sale for the transfer of such share or shares had been produced: provided always, that in any of the cases herein mentioned, good and sufficient security shall be given to produce a legal power or bill of sale within a

reasonable time, or to abide the future claims of the absent owner, his heirs and successors, as the case may be; and at the future request of the party whose property has been so transferred, without the production of a bill of sale from him or from his lawful attorney, such bond shall be available for the protection of his interest, in addition to any powers or rights which he may have in law or equity against the ship or vessel, or against the parties concerned, until he shall have received full indemnity for any loss or injury sustained by him. — § 41.

Transfer by way of Mortgage. — When any transfer of any ship or vessel, or of any share or shares thereof, shall be made only as a security for the payment of a debt or debts, either by way of mortgage, or of assignment to a trustee or trustees for the purpose of selling the same for the payment of any debt or debts, then and in every such case the collector and comptroller of the port where the ship or vessel is registered shall, in the entry in the book of registry, and also in the indorsement on the certificate of registry, in manner herein-before directed, state and express that such transfer was made only as a security for the payment of a debt or debts, or by way of mortgage, or to that effect; and the person or persons to whom such transfer shall be made, or any other person or persons claiming under him or them as a mortgagee or mortgagees, or a trustee or trustees only, shall not by reason thereof be deemed to be the owner or owners of such ship or vessel, share or shares thereof, nor shall the person or persons making such transfer be deemed by reason thereof to have ceased to be an owner or owners of such ship or vessel, any more than if no such transfer had been made, except so far as may be necessary for the purpose of rendering the ship or vessel, share or shares, so transferred, available by sale or otherwise for the payment of the debt or debts for securing the payment of which such transfer shall have been made. — § 42.

Transfers of Ships for Security. — When any transfer of any ship or vessel, or of any share or shares thereof, shall have been made as a security for the payment of any debt or debts, either by way of mortgage or of assignment as aforesaid, and such transfer shall have been duly registered according to the provisions of this act, the right or interest of the mortgagee or other assignee as aforesaid shall not be in any manner affected by any act or acts of bankruptcy committed by such mortgagor or assignor, mortgagors or assignors, after the time when such mortgage or assignment shall have been so registered as aforesaid, notwithstanding such mortgagor or assignor, mortgagors or assignors, at the time he or they shall so become bankrupt as aforesaid, shall have in his or their possession, order, and disposition, and shall be the reputed owner or owners of the said ship or vessel, or the share or shares thereof, so by him or them mortgaged or assigned as aforesaid, but such mortgage or assignment shall take place of and be preferred to any right, claim, or interest which may belong to the assignee or assignees of such bankrupt or bankrupts in such ship or vessel, share or shares thereof, any law or statute to the contrary thereof notwithstanding. — § 43.

Governors of Colonies, &c. may cause Proceedings in Suits to be stayed. — It shall and may be lawful for any governor, lieutenant-governor, or commander-in-chief of any of his Majesty's colonies, plantations, islands, or territories, and they are hereby respectively authorised and required, if any suit, information, libel, or other prosecution or proceeding of any nature or kind whatever shall have been commenced or shall hereafter be commenced in any court whatever in any of the said colonies, plantations, islands, or territories respectively, touching the force and effect of any register granted to any ship or vessel, upon a representation made to any such governor, lieutenant-governor, or commander-in-chief, to cause all proceedings thereon to be stayed, if he shall see just cause so to do, until his Majesty's pleasure shall be known and certified to him by his Majesty, by and with the advice of his Majesty's privy council; and such governor, lieutenant-governor, or commander-in-chief is hereby required to transmit to one of his Majesty's principal secretaries of state, to be laid before his Majesty in council, an authenticated copy of the proceedings in every such case, together with his reasons for causing the same to be stayed, and such documents (properly verified) as he may judge necessary for the information of his Majesty. — § 44.

Penalty of 500l. on Persons making false Declaration, or falsifying any Document. — If any person or persons shall falsely make declaration to any of the matters herein-before required to be verified by declaration, or if any person or persons shall counterfeit, erase, alter, or falsify any certificate or other instrument in writing required or directed to be obtained, granted, or produced by this act, or shall knowingly or wilfully make use of any certificate or other instrument so counterfeited, erased, altered, or falsified, or shall wilfully grant such certificate or other instrument in writing, knowing it to be false, such person or persons shall for every such offence forfeit the sum of 500*l.* — § 45.

How Penalties are to be recovered. — All the penalties and forfeitures inflicted and incurred by this act shall and may be sued for, prosecuted, recovered, and disposed of in such manner, and by such ways, means, and methods, as any penalties or forfeitures inflicted or which may be incurred for any offences committed against any law relating to the customs may now legally be sued for, prosecuted, recovered, and disposed of; and the officer or officers concerned in seizures or prosecutions under this act shall be entitled to and receive the same share of the produce arising from such seizures as in the case of seizures for unlawful importation, and to such share of the produce arising from any pecuniary fine or penalty for any offence against this act as any officer or officers is or are now by any law or regulation entitled to upon prosecutions for pecuniary penalties. — § 46.

REPORT, in commercial navigation, a paper delivered by the masters of all ships arriving from parts beyond seas to the Custom-house, and attested upon oath, containing an account of the cargo on board, &c. — (See *antè*, p. 657.)

REPRISALS. Where the people of one nation have unlawfully seized and detained property belonging to another state, the subjects of the latter are authorised, by the law of nations, to indemnify themselves, by seizing the property of the subjects of the state aggressing. This is termed making reprisals; and commissions to this effect are issued from the Admiralty. — (See PRIVATEERS.)

RESPONDENTIA. See BOTTOMRY AND RESPONDENTIA.

REVENUE AND EXPENDITURE. Though not properly belonging to a work of this sort, we believe we shall do an acceptable service to our readers by laying before them the following comprehensive Table of the revenue and expenditure of the United Kingdom in 1830, 1831, and 1832. It contains more information in a brief space than most parliamentary papers. It was originally framed according to the suggestion, and printed upon the motion of Mr. Pusey; and there are not very many members who have left so useful a memorial of their parliamentary career.

Heads of Income.	Public Income in 1830.		1831.		1832.	
	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.	L. s. d.
Customs and Excise.						
Spirits { Foreign	1,480,507 3 2	- -	1,432,179 8 0	- -	1,857,717 14 7	
Spirits { Rum	1,599,445 6 11	- -	1,629,881 9 5	- -	1,580,380 3 9	
Spirits { British	5,185,574 4 9½	- -	5,195,125 5 6½	- -	5,163,178 16 0½	
Malt	3,436,272 14 2	- -	4,359,333 16 8½	- -	4,825,120 0 10	
Beer*	2,345,122 10 8½	- -	6,888 19 1	- -	6,892 9 11	
Hops	118,912 5 3½	- -	148,594 19 2½	- -	294,325 17 7	
Wine	1,524,177 18 3	- -	1,537,484 2 4	- -	1,715,809 14 6	
Sugar and Molasses	4,927,025 7 6	- -	4,807,472 5 8½	- -	4,648,990 5 7	
Tea	3,387,097 18 9½	- -	3,344,918 12 9½	- -	3,509,834 13 7	
Coffee	579,363 10 7	- -	583,751 5 6	- -	598,038 5 11	
Tobacco and Snuff	2,924,264 13 11	- -	2,960,325 7 4	- -	3,080,588 13 3	
		27,507,763 14 1		26,005,955 11 7½		27,280,876 15 6½
Butter	102,752 5 8	- -	121,256 4 11	- -	128,293 16 5	
Cheese	54,870 19 5	- -	68,256 16 0	- -	69,049 2 8	
Currants and Raisins	420,217 0 3	- -	503,440 9 1	-	465,144 4 2	
Corn	790,109 17 8	- -	544,792 4 3	- -	307,988 2 3	
Cotton Wool* and Sheep's imported	482,274 11 11	- -	476,682 17 7	- -	728,718 2 10	
Silks	209,047 7 3	- -	213,847 14 6	- -	194,523 16 2	
Printed Goods*	570,330 15 0½	- -	58,968 4 6½	- -	3,375 4 10½	
Hides and Skins*	255,278 3 10	- -	52,134 17 0½	- -	43,190 1 5	
Paper	690,610 1 4½	- -	680,140 5 4½	- -	758,761 17 5	
Soap*	1,251,021 12 11½	- -	1,139,313 3 5½	- -	1,187,550 10 7½	
Candles* and Tallow	662,944 18 8½	- -	615,554 12 3	- -	236,503 17 1	
Coals, sea-borne*	1,021,862 5 11	- -	125,745 15 11½	- -	54,420 1 10	
Glass	567,632 18 11	- -	548,050 5 6½	- -	575,680 15 2½	
Bricks, Tiles*, and Slates*	383,985 5 7½	- -	366,418 11 6½	- -	325,256 18 2½	
Timber	1,319,233 9 11	- -	1,278,995 14 10½	- -	1,239,289 8 8	
Auctions	234,854 2 11	- -	218,805 4 7½	- -	227,235 14 6½	
Excise Licences	848,469 14 11½	- -	919,175 4 9½	- -	897,358 7 5	
Miscellaneous Duties of Customs and Excise	1,971,223 8 3½	- -	1,743,795 6 1½	- -	1,689,265 5 6	
		11,836,718 18 7		9,674,653 12 5½		9,130,605 7 4
Total of Customs and Excise	- -	39,344,482 12 8	- -	35,680,609 4 1	- -	36,411,482 2 10½
Stamps.						
Deeds and other Instruments	1,621,427 1 8½	- -	1,512,107 3 1½	- -	1,458,312 6 11½	
Probates and Legacies	2,084,432 15 3	- -	2,001,932 4 7½	- -	2,023,432 12 7	
Insurance { Marine*	219,565 6 1	- -	248,156 11 8½	- -	310,223 11 3	
Insurance { Fire	760,931 3 11½	- -	764,755 11 11	- -	896,948 1 5¾	
Bills of Exchange, Bankers' Notes, &c.	568,546 1 8½	- -	666,704 14 9½	- -	626,959 16 9¾	
Newspapers and Advertisements*	613,848 2 2¾	- -	655,724 10 3	- -	643,888 0 6	
Stage Coaches	418,598 5 9½	-	422,480 14 9¾	- -	414,033 4 11	
Post Horses	220,357 12 10	- -	231,863 3 4	- -	245,068 16 5	
Receipts*	223,660 6 2¾	-	218,847 6 10½	- -	212,496 17 10½	
Other Stamp Duties	516,716 18 8½	- -	416,066 15 0½	- -	288,528 14 7½	
		7,248,083 14 6		7,138,638 16 5½		7,119,892 3 4½
Assessed and Land Taxes.						
Land Taxes	1,184,790 12 5½	- -	1,161,312 7 1½	- -	1,184,340 4 1½	
Houses*	1,361,625 0 5½	- -	1,357,041 13 11¾	- -	1,390,984 11 5½	
Windows	1,185,283 7 10¾	- -	1,178,344 2 3½	- -	1,202,931 0 11½	
Servants	295,087 5 6	- -	295,111 18 6	- -	307,181 19 6	
Horses	425,125 17 0	- -	417,841 2 0	- -	419,786 8 9	
Carriages	397,613 10 0	- -	392,947 4 0	- -	408,414 14 6	
Dogs	186,102 2 0	- -	181,002 1 0	- -	177,966 4 0	
Other Assessed Taxes	259,242 11 7	- -	239,117 19 3	- -	242,081 4 7	
		5,294,870 6 10½		5,222,718 8 1¾		5,333,686 7 10½
Post-office	- -	2,212,206 5 6½	- -	2,227,364 4 11½	- -	2,175,291 8 7½
Crown Lands	- -	363,742 0 4	- -	373,770 10 2½	- -	359,524 15 9
Other Ordinary Revenues and other Resources	- -	376,805 0 6	- -	347,214 6 5½	- -	286,945 7 8
Grand Total	- -	54,840,190 0 43	- -	50,000,315 10 3¾	- -	51,686,822 6 2

N.B.—The duties on beer, printed goods, candles, coals, and tiles and slates have been repealed. Those on raw cotton, soap, marine insurances, advertisements, receipts, &c. have been reduced. The house tax is about being repealed.

Heads of Expenditure.	Public Expenditure in 1830.			1831.			1832.		
	L. s. d.	L. s. d.		L. s. d.	L. s. d.		L. s. d.	L. s. d.	
Revenue Charges of Collection.									
Customs { Civil Departments	819,160 17 0½	- -		804,413 12 5½	- -		815,021 10 8		
Customs { Preventive Service	260,043 1 4½	- -		313,674 13 7½	- -		360,330 14 0½		
Total	1,079,203 18 5½	- -		1,118,088 6 1½	- -		1,175,352 4 8¼		
Excise	1,062,686 12 1½	- -		998,760 11 11	- -		992,761 11 1		
Stamps	177,924 1 11½	- -		173,016 5 10½	- -		182,358 0 10½		
Assessed and Land Taxes	266,309 15 2	- -		264,687 15 8	- -		219,212 6 9½		
Other Ordinary Revenues (except the Post-office)	25,551 0 9	- -		26,342 4 1½	- -		23,248 14 7		
Superannuation and other Allowances	402,549 2 11½	- -		374,950 19 8¾	- -		393,585 13 11¾		
Total Revenue		3,014,224 11 4½			2,955,846 3 5½			2,986,518 12	
Public Debt.									
Interest of Permanent Debt	24,091,750 7 10	- -		24,027,666 2 6½	- -		23,982,044 9 7½		
Actual Charge for Terminable Annuities*	1,843,106 11 7	- -		1,844,498 4 1	- -		1,842,182 13 2		
Actual Charge for Life Annuities and Annuities for Terms of Years*	1,453,269 2 5	- -		1,501,991 5 6	- -		1,596,427 7 0		
Interest of Exchequer Bills	813,300 16 5	- -		635,329 11 3	- -		659,165 6 6		
Management	275,179 3 4	- -		273,296 8 9¾	- -		271,553 1 10½		
Total Debt		28,476,606 1 7			28,302,781 12 2			28,351,352 18	
Civil Government.									
Civil List: Privy Purse; Salaries of the Household; and Tradesmen's Bills	401,628 16 10¾	- -		411,800 0 0	- -		411,800 0 0		
The Allowances to the Junior Branches of the Royal Family, and to H. R. H. Leopold Prince of Coburg	245,923 1 6½	- -		212,375 0 0	- -		220,000 0 0		
The Lord Lieutenant of Ireland's Establishment	32,749 9 3¾	- -		36,379 14 1	- -		37,435 16 5½		
The Salaries and other Expenses of the Houses of Parliament (including Printing)	144,374 6 5	- -		238,037 19 11	- -		145,464 3 8		
Civil Departments, exclusive of those in the Army, Navy, and Ordnance Estimates	320,045 1 8½	- -		339,376 9 8½	- -		356,228 7 7		
Pensions on the Consolidated Fund and on the Gross Revenue	264,247 3 2½	- -		348,275 2 3½	- -		318,784 15 6¾		
Ditto on Civil List	170,000 0 0	- -		75,000 0 0	- -		75,000 0 0		
Total Civil Government		1,378,967 19 0½			1,661,244 6 0			1,564,713 3	
Justice.									
Courts of Justice	407,801 9 9½	- -		415,953 7 6¾	- -		437,784 16 0		
Police, and Criminal Prosecutions	222,450 9 4	- -		210,523 4 11	- -		217,029 14 0		
Correction. { Convicts at Home and Abroad	140,305 16 1	- -		129,587 3 1	- -		139,323 16 0½		
Correction. { Convicts, New S. Wales	167,500 0 0	- -		167,500 0 0	- -		137,788 16 0		
Correction. { Other Expenses	55,620 6 11¾	- -		63,184 0 0	- -		57,549 6 5		
Total Justice		993,678 2 2½			986,747 17 6¾			989,476 8	
Diplomatic.									
Salaries and Retired Allowances of Foreign Ministers	220,930 15 9¾	- -		141,437 15 3	- -		197,489 17 9½		
Ditto ditto Consuls	117,595 0 0	- -		112,195 0 0	- -		93,223 6 4		
Civil Contingencies, Expenses	37,099 7 1	- -		45,193 3 8	- -		39,726 15 6		
Total Diplomatic		375,625 2 10¾			298,825 18 11			330,439 19	
Forces.									
Army. { Effective { Number of Men	(84,172.)	- -		(78,498.)	- -		(89,690.)		
Army. { Effective { Charge	4,492,688 5 7½	- -		4,808,362 16 2	- -		4,347,390 1 7		
Army. { Non-effective { Number of Men	(96,081.)	- -		(94,024.)	- -		(90,868.)		
Army. { Non-effective { Charge	2,939,606 9 6	- -		2,924,604 17 4	- -		2,790,091 17 5		
Total Army	7,432,294 15 1½	- -		7,732,967 13 6	- -		7,137,481 19 0		
Ordnance. { Effective { Number of Men	(8,878.)	- -		(12,791.)	- -		(12,237.)		
Ordnance. { Effective { Charge	1,332,354 0 0	- -		1,062,913 0 0	- -		1,073,211 0 0		
Ordnance. { Non-effective { Number of Men	(12,384.)	- -		(13,052.)	- -		(12,821.)		
Ordnance. { Non-effective { Charge	357,090 0 0	- -		355,904 0 0	- -		351,477 0 0		
Total Ordnance	1,689,444 0 0	- -		1,418,817 0 0	- -		1,424,688 0 0		
Navy. { Effective { Number of Men	(31,444.)	- -		(33,794.)	- -		(28,759.)		
Navy. { Effective { Charge	4,063,308 7 8½	- -		4,243,846 7 3	- -		3,265,306 8 1		
Navy. { Non-effective { Number of Men	(29,922.)	- -		(32,021.)	- -		(29,294.)		
Navy. { Non-effective { Charge	1,531,646 17 11¾	- -		1,626,704 14 5	- -		1,613,328 6 6		
Total Navy	5,594,955 5 8	- -		5,870,551 1 8	- -		4,878,634 14 7		
Total Forces		14,716,694 0 9½			15,022,335 15 2			13,440,804 13	
Bounties for promoting Fisheries, Linen Manufactures, &c.	- -	207,966 10 1½		- -	173,955 18 9½		- -	79,528 16	
Public Works	- -	474,242 0 1		- -	825,210 8 3		- -	345,184 17	
Payments out of the Revenue of Crown Lands, for Improvements and various Public Services	- -	252,601 5 7½		- -	254,433 11 9¾		- -	297,499 10	
Post-office Charges of Collection and other Payments	- -	718,359 8 6½		- -	673,317 5 3½			707,288 19	
Quarantine and Warehousing Establishments	- -	214,037 14 6¾		- -	203,734 0 6½		- -	215,538 11	
Miscellaneous Services, not classed under the aforegoing Heads, consisting of Grants of Parliament, Payments out of the Gross Revenue, Consolidated Fund, and Civil List	-	1,988,530 7 8½		- -	1,216,875 18 5		- -	1,076,771 17	
Grand Total	- -	53,011,533 4 5½		- -	52,575,308 16 3¾		- -	50,385,118 7	
* Terminable and Life Annuities	- -	3,296,375 14 0		- -	3,346,489 9 7		- -	3,438,610 0	
Corresponding Perpetuities, as estimated by Mr. Finlaison	- -	2,143,685 13 6		- -	2,104,507 18 2		- -	2,103,399 15	
Difference	- -	1,152,690 0 6		- -	2,411,981 11 5		- -	1,335,210 4	

RHUBARB (Du. *Rhubarber;* Fr. *Rhubarbe, Rubarbe;* It. *Rabarbaro, Reo-barbaro;* Sp. *Ruibarbo;* Rus. *Rewen;* Arab. *Rawend;* Chin. *Ta-hwang*), the root of a plant, a native of China and Tartary. Three varieties of rhubarb are known in the shops; viz. Russian, Turkey, and East Indian or Chinese rhubarb. The first two resemble each other in every respect. They are, in fact, the same article, being both derived from Tartary. The portion destined for the Petersburgh market being selected and sorted at Kiachta, acquires the name of Russian rhubarb; while the portion that is sent from Tartary to Smyrna and other places in Turkey, is called Turkey rhubarb. The best pieces only are sent to Petersburgh; and according to the contract with the government, on whose account it is bought, all that is rejected must be burnt; and that which is approved undergoes a second cleaning before being finally packed up for Petersburgh. The best pieces of Russian and Turkey rhubarb are roundish, and perforated with a large hole, of a reddish or yellow colour on the outside, and when cut or broken exhibit a mottled texture, and alternate streaks of red and grey. Its odour is peculiar; and its taste nauseous, bitter, and astringent. It should not be porous, but rather compact and heavy. East Indian or Chinese rhubarb is in oblong flat pieces, seldom perforated; has a stronger odour, and is more nauseous to the taste than the other; it is heavier, more compact, breaks smoother, and affords a powder of a redder shade. — (*Thomson's Dispensatory; Ainslie's Mat. Indica, &c.*)

The total quantity of rhubarb imported in 1831 amounted to 140,395 lbs.; of which 6,901 lbs. came from Russia, and 133,462 from the East Indies. Of the quantity imported, 40,124 lbs. were retained for home consumption. The price of rhubarb in bond varies from 2*s.* per lb. for the inferior East Indian, to 8*s.* for the best Russian.

RICE (Fr. *Riz;* It. *Riso;* Arab. *Aruz;* Hind. *Chawl*), one of the most valuable of the cereal grasses, the *Oryza sativa* of botanists. It is raised in immense quantities in India, China, and most Eastern countries; in the West Indies, Central America, and the United States; and in some of the southern countries of Europe. It, in fact, occupies the same place in most intertropical regions as wheat in the warmer parts of Europe, and oats and rye in those more to the north. Forming, as it does, the principal part of the food of the most civilised and populous Eastern nations, it is more extensively consumed than any other species of grain. It is light and wholesome, but is said to contain less of the nutritive principle than wheat. When rough, or in its natural state in the husk, it is called *paddy*. There is an immense variety in the qualities of rice. That which is principally exported from Bengal has received the name of *cargo* rice. It is of a coarse reddish cast, but is sweet and large grained, and is preferred by the natives to every other sort. It is not kiln-dried, but is parboiled in earthen pots or caldrons, partly to destroy the vegetative principle, so that it may keep better, and partly to facilitate the process of husking. Patna rice is more esteemed in Europe than any other sort of rice imported from the East. It is small grained, rather long and wiry, and remarkably white. But the rice raised on the low marshy grounds of Carolina is unquestionably very superior to any brought from any part of India.

The produce of lands naturally or artificially irrigated is, as far as rice is concerned, from 5 to 10 times greater than that of dry land having no command of water: and hence the vast importance of irrigation in all countries where this grain is cultivated. But it is worthy of remark, that, owing to the not unfrequent occurrence of severe droughts, there is a greater variation in the crops of rice than in those of any other species of grain. Those who, like the Hindoos, depend almost entirely on it for subsistence, are, consequently, placed in a very precarious situation. There can be no doubt that famines are at once more frequent and severe in Hindostan than in any other quarter.

A few years ago, England was principally supplied with cleaned rice from Carolina. Latterly, however, the imports of Carolina rice have been much reduced. An improved method of separating the husk, which throws out the grain clean and unbroken, has recently been practised in this country; and as the grain, when in the husk, is found to preserve its flavour and sweetness better during a long voyage than when shelled, large quantities are now imported rough from Bengal and the United States. Unquestionably, however, the oppressive discriminating duty of 14*s.* a cwt. on American and other foreign cleaned rice has done more than any thing else to increase the imports of rough grain; and the fact of the duty on paddy from Bengal being only 1*d.* per quarter, while that on paddy from Carolina is 2*s.* 6*d.* a bushel, sufficiently accounts for the increased imports from the former.

The consumption of rice increased rapidly after the reduction of the duty on the cleaned and rough grain from India in 1828. In 1830, the entries for home consumption amounted to 153,652 cwt. of cleaned, and 189,249 cwt. of rough grain. But, contrary to our anticipations in the former edition of this work, the consumption has since materially fallen off. The entries for home consumption in 1832 amounted to only 111,461 cwt. of clean, and 179,627 cwt. of rough grain, or paddy; and, during last year (1833), there was a still further decline. Mr. Cook ascribes this diminution to the reduction that has taken place in the price of wheat, which has fallen from 64*s.* 3*d.* in 1830 to 52*s.* 11*d.* in 1833. Mr. C. farther mentions that, in bad seasons, when grain is soft and damp, the millers consider it advantageous to grind a certain proportion of rice with it. — (*Milburn's Orient. Com.; Ainslie's Mat. Ind.; Cook's Com. of Great Britain in* 1833; and *private information.*)

The price of rice in bond in the London market, in January, 1834, was as under: —

	L.	*s.*	*d.*		*L.*	*s.*	*d.*
Rice, Carolina, new, per cwt. -	0	19	0	to	1	1	0
East India, fine, Patna, do. -	0	17	0	-	1	1	0
Bengal, white, do. -	0	13	6	-	0	16	0
cargo, and ordinary -	0	9	0	-	0	12	0

Duty on paddy, the produce of, and imported from, British possessions, 1*d.* per quarter.
From America and other foreign places, 2*s.* 6*d.* per bushel.
Duty on American and other foreign places of growth, 15*s.* per cwt. — Bengal, and other sorts, 1*s.* per cwt.

RIGA, a city of European Russia, the capital of Livonia, situated on the Duna, about 9 miles from the sea, in lat. 56° 56′ 5″ N., lon. 24° 0′ 4″ E. Population about 47,000.

Harbour. — A light-house has been erected on Fort Comet, on the western side of the mouth of the river. It has 2 lights: the first, elevated about 104 feet (English) above the level of the sea, may be seen, under favourable circumstances, at the distance of 4 leagues; and the second, elevated about 24½ feet, may be seen at the distance of 2⅓ leagues. The bar at the mouth of the river has usually from 12 to 13 feet water; and vessels drawing more than this frequently load and unload part of their cargoes by means of lighters at Bolderaa, a small town on the west side of the river, near its mouth. There is a fair-way beacon without the bar, in 5 fathoms water; and within the channel, is buoyed with black and white buoys; the black being left on the right or starboard side when entering, and the white on the larboard. Vessels bound for Riga take pilots at Bolderaa, who carry them to their anchorage. No ballast is allowed to be discharged, except at Poderague. Regulations as to clearing, &c. similar to those at Petersburgh. — (*Coulier sur les Phares*, 2d ed.; and *Regulations published by the Russian Authorities.*)

Trade. — Owing to its advantageous situation near the mouth of a great navigable river, the trade of Riga is very extensive; being, of the Russian towns on the Baltic, in this respect second only to Petersburgh. The trade is chiefly carried on by foreign merchants, particularly by the English. The principal exports are corn, hemp and flax, linseed, iron, timber, masts, leather, tallow, &c.; the imports are salt, cloth and cotton stuffs, silks, wine, sugar, coffee, and groceries of all sorts, indigo, dye woods, salted herrings, &c.

The mast trade is very extensive. The burghers of Riga send persons who are called mast brokers into the provinces to mark the trees, which are purchased standing. They grow mostly in the districts which border on the Dnieper, are sent up that river to a landing place, transported 30 versts to the Duna, when, being formed into rafts of from 50 to 200 pieces, they descend the stream to Riga. The tree which produces the largest masts is the Scotch fir. Those pieces which are from 18 to 25 inches in diameter are called masts; under those dimensions, spars, or, in England, Norway masts, because Norway exports no trees more than 18 inches in diameter. Great skill is required in distinguishing those masts that are sound from those which are in the least internally decayed. They are usually from 70 to 80 feet in length.

Hemp is brought from the Ukraine and Poland, and requires 2 years in its passage to Riga. The barks in which it is conveyed are from 250 to 300 tons burden, covered with mats sloping like a pent-house roof, and have a false bottom. They ascend the Dnieper and the Duna; but on account of numerous shoals, can only pass the Duna in the spring, or about 3 weeks after the snow begins to melt; and, if they miss that time, are delayed till autumn. The hemp exported from Riga is considered the best in Europe, and is generally about 30 per cent. dearer than that exported from Petersburgh. Riga hemp is chiefly used for the shrouds and stays of men-of-war. — (*Coxe's Travels in the North of Europe*, 5th ed. vol. ii. p. 241.)

The best kind of flax shipped from Riga is grown in White Russia, and is called Druana rakitzer; its colour is very white, and the threads long, fine, and loose, but it has sometimes black spots: the next quality, coming from the province of Trockie in Lithuania, is called Lithuanian rakitzer, and is very little inferior to Druana, but its colour is a little brown; of this kind the best sort is Thiesenhausen. The best kind of Courland flax shipped from Riga is Marienburgh; that grown in Livonia is of inferior quality. There are two kinds of linseed: that of the last crop, which is used for sowing; and that of former years, for crushing. To prevent deception, the year of its growth is stamped on the barrel by sworn inspectors (*brackers*). Some hemp-seed is occasionally shipped, mostly to Holland. Riga wheat is very inferior to that of Dantzic. Two descriptions are shipped — one the growth of Russia, the other of Courland; the last is much the best, being larger bodied and of a brighter colour than the Russian; still, however, it makes but indifferent flour. Oats are of a good quality, and are largely exported; peas are also occasionally exported.

In shipping masts, the rest of the cargo generally consists of deals and wainscot logs; the latter are much exported to England, and are very superior. Tallow is not so cheap here as at Petersburgh.

Money. — For the monies of Riga, see PETERSBURGH. The current rixdollar of Riga = 3*s.* 1½*d.* sterling; hence 1*l.* sterling = 6 rixdollars 36 groschen currency; the Riga dollar being divided into 90 groschen.

Weights and Measures. — The commercial pound is divided into 2 marcs, or 32 loths; and also into halves, quarters, &c. It contains 6,452 English grains. Hence 100 lbs. of Riga = 92·17 lbs. avoirdupois = 41·8 kilog. = 86·32 lbs. of Hamburgh = 84·64 lbs. of Amsterdam. The lispound = 20 lbs.; the shippound = 20 lispounds.

The loof is the measure for grain: 48 loofs = 1 last of wheat, barley, or linseed; 45 loofs = 1 last of rye; and 60 loofs = 1 last of oats, malt, and beans. According to Dr. Kelly, the loof = 1·9375 Winchester bushel; and, consequently, the last of wheat = 11·625 quarters. Nelkenbrecher does not value the loof quite so high as Dr. Kelly.

The fuder, the measure for liquids, is divided into 6 ahms, 24 ankers, 120 quarts, or 720 stoofs. The anker = 10¼ English wine gallons.

The foot of Riga = 10·79 English inches. The ell = 2 feet; the clafter = 6 feet.

I. Account of the Quantities of the Principal Articles exported from Riga during each of the Three Years ending with 1833.

Articles.		1831.	1832.	1833.	Articles.		1831.	1832.	1833.
Flax, 1st sort	sh. lbs.	85,106	88,003	98,613	Wheat	lasts	11,365	4,951	407
2d	—	17,365	24,802	40,749	Rye	—	34,375	36,020	4,974
3d	—	9,170	10,860	13,647	Barley	—	5,958	7,441	646
codilla	—	3,000	2,950	4,080	Oats	—	10,802	1,491	99
Hemp, Rhine	—	31,099	25,529	22,143	Peas	—	489	84	17
outshot	—	12,938	19,571	15,101	Tallow	sh. lbs.	6,384	5,370	3,425
pass	—	21,146	30,111	23,725	Hides	pieces	117,218	103,184	114,946
codilla	—	7,974	10,174	11,776	Wainscot logs	—	5,699	6,541	6,541
Linseed, crushing	barrels	245,378	189,926	174,821	Deals	—	344,580	122,000	204,731
sowing	—	119,218	37,528	95,595	Square timber	—	26,103	44,239	26,715
Hemp-seed	—	16,022	23,580	100,703	Masts and spars	—	2,351	2,208	1,730

II. Value of Exports in Bank Note Roubles.

	1830.	1831.
To Great Britain	23,458,286	37,158,861
Other countries	21,070,020	18,431,059
Total	44,528,306	55,589,920

III. Ships cleared out from Riga in 1832.

Flags.	Ships.	Flags.	Ships.	To what Country.	Ships.	To what Country.	Ships.
British	380	Prussian	146	To Great Britain	342	To Prussia	27
Hanoverian	109	Mecklenburgh	158	Hanover	5	Lubeck	24
Dutch	193	Oldenburgh	27	Holland	522	Hamburgh	9
Danish	178	Hamburgh	2	Belgium	165	Bremen	43
Swedish	81	Lubeck	16	France	30	Rostock	8
Norwegian	121	Bremen	13	Denmark	143	America	1
French	12	American	2	Sweden & Norway	112	Elsinore	244
Spanish	1	Russian	44	Portugal	8		
			1,483				1,483

IV. Ships despatched from Riga during the Six Years ending with 1832.

Years.	1827.	1828.	1829.	1830.	1831.	1832
Ships.	1,378	1,180	1,331	1,245	1,573	1,483

RIO DE JANEIRO, the capital of Brazil, situated in lat. 22° 54′ 15″ S., lon. 43° 15′ 50″ W. Population about 160,000. The harbour of Rio is one of the finest in the world, both as respects capaciousness and security for all sorts of vessels. In coming from the N.E. it is usual to make Cape Frio, in lat. 23° 1′ 18″ S., lon. 42° 3′ 19″ W., being about 4 leagues nearly E. of Rio. The entrance to the harbour is marked by a remarkable hill in the form of a sugarloaf, 900 feet high, close to its west side; while on the east, or opposite side of the bay, at the distance of about 1½ mile, is the fort of Santa Cruz. But the wood-cut in the next page, taken from a chart published by order of the Brazilian authorities, gives a much better idea of this noble harbour than could be obtained from any description.

Entrance to the Harbour. — Vessels bound for Rio, coming from the N., should, after rounding Cape Frio, steer due W., keeping about 3 leagues from the coast, until they come within 5 or 6 miles of the *Ilha Raza*, or Flat Island, lying almost due S. from the mouth of the harbour, at the distance of about 3 leagues. A light-house, the lantern of which is said to be elevated nearly 300 feet above the level of the sea was erected on this island in 1829. The light is a revolving one, finishing its revolution in 3 minutes, and exhibiting alternately a white and a red light. There is also a light-house in the fort of Santa Cruz, the light of which is fixed and elevated about 50 feet above the level of the sea. — (*Coulier sur les Phares*, 2d ed.) Having got within 5 or 6 miles of the Ilha Raza, ships may enter by day or by night, the dotted line in the cut marking the fair-way into the harbour. There are no pilots to be met with; and as there are no hidden dangers of any kind, their services are not wanted. On entering, vessels must pass within hail of Fort Santa Cruz, to be ready to answer any questions that may be put to them. They then proceed to Fort Vilganhon, below or opposite to which they must bring to, or come to anchor, allowing no boats to come alongside, but those of the government, until they have received *pratique*, when they will be permitted to proceed to the usual place of anchorage for the merchant shipping.

The sea breeze generally sets in about 11 A. M., and lasts till about sunset. It is strong enough to enable ships to overcome the ebb. High water at full and change at 2 in the afternoon.

Trade. — The trade of Rio is extensive, and has increased rapidly of late years. The principal articles of export are coffee, sugar, cotton, hides, rum, tallow, indigo, coarse cotton cloths, gold, diamonds, precious stones, tobacco, cabinet and dye woods, rice, &c. The imports consist principally of cottons, hardware, flour, dried fish, linens, woollens, soap and candles, wines, oils, &c. Until 1830, slaves formed one of the principal articles of import into Rio and other Brazilian ports; so many as 45,000 having been imported in one year, of which Rio received the greater proportion. But, according to a convention entered into with this country, this infamous traffic should have ceased in February, 1830: whether it has really done so is more than we can undertake to affirm.

Comparative Monthly and Yearly Statement of the Coffee, Sugar, and Hides exported from Rio de Janeiro, during the Six Years ending with 1832.

	Coffee.						Sugar.					
Months.	1827.	1828.	1829.	1830.	1831.	1832.	1827.	1828.	1829.	1830.	1831.	1832.
	Bags.	*Bags.*	*Bags.*	*Bags.*	*Bags.*	*Bags.*	*Cases.*	*Cases.*	*Cases.*	*Cases.*	*Cases.*	*Cases.*
January	25,971	21,824	34,102	38,490	19,028	43,074	1,141	1,679	1,656	3,224	1,912	1,093
February	18,687	20,569	33,236	24,527	26,630	35,505	1,256	1,887	1,688	2,737	747	1,399
March	30,614	34,560	23,589	31,289	37,665	35,274	3,183	1,463	3,623	2,076	1,827	3,475
April	10,013	14,396	13,089	22,341	31,531	26,508	1,721	855	2,690	1,318	1,112	1,974
May	27,105	29,960	27,511	20,109	23,627	39,817	2,227	2,078	1,248	2,310	2,924	594
June	28,518	32,344	27,350	24,028	38,192	31,571	1,117	2,789	1,558	1,796	4,418	1,235
July	31,066	37,285	36,347	43,717	35,429	38,396	1,855	593	1,279	1,277	2,710	1,870
August	40,215	52,160	47,207	33,959	53,237	45,912	1,484	1,134	1,377	671	947	1,941
September	33,588	41,395	33,074	45,824	48,093	40,034	908	1,900	173	806	662	841
October	41,707	28,677	36,891	28,789	42,173	44,712	785	794	1,907	1,781	1,100	771
November	31,415	30,562	36,029	33,815	42,164	51,215	876	456	553	2,101	1,270	757
December	32,001	25,415	26,772	44,897	50,477	46,932	3,091	3,407	1,112	2,391	2,375	695
Total	350,900	369,147	375,107	391,785	448,219	478,950	19,644	19,035	18,864	22,488	22,004	16,645

Hides.

Months.	1827.	1828.	1829.	1830.	1831.	1832.	Months.	1827.	1828.	1829.	1830.	1831.	1832.
	No.	*No.*	*No.*	*No.*	*No.*	*No.*		*No.*	*No.*	*No.*	*No.*	*No.*	*No.*
January	69,173	15,828	46,665	8,578	36,911	3,990	July	24,058	24,888	45,057	13,389	13,772	37,776
February	12,548	12,205	32,473	18,835	42,860	5,312	August	29,658	16,300	36,306	16,438	25,236	14,551
March	48,477	33,107	21,562	24,258	28,698	32,707	September	12,093	15,559	10,567	19,274	9,979	14,300
April	21,958	418	34,242	31,882	28,977	74,641	October	10,743	890	43,130	4,798	26,319	32,928
May	47,038	18,106	17,467	44,346	12,998	18,016	November	31,148	21,281	30,572	33,816	30,850	5,275
June	11,737	15,553	16,883	30,592	41,488	9,944	December	10,189	33,133	16,969	20,513	44,297	14,217
							Total	329,320	207,268	351,893	266,719	342,385	263,657

This statement is taken from the *Circular* of *Stockmeyer, Gracie, & Co.*, dated Rio de Janeiro of January, 1833, who state that they derived the details from the manifests of the vessels cleared out at the Custom-house.

References to Plan. — A, Ilha do Catunduba. B, Fort de St. Joao. C, Morro do Flamengo. D, Ponta do Calhabouco. E, Fort da Ilha das Cobras. F, Ilha dos Rattos. G. Fort da Boa Viagem.

The increase in the exports of sugar and coffee from Brazil during the last 10 years has been quite unprecedented. In 1822, the total export of sugar from the empire was only 40,000 tons, whereas it now amounts to about 75,000 tons. In 1821, the quantity of coffee exported from Rio did not exceed 7,500 tons; but in 1833 it amounted to more than 4 times that quantity, or to about 35,000 tons! The exports of cotton

have also increased, but not so rapidly. The imports of cotton from Brazil to England in 1831, were 31,695,761 lbs., being between a 7th and an 8th of the total quantity we imported that year. In 1832, the imports declined to 20,109,560 lbs.

A considerable part of the extraordinarily rapid increase of the sugar and coffee cultivation in Brazil must be ascribed to the facility with which slaves have recently been imported; and it is possible that the cessation of their importation, supposing the convention to that effect to be executed, may check, for a while, the extension of cultivation in Brazil.

We have derived the following statements, as to the trade of Brazil, from the highest mercantile authority. Of their accuracy there can be no more question than of their interest and importance: —

"Unfortunately, the government of Brazil does not publish any official statements of the trade of the different ports, not even of the amount of exports or imports, so that information on these points can only be drawn from private sources.

"Estimated Amount of Brazilian Exports, with their Values at the Port of Shipment.

	£	£	£
Middle Provinces.			
Rio. — Coffee - - bags, 550,000* at £3 10 0 per bag	- -	- -	1,925,000
Hides - - - No. 300,000 — 0 13 0 per skin	-	- -	195,000
Sugar - - cases, 22,000† — 11 16 0 per case	- -	- -	260,000
Cotton, drugs, dyes, gold, and diamonds -	- -	- -	500,000
			2,880,000
Northern Provinces.			
Bahia. — Coffee - - bags, 10,000 at 3 10 0 per bag	35,000		
Cotton - - - — 47,000 — 4 0 10 —	190,000		
Sugar - - - cases, 58,000 — 10 0 0 per case	580,000		
Tobacco - - packages, 15,000 — 3 4 0 per pck.	50,000		
Drugs, hides, leather, rice, rum, &c. - - - -	20,000		
		875,000	
Ceara. — Cotton - - bags, 14,000 — 4 13 0 per bag	65,000		
Hides - - - - - - - -	5,000		
		70,000	
Macayo. — Cotton - - bags, 10,000 — 4 10 0 per bag	45,000		
Sugar - - - cases, 3,000 — 10 0 0 per case	30,000		
		75,000	
Maranham. — Cotton - bags, 75,000 — 4 10 8 per bag	340,000		
Rice - - - - - - -	60,000		
		400,000	
Para. — Cocoa - - bags, 60,000 — 0 16 8 per bag	50,000		
India rubber - - tons, 300 — 66 13 4 per ton	20,000		
Isinglass, rice, drugs, and cotton - - - -	180,000		
		250,000	
Pernambuco. — Cotton - bags, 60,000 — 5 0 0 per bag	300,000		
Hides and dye woods - - - - - -	100,000		
Sugar - - - cases, 20,000 — 10 0 0 per case	200,000		
		600,000	
Paraiba. — Cotton - - bags, 20,000 — 5 0 0 per bag	100,000		
Sugar - - - cases, 5,000 — 10 0 0 per case	50,000		
		150,000	
			2,420,000
Southern Provinces.			
Rio Grande of the South. — Hides and tallow, (chiefly coastwise to other ports, but) foreign export about - - - -	100,000		
Santos. — Sugar, rice, and coffee, (much direct to Rio, but) foreign export - - - - - - - -	100,000		
			200,000
			5,500,000

"The imports are chiefly from Great Britain, consisting principally of our cotton, linen, woollen, hardware, and other manufactures, amounting annually to about 4,000,000*l*. The remainder of the imports consist of wines, brandies, &c. from Portugal and the Mediterranean; flour from the United States; cod fish from ditto and Newfoundland; with a comparatively small amount of French, German, Swiss, and Indian manufactures, and tea; the latter chiefly through the United States.

"The duties on all imports, without exception, are 15 per cent. on the tariff value, which averages about 20 per cent. on the real value of British goods: those on exports vary at the different ports, and on every description of produce. On coffee they amount to about 10 per cent.; on sugar, 12 per cent. ($\frac{1}{3}$ being paid by the planter). The export duty on cotton has lately been reduced from 20 to about 3 per cent.

"There are no commercial or discount banks in any part of Brazil; but at Rio there is one of issue, the whole of its transactions being with the government.

"The usual mode of selling goods in Brazil is on an open credit of 4 to 8 months, and sometimes even 12 months, the parties paying by weekly or monthly instalments, as they effect sales, generally exceeding the stipulated credit, by 2, 3, and even 6 months, according to the state of markets, without allowing any charge for interest. On the other hand, all produce is bought by the foreign merchants for *cash down*, or, if any credit be given, the usual extra charge is 1 per cent. per month; in fact, the whole commerce of the country is on British capital.

"The usual commissions are, 5 per cent. on the sale of goods; $2\frac{1}{2}$ ditto for guarantee; with $2\frac{1}{2}$ per cent. for the purchase and shipment of produce in return; 5 per cent. when purchased by credits on London: the usance being 60 days after sight.

"The currency of Brazil is chiefly paper and copper, of a very depreciated and base kind, and varying in almost every province. The par of exchange, when the silver currency was maintained, was $67\frac{1}{2}d.$ and the current rate always above it, say from 70*d.* to 72*d.*; but *now*, owing to the introduction of paper and copper, the exchange has fallen, at Rio, to 36*d.*, Bahia 32*d.*, Pernambuco 38*d.*, and Maranham

* Bag of coffee about 1 cwt. 1 qr. 14 lbs.

† Case of sugar about 15 cwt.

40*d.*; and, at one period, the exchange at Rio fell as low as 20*d.*, owing to the extensive issue of paper by the bank.

"The great difficulties under which our trade with Brazil labours are,—1st, The prohibitory duties chargeable on sugar and coffee, the chief productions of the country; which admit to consumption only cottons and hides, the latter not being wanted; so that, with an export of nearly 4,000,000*l.*, we have no *direct* means of return for 1-4th the amount, the other 3-4ths being forced into the hands of the Americans, Germans, Swedes, &c. who thus get employment for their shipping, and carry on an extensive commerce, entirely upon British capital, whilst the British merchant is compelled to transfer his property into their hands for 5 or 6 months, as the only means of getting payment for the manufactures he has exported; at the same time that the British consumer at home is compelled to pay, exclusive of the heavy duties, a decidedly higher price for sugar and coffee than is paid by the consumers of any other European state.

"The 2d grievance is the wretched state of the currency in Brazil, which occasions fluctuations in the exchange of from 10 to 20 per cent. in 2 or 3 months, and even 50 per cent. in the course of the year; so that the actual proceeds, in sterling, of any goods sold on credit can never be guessed at till the money is received; there being no discount banks or means of realisation, till the expiration of the credit.

"The Brazilian Regency have at length recommended their currency to the immediate attention of the 'Assembly;' but it may be doubted whether they have either courage or honesty to take any effectual means to eradicate the evil: this can only be done by a return to a gold and silver standard, and a new coinage, calling in the old, one half of which is debased."—(*13th of August*, 1833.)

Account of the Trade of Great Britain with Brazil, for the Six Years ending with 1831, according to the Official Returns and Values.

Years.	Exports.		Totals.	Imports from Brazil.
	British and Irish Manufactures.	Foreign and Colonial Produce.		
	L.	*L.*	*L.*	*L.*
1826	4,116,130	80,743	4,196,873	1,818,281
1827	2,556,140	37,591	2,593,731	767,918
1828	3,757,014	65,473	3,822,187	1,382,818
1829	6,055,902	99,819	6,155,721	1,488,271
1830	4,566,010	76,314	4,642,324	1,169,015
1831	2,392,662	39,002	2,431,664	2,278,059

Account of the Quantity and declared Value of the principal Articles of British Produce and Manufacture exported to Brazil in 1833.

Articles.	Quantities.	Value.	Articles.	Quantities.	Value.
		L.			*L.*
Apparel, slops, and haberdashery -	- -	14,769	Saddlery and harness - -	- -	3,200
Arms and ammunition - -	- -	8,732	Linen manufactures - yards	7,527,781	187,581
Bacon and hams - - cwt.	637	2,031	Thread, tapes, &c. - - -	- -	2,075
Beef and pork - - barrels	77	199	Machinery and mill work - -	- -	2,671
Beer and ale - - - tuns	467	7,778	Painters' colours - - -	- -	4,730
Books, printed - - cwt.	20	516	Plate, plated ware, jewellery, and watches - - -	- -	801
Brass and copper manufactures —	5,425	27,195	Salt - - - bushels	37,944	666
Butter and cheese - - —	21,371	72,083	Silk manufactures - - -	- -	27,783
Coals, culm, and cinders - tons	1,863	853	Soap and candles - - lbs.	3,350,495	61,910
Cordage - - - cwt.	9,144	14,786	Stationery of all sorts - -	- -	8,394
Cotton manufactures - yards	68,903,398	1,607,735	Sugar, refined - - cwt.	10	26
Hosiery, lace, and small wares -	- -	59,848	Tin, unwrought - - - —	322	1,186
Cotton twist and yarn - lbs.	11,434	1,073	Tin and pewter wares, tin plates -	- -	3,050
Earthenware of all sorts - pieces	2,950,155	27,469	Woollen manufactures, by the piece pieces	89,107	253,128
Fish — herrings - - barrels	6	6	Do. by the yard - - yards	231,858	17,414
Glass - - - cwt.	11,616	22,371	Hosiery and small wares - -	- -	4,027
at value - - - -	- -	23	All other articles - -	- -	23,989
Hardwares and cutlery - cwt.	11,255	42,099	Total declared value -	- -	2,575,680
Hats, beaver and felt - dozens	4,423	14,430			
Iron and steel - - tons	2,191	34,916			
Lead and shot - - —	522	7,760			
Leather, wrought and unwrought, lbs.	43,373	6,286			

The number of ships which arrived at Rio in 1826, were—

From Great Britain - - -	62
France - - - -	19
Spain - - - - -	4 Spanish. 15 foreign.
Portugal - - -	51 Portuguese. 10 British.
Holland - - - - -	14 Dutch. 5 foreign.
Hanse Towns - - - -	15
United States - - - -	53 American. 6 foreign.
North of Europe - - -	37
Cape of Good Hope, and Cape Verd Islands - - - -	12 British. 3 French.
From slave settlements - - -	53 Portuguese & Brazilian.
South America - - -	81
Total	440

In 1832, there arrived at Rio 591 vessels; and in 1833, 620. Of the arrivals during the last-mentioned year, 241 were English, including packets, and 161 American. Perhaps not more than 2-3ds of the 620 ships would load at Rio; many calling in quest of freights, and for orders, stores, &c. The returns do not include the native coasting vessels.

In order still better to illustrate the trade of Brazil, we take leave to subjoin the following details from *Mr. Caldcleugh's Travels in South America*. They are neither, however, so recent, nor of such authority, as those already laid before the reader:—"The colonial system, which was strictly preserved until the arrival of the court, kept the country in a state of ignorance of many of those beautiful articles of English manufacture, now so greedily purchased by all. The Brazil trade may be considered as entirely in the hands of the British, as if an exclusive monopoly existed in their favour. Brazil takes from us every thing she requires, excepting wine from Portugal; and the importance of this trade to England may be well conceived, when it is mentioned, that, after the East and West Indies and the United States, it forms the greatest mart for our fabrics, and one that is most rapidly increasing.

"In 1820, the imports of British manufactures amounted to 1,800,000*l.*; in 1821, to 2,230,000*l.* The exports of 1820 were 950,000*l.*; in 1821, 1,300,000*l.*; showing a great and progressive increase.

"Of the amount of imports, about *three fifths* are brought to the capital, owing to the greater consumption, and from its being in communication with the mines, the most inhabited districts of the interior.

"The other nations trading to Brazil exhibit a poor figure after Great Britain. By far the most active of them—the United States—exported to Brazil only to the amount of 320,000*l.*, chiefly in flour, fish, and minor articles. It is impossible to say what may happen, but at present it does not appear that England has much to fear in this quarter. The immense command of capital which our merchants possess strikes all foreigners with astonishment, and forces them to abandon all idea of competition. The trade carried on by the rest of the world amounts, in the aggregate, to little: that of France being chiefly confined to articles of dress and fashion; and of Sweden, to a few ship-loads of iron annually.

"The trade expressly confined to Brazilian vessels is the coasting and African. This latter traffic, it is well known, is now restricted, by treaty, to that part of Africa south of the line, which comprehends, in

fact, almost the whole of the Portuguese possessions. The importation of negroes varies in amount; but of late years it cannot be estimated, on an average, at less than £1,000 into Rio de Janeiro only. It affords too great a return of gain to be easily abandoned; more especially when, strange to say, patriotic feelings are considered, in this instance, to go hand in hand with profit; and when it is imagined, that the moment the trade is prohibited, the prosperity of the country must decay. When it is considered that this number is annually received into the capital, and that there are 3 other ports trading to the same extent, and that scarcely $\frac{2}{3}$ of the negroes taken from the coast live to be landed, the number of negroes carried away by this outlet only in the course of the year appears prodigious.

"Many years since, a considerable capital was employed in the whale fishery. The black whale was extremely common near the mouth of the harbour; but an increasing traffic has driven this animal to the southward, and the only establishments at present are in the province of St. Catharine's. It forms another of the royal monopolies; and, in 1820, was farmed by some Frenchmen.

"The other trade carried on in Brazilian bottoms is very much confined to that with the mother country; its dependencies, as Madeira; and its possessions in Africa and the East. The traffic with China is still continued, but no longer in that way which made Portugal at one time the envy of all maritime nations.

"The internal trade is very much confined to the products of the district of the mines; and is carried on by means of large troops of mules, some of which, from the western provinces of Gozaz and Matto Grosso, are 4 months on the journey. It is not easy to learn with accuracy the produce of the diamond mines; as they are worked by government, and strictly monopolised: much smuggling consequently prevails. In some years, the quantity recovered by government has amounted to as much as 4,000 octavas of 18 carats; but these are years of rare occurrence: taking the average, however, of some years, the number of octavas would come to near 1,200. In this quantity there would be, of course, many of large size, adding immensely to their value. It is calculated that about the same quantity is smuggled; and there are strong reasons to suppose, that if no difficulties were thrown in the way, owing to the facility with which they are obtained, the produce of Brazil diamonds, in every way as fine as the Oriental, would have considerable effect on the demand.

"With respect to the quantity of gold which comes from the mines, it is immersed in a certain degree of obscurity. The 1-5th due to government is the principal cause that I could never ascertain, in any mine which I visited, its exact produce. I shall have another opportunity of saying more on this head, and explaining why the produce of gold mines is on the decrease, which I certainly conceive to be the case.

"No silver is produced in Brazil. As there is lead, it would be too much to affirm that none exists; but probably the quantity would be trifling. The silver coin is mostly Spanish dollars, restamped into 8-patac pieces, by which a considerable profit is obtained on each.

"The quantity of precious stones shipped is now very considerable. In most cases they are sent to a losing market; being, in fact, more valuable in Brazil than in London or Paris. Aquamarines — (see BERYL) — of a very large size have been found. In January, 1811, one was found in the Riberao das Americanas, near the diamond district, which weighed 15 lbs.; and in the same place, in the October following, one was discovered weighing 4 lbs. Topazes of fine quality, but seldom large, amethysts, and chrysolites, are also articles of exportation; and at times some fine specimens of these gems are to be met with in the jewellers' shops.

"Correctly speaking, there are no trading companies in Rio de Janeiro: there is a society for effecting maritime assurances, but no other.

"The Bank of Brazil has had very extensive concessions made in its favour, and ought to be in a flourishing state. It has the power of issuing notes; and all disputed monies and property of the deceased and absent (*mortes e auzentes*) must be placed in its hands, and 2 per cent. per annum charged for the care and trouble. This, in addition to the interest which might be obtained for the deposit, would alone, in an active mercantile country, form no inconsiderable revenue. Specie is prohibited from being carried coastwise: merchants who wish to deposit cash in one of the northern ports, where the largest purchases are made, are therefore forced to take hand bills, and pay a premium for them, varying from 3 to 5 per cent.

"Some enormous capitals have been amassed; but generally the speculations of the native merchants are conducted on a very limited scale.

"The legal rate of interest is 6 per cent.; but money can seldom be obtained under 12."— (*Caldcleugh's Travels in South America*, vol. i. pp. 53 — 59.)

Population of Brazil. — The magnitude of the population of Brazil is involved in great uncertainty. One of the latest estimates is as follows: — Portuguese and creoles, 900,000; free mestizos, 600,000; enslaved mestizos, 250,000; free negroes, 180,000; enslaved negroes, 2,900,000; Indians, 450,000; making in all, 5,280,000. — (*Weimar Almanac*, for 1832.) But we incline to think that this estimate is rather beyond the mark.

ROADS, pathways formed through the country with more or less art and care, for facilitating the transit of individuals, carriages, &c. between different places. They are of every variety of form — from rude, narrow, rugged, and unformed paths, carried over mountains, interrupted by every petty rivulet, and almost impracticable to any but foot passengers, to smooth, broad, and level ways, formed of solid materials, winding round or cut through mountains, and carried over swamps and rivers at an immense expense, and admitting of the easy passage of carriages and of all sorts of goods.

The laying out of improved roads, and their construction, forms an important part of what is denominated the science of civil engineering. But as it would be quite foreign to our purpose to enter into any details as to the formation of roads, we shall satisfy ourselves with laying before the reader the following statements as to their importance in a commercial point of view.

Importance and Utility of improved Roads. — Next to the introduction of money, and weights and measures, the formation of good roads and bridges gives the greatest facility to commerce, and contributes more powerfully, perhaps, than any thing else to the progress of improvement. They have been denominated national veins and arteries; and the latter are not more indispensable to the existence of individuals, than improved communications are to a healthy state of the public economy. It were vain to attempt to point out in detail the various advantages derived from the easy means of communication that exist in Great Britain. There is not a single district that is not indebted to others for a large part of its supplies, even of some of the bulkiest commodities. Besides the coal, metals, minerals, timber, corn, &c. conveyed from one part of the empire to another by sea, immense quantities are conveyed from place to place in the interior, by roads

and canals; and every improvement effected in the means of conveyance has obviously the same effect upon the cost of commodities that have to be conveyed, as an improvement in the methods by which they are raised or manufactured.

Wherever the means of internal communication are deficient in a country, the inhabitants must unavoidably disperse themselves over the surface. Cities were originally founded by individuals congregating more, perhaps, for the purpose of national defence and protection, than for any other cause. But in countries where good government is established, and property is secure, men resort to cities only from a sense of the advantages they afford. The scale on which business is here conducted presents facilities that cannot be elsewhere afforded for making a fortune; and the extent to which the subdivision of employments is carried opens a field for the exercise of all sorts of talent; at the same time that it improves and perfects all sorts of arts, whether subservient to industrious or scientific pursuits, or to those of pleasure and dissipation. It is this that attracts the aspiring, the industrious, the gay, and the profligate, to cities, — that fills them with the best and the worst part of the species. The competition that takes place in a great town, — the excitement that is constantly kept up, the collision of so many minds brought into immediate contact, and all endeavouring to outstrip each other in their respective departments, — developes all the resources of the human mind, and renders a great city a perpetually radiating focus of intelligence and invention. There are, however, considerable clogs upon the continued increase of cities. The food and fuel made use of by the inhabitants, and the raw products on which their industry is to be exerted, must all be brought from the country; and according as the size of the city increases, the distances from which its supplies must be brought become so much the greater, that ultimately the cost of their conveyance may be so great as to balance or more the peculiar advantages resulting from a residence in town. Hence the impossibility of a large or even a considerable city existing any where without possessing extensive means of communication either with the surrounding country, or with other countries; and hence, too, the explanation of the apparently singular fact, of almost all large cities having been founded on or near the sea, or a navigable river. Had London been an inland town, 50 miles from the shore, it is abundantly certain that she could not have attained to one third her present size; but the facilities afforded, by her admirable situation on the Thames, for the importation of all sorts of produce from abroad, as well as from other parts of England, will enable her, should her commerce continue to prosper, to add to her colossal magnitude for centuries to come.

But all towns cannot be founded on the sea coast, or the banks of navigable rivers; and the growth of those in inland situations must, in all cases, depend on their means of communicating with the surrounding country. Without our improved roads, the great inland manufacturing towns with which England is studded, such as Manchester, Leeds, Birmingham, Sheffield, Bolton, Preston, &c., could not exist. They enable the inhabitants to obtain the rude products of the soil and the mines almost as cheap as if they lived in country villages. There is thus nothing, or next to nothing, to detract from the advantages which the inventive and enterprising artisan may expect to realise from resorting to these great hives of industry. And, owing to the gigantic scale on which all sorts of industry are conducted in them, the scope afforded for the employment of the most powerful machines, and the appropriation of particular sets of workmen to every separate process, however minute, manufacturing industry is carried to a degree of perfection that almost exceeds belief.

The influence that the growth of a large town has upon agriculture is great and striking. "In the neighbourhood," says Dr. Paley, "of trading towns, and in those districts which carry on a communication with the markets of trading towns, the husbandmen are busy and skilful, the peasantry laborious: the land is managed to the best advantage, and double the quantity of corn or herbage (articles which are ultimately converted into human provision) raised from it, of what the same soil yields in remoter and more neglected parts of the country. Wherever a thriving manufactory finds means to establish itself, a new vegetation springs up around it. I believe it is true, that agriculture never arrives at any considerable, much less at its highest, degree of perfection, when it is not connected with trade; that is, when the demand for the produce is not increased by the consumption of trading cities." — (*Moral Philosophy*, book vi. c. 11.)

But the fact of their being mainly conducive to the growth of cities, is not the only advantage which improved roads confer upon agriculture. Without their aid it would be impossible to carry to distant places sufficient supplies of such bulky and heavy articles as lime, marl, shells, and other manures necessary to give luxuriance to the crops of rich soils, and to render those that are poor productive. Not only, too, would inferior roads lessen the market for farm produce, and consequently the quantity raised, but a larger proportional number of horses or other cattle would be required to convey the diminished produce to market. It is plain, therefore, that good roads are both directly and indirectly a prime source of agricultural improvement; — directly, by

increasing the quantity and reducing the cost of manure, and by increasing the quantity and reducing the cost of conveying farm produce to market; and indirectly, by providing for the growth and indefinite extension of cities and towns, that is, of the markets for agricultural produce.

Increased speed of conveyance is one of the principal advantages that have resulted from the formation of good roads, the invention of steam packets, &c. Suppose that it takes 2 days to travel by an uneven, ill-made road between any 2 places; and that, by improving the road, the journey may be accomplished in 1 day: the effect is the same as if the distance were reduced ½; and there is not only a great saving of time to travellers, but also a great saving of cost from the more speedy conveyance of commodities. This latter is a point of much more importance than is commonly supposed. It is not possible to form any correct estimate of the value of the products that are constantly in the act of being carried from place to place in Great Britain and Ireland. It is certain, however, that it is very great; and every additional facility of conveyance, by bringing such products more rapidly to their destination, and enabling them to be sooner applied to the purposes for which they are intended, renders large quantities of capital available for industrious purposes, that would otherwise be locked up.

Mode of defraying Costs of Roads. — Roads of one sort or other must, of course, exist in every country emerged from barbarism, — but in England, the statute of the 28th of Philip and Mary, which is still in force, is the first legislative enactment in which a regular provision was made for the repair of the roads. The preamble to this statute declares, that the roads were tedious and noisome to travel on, and dangerous to passengers and carriages; and, therefore, it enacts, that in every parish 2 surveyors of the highways shall be annually chosen, and the inhabitants of all parishes obliged, according to their respective ability, to provide labourers, carriages, tools, &c. for *four* days each year, to work upon the roads, under the direction of the surveyors. This system, though in many respects exceedingly defective, was at the time justly considered a great improvement, and answered pretty well till the reign of Charles II., when, owing to the increase of carriages, particularly about London, it became necessary to adopt more efficient measures for the formation and repair of roads; and the plan of imposing tolls upon those who made use of them began then to be adopted. But this system was not carried into full effect, and placed upon a solid footing, till about 1767, when it was extended to the great roads to all parts of the country; the contributions of labour under the act of Philip and Mary being then appropriated entirely to the cross or country roads. A money payment is also very frequently made instead of a contribution in labour.

When the plan for extending turnpike roads from the metropolis to distant parts of the country was in agitation, the counties in the neighbourhood of London petitioned parliament against it, alleging that the remoter counties would be able, from the comparative cheapness of labour in them, to sell their produce in London at a lower rate than they could do; and that their rents would be reduced, and cultivation ruined, by the measure! Luckily this interested opposition proved ineffectual; and instead of being injurious to the counties adjoining the metropolis, the improvement of the roads has been quite as beneficial to them as to those at a distance, inasmuch as, by providing for the indefinite extension of the city, it has rendered it a far better market for their peculiar productions, than it would have been had its growth been checked, which must have been the case long ago, had the improvements in question not been made.

The plan of making and repairing roads by contributions of labour is not peculiar to England, but was at one period general all over Europe. By an act of the Scotch parliament, passed in 1669, all persons engaged in husbandry were obliged to labour 6 days each year, before or after harvest, upon the public roads; the farmers and landlords being, at the same time, obliged to furnish horses, carts, &c. according to the extent of land occupied by them. The inconveniences of such a system are many and obvious. Those who get no pay for their work, and who perform it against their will, waste their time and industry; and there is, besides, a great loss incurred by the interruption of the regular pursuits of the labourer. A sense of these disadvantages led, in the early part of the reign of George III., to a commutation of the labour contribution for a money tax on land, rated according to its valuation in the cess books. This measure has been productive of the best effects. Previously to its taking place, the roads, even in the best cultivated districts of Scotland, were in the worst possible state; now, however, they are about the very best in Europe.

A similar system has been followed on the Continent. When Turgot entered on his administration, he sent a circular letter to the road surveyors and engineers of the different provinces of France, desiring them to transmit estimates, framed on the most liberal scale, of the sums of money for which the usual repairs might be made on the old roads, and the ordinary extent of new ones constructed. The average of the estimates showed that a money contribution of about 10,000,000 livres a year would suffice for

these objects; whereas Turgot showed, that the execution of these repairs and constructions, by contributions of forced labour, or *corvées*, cost not less than 40,000,000 livres! — (Art. *Taxation, Supp. to Ency. Brit.*)

There is still, however, a great deal of labour performed on the cross and country roads of England, under the system established by the act of Philip and Mary. Its continuance is most probably to be ascribed to the want of any ready means for its commutation.

It is the duty of government to furnish assistance towards the formation of roads and bridges in parts of the country where they are necessary, and where the funds required for their formation cannot otherwise be obtained. But it is in such cases extremely desirable, in order to prevent government from being deceived by interested representations, that those more immediately concerned in the undertaking should be bound to contribute a considerable portion of its expense. This has been done in the case of the Highland roads. Down to a very recent period, large tracts in the Highlands were quite inaccessible, and were, consequently, in a great measure shut out from all improvement; while the rugged nature of the country and the poverty of the inhabitants rendered any attempt to construct improved roads an undertaking beyond their means. Under these circumstances, government came forward and engaged to advance $\frac{1}{2}$ the expense of making roads and bridges in certain districts, on condition that the landlords and others interested should advance the other $\frac{1}{2}$, and that the work should be executed under the direction of parliamentary commissioners and engineers. This arrangement has been highly beneficial. Through its means about 600 miles of excellent roads have been constructed; and in consequence of the easy means of communication they afford, a spirit of improvement has been excited even in the wildest and least frequented districts.

Dr. Smith seems to have inclined to the opinion, that the roads of a country would be better attended to, and more economically managed, were they placed under the control of government, than when they are left to be planned and superintended by private individuals. But this opinion does not seem to rest on any good foundation. It is, perhaps, true that a few of the great roads between the principal towns of a county might be better laid out by government surveyors, than by surveyors appointed by the gentlemen of the different counties through which they pass. But these great roads bear but a very small proportion to the total extent of cross and other roads with which every county either is, or ought to be, intersected; and, besides, it is abundantly certain, that when the formation of the great roads is left, as in Great Britain, to the care of those who, either by themselves or their tenants, have to defray the greater part of the expense of their construction and repair, they will be managed, if not with greater skill, at least with far more economy than if they were intrusted to the agents of government. M. Dupin has set this matter in the clearest point of view, in the remarks he has made on the administration of the roads in France and England. In the former they are entirely under the control of government; and the consequence is, that while there is a useless expenditure upon a few great roads, the cross roads are almost entirely neglected, and the facilities of internal intercourse are incomparably inferior to ours.

Sir Henry Parnell, who has published by far the best treatise on road-making in the English language, while he approves of the system of local trusts, proposes that measures should be taken for increasing the responsibility of the trustees, and that every trust should be obliged to submit its accounts to the inspection of some public Board. We have no doubt that this plan would be in several respects advantageous. Perhaps, however, the object in view, in making accounts be submitted to a public Board, might be attained by the erection of local tribunals for their inspection. We should be extremely jealous of any plan, how advantageous soever in other respects, that might lead to the employment of government surveyors generally in the laying out of roads, or to any material abridgment of the powers of the private trusts.

Length of Roads, Cost, &c. — The following details, taken from the report of the committee of the House of Lords on turnpike road trusts, show that, in 1829, the total length of the different paved streets and turnpike roads in England and Wales amounted to 19,798 miles; that the direct expenditure by the trustees, on account of these roads, during the same year, was about 1,500,000*l.*, and the revenue about 1,455,000*l.* But, exclusive of this pecuniary outlay, the value of the work performed on these roads by parishes, and not brought into the charge, is estimated at 100,000*l.*; making the whole expenditure 1,600,000*l.* The length of the various cross roads and other highways is estimated at about 95,000 miles.

Summary Statement of Roads, in England and Wales.

Length of turnpike roads	miles, 19,798
Number of turnpike trusts	1,119
Acts of parliament passed	3,783
Toll gates	4,871
Debt	L. 7,304,803

Income in 1829.	L.
Income from tolls	1,309,014
— parish compositions received	52,915
— fines	288
— incidental causes	38,648
Rents of toll-gates and parish compositions due, but unpaid } Tolls	39,542
} Parish compositions *	7,883
Total income for the year	L. 1,455,293

Expenditure in 1829.	L.
Interest paid on mortgage debt	236,629
Manual labour	303,173
Team labour, improvements, materials, and contracts,	578,237
Land purchased or damages paid for in getting materials	56,263
Repairs to toll-houses, gates, &c.	63,968
Salaries to clerks, surveyors, law bills, printing, advertising, stationery, and incidental charges	196,025
Payments comprising part of the debts or accounts of former years, &c. (as deducted from the accounts delivered to the clerk of the peace)	243,757
The gross expenditure for the year 1829, as delivered to the clerk of the peace by the clerks of the roads	1,678,054
Interest not brought into charge in the accounts delivered to the clerk of the peace, but included in the current expenditure	65,271
The nett current expenditure of the several turnpike road trusts for the year 1829	1,499,568

Expenditure	L. 1,499,568
Income	1,455,291
Expenditure above income	L. 44,277

Tolls.—In fixing the rate of tolls, great care should be taken to keep them as low as possible. When they are either too much multiplied, or too high, they have a very pernicious influence. They then operate as a most oppressive and unequal tax on commerce; and obstruct that intercourse they are intended to promote. The same remark is applicable to all sorts of dock and harbour dues, light-house dues, &c. When confined within due bounds, they cannot justly be objected to; for nothing can be fairer than that those who benefit by such increased facilities and security in the prosecution of their business should pay for them. But whenever they exceed the proper limits, they tempt the navigator to resort to ports where the charges are lower, and to direct his course through more insecure but less costly channels.

Improvement of Roads.—It is not easy for those accustomed to travel along the smooth and level roads by which every part of this country is now intersected, to form any accurate idea of the difficulties the traveller had to encounter a century ago. Roads were then hardly formed; and, in summer, not unfrequently consisted of the bottoms of rivulets. Down to the middle of last century, most of the goods conveyed from place to place in Scotland, at least where the distances were not very great, were carried, not by carts or wagons, but on horseback. Oatmeal, coals, turf, and even straw and hay, were conveyed in this way! At this period, and for long previous, there was a set of single-horse traffickers (cadgers), that regularly plied between different places, supplying the inhabitants with such articles as were then most in demand, as salt, fish, poultry, eggs, earthenware, &c.; these were usually conveyed in sacks or baskets, suspended one on each side the horse. But in carrying goods between distant places, it was necessary to employ a cart, as all that a horse could carry on his back was not sufficient to defray the cost of a long journey. The time that the *carriers* (for such was the name given to those that used carts) usually required to perform their journeys, seems now almost incredible. The common carrier from Selkirk to Edinburgh, *thirty-eight* miles distant, required a *fortnight* for his journey between the two places, going and returning! The road originally was among the most perilous in the whole country; a considerable extent of it lay in the bottom of that district called Gala-water, from the name of the principal stream, the channel of the water being, when not flooded, the track chosen as the most level, and easiest to travel in.

Even between the largest cities, the means of travelling were but little superior. In 1678, an agreement was made to run a coach between Edinburgh and Glasgow,—a distance of 44 miles,—which was to be drawn by *six* horses, and to perform the journey from Glasgow to Edinburgh and back again in *six* days. Even so late as the middle of last century, it took 1½ day for the stage coach to travel from Edinburgh to Glasgow,—a journey which is now accomplished in 4½ or 5 hours.

So late as 1763, there was but one stage coach from Edinburgh to London, and it set out only once a month, taking from 12 to 14 days to perform the journey. At present, notwithstanding the immense intercourse between the two cities by means of steam packets, smacks, &c., 6 or 7 coaches set out each day from the one for the other, performing the journey in from 45 to 48 hours.—(*Robertson's Rural Recol.* pp. 39—44.)

The effects of this extraordinary improvement in the means of travelling have been as striking on the manners as on the industry of all classes. The remark of Dr. Smith, that "man is the least transportable species of luggage," is no longer true as applied to Great Britain. During spring, the metropolis is crowded with visiters of all ranks and orders from the remotest provinces; and during summer and autumn vast numbers of the citizens are spread over the country. Hence it is, that manners as well as prices are reduced nearly to the same standard. A respectable family in Penzance or Inverness live very much in the same way as a respectable family in London. Peculiarities of all sorts have disappeared; every thing is, as it were, brought to a level; the fashions

and opinions of the metropolis are immediately diffused over every part of the country, while those that originate in the latter powerfully influence the former.

(These details have been partly borrowed from the treatise on *Commerce*, published by the Society for the Diffusion of Useful Knowledge, contributed by the author of this work.)

ROPE consists of hemp, hair, &c. spun into a thick yarn, of which several strings are twisted together by means of a wheel. When made very small, it is called a cord; and when very thick, a cable. All the different kinds of this manufacture, from a fishing-line, or whip-cord, to the cable of a first-rate ship of war, go by the general name of cordage. — (See CABLE.)

ROSEWOOD (Ger. *Rosenholz*; Fr. *Bois du rose, de Rhode*; It. *Legno rodie*; Sp. *Leno de rosa*; Port. *Páo de rosado*) is produced in Brazil, the Canary Islands; in Siam, whence it is pretty largely exported by the Chinese; and in other places. It is in the highest esteem as a fancy wood. The width of the log imported into this country averages about 22 inches, so that it must be the produce of a large tree. Rosewood has a slightly bitterish, somewhat pungent, balsamic taste, and fragrant smell, whence its name. It should be chosen sound, heavy, of the deepest colour, in the largest pieces that can be procured, and of the most irregular knotty grain. The small, light-coloured and large shivered pieces should be rejected. The more distinct the darker parts are from the purple red, which forms the ground, the more is the wood esteemed. It is usually cut into veneers of 9 to an inch. — (*Milburn's Orient. Com., &c.*)

Rosewood is one of the dearest as well as most beautiful of the fancy woods. Its price in bond varies from about 120*l.* to 125*l.* per ton; so that it is principally used in veneering. Its consumption has more than trebled since 1820. At an average of the 3 years ending with 1822, the entries for home consumption were 277 tons a year, whereas they amounted, during the 3 years ending with 1832, to 912 tons a year! This increase is principally to be ascribed to the reduction of the duty, in 1826, from 20*l.* to 10*l.* a ton, — a wise and judicious measure, by which the revenue as well as the consumption has been considerably increased.

ROSIN. "This substance is obtained from different species of fir; as the *Pinus abies, sylvestris, larix, balsamea.* It is well known that a resinous juice exudes from the *pinus sylvestris*, or common Scotch fir, which hardens into tears. The same exudation appears in the *pinus abies*, or spruce fir. These tears constitute the substance called *thus*, or frankincense. When a portion of the bark is stripped off these trees, a liquid juice flows out, which gradually hardens. The juice has obtained different names, according to the plant from which it comes. The *pinus sylvestris* yields common turpentine; the *larix*, Venice turpentine — (see TURPENTINE); the *balsamea*, balsam of Canada — (see BALSAM), &c. All these juices, which are commonly distinguished by the name of turpentine, are considered as composed of two ingredients; namely, oil of turpentine, and rosin. When the turpentine is distilled, the oil comes over, and the rosin remains behind. When the distillation is continued to dryness, the residuum is known by the name of common rosin, or *colophonium*; but when water is mixed with it while yet fluid, and incorporated by violent agitation, the mass is called *yellow rosin.* During winter, the wounds made in the fir trees become incrusted with a white brittle substance, called *barras* or *galipot*, consisting of rosin united to a small portion of oil. The yellow rosin, made by melting and agitating this substance in water, is preferred for most purposes, because it is more ductile, owing, probably, to its still containing some oil. The uses of rosin are numerous and well known." — (*Thomson's Chemistry.*)

ROTTERDAM, on the north bank of the Maese, in lat. 51° 55′ 19″ N., lon. 4° 29′ 14″ E. Population about 60,000. Rotterdam is the second commercial city of Holland. It is more advantageously situated than Amsterdam; being nearer the sea, and the canals which intersect it are so deep as to admit of the largest vessels coming up to the quays and warehouses of the merchants. Its commerce, during the last 15 years, has increased more rapidly than that of any town in Holland. The exports and imports are similar to those of Amsterdam, The white Zealand wheat shipped here is of a peculiarly fine quality; and it is the best market for madder and geneva. Our imports of madder from the Netherlands, in 1831, amounted to about 18,726 cwt., most of which came from Rotterdam. — (See MADDER.) Geneva is sold by the aam; but, for the convenience of smuggling to England, it is divided into ankers and ½ ankers. The legitimate imports of geneva from the Netherlands, in 1831, amounted to 210,038 gallons.

N. B. — The channel from the sea to Rotterdam is exhibited in the chart of the Dutch coast in the map of Europe in this work.

Monies, Weights, and Measures. — See the article AMSTERDAM, for an account of the current monies, weights, and measures of Holland.

Two different commercial lbs. were formerly used at Rotterdam: one was the Amsterdam weight, 100 lbs. of which = 108·93 lbs. avoirdupois; the other, used by retailers, was 5 per cent. lighter, 100 lbs. of it being = 103·48 lbs. avoirdupois.

The Rotterdam last of corn = 10·642 Winchester bushels.

The aam = 40 English wine gallons very nearly.

A hogshead of flax-seed contains from 7½ to 8 Winchester bushels. Rock salt is sold per great hundred of 404 maaten, containing from 21 to 22 tons. Coals per hoed = ½ a chaldron of Newcastle.

The liquid measures were divided in the same manner as at Amsterdam, but were larger; thus, 100 stoops of Rotterdam were = 67¾ English wine gallons. Brandies were sold per 30 viertels; whale oil, per 90 stoops; vegetable oils per 300 stoops.

The ell is the same as at Amsterdam. 100 feet of Rotterdam = 109¾ feet of Amsterdam, or 102 English feet.

Statement of the Quantities of the principal Articles imported into Rotterdam, and of the Stocks on Hand, in 1832 and 1833. — (From the *Circular* of *Labouchère and Co.*)

Articles.	Imports from Jan. 1. to Dec. 31.		Stocks on Jan. 1.	
	1832.	1833.	1833.	1834.
Ashes, American, pearl - - barrels	2,200	289	860	100
pot - - - —		1,075		500
sundries - - - - casks		1,256		410
Coffee, East India - - - bags	135,543	96,902	108,000	72,000
				4,100 S.Dom.
West India - - - - —	122,595	24,620	22,000	1,850 Brazil
casks	228	382	- -	- -
	16,070,200 kil.	6,807,000 kil.	7,050,000 kil.	4,047,000 kil.
Cotton, North American - - bales	6,871	5,295	583	419
Surinam - - - —	1,648	2,012	790	498
Nickarie - - - —				
Egyptian Mako - - —	1,113	150	148	
Surat and Bengal - - —	9,399	5,304	195	587
Brazil - - - —	- -	382		
St. Domingo - - - —	1,196	919		
Smyrna - - - —	10	-	6	
Dye woods - - - - kilog.	1,040,000	1,585,000	135,000	104,000
Hides, Buenos Ayres - - pieces	10,648	5,072	8,228	1,000
Rio Grande - - —	26,271	8,400	6,833	1,600
Valparaiso - - - —	- -	1,716	-	1,716
Brazil - - - —	2,636			
East India - - - —	18,920	12,370	2,199	4,500
Indigo - - - - boxes	2,110	1,366	150	20
serons	105	110	60	
Pepper - - - - bags	10,236	4,483	4,500	2,000
Rice - - - - casks	6,065	11,220	309	240
bags	26,736	43,100	12,700	10,000
Sugar, raw, and sundries - - hhds.	4,277	2,965	355	691
Java - - - cases and baskets	29,145	19,031	14,765	9,523
Brazil, white - - - - chests	287	618	- -	419
do. muscovado - - - —	287	772	- -	618
Havannah, white - - - boxes	1,551	2,066	607	729
do. yellow - - - —	5,962	3,493	3,539	371
Manilla - - - - mats	14,789	10,662	- -	- -
sundries - - bags and mats	3,620	4,374	1,305	664
	12,423,000 kil.	8,673,000 kil.	4,077,000 kil.	3,348,000 kil.
Tea - - - - - ½ chests	6,029	19,365	1,888	700
Tin, Banca - - - - slabs	19,561	27,899	2,700	8,788
Tobacco, Maryland - - - hhds.	6,490	7,527	4,196	4,280
Virginia - - - - —	2,233	50	3,805	1,527
Kentucky - - - - —	1,826	80	809	291
stems - - - - —	356	243	27	50

Tares and Allowances.

	Tares.	Drafts.	Allowances.
Coffee, Surinam - } St. Domingo - }	6 per cent.	1 per ct.	1 per ct.
Bourbon -	10 lbs. per bale	1 —	1 —
Mocha -	24 lbs. —	1 —	1 —
Java -	14 lbs. per bale of 270 lbs.	1 —	3 —
Sugar, Jamaica	18 per cent.		
Surinam -	20 —	1 —	1 —
East India, in bags	10 —		
Havre chests below 454 lbs. -	80 lbs. per chest	1 —	1 —
above -	13 per cent.		
Martinique - } St. Domingo - }	18 —	1 —	1 —
Cotton -	6 —	1 —	1 —

	Tares.	Drafts.	Allowances.
Hides, Buenos Ayres	2 lbs. per hide	2 per ct.	1 per ct.
Tobacco, Virginia	3 per cent.	2 —	3 —
Logwood -	3 —	1 —	1 —
Pimento -	real tare	1 —	1 —
Indigo -	3 per cent.	-	2 —
Pepper -	5 lbs. per bale	1 —	2 —
Whale oil -	1 per cent.	-	1 —
Madders -	real tare	-	1 —

The number of ships entering the Maese and the Goré, chiefly destined for Rotterdam, in the 5 years ending with 1828, was as follows: —

Years.	Ships.	Years.	Ships.
1824 -	1,373	1827 -	1,731
1825 -	1,396	1828 -	2,085
1826 -	1,587		

RUBY, a precious stone, very highly esteemed; but under this name a variety of minerals have not unfrequently been sold, which differ essentially in their characters.

The *Oriental Ruby* is, in fact, a red variety of the sapphire. When perfect, its colour is a cochineal red, presenting a richness of hue the most exquisite and unrivalled: it is, however, in general, more or less pale, and often mixed with blue; hence it occurs rose red, peach blossom red, and lilac blue, passing into the amethyst. It is harder than any other mineral, except the diamond. Easily frangible. Specific gravity from 3·916 to 4·283. Infusible before the blowpipe. Oriental rubies of 10 carats are extremely rare and valuable. One of 22 grains was sold for 160*l*. Rubies in lots, Indian cut, or small sizes, and of different qualities, are at all times to be had, and sell at from 15*s*. to 65*s*. a carat; but a perfect stone of a carat, or 6 grains, may be deemed rare, and falls little short of the value of the diamond: nay, in some cases, rubies of 2, 3, or 4 carats, if *very fine*, are much scarcer, and even more valuable, than diamonds of equal weight. The finest ruby in England, or, perhaps, in Europe, is in the collection of the late Mr. Hope, author of "Anastasius."

There are two other species of ruby, the *Spinelle* and *Balais*. When perfect, the Spinelle is a gem of great value and scarcity. Its colour is a fine full carmine or rose red, but it never presents that rich mellow tinge that attends the Oriental ruby. It is also inferior to the latter in hardness and specific gravity. Stones of 3 carats and upwards are very rare and valuable.

The *Balais Ruby* is a pale variety of the spinelle. It varies in colour from light red to yellowish red. Though not so rare as the spinelle, it is by no means common. It is much admired for its agreeable tinge of colour; and, when pure and perfect, fetches a very high price; though considerably less than the other varieties.

Rubies are not found in any considerable quantity except in Ava. — (See SAPPHIRE.) — (*Mawe on Diamonds*, 2d ed. pp. 99, 101; *Thomson's Chemistry.*)

RUM, a well known and highly esteemed spirituous liquor, imported from the West Indies, of which it forms one of the staple products. It is obtained, by means of fermentation and distillation, from molasses, the refuse of the cane juice, and portions of the cane, after the sugar has been extracted. The flavour and taste peculiar to rum are derived from the essential oils carried over in distillation. When the distillation has been carelessly performed, the spirit contains so large a quantity of the grosser and less volatile part of the oil as to be unfit for use till it has attained a considerable age. When it is well rectified, it mellows much sooner. Rum of a brownish transparent colour, smooth oily taste, strong body and consistence, good age, and well kept, is the best. That of a clear, limpid colour, and hot pungent taste, is either too new, or mixed with other spirits. Jamaica rum is the first in point of quality; the Leeward Island rum, as it is called, being always inferior to it, both in flavour, strength, and value. The price of the latter is usually 20 per cent. below that of the former. We import all our rum in puncheons, containing from 84 to 90 gallons each. It is customary, in some of the West India islands, to put sliced pine-apples in puncheons of rum: this gives the spirit the flavour of the fruit; and hence the designation, *pine-apple rum*.

Rum is said to be much adulterated by the retail dealers in England, sometimes with corn spirit; but if done with molasses spirit, the tastes of both are so nearly allied, that the cheat is not easily discovered.

Consumption of, and Duties upon, Rum, &c. —The following Tables show the quantity of rum consumed in Great Britain and Ireland since 1800, the rates of duty charged upon it, and the produce of the duties; the quantities derived from our different colonies last year, and the countries to which the excess of imports has been again exported, &c.

I. Account, stated in *Imperial Proof Gallons*, of the Rum annually entered for Home Consumption in the United Kingdom, from 1800 to 1832, both inclusive, distinguishing England, Ireland, and Scotland; the Rates of Duty payable respectively thereon; the Produce of the Duties; and the Price of Rum in Bond since 1814. (This account has been prepared partly from published, and partly from unpublished *official* documents. The column of prices has been supplied principally by Mr. Cook.)

Years.	Quantities entered for Home Consumption.				Rate of Duty payable (Customs and Excise.)		Nett Produce of the Duties in Great Britain.	Nett Produce of the Duties in Ireland.	Price of Jamaica Rum in Bond.
	England.	Scotland.	Ireland.	United Kingdom.	In England and Scotland.	In Ireland.			
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Per Gal.* s. d.	*Per Gal.* s. d.	*L.* s. d.	*L.* s. d.	*Per Gallon.* s. d. — s. d.
1800	1,945,266	239,913	864,411	3,049,590	9 0½	6 8½	920,827 6 4	263,355 0 0	
1801	1,687,839	319,237	1,027,316	3,034,392	8 10½	- -	955,177 1 5	347,455 7 9	
1802	2,204,897	468,163	637,005	3,310,065	9 0½	6 11½	1,222,989 11 2	206,861 2 10	
1803	2,573,602	379,043	259,366	3,212,611	13 4½	8 6½	1,368,870 13 4	88,140 7 8	
1804	1,508,899	124,548	180,289	1,813,736	13 5½	9 2½	1,054,625 1 6	69,292 8 3	
1805	1,696,384	153,635	123,049	1,973,068	13 5½	- -	1,223,770 0 9	56,401 2 4	
1806	1,857,321	188,811	160,148	2,206,280	13 5½	- -	1,373,986 5 0	72,615 16 0	
1807	1,999,783	226,296	210,822	2,436,901	- -	- -	1,496,814 1 8	69,776 13 3	
1808	2,174,751	230,263	343,333	2,757,347	- -	10 5½	1,637,475 16 2	161,789 3 9	
1809	2,260,625	289,325	1,063,661	3,613,611	13 7½	- -	1,738,074 5 8	546,747 1 7	
1810	2,703,718	330,560	336,658	3,370,936	- -	- -	2,069,170 0 7	172,424 11 8	
1811	2,711,945	300,396	149,250	3,162,541	- -	- -	2,055,161 4 0	77,378 3 11	
1812	3,205,165	286,569	283,135	3,775,169	- -	- -	2,366,338 12 10	149,817 9 1	
1813	3,044,680	241,686	453,008	3,743,374	13 10½	12 10½	2,278,636 10 0	251,639 9 2	
1814	3,532,188	280,493	91,154	3,703,835	- -	12 8½	2,615,578 2 7	58,060 6 6	4 6 to 6 6
1815	3,049,204	281,748	61,833	3,365,785	- -	- -	2,240,472 17 10	41,295 5 10	3 2 — 4 6
1816	2,221,533	185,874	21,543	2,428,950	- -	- -	1,636,386 13 10	12,171 5 0	3 7 — 4 8
1817	2,179,213	198,412	30,686	2,408,311	- -	- -	1,619,425 16 5	19,423 6 2	3 9 — 5 0
1818	2,406,266	203,951	21,366	2,631,583	- -	- -	1,775,714 12 2	15,587 15 4	3 5 — 4 6
1819	2,390,193	148,955	25,735	2,564,883	13 11½	- -	1,730,446 14 9	16,289 14 6	2 6 — 3 9
1820	2,325,733	142,297	20,390	2,489,120	- -	- -	1,684,425 7 8	12,981 5 2	2 8 — 4 0
1821	2,166,441	138,189	19,683	2,324,315	- -	- -	1,576,377 1 4	12,538 6 0	1 6 — 2 9
1822	2,100,925	130,879	15,035	2,246,839	- -	- -	1,516,645 11 6	9,557 6 8	1 8 — 2 8
1823	2,222,923	108,562	18,175	2,349,660	- -	13 11½	1,600,666 18 6	11,534 6 5	1 8 — 2 4
1824	2,407,207	134,986	9,453	2,551,646	12 7½	12 7½	1,600,827 6 6	6,097 7 1	1 7 — 2 6
1825	1,980,807	101,752	10,128	2,092,687	- -	- -	1,278,313 19 1	6,313 19 4	2 6 — 3 4
1826	3,982,053	295,505	27,758	4,305,316	8 6	8 6	1,817,108 2 3	11,770 6 6	3 0 — 4 0
1827	3,080,152	185,214	23,240	3,288,606	- -	- -	1,386,726 1 1	9,850 7 10	3 4 — 4 4
1828	3,064,856	188,089	24,708	3,277,653	- -	- -	1,382,624 19 5	10,528 17 9	3 3 — 4 3
1829	3,202,143	152,461	21,262	3,375,866	- -	- -	1,425,746 18 8	9,035 14 5	2 3 — 3 3
1830	3,303,144	136,320	19,294	3,458,958	9 0	9 0	1,591,838 11 5	8,492 18 6	2 3 — 3 8
1831	3,479,911	125,702	18,984	3,624,597	- -	- -	1,621,341 0 5	8,540 9 0	2 2 — 3 8
1832	3,377,507	112,026	24,432	3,513,965	- -	- -	1,569,402 10 3	10,977 13 6	2 0 — 3 2

II. An Account of the Total Number of Gallons of Rum entered for Home Consumption, with the Amount of Duty paid thereon, in Great Britain and Ireland respectively, from the 5th of January, 1832, to the 5th of January, 1833, distinguishing England from Scotland; also, a similar Account of all other Spirits from Foreign Countries, entered for Home Consumption, distinguishing such Countries, for the same Year. — (*Parl. Paper*, No. 320. Sess. 1833.)

Articles.	Great Britain.			Ireland.	United Kingdom.
	England.	Scotland.	Total.		
	Proof Gallons.	*Proof Gallons.*	*Proof Gallons.*	*Proof Gallons.*	*Proof Gallons.*
Rum - - -	3,377,507	112,026	3,489,533	24,432	3,513,965
Other foreign spirits:					
From the Netherlands -	17,451	7,280	24,731	1,484	26,215
France - -	1,509,256	61,120	1,570,376	31,717	1,602,093
the East India Company's territories and Mauritius	737	- -	737	- -	737
the British West Indies -	2,016	764	2,780	210	2,990
other parts - -	1,528	72	1,600	2	1,602
Total quantity of foreign spirits entered for home consumption	4,908,495	181,262	5,089,757	57,845	5,147,602
	L. s. d.	*L.* s. d.	*L.* s. d.	*L.* s. d.	*L.* s. d.
Rum - -	1,520,102 1 11	50,411 14 2	1,570,513 16 1	10,985 6 6	1,581,499 2 7
Other foreign spirits - -	1,722,159 [illegible]	[illegible]	[illegible]	[illegible]	1,837,908 6 9
Total receipt of duty on foreign spirits - - -	3,242,261 2 6	[illegible]	[illegible]	[illegible]	[illegible]

III. Account of the Quantity of Rum imported into the United Kingdom, distinguishing the several Colonies and Countries from which the same was importe , and the Quantity imported from each, in the Year ended 5th of January, 1833.

Countries from which imported.	Rum imported in the Year ending the 5th of Jan. 1833.			Countries from which imported.	Rum imported in the Year ending the 5th of Jan. 1833.		
	Into Great Britain.	Into Ireland.	Into the United Kingdom.		Into Great Britain.	Into Ireland.	Into the United Kingdom.
British colonies and plantations in America; viz.	*Prf. Galls.*	*Prf. Galls.*	*Prf. Galls.*		*Prf. Galls.*	*Prf. Galls.*	*Prf. Galls.*
				Tortola	108	-	108
Antigua	27,233	1,940	29,173	Trinidad	1,797	3,759	5,556
Barbadoes	5,700	40	5,740	Bermudas	30	-	30
Dominica	34,599	-	34,599	Demerara	1,290,673	2,492	1,293,256
Grenada	103,650	4	103,654	Berbice	122,194	-	122,194
Jamaica	2,755,335	1,718	2,757,053	British N. American colonies	19,716	-	19,716
Montserrat	11,504	-	11,504	Foreign colonies in the West Indies; viz.			
Nevis	11,189	-	11,189				
St. Christopher	29,951	-	29,951	St. Thomas and St. Croix	10,907	-	10,907
St. Lucia	4,075	2,469	6,544	Other countries	1,233	-	1,233
St. Vincent	29,732	-	29,732				
Tobago	281,651	-	281,651	Total	4,741,367	12,422	4,753,789

IV. Account of the Quantity of Rum exported from the United Kingdom, distinguishing the Countries to which the same was exported, and the Quantity exported to each, in the Year ended the 5th of January, 1833.

Countries to which exported.	Rum exported in the Year ending the 5th of Jan. 1833.			Countries to which exported.	Rum exported in the Year ending the 5th of Jan. 1833.		
	From Great Britain.	From Ireland.	From the United Kingdom.		From Great Britain.	From Ireland.	From the United Kingdom.
	Prf. Galls.	*Prf. Galls.*	*Prf. Galls.*		*Prf. Galls.*	*Prf. Galls.*	*Prf. Galls.*
Russia	64,917	587	65,504	Cape of Good Hope	12,893	-	12,893
Sweden	11,342	-	11,342	Other parts of Africa	217,593	165	217,758
Norway	5,281	-	5,281	East Indies and China	32,176	-	32,176
Denmark	64,422	-	64,422	New South Wales, Swan River, and Van Diemen's Land	327,911	-	327,911
Prussia	366,211	40	366,251				
Germany	622,246	-	622,246				
The Netherlands	146,404	-	146,404	British North American colonies	68,826	14,055	82,881
France	1,661	40	1,701	British West Indies	17,334	1,465	18,799
Portugal, the Azores, and Madeira	10,878	169	11,047	Foreign West Indies	4,017	-	4,017
Spain and the Canaries	5,562	89	5,651	United States of America	7,109	2,045	9,154
Gibraltar	16,893	205	17,098	Mexico	358	-	358
Italy	113,231	-	113,231	Colombia	133	-	133
Malta	11,682	-	11,682	Brazil	3 079	185	3,264
The Ionian Islands	13,644	-	13,644	States of the Rio de la Plata	290	-	290
Turkey and Continental Greece	51,675	166	51,841	Chili	4,007	-	4,007
				Peru	2,923	-	2,923
Morea and Greek islands	96	-	96	The Whale Fisheries	6,213	-	6,213
Guernsey, Jersey, Alderney, and Man	90,317	-	90,317	Total	2,304,324	19,011	2,323,335

Though rum has not been so much over-taxed as brandy, geneva, and wine, still it seems pretty clear that even, in its case, taxation has been carried far beyond its proper limits. During the 3 years ending with 1802, when the duty in Great Britain was about 9*s.* a gallon, and in Ireland 6*s.* 8$\frac{3}{4}$*d.*, the consumption of the United Kingdom amounted to 3,150,000 gallons a year; while, notwithstanding the great increase of population, during the 3 years ending with 1823, when the duty in Great Britain was 13*s.* 11$\frac{1}{2}$*d.* a gallon, and in Ireland 12*s.* 8$\frac{3}{4}$*d.*, the annual consumption amounted to only 2,307,000 gallons! The reduction of the duty in 1826 to 8*s.* 6*d.* increased the consumption from about 2,500,000 to above 3,600,000 gallons in 1830. But 6*d.* having been added to the duty in 1830, the consumption, influenced no doubt partly by this, but probably also by other circumstances, has since declined. The great demand for rum from 1811 to 1815 was occasioned chiefly by the high price and inferior quality of the British spirits that were then manufactured.

The decrease in the consumption of rum in Ireland is most striking. Unfortunately, however, this is not the only instance the sister kingdom affords of the destructive effects of oppressive taxes. The excessive additions made to the duties on brandy, wine, sugar, &c. since 1805, have had similar effects; the quantity of these articles consumed in Ireland being *decidedly less now than it was* 30 *years ago!* — (See BRANDY, SUGAR, &c.) Exorbitant taxes have gone far to deprive the Irish of every comfort; and, consequently, to take from them some of the most powerful incentives to industry and good conduct. The poverty of the people has set at nought the calculations of our finance ministers; *every increase of taxation in Ireland having produced a diminution of revenue and an increase of crime!* Surely it is high time to abandon so odious a system; particularly after the experience of the beneficial effects that have resulted from the diminution of the spirit duties. As a means of raising revenue, the taxation of Ireland is utterly ineffective; but the wit of man never contrived any thing better fitted to produce barbarism and disaffection.

Rum, the produce of the British possessions in America, is not liable to the duty charged on sweetened spirits, unless the actual strength exceed the strength denoted by Sykes's hydrometer by more than 10 degrees per cent.; and in lieu of such duty there shall be charged upon every degree per cent. more than 8 degrees, and not more than 10 degrees, by which the actual strength shall exceed the strength denoted

by Sykes's hydrometer, a duty of 9*s.* 6*d.*: provided, that if the importer cannot make a perfect entry thereof for payment of duty on the actual strength, he may demand in writing, upon the entry, that trial be made of the actual strength (he paying the expenses of such trial), instead of entering such rum for the payment of duty upon any stated number of such excessive degrees of strength: provided also that all trials of actual strength of such rum shall be made by some skilful person appointed by the commissioners of customs for such purpose.—(7 *Geo.* 4. c. 48. § 31.)

Rum, the produce of the British plantations, must be imported in casks containing not less than 20 gallons.—(3 & 4 *Will.* 4. c. 52.) But rum in casks capable of containing 20 gallons, may be imported on the officer being satisfied that the deficiency has been *wholly occasioned by absorption or leakage*, and not by abstraction.—(*Customs Min.* 24th of March, 1831.)

Rum in bonded warehouses may be drawn off into casks containing not less than 20 gallons each, as stores for ships, and may be delivered into the charge of the searcher, to be shipped as stores for any ship, without entry or payment of duty, the same being duly borne upon the victualling bill of such ships respectively.—(3 & 4 *Will.* 4. c. 57.)

Rum of the British plantations in bonded warehouses may also be drawn off into reputed quart or reputed pint bottles, for the purpose of being exported from the warehouse.—(3 & 4 *Will.* 4. c. 57.)

On applications referring to a former order allowing the admixture of rums of different strengths for exportation, and praying that the rum remaining in the vats after the operation of racking might be admitted for home consumption, the Board were of opinion that the request might be complied with, to the extent of an ullage of 20 gallons, the legal quantity allowed to be exported, and that the duty should be paid, according to the strength, at the time of delivery of the said rum.—(*Min. Com. Cus.* 27th of Sept. 1827.)

Before any rum shall be entered as being the produce of any British possession in America, or of the Mauritius, the master of the ship importing the same must deliver a certificate of origin to the collector or comptroller, and subscribe a declaration that the goods are the produce of such place.—(3 & 4 *Will.* 4. c. 52. § 37.; see *ante*, 660.)

RUSSIA COMPANY, a regulated company for conducting the trade with Russia. It was first incorporated by charter of Philip and Mary, sanctioned by act of parliament in 1566. The statute 10 & 11 Will. 3. c. 6. enacts, that every British subject desiring admission into the Russia Company shall be admitted on paying 5*l.*; and every individual admitted into the Company conducts his business entirely as a private adventurer, or as he would do were the Company abolished.

Table of Duties payable to the Russia Company.

		s.	*d.*
Aniseed	the cwt.	0	3
Ashes, pearl and pot	the ton	0	9
Books, bound	the cwt.	0	3
unbound	the cwt.	0	2
Bristles	the dozen lbs.	0	0½
Castoreum	the lb.	0	1
Caviare	the cwt.	0	2
Cordage	the cwt.	0	2
Down	the 100 lbs.	0	4
Feathers, bed	the cwt.	0	4
Flax	the ton	0	9
Hair, cow or ox	the cwt.	0	2
Hemp	the ton	0	7
Hides, of cows or horses, undressed	each	0	0½
red or Muscovy	each	0	1
Iron	the ton	0	5
Isinglass	the cwt.	0	4
Linen drillings	the 120 ells	0	1½
narrow or diaper	the 120 ells	0	2
22½ to 31½	the 120 ells	0	3
31½ to 45	the 120 ells	0	4
45 and upwards	the 120 ells	0	6
sail cloth	the 120 ells	0	3
Linseed	the quarter	0	2
Mats	the hundred	0	2
Oats	the quarter	0	1
Pitch	the last	0	2
Rhubarb	the lb.	0	1½
Rosin	the cwt.	0	1½
Saltpetre	the cwt.	0	1½
Seeds, garden	the 100 lbs.	0	3
Skins and furs, viz.—			
Armins or ermines	the zimmer of 40 skins	0	2
Bear	each	0	2
Calabar	the zimmer	0	2
Calf	the hundred	0	3
Fox	the hundred	0	4½
Hare	the 100 dozen	0	2
Sables	the zimmer	1	6
Swan	each	0	1
Wolf	each	0	1½
Tallow	the ton	0	9
Tongues	the hundred	0	2
Tow	the ton	0	6
Wax, bees'	the cwt.	0	2
Wheat	the quarter	0	1
Wood, viz.—			
Balks above 5 inches sq.	the 120	0	4
under do.	the 120	0	3
Barrel boards	the 120	0	1
Battens	the 120	0	1½
Capravens	the 120	0	3
Clap boards	the 120	0	1
Deals under 20 feet long,	the 120	0	4
above do.	the 120	0	9
Fire wood	the fathom	0	1
Fir timber	the load	0	1
Handspikes	the 120	0	1½
Lathwood	the fathom	0	1½
Masts, great	each	0	2
all others	each	0	1
Oak boards	the 120	0	5
plank	the load	0	3
Timber	the load	0	2
Oars	the 120	0	4½
Paling boards	the 120	0	1
Spars	the 120	0	2
Staves	the 120	0	3
Tar	the last	0	2
Wainscot logs	the load	0	2

All goods not enumerated, pay 1-8th per cent. *ad valorem* on the declaration of the importer.

RUSSIA LEATHER (Fr. *Cuir de Russie*; Ger. *Juften*; It. *Cuojo di Russia*; Pol. *Jachta*; Rus. *Juft*, *Youft*; Sp. *Moscovia*), the tanned hides of oxen and other kine, denominated by the Russians *youfts*, or *juffs*,—a designation said to be derived from their being generally manufactured in pairs. The business of tanning is carried on in most towns of the empire, but principally at Moscow and Petersburgh. Russia leather is soft, has a strongly prominent grain, a great deal of lustre, and a powerful and peculiar odour. It is principally either red or black: the former is the best, and is largely used in this and other countries in bookbinding; for which purpose it is superior to every other material. The black is, however, in very extensive demand in Russia; large quantities being made up into boots and shoes. The process followed by the Russians in the preparation of this valuable commodity has been frequently described; but notwithstanding this circumstance, and the fact that foreigners have repeatedly engaged in the business in Russia, with the intention of making themselves masters of its details, and undertaking it at home, the efforts made to introduce the manufacture into other countries have hitherto entirely failed. One of the best tests of genuine Russia leather is its throwing out a strong odour of burnt hide upon being rubbed a little.—(*Ricard, Traité Général du Commerce*, tome i. p. 275. ed. 1781.)

We borrow from Mr. Borrisow's work on the *Commerce of Petersburgh* the following details with respect to this article:—Russia leather forms one of the principal export commodities of Petersburgh.

But since the ports of the Black Sea have been opened, the exports of leather from this port have considerably decreased; Italy, the principal consumer, supplying its wants from Odessa and Taganrog, more easily, cheaply, and expeditiously than from Petersburgh. The chief exportation from the latter is to Prussia, Germany, and England. Frankfort on the Maine and Leipzic are of great importance as respects the trade in Russia leather, on account of the fairs held in them.

Juffs are never bought on contract, but always on the spot at cash prices. It nevertheless often happens that agents, in order to secure a lot of juffs, pay a certain sum in advance, and settle for the amount at the first market prices; no prices being fixed in the months of January, February, March, and sometimes even April.

Juffs are assorted or *bracked* when received, according to their different qualities, into *Gave*, *Rosval*, *Malja*, and *Domashna*. The three first sorts are again divided into *heavy* and *light Gave*, *heavy* and *light Rosval*, &c. Domashna is the worst, and consequently the cheapest sort. It often happens that juffs are bought unassorted, and then the prices are regulated according as the quantity of Domashna contained in the lot is greater or less. Persons well acquainted with the nature of Russia leather prefer purchasing it in this state.

Juffs are sold by the pood, which consists, as it is commonly expressed, of 4, 4¼, 4½, 5, 5¼, and 5½ hides. By this is understood, that so many hides make a pood, calculated upon the whole lot; and it is to be observed that the lightest juffs are esteemed the best in quality. Heavy juffs, or those of 4 and 4½ hides, are shipped for Italy: the Germans, on the contrary, prefer the lighter sort.

Juffs are packed in rolls, each containing 10 hides; and from 10 to 15 of these rolls are packed together in a bundle, which is well secured by thick matting. There are red, white, and black juffs; but the red are most in demand. Their goodness is determined by their being of a high red colour, of equal size, and unmixed with small hides: they must also be free from holes, well stretched, and equally thin. In a well finished lot, no thick head or feet parts should be found. If spots resembling flowers are seen on the red hides, it is an additional sign of their good quality; and they are then called *bloomed juffs*. The inside should be clean, soft, and white, and, when taken in the hand, should feel elastic. The best connoisseurs of Russia leather can nearly determine the quality by the smell alone.

Great attention must be paid, in shipping juffs, to secure them from being wetted, as damp air alone is sufficient to injure them.

Sixty rolls of juffs make a last; 88 poods nett weight, when shipped for Italy, make a last; and 44 poods a ton in England.

The exports of juffs from Russia, in 1831, were 463 bales, 261,240 skins, and 80,000 poods. Their aggregate value was 3,464,209 roubles.

RYE (Ger. *Rogken*, *Rocken*; Du. *Rog*, *Rogge*; Fr. *Seigle*; It. *Segale*, *Segala*; Sp. *Centeno*; Rus. *Rosch*, *Sel*, *Jar*; Lat. *Secale*), according to some, is a native of Crete; but it is very doubtful if it be found wild in any country. It has been cultivated from time immemorial, and is considered as coming nearer in its properties to wheat than any other grain. It is more common than wheat in many parts of the Continent; being a more certain crop, and requiring less culture and manure. It is the bread corn of Germany and Russia. In Britain it is now very little grown; being no longer a bread corn; and, therefore, of less value to the farmer than barley, oats, or peas.—(*Loudon's Ency. of Agriculture.*)

For the regulations as to the importation and exportation of rye, see Corn Laws and Corn Trade.

S.

SABLE (Ger. *Zobel*; Fr. *Zibelline*; It. *Zibellino*; Rus. *Sohol*), an animal of the weasel tribe, found in the northern parts of Asiatic Russia and America, hunted for the sake of its fur. Its colour is generally of a deep glossy brown, and sometimes of a fine glossy black, which is most esteemed. Sable skins have sometimes, though very rarely, been found yellow, and white. The finer sorts of the fur of sables are very scarce and dear.—(See Fur Trade.)

SADDLES (Fr. *Selles*; Ger. *Sattel*; It. *Selle*; Rus. *Südla*; Sp. *Selles*), seats adapted to the horse's back, for the convenience of the rider. Those made in England are reckoned the best. Sherborne and Lynn are particularly remarkable for this manufacture. The hogskins, which, when tanned, are used for the seat of the saddle, are mostly imported from Russia.

SAFFLOWER, or BASTARD SAFFRON (Ger. *Safflor*; Du. *Saffloer*, *Basterd Saffran*; Fr. *Cartame*, *Saffran batard*; It. *Zaffrone*; Sp. *Alazor*, *Azafran bastardo*; Rus. *Polerroi*, *Prostoi schafran*), the flower of an annual plant (*Carthamus tinctorius* Lin.) growing in India, Egypt, America, and some of the warmer parts of Europe. It is not easily distinguished from saffron by the eye, but it has nothing of its smell or taste.

The flowers, which are sometimes sold under the name of *saffranon*, are the only parts employed in dyeing. They yield two sorts of colouring matter: one soluble in water, and producing a yellow of but little beauty; the other is *resinous*, and best dissolved by the fixed alkalies: it is this last which alone renders safflower valuable in dyeing; as it affords a red colour exceeding in delicacy and beauty, as it does in costliness, any which can be obtained even from cochineal, though much inferior to the latter in durability. The colour of safflower will not bear the action of soap, nor even that of the sun and air for a long time; and being very costly, it is principally employed for imitating upon silk the fine scarlet (*ponceau* of the French) and rose colours dyed with cochineal upon woollen cloth.

The fine rose colour of safflower, extracted by crystallised soda, precipitated by citric acid, then slowly dried, and ground with the purest talc, produces the beautiful *rouge* known by the name of *rouge végétale*.

Safflower should be chosen in flakes of a bright pink colour, and of a smell somewhat resembling tobacco. That which is in powder, dark coloured, or oily, ought to be rejected.—(*Hasselquist's Voyages* Eng. ed. p. 252.; *Bancroft's Permanent Colours*, vol. i. pp. 286—289.; *Milburn's Orient. Com.*)

Of 2,772 cwt. of safflower imported in 1831, 2,436 came from the East Indies; but we occasionally import considerable quantities from the United States and Egypt. The price of safflower in bond varies from 6*l.* to 9*l.* 10*s.* a cwt.

Notwithstanding the limited use of safflower, its recent history may be quoted in illustration of the beneficial effects of moderate duties. At an average of the 3 years ending with 1822, when the duty was 8*s.* 9*d.* a cwt., the entries for home consumption were at the rate of 1,997 cwt. a year. In 1825, the duty was reduced to 5*s.*, and in 1826 to 2*s.* 6*d.* a cwt.; and at an average of the 3 years ending with 1832, the entries for home consumption were 2,416 cwt. a year. The duty has since been reduced to 1*s.* a cwt.

SAFFRON (Ger. *Saffran*; Du. *Safran*; It. *Zafferano*; Sp. *Saffron*; Fr. *Azafran*; Rus. *Schafran*), a sort of cake prepared from the stigmas, with a proportion of the style, of a perennial bulbous plant (*Crocus sativus* Lin.) cultivated to a small extent in Cambridgeshire. It is also imported from Sicily, France, and Spain; but the English, as being fresher, more genuine, and better cured, is always preferred. When good, saffron has a sweetish, penetrating, diffusive odour; a warm, pungent, bitterish taste; and a rich, deep orange red colour. It should be chosen fresh, in close, tough, compact cakes, moderately moist, and possessing in an obvious degree all the above mentioned qualities. The not staining the fingers, the making them oily, and its being of a whitish yellow or blackish colour, indicate that it is bad, or too old. Saffron is used in medicine, and in the arts; but in this country the consumption seems to be diminishing. It is employed to colour butter and cheese, and also by painters and dyers.—(*Thomson's Dispensatory*; *Loudon's Ency. of Agriculture.*)

SAGAPENUM (Arab. *Sulbenuj*), a concrete gum-resin, the produce of an unknown Persian plant. It is imported from Alexandria, Smyrna, &c. It has an odour of garlic; and a hot, acrid, bitterish taste. It is in agglutinated drops or masses, of an olive or brownish yellow colour, slightly translucent, and breaking with a horny fracture. It softens and is tenacious between the fingers, melts at a low heat, and burns with a crackling noise and white flame, giving out abundance of smoke, and leaving behind a light spongy charcoal. It is used only in medicine.—(*Thomson's Dispensatory.*)

SAGO (Malay, *Sagu*; Jav. *Sagu*), a species of meal, the produce of a palm (*Metroxylon Sagu*) indigenous to and abundant in such of the Eastern islands as produce spices, where it supplies a principal part of the farinaceous food of the inhabitants.

The tree, when at maturity, is about 30 feet high, and from 18 to 22 inches in diameter. Before the formation of the fruit, the stem consists of an external wall about 2 inches thick, the whole interior being filled up with a sort of spongy medullary matter. When the tree attains to maturity, and the fruit is formed, the stem is quite hollow. Being cut down at a proper period, the medullary part is extracted from the trunk, and reduced to a powder like sawdust. The filaments are next separated by washing. The meal is then laid to dry; and being made into cakes and baked, is eaten by the islanders. For exportation, the finest sago meal is mixed with water, and the paste rubbed into small grains of the size and form of coriander seeds. This is the species principally brought to England, for which market it should be chosen of a reddish hue, and readily dissolving in hot water into a fine jelly. Within these few years however, a process has been invented by the Chinese for refining sago, so as to give it a fine pearly lustre; and the sago so cured is in the highest estimation in all the European markets. It is a light, wholesome, nutritious food. It is sent from the islands where it is grown to Singapore, where it is granulated and bleached by the Chinese. The export trade to Europe and India is now principally confined to that settlement.—(*Ainslie's Mat. Indica*; *Crawfurd's East. Archip.* vol. i. pp. 383—393., vol. iii. p. 348.; *Bell's Review of the Commerce of Bengal, &c.*)

The consumption of sago has been about trebled during the last dozen years; having amounted to 1,339 cwt. a year at an average of the 3 years ending with 1822, and to 3,859 cwt. a year at an average of the 3 years ending with 1832. This large increase is wholly ascribable to the reduction in the interval of the oppressive duties by which the article was formerly loaded.—(*Papers published by the Board of Trade.*) The price of common sago in bond varies from 12*s.* to 1*l.*; while pearl sago fetches from 15*s.* to 1*l.* 15*s.* a cwt.; but the price is liable to great fluctuation.

SAIL, a coarse linen or canvass sheet attached to the masts and yards of ships, the blades of windmills, &c., to intercept the wind and occasion their movement.

Foreign sails, when imported by, and fit and necessary for, and *in the actual use* of any British ship, are exempted from duty; but when otherwise disposed of, they pay a duty of 20 per cent. *ad valorem.*—(9 *Geo.* 4. c. 76. § 12.)

Sails and cordage of British manufacture, exported from Great Britain to the colonies, and afterwards imported into the United Kingdom, are in all cases, other than those in which they are imported by *bill of store*, to be deemed foreign; and such sails and cordage, although not liable to duty so long as the vessel continues to belong to the colony, become subject to the duties in question as soon as the vessel becomes the property of persons residing in this country.—(*Treasury Order*, 29th of Jan. 1828.)

SALEP, a species of powder prepared from the dried roots of a plant of the orchis kind (*Orchis mascula* Lin.). That which is imported from India is in white oval pieces, hard, clear, and pellucid, without smell, and tasting like tragacanth. As an article of diet, it is said to be light, bland, and nutritious. The plant thrives in England, but it is not cultivated to any extent; and very little is imported.—(*Ainslie's Mat. Indica*; *Milburn's Orient. Com.*)

SALMON (Ger. *Lachs, Salm;* Fr. *Saumon;* It. *Sermone, Salamone;* Sp. *Salmon;* Rus. *Lemga*). This capital fish is too well known to require any description. It is found only in northern seas, being unknown in the Mediterranean and other warm regions. In this country it is an article of much value and importance. It is exceedingly abundant in Japan and Kamtschatka.

"Salmon fisheries," Marshall observes, "are copious and constant sources of human food; they rank next to agriculture. They have, indeed, one advantage over every other internal produce, — their increase does not lessen other articles of human subsistence. The salmon does not prey on the produce of the soil, nor does it owe its size and nutritive qualities to the destruction of its compatriot tribes. It leaves its native river at an early state of growth; and going, even naturalists know not where, returns of ample size, and rich in human nourishment; exposing itself in the narrowest streams, as if nature intended it as a special boon to man. In every stage of savageness and civilisation, the salmon must have been considered as a valuable benefaction to this country."

Being rarely caught, except in estuaries or rivers, the salmon may be considered in a great degree as private property. The London market, where the consumption is immense, is principally supplied from the Scotch rivers. The Tweed fishery is the first in point of magnitude of any in the kingdom; the take is sometimes quite astonishing, several hundreds having been frequently taken by a single sweep of the net! Salmon are despatched in fast sailing vessels from the Spey, the Tay, the Tweed, and other Scotch rivers, for London, packed in ice, by which means they are preserved quite fresh. When the season is at its height, and the catch greater than can be taken off fresh, it is salted, pickled, or dried for winter consumption at home, and for foreign markets. Formerly, such part of the Scotch salmon as was not consumed at home, was pickled and kitted after being boiled, and was in this state sent up to London under the name of Newcastle salmon; but the present method of disposing of the fish has so raised its value, as to have nearly deprived all but the richer inhabitants in the environs of the fishery of the use of salmon. Within the memory of many now living, salted salmon formed a material article of household economy in all the farm-houses in the vale of the Tweed; insomuch, that in-door servants used to stipulate that they should not be obliged to take more than two weekly meals of salmon. Its ordinary price was then 2*s.* a stone of 19 lbs.; but it is now never below 12*s.*, often 36*s.*, and sometimes 42*s.* a stone! This rise in the price of the fish has produced a corresponding rise in the value of the salmon fisheries, some of which yield very large rents. The total value of the salmon caught in the Scotch rivers has been estimated at 150,000*l.* a year. There are considerable fisheries in some of the Irish and English rivers; but inferior to those of Scotland. — (*Loudon's Ency. of Agriculture; General Report of Scotland*, vol. iii. p. 327.)

Decrease of the Supply of Salmon, Poaching, &c. — The decrease of salmon in the English and Scotch rivers, particularly of late years, is a fact as to which there can be no manner of doubt. Much unsatisfactory discussion has taken place as to its causes, which are, probably, of a very diversified character. A good deal has been ascribed to the increase of water machinery on the banks of the different rivers; but we hardly think that this could have much influence, except, perhaps, in the case of the smaller class of rivers. *Weirs*, or salmon traps, have also been much objected to; though, as we have been assured, with still less reason. On the whole, we are inclined to think that the falling off in the supply of this valuable fish is principally to be ascribed to the temptation to over-fish the rivers, caused by the extraordinary rise in the price of salmon; to the prevalence of poaching; and, more than all, to the too limited duration of the *close time*. In 1828, after a great deal of discussion and inquiry, an act was passed (9 Geo. 4. c. 39.), which has done a good deal to remedy these defects — in so far, at least, as respects the Scotch fisheries. The rivers are to be shut from the 14th of September to the 1st of February; and every person catching or attempting to catch fish during that period is to forfeit not less than 1*l.* and not more than 10*l.* for every offence, besides the fish, if he have caught any, and such boats, nets, or other implements, as he may have made use of. Pecuniary penalties are also inflicted upon poachers and trespassers; and provision is made for the watching of the rivers. We understand that this act has had a very good effect; though it is believed that it would be better were the *close time* extended from the 1st of September to the middle of February.

It is enacted by stat. 1 Geo. 1. st. 2. c. 18., that no salmon shall be sent to any fishmonger or fish-seller in England, of less than 6 lbs. weight, under a penalty of 5*l.* The 58 Geo. 3. c. 43. authorises the justices at quarter sessions to appoint conservators of rivers, and to fix the beginning and termination of the *close time*. The penalty upon poaching and taking fish in *close time* is by the same act fixed at not more than 10*l.* and not less than 5*l.*, with forfeiture of fish, boats, nets, &c.

SALONICA, a large city and sea-port of European Turkey, at the north-east extremity of the gulf of the same name, in lat. 40° 38′ 47″ N., lon. 22° 57′ 13″ E. Population estimated at 70,000. There is no port at Salonica, but there is excellent anchorage in the roads opposite to the town. The access to them is by no means difficult. Pilots, however, are, for the most part, employed; and of these, some are always on the look-out. During that period of the late war when the anti-commercial system of Napoleon was at its height, Salonica became a great *depôt* for British goods; whence they were conveyed to Germany, Russia, and other parts of Europe. At all times, however, Salonica has a considerable trade. The exports principally consist of wheat, barley, and Indian corn, timber, raw cotton, wool, raw silk, wax, and tobacco. The average exportation of cotton is said to be about 100,000 bales; of tobacco about 30,000 bales; each bale containing about 275 lbs. The export of wool is said to amount to about 1,000,000 lbs. The imports are sugar, coffee, dye woods, indigo, muslins, printed calicoes, iron, lead, tin, watches, &c.

Arrivals. — In 1831, there arrived at Salonica 535 vessels, of the burden of 31,205 tons.

Money, Weights, and Measures. — Accounts are kept in piastres of 40 paras, or 120 aspers. The coins are those of Constantinople; which see.

The weights and measures are the same as those of Smyrna, except that the kisloz, killow, or corn measure of Salonica, = 3·78 kisloz of Smyrna.

SALT (Ger. *Salz;* Du. *Zout;* Fr. *Sel;* It. *Sale;* Sp. *Sal;* Rus. *Sol;* Lat. *Sla;* Arab. *Melh;* Chin. *Yen;* Hind. *Nimmuck;* Per. *Nun*), the *chloride of sodium* of modern chemists, has been known and in common use as a seasoner and preserver of food from the earliest ages. Immense masses of it are found in this and many other countries, which require only to be dug out and reduced to powder. In that state it is called

rock-salt. The water of the ocean also contains a great deal of salt; to which, indeed, it owes its taste, and the power which it possesses of resisting freezing till cooled down to 28·5°. When this water is sufficiently evaporated, the salt precipitates in crystals. This is the common process by which it is obtained in many countries. There are various processes by which it may be obtained quite pure. Common salt usually crystallises in cubes. Its taste is universally known, and is what is strictly denominated *salt*. Its specific gravity is 2·125. It is soluble in 2·82 times its weight of cold water, and in 2·76 times its weight of boiling water. — (*Thomson's Chemistry.*)

Besides its vast utility in seasoning food, and preserving meat both for domestic consumption and during the longest voyages, and in furnishing muriatic acid and soda, salt forms a glaze for coarse pottery, by being thrown into the oven where it is baked; it improves the whiteness and clearness of glass; it gives hardness to soap; in melting metals, it preserves their surface from calcination, by defending them from the air, and is employed with advantage in some assays; it is used as a mordant, and for improving certain colours; and enters more or less into many other processes of the arts. Many contradictory statements have been made as to the use of salt as a manure. Probably it may be advantageous in some situations, and not in others.

Salt Mines, Springs, &c. — The principal salt mines are at Wielitska in Poland, Catalonia in Spain, Altemonte in Calabria, Lowur in Hungary, in many places in Asia and Africa, and in Cheshire in this country. The mines at Wielitska are upon a very large scale; but the statements that have frequently been published of their containing villages, inhabited by colonies of miners who never saw the light, are altogether without foundation. These mines have been wrought for more than 600 years. — (*Coxe's Travels in the North of Europe*, vol. i. p. 149. 8vo ed.)

The salt mines in the neighbourhood of Northwich in Cheshire are very extensive. They have been wrought since 1670; and the quantity of salt obtained from them is greater, probably, than is obtained from any other salt mines in the world. In its solid form, when dug from the mine, Cheshire salt is not sufficiently pure for use. To purify it, it is dissolved in sea water, from which it is afterwards separated by evaporation and crystallisation. The greater part of this salt is exported.

Salt springs are met with in several countries. Those in Cheshire and Worcestershire furnish a large proportion of the salt made use of in Great Britain. The brine, being pumped up from very deep wells, is evaporated in wrought iron pans from 20 to 30 feet square and 10 or 12 inches deep, placed over a furnace.

Most of the salt used in Scotland previously to the repeal of the duty, was obtained by the evaporation of sea water nearly in the way now mentioned; but several of the Scotch salt works have since been relinquished.

In warm countries, salt is obtained by the evaporation of sea water by the heat of the sun; and the crystals of salt made in this way are more perfect, and purer, from the greater slowness of the process. French salt is manufactured in this mode, and it has always been in considerable demand in this and other countries; but the principal imports of foreign salt into Great Britain at present are from Portugal. They amount, at an average, to from 300,000 to 350,000 bushels a year.

Consumption of Salt. — The consumption of salt in this country is immense. Necker estimated the consumption in those provinces of France which had purchased an exemption from the *gabelle* (*Pays francs rédimées*) at about 19½ lbs. (Eng.) for each individual. — (*Administration des Finances*, tome ii. p. 12.) From all that we have been able to learn on the subject, we believe that the consumption of the people of this country may be estimated a little higher, or at 22 lbs.; the difference in our food and habits, as compared with the French, fully accounting for this increased allowance. On this supposition, and taking the population at 16,500,000, the entire consumption will amount to 363,000,000 lbs., or 161,000 tons.

Exclusive of this immense home consumption, we annually export about 10,000,000 bushels, which, at 56 lbs. a bushel, are equivalent to 250,000 tons. The Americans are the largest consumers of British salt; the exports to the United States in 1831 having amounted to 3,130,250 bushels. During the same year we exported to the Netherlands, 1,154,601 bushels; to the British North American colonies, 1,559,630 do.; to Russia, 1,191,896 do.; to Prussia, 624,190 do., &c.

The cheapness of this important necessary of life is not less remarkable than its diffusion. Its present cost may be estimated, at a medium, at from 14*s.* to 16*s.* a ton.

Duties on Salt. — In ancient Rome, salt was subjected to a duty (*vectigal salinarum*; see *Burman, Dissertatio de Vectigalibus Pop. Rom.* c. 6.); and it has been heavily taxed in most modern states. The *gabelle*, or code of salt laws, formerly established in France, was most oppressive. From 4,000 to 5,000 persons are calculated to have been sent annually to prison and the galleys for offences connected with these laws, the severity of which had no inconsiderable share in bringing about the Revolution. — (*Young's Travels in France*, vol. i. p. 598.) In this country, duties upon salt were imposed in the reign of William III. In 1798, they amounted to 5*s.* a bushel; but were subsequently increased to 15*s.* a bushel, or about *forty times* the cost of the salt! So exorbitant a duty was productive of the worst effects; and occasioned, by its magnitude, and the regulations for allowing salt, duty free, to the fisheries, a vast deal of smuggling. The opinion of the public and of the House of Commons having been strongly pronounced against the tax, it was finally repealed in 1823.

That the repeal of so exorbitant a duty has been productive of great advantage, no one can doubt; but seeing that a large revenue must be raised, we question whether government acted wisely in totally relinquishing the tax. Had the duty been reduced to 2*s.* or 2*s.* 6*d.* a bushel, and no duty free salt allowed for the fisheries, but a drawback given on the fish exported, a revenue of 1,000,000*l.* a year might have been derived from this source with but little injury. It was not the nature of the salt tax, but the absurd extent to which it had been carried, that rendered it justly odious. When at the highest, it produced about 1,500,000*l.* a year.

SALTPETRE, OR NITRATE OF POTASH (Ger. *Salpeter*; Fr. *Nitre, Salpêtre*; It. *Nitro, Salnitro*; Sp. *Nitro, Salitre*; Rus. *Senitra*; Lat. *Nitrum*; Arab. *Ubkir*; Hind. *Shorah*), a salt well known in commerce, and of very great importance. It may be regarded both as a natural and an artificial production; being found on the surface of the soil in many parts of India, Egypt, Italy, &c.; but in these and other places all that is known in commerce is obtained by an artificial process, or by lixiviating earth that has been formed into *nitre* beds. The saltpetre consumed in England is brought from Bengal in an impure state, but crystallised, in bags, each containing 164 lbs. Saltpetre forms the principal ingredient in the manufacture of gunpowder; and is used in various arts. It is also of great utility in the commerce of India, from its fur-

nishing a large amount of dead weight for the shipping engaged in it. Saltpetre possesses considerable antiseptic power. That which is of the best quality and well refined, is in long transparent crystals; its taste is sharp, bitterish, and cooling; it flames much when thrown upon burning coals; it is very brittle; its specific gravity is 1·933. It is not altered by exposure to the air.

Beckmann contends, in a long and elaborate dissertation (*Hist. of Invent.* vol. iv. pp. 525—586. Eng. ed.), that the ancients were unacquainted with saltpetre, and that their *nitrum* was really an alkaline salt. But, as saltpetre is produced naturally in considerable quantities in Egypt, it is difficult to suppose that they could be entirely ignorant of it; though it would appear that they had confounded it with other things. It has been known in the East from a very early period. Beckmann concurs in opinion with those who believe that gunpowder was invented in India, and brought by the Saracens from Africa to the Europeans; who improved its manufacture, and made it available for warlike purposes. — (Vol. iv. p. 571.)

The consumption of saltpetre during periods of war is very great. Its price is consequently liable to extreme fluctuation. In remarking on the varieties in the price of saltpetre, Mr. Tooke observes, "It reached its greatest height in 1795, viz. 170*s.* a cwt.; in 1796, it fell at one time to 45*s.*, and rose again to 96*s.* It seems to have been affected considerably by the scale of hostilities on the Continent. But in consequence of the discoveries in chemistry, by which the French were enabled to dispense with a foreign supply, and by the increased importation from India to this country, by which we were enabled to supply the rest of the Continent at a reduced cost, the price declined permanently after 1798-9, when it had reached 145*s.*; and never after was so high as 100*s.*, except during the short interval of speculation in exports during the peace of 1814, and again upon the breaking out of the war terminated by the battle of Waterloo." The price of saltpetre in the London market varies at this moment (January, 1834) from 32*s.* to 40*s.* a cwt.

We are indebted for the following comprehensive statement of the importation, consumption, &c. of East Indian saltpetre to *Mr. Cook's State of the Commerce of Great Britain in* 1833: —

Imports, Deliveries, Prices, and Stocks of East Indian Saltpetre during the 10 Years ending with 1833.

Years.	Imports.			Deliveries.			Average Price during the Year.	Stock.
	By the E. I. Company.	By the Private Trade.	Total.	For Export.	Quantity charged with Duty.	Total.		Close of the Year.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*L. s. d.*	*Tons.*
1824	1,570	6,170	7,740	2,650	6,780	9,430	1 1 4	12,320
1825	1,720	3,160	4,880	2,530	5,620	8,150	1 5 3	9,950
1826	1,700	4,860	6,560	2,620	6,100	8,720	1 1 10	8,250
1827	1,630	8,870	10,500	2,360	7,370	9,730	1 3 4	7,850
1828	2,100	8,140	10,240	3,450	8,590	12,040	1 4 1	5,570
1829	4,280	4,550	8,830	2,330	7,750	10,080	1 4 11	4,600
1830	2,270	4,960	7,230	750	7,150	7,900	1 15 0	3,530
1831	1,850	6,950	8,800	1,510	7,770	9,280	2 0 5	2,480
1832	2,720	10,160	12,880	1,510	9,570	11,280	1 14 1	3,800
1833	3,250	6,310	9,560	950	7,750	8,700	1 15 0	4,660
Average of 10 years	2,305	6,413	8,722	2,066	7,445*	9,511		

Within the last 3 years, a new species of saltpetre, under the denomination of *nitrate of soda*, has been received from South America. The imports of it have increased from 70 tons in 1831, to 1,450 in 1833. Though not applicable to all the purposes for which East Indian saltpetre is used, it is rather preferred by vitriol makers, and by some other classes of manufacturers. The deliveries of this description for home consumption have been in 1831, 70 tons; in 1832, 690 do.; and in 1833, 1,210. — (*Cook, in loc. cit.*)

SALVAGE, as the term is now understood, is an allowance or compensation made to those by whose exertions ships or goods have been saved from the dangers of the seas, fire, pirates, or enemies.

The propriety and justice of making such an allowance must be obvious to every one. It was allowed by the laws of Rhodes, Oleron, and Wisby; and in this respect they have been followed by all modern maritime states. At common law, the party who has saved the goods of another from loss or any imminent peril has a *lien* upon them, and may retain them in his possession till payment of a reasonable salvage.

1. *Salvage upon Losses by Perils of the Sea.* — If the salvage be performed at sea, or within high or low water mark, the Court of Admiralty has jurisdiction over the subject, and will fix the sum to be paid, and adjust the proportions, and take care of the property pending the suit; or, if a sale be necessary, direct it to be made; and divide the proceeds between the salvors and the proprietors according to equity and reason. And in fixing the rate of salvage, the court usually has regard not only to the labour and peril incurred by the salvors, but also to the situation in which they may happen to stand in respect of the property saved, to the promptitude and alacrity manifested by them, and to the value of the ship and cargo, as well as the degree of danger from which they were rescued. Sometimes the court has allowed as large a proportion as *a half* of the property saved as salvage; and in others, not more than *a tenth*.

The crew of a ship are not entitled to salvage, or any unusual remuneration for the extraordinary efforts they may have made in saving her; it being their duty as well as interest to contribute their utmost upon such occasions, the whole of their possible service being pledged to the master and owners. Neither are passengers entitled to claim any thing for the *ordinary assistance* they may have been able to afford to a vessel in distress. But a passenger is not bound to remain on board a ship in the hour of danger, provided he can leave her; and if he perform any *extraordinary services*, he is entitled to a proportional recompence.

* Including from 600 to 1,000 tons annually exported in a refined state.

In the case of valuable property, and of numerous proprietors and salvors, the jurisdiction and proceedings of the Court of Admiralty are well adapted to further the purposes of justice. But, as the delay and expense necessarily incident to the proceedings of a court sitting at a distance from the subject will often be very burdensome upon the parties, in cases where the property saved is not, perhaps, very considerable, the legislature has endeavoured to introduce a more expeditious and less expensive method of proceeding.

The first act for this purpose is the 12 Ann. stat. 2 c. 18. It appears from the preamble, that the infamous practices, once so common, of plundering ships driven on shore, and seizing whatever could be laid hold of as lawful property — (see WRECK), — had not been wholly abandoned; or that, if the property was restored to the owners, the demand for salvage was so exorbitant, that the inevitable ruin of the trader was the immediate consequence. To remedy those mischiefs in future, it was enacted, "that if a ship was in danger of being stranded, or being run ashore, the sheriffs, justices, mayors, constables, or officers of the customs, nearest the place of danger, should, upon application made to them, summon and call together as many men as should be thought necessary to the assistance, and for the preservation, of such ship in distress, and her cargo; and that if any ship, man-of-war, or merchantman, should be riding at anchor near the place of danger, the constables and officers of the customs might demand of the superior officers of such ship the assistance of her boats, and such hands as could be spared; and that, if the superior officer should refuse to grant such assistance, he should forfeit 100*l.*"

Then follows the section respecting salvage. It enacts, "that all persons employed in preserving ships or vessels in distress, or their cargoes, shall, within 20 days after the service is performed, be paid a *reasonable reward* for the same, by the commander, master, or other superior officer, mariners, or owners, of the ship or vessel so in distress, or by any merchant whose vessel or goods shall be so saved; and, in default thereof, the said ship or vessel so saved shall remain in the custody of the officers of customs until all charges are paid, and until the officers of the customs, and the master or other officers of the ship or vessel, and all others employed in the preservation of the ship, shall be *reasonably gratified* for their assistance and trouble, or good security given for that purpose: and if any disagreement shall take place between the persons whose ships or goods have been saved, and the officer of the customs, touching the monies deserved by any of the persons so employed, it shall be lawful for the commander of the ship or vessel so saved, or the owner of the goods, or the merchant interested therein, and also for the officer of the customs, or his deputy, to nominate 3 of the neighbouring justices of the peace, who shall thereupon adjust the *quantum* of the monies or gratuity to be paid to the several persons acting or being employed in the salvage of the said ship, vessel, or goods; and such adjustment shall be binding upon all parties, and shall be recoverable in an action at law; and in case it shall so happen, that no person shall appear to make his claim to all or any of the goods that may be saved, that then the chief officer of the customs of the nearest port to the place where the said ship or vessel was so in distress shall apply to 3 of the nearest justices of the peace, who shall put him or some other responsible person in possession of the said goods, such justices taking an account in writing of the said goods, to be signed by the said officer of the customs; and if the said goods shall not be legally claimed within the space of 12 months next ensuing, by the rightful owner thereof, then public sale shall be made thereof; and, if perishable goods, forthwith to be sold, and, after all charges deducted, the residue of the monies arising from such sale, with a fair and just account of the whole, shall be transmitted to her Majesty's exchequer, there to remain for the benefit of the rightful owner, when appearing; who, upon affidavit, or other proof made of his or their right or property thereto, to the satisfaction of one of the barons of the coif of the exchequer, shall, upon his order, receive the same out of the exchequer."

By a subsequent statute, 26 Geo. 2. c. 19., it is enacted, "that in case any person or persons, not employed by the master, mariners, or owners, or other person lawfully authorised, in the salvage of any vessel, or the cargo or provision thereof, shall, in the absence of the person so employed and authorised, save any such vessel, goods, or effects, and cause the same to be carried, for the benefit of the owners or proprietors, into port, or to any near adjoining Custom-house, or other place of safe custody, immediately giving notice thereof to some justice of the peace, magistrate, or Custom-house or excise officer, or shall discover to such magistrate or officer where any such goods or effects are wrongfully bought, sold, or concealed, then such person or persons shall be entitled to a *reasonable reward* for such services, to be paid by the masters or owners of such vessels or goods, and to be adjusted, in case of disagreement about the *quantum*, in like manner as the salvage is to be adjusted and paid by 12th Anne, or else as follows: —

"And be it further enacted, that, for the better ascertaining the salvage to be paid in pursuance of the present act and the act before-mentioned, and for the more effectually putting the said acts into execution, the justice of the peace, mayor, bailiff, collector of the customs, or chief constable, who shall be nearest to the place where any ship, goods, or effects shall be stranded or cast away, shall forthwith give public notice for a meeting to be held as soon as possible, of the sheriff or his deputy, the justices of the peace, mayors, or other chief magistrates of towns corporate, coroners, or commissioners of the land tax, or any 5 or more of them, who are hereby empowered and required to give aid in the execution of this and the said former act, and to employ proper persons for the saving ships in distress, and such ships, vessels, and effects, as shall be stranded or cast away; and also to examine persons upon oath, touching the same, or the salvage thereof, and to adjust the *quantum* of such salvage, and distribute the same among the persons concerned in such salvage, in case of disagreement among the parties or the said persons; and that every such magistrate, &c. attending and acting at such meeting, shall be paid 4*l.* a day for his expenses in such attendance, out of the goods and effects saved by their care or direction.

"Provided always, that if the charges and rewards for salvage directed to be paid by the former statute and by this act, shall not be fully paid, or sufficient security given for the same, within 40 days next after the said services performed, then it shall be lawful for the officer of the customs concerned in such salvage to borrow or raise so much money as shall be sufficient to satisfy and pay such charges and rewards, or any part thereof then remaining unpaid, or not secured as aforesaid, by or upon one or more bill or bills of sale, under his hand and seal, of the ship or vessel, or cargo saved, or such part thereof as shall be sufficient, redeemable upon payment of the principal sum borrowed, and interest upon the same at the rate of 4*l. per cent. per annum.*"

An act of the 53 Geo. 3. c. 87., continued and extended by the 1 & 2 Geo. 4. c. 76., contains some regulations supplying defects in former statutes. They enact, that goods of a perishable nature, or so much damaged that they cannot be kept, may, at the request of any person interested or concerned in the same, or in saving thereof, be sold with the consent of a justice, the money being deposited in the hands of the lord of the manor, and an account of the sale transmitted to the deputy vice-admiral. They also authorise the passage of horses, carts, carriages, &c. to the part of the sea coast where a vessel may be wrecked, over the adjoining lands, if there be no road leading as conveniently thereto, under penalty of 100*l.*, the damages to be settled by two justices in the event of the parties not agreeing. — (1 & 2 *Geo.* 4 §§ 27. 29, 30.)

It is ordered by the same statute, that no lord of the manor, or other person claiming to be entitled to wreck or goods, shall appropriate or dispose of the same until he shall have caused to be given in writing to the deputy vice-admiral of that part of the coast, or to his agents if they reside within 50 miles, if not, then to the corporation of the Trinity House, a report containing an accurate and particular description of the wreck or goods found, and of the place where and time when found, and of any marks thereon, and

of such other particulars as may better enable the owner to recover them, and also of the place where they are deposited, and may be found and examined by any person claiming any right to them, nor until the expiration of 1 whole year and a day after the expiration of such notice: the deputy vice-admiral, or his agent, is, within 48 hours of receiving such report, to transmit a copy thereof to the secretary of the corporation of the Trinity House, upon pain of forfeiting, for every neglect to transmit such account, 50*l.* to any person who shall sue for the same; and the secretary is to cause such account to be placed in some conspicuous situation for the inspection of all persons claiming to inspect and examine it. — (1 & 2 *Geo.* 4. c. 75. § 26.)

It is further ordered by the same statute, that pilots and others taking possession of anchors, cables, or other wrecked or left materials upon the coast, or within any harbour, river, or bay, shall send notice thereof, within *twenty-four* hours, to the nearest deputy vice-admiral, or his agent, delivering the articles at such place as may be appointed, under pain of being deemed receivers of stolen goods. The deputy vice-admiral, or his agent, may also seize *such articles as have not been reported to him*, and is required to keep and report them to the Trinity House as aforesaid; and if he seize them without previous information, he is to have 1-3d of the value; if he seize in pursuance of information, the third is to be divided between him and the informer. If the articles are not claimed within a year and a day, they are to be sold, and the money applied as directed by the act of Queen Anne (12 Ann. stat. 2. c. 18., previously quoted), the deputy vice-admiral, or his agent, and the person who may have given information, being in such cases entitled to the salvage allowed upon unclaimed property. And it is further enacted, that if any dispute shall arise between the salvors of any goods found, lodged, and reported as aforesaid, and the owners thereof, as to the salvage to be paid in respect of the same, it is to be determined by the decision of 3 justices; or if they differ, by their nominee, who is to be a person conversant with maritime affairs. Masters and others bound to foreign parts, finding or taking on board anchors, goods, &c., knowing them to be found, are to enter the same in the log book, with the place and time of finding, and to transmit a copy of such entry, by the first possible opportunity, to the Trinity House, and to deliver up the articles on their return home, which, if not claimed, are to be sold within a year and day, according to the aforementioned statute of Anne. Masters selling such articles incur a penalty of not less than 30*l.* and not more than 100*l.*

Pilots, boatmen, or other persons, conveying anchors and cables to foreign countries, and disposing of them there, are to be adjudged guilty of felony, and may be transported for 7 years.

The same statute authorises 3 justices, or their nominee, to decide upon all claims made by boatmen, pilots, and other persons, for services of any description (except pilotage) rendered by them to any ship or vessel, whether in distress or not.

Parties dissatisfied with the award of the justices or their nominee may appeal to the Court of Admiralty; but the justices are in such cases to deliver the goods to the proprietors, or their agent, on their giving good security for double their value. This act does not extend to Scotland.

None of the previously mentioned acts have any force within the *Cinque Ports*; but the Lord Warden is directed by stat. 1 & 2 Geo. 4. c. 76. to appoint 3 or more substantial persons in each of these towns, who are authorised to decide upon all claims for services of any sort or description rendered to any vessel, or for saving or preserving, within the jurisdiction, any goods or merchandise wrecked, stranded, or cast away, or for bringing anchors or cables ashore, &c. No commissioner can act for any other place than that in which, or within a mile of which, he is resident. Either party may, within 8 days of the award, declare his intention of bringing the matter before some competent Court of Admiralty; selecting, as he may judge best, the Admiralty of England or that of the Cinque Ports. The provisions in this statute have been justly eulogised by Lord Tenterden, for the cheap and easy means they afford for settling such questions.

It is impossible, as Mr. Justice Park has observed (*Law of Insurance*, c. 8.), to suppose 2 instances of loss by shipwreck, or other peril of the sea, so similar to each other, that the trouble, danger, and expense of the salvors should be exactly equal; and it would, consequently, be contrary to the first principles of justice to award the same sum for all possible cases of salvage. There was, therefore, no other resource but to appoint competent persons to decide as to the allowance due in any case of salvage that might arise, after taking the various circumstances with respect to it into account.

2. *Salvage upon Recapture.* — It was the practice of our courts, previously to any regulations on the subject, to order restitution of ships or goods, if retaken before condemnation, to be made to the original owners, on payment of a *reasonable salvage* to the recaptors; but by stat. 43 Geo. 3. c. 160. it has been adjudged, that "if any ship or vessel taken as prize, or any goods therein, shall appear, in the Court of Admiralty, to have belonged to any of his Majesty's subjects, which were before taken by any of his Majesty's enemies, and at any time afterwards retaken by any of his Majesty's ships, or any privateer, or other ship or vessel under his Majesty's protection, such ships, vessels, and goods shall, in all cases (save as hereafter excepted), be adjudged to be restored, and shall be accordingly restored, to such former owner or owners, he or they paying for salvage, if retaken by any of *his Majesty's ships*, *one eighth* part of the true value thereof, to the flag officers, captains, &c., to be divided as the same act directs; and if retaken by any *privateer*, or other ship or vessel, *one sixth* part of the true value of such ships and goods, to be paid to the owners, officers, and seamen of such privateer or other vessel, without any deduction; and if retaken by the joint operation of one or more of his Majesty's ships, and one or more private ships of war, the judge of the Court of Admiralty, or other court having cognisance thereof, shall order such salvage, and in such proportions, to be paid to the captors by the owners, as he shall, under the circumstances of the case, deem fit and reasonable; but if such recaptured ship or vessel shall appear to have been set forth by the enemy as a ship or vessel of war, the said ship or vessel shall not be restored to the former owners, but shall in all cases, whether retaken by any of his Majesty's ships or any privateer, be adjudged lawful prize for the benefit of the captors."

This act is decidedly more favourable to the merchants than the old law, which adjudged that all ships recaptured after sentence of condemnation should be the property of the captors.

In the case of neutral ships captured by an enemy, and retaken by British men-of-war or privateers, the Courts of Admiralty have a discretionary power of allowing such salvage, and in such proportions, as, under the circumstances of each particular case, may appear just; but there is no positive law or binding regulation to which parties may appeal, for ascertaining the rate of such salvage. "The maritime law of England," says Lord Stowell, "having adopted a most liberal rule of restitution on salvage, with respect to the recaptured property of its own subjects, gives the benefit of that rule to its allies, till it appears that they act towards British property on a less liberal principle; *in such a case, it adopts their rule*, and treats them according to their own measure of justice." — (1 *Rob. Adm. Rep.* 54.)

Salvage is one of those charges which are usually provided against by insurance. When, however, the salvage is very high, and the object of the voyage in so far defeated, the insured is, by the laws of this and all other maritime nations, allowed to abandon, and to call upon the insurer as for a total loss.—(See ABANDONMENT.)

For further information with respect to salvage, see *Abbott on the Law of Shipping*, part iii. c. 10.; *Park on Insurance*, c. 8.; and *Marshall on Insurance*, book i. c. 12. § 8.

SAMPLE, a small quantity of a commodity exhibited at public or private sales, as a specimen. Sugars, wool, spirits, wine, coffee, and, indeed, most species of merchandise, are sold by sample. If an article be not, at an average, equal to the sample by which it is sold, the buyer may cancel the contract, and return the article to the seller.

Subjoined is a list of most articles that may be warehoused, and of the quantities that may be taken out as samples. — (*Customs Min.* Oct. 11. 1825.)

Alkali or barilla,	5 lbs. per pile 5 tons.
Aloes	2 oz. per package.
Argol	½ lb. do.
Arrow root	½ lb. do.
Balsam capivi	2 oz. do.
Bark, Jesuit's,	¼ lb. do.
in general, except Jesuit's	½ lb. do.
Brimstone, rough,	2 lbs. per pile.
in rolls,	1 lb. per package.
Cassia	½ lb. do.
Cantharides	2 oz. do.
Capers	½ lb. do.
Cochineal	2 oz. do.
dust	2 oz. do.
Cocoa nut oil	½ pint each cask.
Coffee	2 oz. per bag.
Coloquintida	2 oz. per package.
Cocculus Indicus,	1 oz. do.
Cotton	4 oz. do.
Cream of tartar,	1 lb. do.
Currants	½ lb. do.
Essence of bergamot or lemon	1 oz. do.
Euphorbium	1 oz. do.
Feathers, bed	½ lb. per lot 6 bags.
Galls	1 lb. do.
Gentian	½ lb. do.
Ginger	8 oz. do.
Granilla, *see* Cochineal.	
Gum Arabic	1 lb. per package.
Senegal	½ lb. do.
tragacanth,	2 oz. do.
other gum,	4 oz. do.
Honey	½ oz. do.
Jalap	1 oz. do.
Indigo	½ lb. do.
Any further quantity (not exceeding 1½ lb.) to be charged with duty on delivery of the packages.	
Isinglass	½ lb. per package
Juice of lemons,	½ pint do.
Lac dye	1 oz. do.
Lead, black	1 lb. do.
Lemon peel	½ lb. each entry.
Liquorice juice	½ lb. per package.
root	½ lb. do.
Madder, manufactured	½ lb. do.
root	½ lb. do.
Oil of almonds	1 oz. do.
aniseed	1 oz. do.
bay	1 oz. do.
juniper	1 oz. do.
olive	½ pint per cask.
palm	½ pint do.
rosemary	1 oz. per package.
spike	1 oz. do.
thyme	1 oz. do.
Orange peel	½ lb. do.
Orchella	2 oz. do.
Orrice root	½ lb. do.
Pepper	1 oz. per bag.
Pimento	2 oz. do.
Radix contrayervæ	1 oz. per package.
galanga	2 lb. per pile.
ipecacuanhæ	1 oz. per package.
senekæ	1 oz. do.
Raisins	½ lb. each mark.
Rhubarb	1 oz. per package.
Rice	½ lb. do.
Saffron	½ oz. do.
Sago	2 lbs. per pile.
Salep	1 oz. per package.
Sarsaparilla	1 oz. do.
Saltpetre	½ lb. do.
Seed, aniseed	1 oz. per package.
clover	2 oz. do.
caraway	2 oz. do.
lac	1 oz. do.
mustard	1 oz. do.
Senna	1 oz. do.
Shumac	1 lb. per lot 10 bags.
Silk, raw	2 oz. per package.
thrown	1 oz. do.
waste	2 oz. do.
Smalts	1 oz. do.
Spirits	½ pint per cask.
Sugar, foreign	2 oz. per bag. 4 oz. per box not exceeding 5 cwt. 8 oz. per box or chest, exceeding 5 cwt.
British plantation	1½ lb. per hogshead. 1½ lb. per tierce. ½ lb. per chest. 12 oz. per barrel. ½ lb. molasses per hhd. or cask.
Tallow	4 lbs. per lot 10 pcks.
Tapioca	1 oz. per package.
Turmeric	2 lbs. per pile.
Valonia	3 lbs. per lot.
Wax, bees'	¼ lbs. per package.
Wine	½ pint.
Wool, cotton	4 oz. per package.
sheep or lambs'	1 lb. do.
Spanish	1 lb. do.
Yarn, mohair	½ lb. do.
cotton	½ lb. do.
Mother of pearl shells	7 lbs. per lot of 10 packages.
Vermicelli	1 oz. per package.

SANDAL WOOD, the wood of a tree (*Santalum album* Lin.) having somewhat of the appearance of a large myrtle. It is of a deep yellow colour, and yields an agreeable perfume. The tree, when cut down, is usually about 9 inches in diameter at the root, but sometimes considerably more. After being felled, it is barked, cut into billets, and buried in a dry place for about a couple of months, during which time the white ants eat off the outer wood, without touching the heart, which is the sandal. It is then taken up and sorted, according to the size of the billets. The deeper the colour, and the nearer the root, the higher is the perfume. Reject such pieces as are of a pale colour, small, decayed, or have white wood about them; and take especial care that it be not mixed with wood resembling sandal, but without its perfume. — (*Milburn's Orient. Com.*)

Sandal wood is extensively employed by the Hindoos as a perfume, in their funeral ceremonies. But the Chinese are its principal consumers. They manufacture it into fans, and small articles of furniture, and use it, when ground into powder, as a cosmetic. During the year ended the 31st of March, 1832, there were imported by British vessels into Canton, 6,338 piculs (395 tons) of sandal wood, valued at 74,471 dollars (see *antè*, p. 237.); and the imports in some years are more than twice this amount. The average importation into Calcutta is about 200 tons a year. It grows principally in Malabar, in the mountainous country at a little distance from the low sea coast; in Timor; and in the Fejee Islands in the South Sea. Calcutta is principally supplied from Malabar, while China derives the larger portion of her supplies from Timor and the other islands. It is seldom brought to Europe, except by individuals for their own use, or as presents for their friends. — (*Bell's External Com. of Bengal*, pp. 49. and 85.; *Crawfurd's Indian Archipelago*, vol. i. p. 519., vol. iii. p. 421. &c.)

SANDARACH, a resinous substance, commonly met with in loose granules a little larger than a pea, of a whitish yellow colour, brittle, inflammable, of a resinous smell, and acrid aromatic taste. It exudes, it is said, in warm climates, from cracks and incisions in the common juniper bush. It is used as a varnish, dissolved in spirits of wine. — (*Ainslie's Mat. Indica.*)

SAPAN WOOD is obtained from a species of the same tree that yields the Brazil wood (*Cæsalpinia Sapan* Lin.). It is a middle-sized forest tree, indigenous to Siam, Pegu, the Philippine Islands, &c. It has been employed for dyeing in the greater part of Asia for many centuries. It found its way into Europe some time before the discovery of America; but very little is now imported. Its colouring matter differs but little from that of Brazil wood, but the best sapan wood does not yield more than half the quantity that may be obtained from an equal weight of Brazil wood, and the colour is not quite so bright. — (*Bancroft on Colours*, vol. ii. p. 329.) Its price in the London market varies from 8*l.* to 14*l.* a ton.

SAPPHIRE (Ger. *Sapphir*; Du. *Saffiersteen*; Fr. *Saphir*; It. *Zaffiro*; Sp. *Safiro*, *Safir*; Rus. *Jachant*; Lat. *Sapphirus*), a precious stone in very high estimation. Colours blue and red; also gray, white, green, and yellow. It occurs in blunt-edged pieces, in roundish pebbles, and crystallised. Varies from transparent to translucent. Refracts double. After diamond, it is the hardest substance in nature. The blue variety, or sapphire, is harder than the ruby, or red variety. Brittle. Specific gravity 4 to 4·2.

It is found in Bohemia, Saxony, France, &c.; but the red sapphire, or Oriental ruby, is not found in any considerable quantity anywhere except in Ava. Next to diamond, sapphire is the most valuable of

the gems. The white and pale blue varieties, by exposure to heat, become snow white, and, when cut, exhibit so high a degree of lustre, that they are used in place of diamond. The most highly prized varieties are the crimson and carmine red; these are the Oriental *ruby* of the jeweller; the next is *sapphire;* and last, the yellow or Oriental *topaz*. The *asterias*, or star-stone, is a very beautiful variety, in which the colour is generally of a reddish violet, and the form a rhomboid, with truncated apices, which exhibit an opalescent lustre.* — (See RUBY.)

Mr. Crawfurd gives the following details with respect to the sapphire and ruby mines of Ava: — "The precious stones ascertained to exist in the Burmese territory are chiefly those of the sapphire family, and the spinelle ruby. They are found at 2 places, not very distant from each other, called Mogaut and Kyatpëan, about 5 days' journey from the capital, in an E.S.E. direction. From what I could learn, the gems are not obtained by any regular mining operations, but by digging and washing the gravel in the beds of rivulets or small brooks. All the varieties of the sapphire, as well as the spinelle, are found together, and along with them large quantities of corundum. The varieties ascertained to exist, are the Oriental sapphire; the Oriental ruby, or red stone; the opalescent ruby, or cat's eye ruby; the star ruby; the green; the yellow and the white sapphires; and the Oriental amethyst. The common sapphire is by far the most frequent, but, in comparison with the ruby, is very little prized by the Burmese, in which they agree with other nations. I brought home with me several of great size, the largest weighing no less than 3,630 grains, or above 907 carats. The spinelle ruby (zebu-gaong) is not unfrequent in Ava, but is not much valued by the natives. I brought with me to England a perfect specimen, both as to colour and freedom from flaws, weighing 22 carats. The sapphire and ruby mines are considered the property of the king; at least he lays claim to all stones that exceed in value a viss of silver, or 100 ticals. The miners, it appears, endeavour to evade this law by breaking the large stones into fragments. In the royal treasury, there are, notwithstanding, many fine stones of both descriptions. The year before our visit, the king received from the mines a ruby weighing 124 grains; and the year preceding that 8 good ones, but of smaller size. No stranger is permitted to visit the mines; even the Chinese and Mohammedans residing at Ava are carefully excluded." — (*Journal of an Embassy to the Court of Ava*, p. 442.)

SARCOCOLLA, a subviscid, sweetish, and somewhat nauseous gum-resin. It is brought from Arabia and Persia in small grains of a pale yellow colour; the whitest, as being the freshest, is preferred. It is but seldom imported. — (*Milburn's Orient. Com.*)

SARDINES, OR SARDINIAS (Ger. *Sardellen;* Fr. *Sardines;* It. *Sardine;* Sp. *Sardinas*), a species of fish of the herring tribe, but smaller. They are taken in considerable quantities on our coasts, and are exceedingly plentiful on the coasts of Algarve in Portugal, Andalusia and Granada in Spain, and along the shores of Italy. The small sardines, caught on the coast of Provence, in France, are esteemed the best. From 1,000 to 1,200 fishing smacks are engaged in catching these fish on the coast of Britany, from June to the middle of October. The French frequently cure them in red brine; and, when thus prepared, designate them *anchoisées*, or *anchovied sardines*. These are packed in vessels previously employed for holding wine, and exported to the Levant. When perfectly fresh, sardines are accounted excellent fish; but if kept for any time, they entirely lose their flavour, and become quite insipid.

SARDONYX, a precious stone, a variety of chalcedony.

The ancients selected this substance to engrave upon, no doubt from its possessing two peculiar and necessary qualities, viz. hardness and tenacity, by which it is capable of receiving the finest touch or stroke of the tool without chipping, and showing the art of the engraver to the highest perfection. — (*Mawe on Diamonds*, 2d ed. p. 121.)

SARSAPARILLA (Ger. *Sarsaparille;* Fr. *Salsepareille;* It. *Salsapariglia;* Sp. *Zarzaparilla*), the root of the *Smilax Sarsaparilla*, a plant growing in South America and the West Indies. It is imported in bales. It is known in the London market by the names of Lisbon, Honduras, and Vera Cruz, but it is also brought from Jamaica. The Lisbon root, which is the produce of Brazil, has a reddish or dark brown cuticle, is internally farinaceous, and more free from fibre than the other kinds: the Honduras has a dirty brown, and sometimes whitish, cuticle; it is more fibrous, and has more ligneous matter than the Lisbon and Vera Cruz. It is in long, slender twigs, covered with a wrinkled brown cuticle, and has a small woody heart. The Jamaica differs from the others, in having a deep red cuticle of a close texture; and the red colour partially diffused through the ligneous part. The root is inodorous, and has a mucilaginous, very slightly bitter taste: the bark is the only useful part of the plant; the ligneous part being tasteless, inert, woody fibre. — (*Thomson's Dispensatory.*) The quantity imported in 1831 amounted to 176,854 lbs., of which 107,410 lbs. were retained for home consumption. The duty, which formerly varied, according as it was brought from a foreign country or a British possession, from 1*s.* 3*d.* to 1*s.* per lb., was reduced, in 1832, to 6*d.* per lb.

SASSAFRAS (Ger. and Fr. *Sassafras;* It. *Sassafrasso;* Sp. *Sasafras*), a species of laurel (*Laurus Sassafras*, Lin.), a native of the southern parts of North America, Cochin-China, and several of the Indian islands. Sassafras wood, root, and bark, have a fragrant odour, and a sweetish aromatic taste. The wood is of a brownish white colour; and the bark ferruginous within, spongy, and divisible into layers. Their sensible qualities and virtues depend on an essential oil, which may be obtained separate by distilling the chips or the bark with water. It is very fragrant, hot, and penetrating

* Professor Jameson says, in his *Mineralogy*, that some peculiarly beautiful sapphires are found in the Capelan mountains, in Pegu. But we do not believe that there are any such mountains in any part of the world; and, in point of fact, there are no mountains in Pegu, nor have any precious stones been ever found in it.

to the taste, of a pale yellow colour, and heavier than water. It is used only in the *materia medica*. Very little is imported. — (*Thomson's Dispensatory.*)

SAUNDERS (RED) (Arab. *Sundal-ahmer*; Hind. *Ruckut-chundum*), the wood of a lofty tree (*Pterocarpus santalinus*) indigenous to various parts of India, Ceylon, Timor, &c. The wood is brought to Europe in billets, which are very heavy and sink in water. It is extremely hard, of a fine grain, and a bright garnet red colour, which brightens on exposure to the air. It is employed to dye lasting reddish brown colours on wool. It yields its colouring matter to ether and alcohol, but not to water. The quantity imported is but inconsiderable. The price in bond varies at this moment (February, 1834) from 13*l.* to 14*l.* a ton. — (*Thomson's Dispensatory*; *Bancroft on Colours*, vol. ii. p. 236.)

SCAMMONY (Ger. *Skammonien*; Fr. *Scammonée*; It. *Scammonea*; Sp. *Escamonea*), a gum-resin, the produce of a species of convolvulus, or creeper plant, which grows abundantly in Syria. When an incision is made into the roots, they yield a milky juice, which, being kept, grows hard, and is the scammony of the shops. It is imported from Aleppo in what are called drums, weighing from 75 to 125 lbs. each; and from Smyrna in cakes like wax, packed in chests. The former is light and friable, and is considered the best; that from Smyrna is more compact and ponderous, less friable, and fuller of impurities. It has a peculiar heavy odour, not unlike that of old cheese; and a bitterish, slightly acrid taste. The colour is blackish or bluish grey, changing to dirty white, or lathering when the surface is rubbed with a wet finger. Its specific gravity is 1·235. It is very liable to be adulterated; and when of a dark colour, heavy, and splintery, it ought to be rejected. It is used only in medicine. — (*Thomson's Dispensatory.*) The duty on scammony, which was formerly as high as 6*s.* 4*d.* per lb. was reduced in 1832 to 2*s.* 6*d.*

SCULPTURES, figures cut in stone, metal, or other solid substance, representing or describing some real or imaginary object. The art of the sculptor, or statuary, was carried to the highest pitch of excellence in ancient Greece. Fortunately, several of the works of the Grecian sculptors have been preserved; and serve at once to stimulate and direct the genius of modern artists.

Models, are casts or representations of sculptures.

The act 54 Geo. 3. c. 56. vests the property of sculptures, models, copies, and casts, in the proprietor for 14 years; provided he cause his name, with the date, to be put on them before they are published; with the same term in addition, if he should be living at the end of the first period. In actions for piracy, double costs to be given. The act 6 Geo. 4. c. 107. prohibits the importation, on pain of forfeiture, of any sculptures, models, casts, &c. first made in the United Kingdom.

SEAL (Lat. *Sigillum*), a stone, piece of metal, or other solid substance, generally round or elliptical, on which is engraved the arms, crest, name, device, &c. of some state, prince, public body, or private individual. It is employed as a stamp to make an impression on sealing wax, thereby authenticating public acts, deeds, &c., or to close letters or packets. Seals were very early invented, and much learning has been employed in tracing their history, and explaining the figures upon them. — (See particularly the work of *Hopkinck*, *De Sigillorum Prisco et Novo Jure*, 4to, 1642.) They are now very generally used.

The best are usually formed of precious stones, on which the crest or the initials of the person's name are engraved, set in gold. But immense numbers are formed of stained glass, and set in gilt copper. They are manufactured at London, Birmingham, &c., and are extensively exported.

SEAL FISHERY. The seal, an amphibious animal, of which there are many varieties, is found in vast numbers in the seas round Spitzbergen, and on the coasts of Labrador and Newfoundland. As it frequents the British shores, it is well known, and has been repeatedly described. Seals are principally hunted for their oil and skins. When taken in the spring of the year, — at which time they are fattest, — a full grown seal will yield from 8 to 12 gallons of oil, and a small one from 4 to 5 gallons. The oil, when extracted before putrefaction has commenced, is beautifully transparent, free from smell, and not unpleasant in its taste. The skin, when tanned, is extensively employed in the making of shoes; and when dressed with the hair on, serves for the covering of trunks, &c.

"To the Esquimaux the seal is of as much importance as bread to a European. Its flesh forms their most usual food; the fat is partly dressed for eating, and partly consumed in their lamps; the liver, when fried, is esteemed, even among sailors, as an agreeable dish. The skin, which the Esquimaux dress by processes peculiar to themselves, is made water proof. With the hair off, it is used as coverings, instead of planks, for their boats, and as outer garments for themselves; shielded with which, they can invert themselves and canoes in the water, without getting their bodies wet. It serves also for coverings for their tents, and for various other purposes. The jackets and trowsers made of seal-skin by the Esquimaux are in great request among the whale fishers for preserving them from oil and wet." — (*Scoresby's Arctic Regions*, vol. i. p. 510.)

Seals in fine weather prefer the ice to the water, and vast herds of them are frequently found lying on the field ice; the places where they are met with being thence called "seal meadows." The seal hunters endeavour to surprise them while sleeping, and to intercept their retreat to the water. They attack them with muskets and bludgeons, but principally the latter, they being easily despatched by a blow on the nose.

The seal fishery has long been prosecuted to a considerable extent in the northern seas by ships from the Elbe and the Weser; but very few ships have been sent out for *sealing* only from England, though occasionally some of the whale ships have taken large quantities of seals. Latterly, however, the seal fishery has been prosecuted on a large scale, and with extraordinary success, by vessels of from 60 to 120 tons each, having crews of from 16 to 30 men, fitted out from the ports of Newfoundland, Nova Scotia, &c. The business is attended with a good deal of risk, and instances frequently occur of the vessels being crushed to pieces by the collision of the fields of ice. We borrow the following details from Mr. Bliss's late tract on the *Trade, Statistics, &c. of Canada and our North American Possessions.*

"There is another department of the colonial fishery which has originated within no distant period, and is now becoming of great extent and importance. The large fields of ice which, in the months of March and April, drift southward from the Polar seas, are accompanied by many herds of seals: these are found sleeping in what are called the seal meadows of the ice, and are there attacked and slaughtered in vast numbers. For this purpose the fishers of Newfoundland, from which island these voyages are principally made, without waiting till the return of spring shall have opened their harbours, saw channels through the ice for their vessels, and set sail in quest of those drifting fields, through the openings of which they work a passage, attended with great difficulties and dangers, till they encounter their prey on the seal meadows. This bold and hazardous enterprise seems well compensated by its success. The number of seals thus taken is almost incredible, and is greatly on the increase. There were captured by the Newfoundland fishermen, in 1829, 280,613 seals; in 1830, 553,435; and in 1831, 748,735; making a total catch during these 3 years of no fewer than 1,582,783 seals! The number of vessels employed in the fishery from Newfoundland, in 1831, was 115; and in 1832, 159; being an increase of about 3,400 tons." — (p. 70.)

Subjoined is a statement of the prices of the different sorts of fish oil in London, in January, 1834.

	L.	s.		L.	s.		L.	s.		L.	s.
Fish oils, cod, Newfoundland, per tun (Imp.)	25	0	to	0	0	Fish oils, southern fishery, pale, per tun (Imp.)	23	10	—	9	0
seal, brown and yellow —	22	0	—	23	0	yellow 22*l.* to 0*l.* —		brown		22	0
pale - —	25	10	—	26	0	sperm - - —	68	0	—	0	0
whale, Greenland - —	21	10	—	22	0	head matter - —	70	0	—	0	0

Undressed seal skins are worth from 1*s.* to 1*s.* 6*d.* each.

See also *M'Gregor's British America*, 2d edit. vol. i. p. 197. &c. There is a good account of the seal in *Laing's Voyage to Spitzbergen.*

SEALING WAX (Ger. *Siegellack*; Fr. *Cire d'Espagne, Cire à cacheter*; It. *Cera Lacca, Cera di Spagna*; Sp. *Lacre*; Rus. *Surgutsch*), the wax used for sealing letters, legal instruments, &c. It is a composition of gum lac, melted and incorporated with resin, and afterwards coloured with some pigment, as vermilion, verditer, ivory black, &c.

SEAMEN, the individuals engaged in navigating ships, barges, &c. upon the high seas. Those employed for this purpose upon rivers, lakes, or canals, are denominated watermen.

A *British Seaman* must be a natural born subject of his Majesty; or be naturalised by act of parliament; or made a denizen by letters of denization; or have become a British subject by the conquest or cession of some newly acquired territory; or (being a foreigner) have served on board his Majesty's ships of war, in time of war, for the space of 3 years. — (3 & 4 *Will.* 4. c. 54. § 16.) But his Majesty may, by proclamation during war, declare that foreigners who have served *two* years in the royal navy, during such war, shall be deemed British seamen. — (§ 17.)

Various regulations have been enacted with respect to the hiring of seamen, their conduct while on board, and the payment of their wages. These regulations differ in different countries; but, in all, they have been intended to obviate any disputes that might otherwise arise between the master and seamen as to the terms of the contract between them, to secure due obedience to the master's orders, and to interest the seamen in the completion of the voyage, by making their earnings depend on its successful termination.

1. *Hiring of Seamen.* — To prevent the mischiefs that frequently arose from the want of proper proof of the precise terms upon which seamen engaged to perform their service in merchant ships, it is enacted by statute (2 Geo. 2. c. 36.), "that it shall not be lawful for any master or commander of any ship or vessel bound to parts beyond the seas, to carry any seaman or mariner, except his apprentice or apprentices, to sea from any port or place where he or they were entered or shipped, to proceed on any voyage to parts beyond the seas, without first coming to an agreement or contract with such seamen or mariners for their wages; which agreement or agreements shall be made in writing, declaring what wages each seaman or mariner is to have respectively, during the whole voyage, or for so long time as he or they shall ship themselves for; and also to express in the said agreement or contract the voyage for which such seaman or mariner was shipped to perform the same;" under a penalty of 5*l.* for each mariner carried to sea without such agreement, to be forfeited by the master to the use of Greenwich Hospital. This agreement is to be signed by each mariner within 3 days after he shall have entered himself on board the ship; and is, when signed, conclusive and binding upon all parties. By a subsequent statute, these provisions have been extended to vessels of the burden of 100 tons and upwards, employed in the *coasting trade.* — (31 *Geo.* 3. c. 39.)

The following is the form of the articles of agreement required by statute (37 Geo. 3. c. 73.) to be entered into between the masters and mariners of ships engaged in the West India trade. It is substantially the same with that which previously was, and still continues to be in common use for all ships employed in foreign trade.

Ship

IT is hereby agreed between the master, seamen, and mariners of the ship now bound for the port of and the master or commander of the said ship, That, in consideration of the monthly or other wages against each respective seaman or mariner's name hereunto set, they severally shall and will perform the above-mentioned voyage: and the said master doth hereby agree with and hire the seamen and mariners for the said voyage at such monthly wages, to be paid pursuant to the laws of Great Britain; and they, the said seamen and mariners, do hereby promise and oblige themselves to do their duty, and obey the lawful commands of their officers on board the said ship or boats thereunto belonging, as become good and faithful seamen and mariners, and at all places where the said ship shall put in or anchor during the said ship's voyage, to do their best endeavours for the preservation of the said ship and cargo, and not to neglect or refuse doing their duty by day or night; nor shall go out of the said ship on board any other vessel, or be on shore under any pretence whatsoever, till the voyage is ended, and the ship discharged of her cargo, without leave first obtained of the master, captain, or commanding officer on board; and, in default thereof, they freely agree to be liable to the penalties mentioned in the act of parliament made in the 2d year of the reign of King George the Second, intituled "An Act for the better Regulation and Government of Seamen in the Merchants' Service;" and the act made in the 37th year of the reign of King George the Third, intituled "An Act for preventing the Desertion of Seamen from British Merchant Ships trading to his Majesty's Colonies and Plantations in the West Indies:" and it is further agreed by the parties to these presents, that 24 hours' absence without leave shall be deemed a total desertion, and render such seamen and mariners liable to the forfeitures and penalties contained in the acts above recited; that each and every lawful command which the said master shall think necessary to issue for the effectual government of the said vessel, suppressing immorality and vice of all kinds, be strictly complied with, under the penalty of the person or persons disobeying forfeiting his or their whole wages or hire, together with every thing belonging to him or them on board the said vessel: and it is further agreed, that no officer or seaman, or person belonging to the said ship, shall demand or be entitled to his wages, or any part thereof, until the arrival of the said ship at the above-mentioned port of discharge, and her cargo delivered, nor less than 20 days, in case the seaman is not employed in the delivery: and it is hereby further agreed between the master and officers of the said ship, that whatever apparel, furniture, and stores, each of them may receive into their charge, belonging to the said ship, shall be accounted for on her return; and in case any thing shall be lost or damaged through their carelessness or insufficiency it shall be made good by such officer or seaman, by whose means it may happen, to the master and owner of the said ship: and whereas it is customary for the officers and seamen, on the ship's return home in the river, and during the time their cargoes are delivering, to go on shore each night to sleep, greatly to the prejudice of such ship and freighters; be it further agreed by the said parties, that neither officer nor seaman shall, on any pretence whatsoever, be entitled to such indulgence, but shall do their duty by day in discharge of the cargo, and keep such watch by night as the master or commander of the said ship shall think necessary, in order for the preservation of the above: and whereas it often happens that part of the cargo is embezzled after being delivered into lighters; and, as such losses are made good by the owners of the ships, be it therefore agreed, by these presents, that whatever officer or seaman the master shall think proper to appoint, shall take charge of the cargo in the lighters, and go with the same to the lawful quay, and there deliver his charge to the ship's husband, or his representative, or see the same safely weighed at the king's beam; and, in consequence of their true fidelity, such seamen shall be entitled to 2*s.* 6*d.* each lighter, exclusive of their monthly pay; and should it so happen that lighters are detained any considerable time at the quay before they can be unloaded, such officer and seaman so appointed shall in that case be entitled to 2*s.* 6*d.* for every 24 hours, exclusive of their monthly pay; that each seaman and mariner, who shall well and truly perform the above-mentioned voyage, (provided always, that there be no plunderage, embezzlement, or other unlawful acts, committed on the vessel's cargo or stores,) shall be entitled to their wages or hire that may become due to him pursuant to this agreement; that, for the due performance of each and every the above-mentioned articles and agreements, and acknowledgment of their being voluntary and without compulsion, or any other clandestine means being used, the said parties have hereunto subscribed their names, the day and month set opposite to their respective names.

Place and Time of Entry.	Men's Names.	Quality.	Witnesses to each Man's signing.	Pay in the River.		Wages per Month, or for the Voyage.	Whole Wages.
				Whole.	Half.		

The statutes do not render a verbal agreement for wages absolutely void; but impose a penalty on the master if a written agreement be not made. When a written agreement is made, it becomes the only evidence of the contract between the parties; and a seaman cannot recover any thing agreed to be given in reward for his services, which is not specified in the articles.

A seaman who has engaged to serve on board a ship, is bound to exert himself to the utmost in the service of the ship; and, therefore, a promise made by the master of *a ship in distress*, to pay an extra sum to a seaman, as an inducement to extraordinary exertion on his part, is held to be essentially void.

2. *Conduct of Seamen.* — It is essential to the business of navigation that the most prompt and ready obedience should be paid to the lawful commands of the master. To this effect it is covenanted in the articles of agreement previously quoted, that "each and every lawful command which the said master shall think necessary to issue for the effectual government of the said vessel, suppressing immorality and vice of all kinds, be strictly complied with, under the penalty of the person or persons disobeying forfeiting his or their whole wages or hire, together with every thing belonging to him or them on board the said vessel."

In case of disobedience or disorderly conduct on the part of the seamen, the master may correct them in a reasonable manner. Such an authority is absolutely necessary to the safety of the ship and of those on board; but it behoves the master to act in such cases with great deliberation, and not to pervert the powers with which he is intrusted for the good of the whole to cruel or vindictive purposes. Masters abusing their au-

thority must answer at law for the consequences. In the case of actual or open mutiny by the crew, or any part of them, the resistance of the master becomes an act of self defence, and is to be considered in all its consequences in that point of view. The Ordinances of Oleron and Wisby declare that a mariner who strikes the master shall either pay a fine or lose his right hand; a singular as well as cruel alternative, unknown in modern jurisprudence.

But although the master may by force restrain the commission of great crimes, he has no judicial authority over the criminal, but is bound to secure his person and bring him before a proper tribunal. And all justices of the peace are empowered to receive informations touching any murder, piracy, felony, or robbery upon the sea, and to commit the offenders for trial. — (43 *Geo.* 3. c. 160.)

The *desertion* or absence without leave of seamen from a ship, while on a voyage to foreign parts, being attended with many bad consequences, has been provided against in all maritime laws. It was enacted in this country, by the 11 & 12 Will. 3. c. 7.,

"That all such seamen, officers, or sailors, who shall desert the ships or vessels wherein they are hired to serve for that voyage, shall for such offence forfeit all such wages as shall be then due to him or them." By subsequent statutes (2 Geo. 2. c. 36., and 31 Geo. 3. c. 39.), it is enacted, that if, after having entered into the agreement previously referred to, a mariner deserts or refuses to proceed on the voyage, he forfeits to the owners all the wages then due to him, and a justice of the peace may, on complaint of the master, owner, or person having charge of the ship, issue a warrant to apprehend him; and in case of his refusal to proceed on the voyage, or of his not assigning a sufficient reason for such refusal, may commit him to hard labour in the house of correction for not more than *thirty* nor less than *fourteen* days. A mariner *absenting* himself from the ship without leave of the master or other chief officer having charge of the ship, forfeits *two* days' pay for every such day's absence, to the use of Greenwich Hospital. And in the case of foreign voyages, if, upon the ship's arrival at her port of delivery here, he leaves her without a *written discharge* from the master or other person having charge of the ship, or if in the coasting trade he quits the ship before the *voyage is completed and* THE CARGO DELIVERED, or before the expiration of the term for which he engaged, or before he has obtained a discharge in writing, he forfeits 1 month's pay to the said hospital. But these provisions do not debar seamen from entering on board any of his Majesty's ships.

In order still further to discountenance desertion, a penalty of 100*l.* is imposed by the 37 Geo. 3. c. 73. on every master or commander of any British merchant ship who engages any seaman or other person to serve on board such ship, in the event of such master or commander being aware, at the time, that such seaman or person had deserted from any other ship or vessel.

For an account of the penalties imposed on the master for leaving seamen in foreign countries, or refusing to bring them back, see MASTER.

Neglect of duty, disobedience of orders, habitual drunkenness, or any cause which will justify a master in discharging a seaman during the voyage, will also deprive the seaman of his wages.

If the cargo be embezzled or injured by the fraud or negligence of the seamen, so that the merchant has a right to claim satisfaction from the master and owners, they may, by the custom of merchants, deduct the value thereof from the wages of the seamen by whose misconduct the injury has taken place. And the last proviso introduced into the usual agreement signed by the seamen, is calculated to enforce this rule in the case of embezzlement either of the cargo or of the ship's stores. This proviso, however, is to be construed individually, as affecting only the particular persons guilty of the embezzlement, and not the whole crew. Nor is any innocent person liable to contribute a portion of his wages to make good the loss occasioned by the misconduct of others.

The offences of running away with the ship, or voluntarily yielding her up to an enemy, or making a revolt, are punishable by death. The statute 11 & 12 Will. 3. c. 7. enacts,

"That if any commander or master of any ship, or any seaman or mariner, shall in any place, where the admiral hath jurisdiction, betray his trust and turn pirate, enemy, or rebel, and piratically and feloniously run away with his or their ship or ships, or any barge, boat, ordnance, ammunition, goods, or merchandises, or yield them up voluntarily to any pirate, or shall bring any seducing messages from any pirate, enemy, or rebel, or consult, combine, or confederate with, or attempt or endeavour to corrupt any commander, master, officer, or mariner, to yield up or run away with any ship, goods, or merchandises, or turn pirate, or go over to pirates; or if any person shall lay violent hands on his commander, whereby to hinder him from fighting in defence of his ship and goods committed to his trust, or that shall confine his master, or make or endeavour to make a revolt in the ship; shall be adjudged, deemed, and taken to be a *pirate*, *felon*, and *robber*, and being convicted thereof according to the directions of this act, shall have and suffer pain of *death*, loss of lands, goods, and chattels, as *pirates*, *felons*, and *robbers* upon the seas ought to have and suffer."

The wilful destruction or loss of the ship is, in all countries, punishable by death. But doubts having been entertained whether the destruction of a ship that had been insured came within the scope of the previously existing statutes, they were repealed by the 43 Geo. 3. c. 113., and the following provision substituted in their stead: —

"That if any person or persons shall, from and after the *sixteenth* day of *July*, 1803, wilfully cast away, burn, or otherwise destroy, any ship or vessel, or in any wise counsel, direct, or procure the same to be done, and the same be accordingly done, with intent or design thereby wilfully and maliciously to prejudice any owner or owners of such ship or vessel, or any owner or owners of any goods laden on board the same, or any person or persons, body politic or corporate, that hath or have underwritten or shall underwrite any policy or policies of insurance upon such ship or vessel, the freight thereof, or upon any goods

laden on board the same, the person or persons offending therein, being thereof lawfully convicted, shall be deemed and adjudged a principal felon or felons, and shall suffer death as in cases of felony, without benefit of clergy."

3. *Payment of Seamen's Wages, &c.* — In order to stimulate the zeal and attention of seamen, it has been the policy of all maritime states to make the payment of their wages depend on the successful termination of the voyage. "*Freight is the mother of wages; the safety of the ship the mother of freight.*" When, therefore, by any disaster happening in the course of the voyage, such as the loss or capture of the ship, the owners lose their freight, the seamen also lose their wages.

If a ship destined on a voyage out and home has delivered her outward bound cargo, but perishes in the homeward voyage, the freight for the outward voyage is due; so in the same case the seamen are entitled to receive their wages for the time employed in the outward voyage and the unloading of the cargo, unless by the terms of their contract the outward and homeward voyages are consolidated into one. If a ship sail to several places, wages are payable to the time of the delivery of the last cargo. Upon the same principle, where money had been advanced to the owners in part of the freight outwards, and the ship perished before her arrival at the port of delivery, it was held that the seamen were entitled to wages in proportion to the money advanced.

If, after seamen have been hired, the owners of a ship do not think proper to send her on the intended voyage, the seamen are to be paid for the time during which they may have been employed on board the ship; and in the event of their sustaining any special damage by breaking off the contract, it is but reasonable that they should be indemnified.

In the case of shipwreck, it is the duty of the seamen to exert themselves to the utmost to save as much as possible of the vessel and cargo. If the cargo be saved, and a proportion of the freight paid by the merchant in respect thereof, it seems, upon principle, that the seamen are also entitled to a proportion of their wages. And for their labour in saving the cargo, or the remains of the ship, they, as well as other persons, may be entitled to a recompence by way of *salvage*. The laws of Oleron rule, that if, in case of shipwreck, "the seamen preserve a part of the ship and lading, the master shall allow them a reasonable consideration to carry them home to their own country; and in case they save enough to enable the master to do this, he may lawfully pledge to some honest persons such part thereof as may be sufficient for the occasion."

By the laws of Wisby, "the mariners are bound to save and preserve the merchandise to the utmost of their power, and whilst they do so (*ce-faisant*, according to the *French* translation), ought to be paid their wages, otherwise not." By the Hanseatic Ordinance, if a ship happens to be cast away, the mariners are obliged to save as much as in them lies, and the master ought to requite them for their pains to their content, and convey them at his own charge to their dwelling places; but if the mariners refuse to assist their master, in such case they shall have neither reward nor wages paid them." It is not quite clear, from the language of these ancient ordinances, whether the payment directed to be made to seamen on those melancholy occasions, is to be a reward only for their labour in the salvage, or a recompence for their former services in the ship, for which, according to general principles, they are entitled to no payment, if no freight is earned. But Cleirac, in his *Commentary on the Laws of Oleron*, says, that by an ordinance of Philip II. of Spain, made in the year 1563, it is ordained, that the seamen shall save as much as they can from shipwreck; and, in that case, the master is bound to pay them their wages, and to give them a further reward for their labour out of the goods. And the Hanseatic Ordinance of the year 1614 expressly directs, that if so much of the ship be saved as equals the value of the wages of the seamen, they shall be paid their whole wages. In like manner, the Ordinance of Rotterdam and the *French* Ordinance also expressly direct the payment of wages out of the relics and materials of the ship. — (*Abbott on the Law of Shipping*, part iv. c. 2.)

"I have not been able," says Lord Tenterden, "to find any decision of an English court on the point, and the legislature has made no provision relating to it. As an inducement to the mariners to exert themselves in the hour of danger, it may not be unfit to hold out to them the prospect of obtaining their wages, if they save so much of the ship as shall be sufficient to pay them; but their claim upon the ship seems not to extend to a case, wherein, according to the principles of the law upon which their claim is founded, no wages are payable to them." — (Part iv. c. 2.)

The laws of Oleron, Wisby, and the Hanse towns, direct, that if a seaman die during the voyage, wages shall be paid to his heirs: but it is not clear whether the sum thus directed to be paid is to be understood as meaning a payment proportioned to the time of his service, or the whole sum that he would have earned had he lived till the conclusion of the voyage. This question has not been judicially decided in England; but by the act 37 Geo. 3. c. 73. it is ordered, that the wages due to any seaman, who has died on board any ship trading to the West Indies, shall be paid, within 3 months of

the arrival of such ship in Great Britain, to the receiver of the sixpenny duty for Greenwich Hospital, for the use of the seaman's executor or administrator. All masters neglecting or refusing to pay the same incur a penalty of 50*l.*, and pay double wages for each offence.

A seaman impressed from a merchant ship into the royal service, is entitled to receive the proportion of his wages due to him at the time of impressment, provided the merchant ship *arrive in safety* at the port of her discharge.

Policy requires that the wages of seamen should not be paid to them in foreign countries, as well to prevent desertion, as to preserve, for the benefit of their families, what might otherwise be spent in riot and debauchery. Conformably to this principle it has been enacted,

"That no master or owner of any merchant ship or vessel shall pay or advance, or cause to be paid or advanced, to any seaman or mariner, during the time he shall be in parts beyond the seas, any money or effects upon account of wages, exceeding *one moiety* of the wages which shall be due at the time of such payment, until such ship or vessel shall return to *Great Britain* or *Ireland*, or the plantations, or to some other of his Majesty's dominions, whereto they belong, and from whence they were first fitted out; and if any such master or owner of such merchant ship or vessel shall pay or advance, or cause to be paid or advanced, any wages to any seaman or mariner above the said moiety, such master or owner shall forfeit and pay *double* the money he shall so pay or advance, to be recovered in the High Court of Admiralty by any person who shall first discover and inform of the same."—(8 *Geo.* 1. c. 24.)

The time when wages should be paid has also been made the subject of parliamentary enactments. Thus, as to ships engaged in *foreign voyages*, it is ordered, that upon the arrival of any ship in *Great Britain* from parts beyond the seas, the master or commander shall be obliged to pay the seamen thereto belonging their wages, if demanded, in *thirty days* after the ship's entry at the Custom-house, except in cases where a covenant shall be entered into to the contrary; or at the time the seamen shall be discharged, which shall first happen, if demanded; deducting the penalties and forfeitures imposed by the act, "under the penalty of paying to each seaman or mariner that shall be unpaid, contrary to the intent and meaning of this act, *twenty shillings* over and above the wages that shall be due to each person, to be recovered by the same means and methods as the wages may be recovered; and such payment of wages aforesaid shall be good and valid in law, notwithstanding any action, bill of sale, attachment, or incumbrance whatsoever."—(2 *Geo.* 2. c. 36.)

And as to ships employed in the *coasting trade* in the manner before mentioned, it is enacted, that the master, commander, or person having charge of the ship, shall be obliged to pay the seamen their wages, if demanded, within *five days* after the ship shall be entered at the Custom-house, or the cargo be delivered, or at the time the seamen shall be discharged, which shall first happen, unless an agreement shall have been made to the contrary; in which case the wages shall be paid according to such agreement, deducting in every case the penalties imposed by this act, under the like forfeiture of *twenty shillings*, to be recovered in the same manner as with regard to ships coming from abroad; and such payment shall be good in law, "notwithstanding any action, bill of sale, attachment, or incumbrance whatsoever."—(31 *Geo.* 3. c. 39.)

Seamen have a threefold remedy for the recovery of wages; viz. against the ship, the owner, and the master; and they may proceed either in the admiralty courts or those of common law: in the former case all may join, and payment may be obtained out of the value of the ship. The contract remains in the custody of the master or owner, but they are bound to produce it when required, and it is conclusive evidence of the contract between the parties.

By the act 59 Geo. 3. c. 58., justices of the peace are authorised summarily to decide upon the complaint of any seaman as to the nonpayment of wages not exceeding 20*l.*; and if they find the claim well founded, may, in the event of its not being paid within 2 days, issue their warrant for the levy of the same by distress: parties dissatisfied may appeal to the admiralty.

4. *Payment to Greenwich Hospital.*—During the reign of George II. an establishment attached to Greenwich Hospital was erected (20 Geo. 2. c. 38.) "*for the relief and support of maimed and disabled seamen, and the widows and children of such as shall be killed, slain, or drowned, in the merchant service.* To provide a fund for this charitable institution, every person serving in any merchant ship, or other private ship or vessel, belonging to any of his Majesty's subjects in *England*, (except apprentices under the age of 18, persons employed in boats upon the coasts in taking fish which are brought fresh on shore, or in boats within rivers, or upon boats on the coast, and pilots (except persons employed in the service of the *East India Company*, and who are not entitled to the benefit of this institution, being provided for by a fund established by the Company),) pays *sixpence per month*, which is deducted out of his wages by the master, and by him paid over to the persons appointed under the authority of the act at the port to which the ship belongs, before she shall be allowed to clear inwards. For the management and distribution of this fund, a corporation was created, composed chiefly of eminent merchants, with power to purchase land and erect an hospital, and to provide for seamen

rendered incapable of service by sickness, wounds, or other accidental misfortunes, and decrepit and worn out by age, either by receiving them into the hospital, or by pensions; and also to relieve the widows and children of seamen killed or drowned in the merchant service, provided the children are not of the age of 14 years; or, if of that age and upwards, are incapable of getting a livelihood by reason of lameness, blindness, or other infirmity, and are proper objects of charity; and to make reasonable allowances to those who shall lose an eye or limb, or be otherwise hurt or maimed, in fighting, defending or working their ships, or doing any other duty in their service, in proportion to their hurt; so far forth as the income and revenues of the charity will extend for these purposes. But no person is to be provided for as a worn-out seaman, who has not been employed in the merchant service *five* years, and paid the contribution. And in providing for this class, a preference is given to such as have served longest and contributed most.

In order to ascertain the times of service and payment of the contribution, the master must keep a *muster-roll* of the persons employed in the ship, and before its departure deliver a duplicate to the collector of these duties at the port; and, during the voyage, enter the time and place of discharge, quitting, and desertion, and of receiving other persons on board, and of any hurt, damage, death, or drowning; of which he must also deliver a duplicate at his return, under the penalty of 20*l*., to the truth whereof he may be examined upon oath by the collector. And in case any person employed on board any ship or vessel shall, in doing his duty on shore or on board, break an arm or leg, or be otherwise hurt or maimed, he is to be properly relieved until sufficiently recovered to be sent to the place to which the ship belongs.

But, notwithstanding the *principle* of this charity is excellent, it has been alleged, and, we apprehend, on pretty good grounds, that the conditions under which merchant seamen are admitted to participate in its benefits are too onerous, that they have not reaped from it an advantage equivalent to the sacrifice it imposes on them, and that the expenses of collection have been quite enormous.

The last part of this statement is, indeed, completely borne out by the first of the subjoined documents, which shows that the expense of collection is, in future, to be reduced to a *half* of what it has hitherto been; and we have been well assured that the reduction may be safely carried a good deal further.

The second of the subjoined accounts shows that there is not at present a single seaman in Greenwich Hospital, except such as have served in the navy; a circumstance which, considering the number of men in the merchant service, the large sum (26,000*l*.) annually paid by them to the hospital, and the period that has elapsed since the termination of the war, strikes us as not a little extraordinary. The subject is one that seems to require a thorough investigation. Merchant seamen ought to participate, equally with those in his Majesty's service, in the benefits of an institution to which they contribute so largely.

I. An Account of the Money deducted out of the Wages of Seamen employed in the Merchant Service of the Country, for the Years 1828 and 1829; showing the Gross Amount collected, the Nett Money paid to Greenwich Hospital, and the Amount and Rate per Cent. paid for collecting the same in each Year, and for what Purposes employed.

	1828.	1829.
	L. *s.* *d.*	*L.* *s.* *d.*
Gross amount of the collection	25,683 1 1	26,137 2 3½
Money paid to Greenwich Hospital	18,845 19 8	21,412 17 5½
Total expense of collection	4,837 1 5	4,724 4 10½
Detail of the Total Expense of Collection.		
To the deputy receivers of Great Britain and Ireland, America, Guernsey, Jersey, and Newfoundland, 12½ per cent. for collecting, except the port of Liverpool, which is 7½ per cent.	2,081 3 6	2,343 4 1
To the receivers general for Scotland and Ireland, a salary of 50*l*. per annum each	100 0 0	100 0 0
Plantation clerk at the Custom-house, 10 per cent. on the amount collected in America	78 4 5	77 2 10
Salary of the chief receiver at Newfoundland, 7½ per cent on the collection	- -	81 1 1½
Salaries to the receiver general and comptroller at the port of London, their clerks, clerk at the customs, messenger, and housekeeper	1,635 0 0	1,655 0 0
Repairs	437 11 8	
Superannuation allowances	36 5 0	36 5 0
Postage, stationery, taxes, and housekeeper's disbursements	468 16 10	431 4 10
L.	4,837 1 5	4,724 4 10½

The monies paid to Greenwich Hospital are applied to the general purposes of the institution.

P. C. LE GEYT, Clerk of the Cheque.

The total expense of collecting amounted in the year 1828 to 20¼ per cent., and in 1826 to 18 per cent on the gross receipts; but arrangements are now ordered to be carried into effect, by which the whole expense will be reduced to about 10 per cent.

W. H. HOOPER, Secretary.

Royal Hospital, Greenwich, 10th of May, 1830.

II. Account of Merchant Seamen now in the Royal Hospital for Seamen at Greenwich, with the Comparative Amount of Service in the Navy and in the Merchants' Employ.

Number of Men who have never served in the Navy.	Number of Men who have served in the Navy and in the Merchants' Service.	Total Number of Years served by them in the King's Service.	Total Number of Years served by them in the Merchants' Service.	Average Number of Years served by each Man in the Navy.	Average Number of Years served by each Man in the Merchants' Service.
Nil.	1,121	18,195	14,485	16¼	13

The establishment of Greenwich Hospital is	2,710
Of these are —	
Seamen who have served in merchant ships	1,121
Seamen who have served in king's ships only	1,118
Royal marines	424
Lunatics	22
Absent	9
Vacancies	16
	2,710

III. Account of Children of Merchant Seamen in the School of Greenwich Hospital.

Number of Children of Merchant Seamen whose Fathers have never served in the Navy.	Number of Children of Merchant Seamen whose Fathers have also served in the Navy.	Remarks.
89	23	The original Greenwich Hospital school, to which the children of merchant seamen are eligible, consisted of 200 children, until, by a regulation of 1829, it was increased to 300.

Royal Hospital, Greenwich, 9th of April, 1831. R. G. KEATS, Governor.

For further details with respect to this important subject, see *Lord Tenterden's* work on the *Law of Shipping*.

SEAWORTHY, a term applied to a ship, indicating that she is in every respect fit for her voyage.

It is provided in all charterparties, that the vessel chartered shall be "tight, staunch, and strong, well apparelled, furnished with an adequate number of men and mariners, tackle, provisions, &c." If the ship be insufficient in any of these particulars, the owners, though ignorant of the circumstance, will be liable for whatever damage may, in consequence, be done to the goods of the merchant; and if an insurance has been effected upon her, it will be void.

But whether the condition of seaworthiness be expressed in the charterparty or not, it is always implied. "In every contract," said Lord Ellenborough, "between a person holding himself forth as the owner of a lighter or vessel ready to carry goods for hire, and the person putting goods on board, or employing his vessel or lighter for that purpose, it is a term of the contract on the part of the lighterman or carrier *implied by law*, that his vessel is tight, and fit for the purpose for which he offers and holds it forth to the public: it is the immediate foundation and substratum of the contract that it is so: *the law presumes a promise to that effect on the part of the carrier, without any actual proof;* and every reason of sound policy and public convenience requires that it should be so."

Not only must the ship and furniture be sufficient for the voyage, but she must also be furnished with a sufficient number of persons of competent skill and ability to navigate her. And for sailing down rivers, out of harbours, or through roads, &c., where either by usage or the laws of the country a pilot is required, a pilot must be taken on board. But no owner or master of a ship shall be answerable for any loss or damage by reason of no pilot being on board, unless it shall be proved that the want of a pilot shall have arisen from any refusal to take a pilot on board; or from the negligence of the master in not heaving to, for the purpose of taking on board any pilot who shall be ready and offer to take charge of the ship. — (48 *Geo.* 3. c. 164.)

A ship is not seaworthy unless she be provided with all the documents or papers necessary for the manifestation of the ship and cargo. Neither is she seaworthy, if, during war, she be not supplied with the sails required to facilitate her escape from an enemy.

It is only necessary, to guarantee the owners from loss, that the ship should be seaworthy at the time of her departure. She may cease to be so in a few hours, and yet they may not be liable. The question to be decided in such cases always is, whether the ship's disability arose from any defect existing in her *before* her departure, or from a cause which occasioned it *afterwards*. But if a ship, within a day or two of her departure, become leaky or founder at sea, or be obliged to put back, without any visible or adequate cause to produce such an effect — such as the starting of a plank or other accident to which the best ships are liable, and which no human prudence can prevent — the fair presumption is that she was not seaworthy when she sailed; and it will be incumbent on the owners to show that she was seaworthy at that time. They are liable for damage occasioned by every injury arising from any *original defect* in the ship, or from

bad stowage: but they are not liable for any injury arising from the act of God, the king's enemies, or the perils of the sea.

It is further to be observed, that how perfect soever a ship may be, yet if, from the nature of her construction, or any other cause, she be incapable of performing the proposed voyage, with the proposed cargo on board, she is not seaworthy. *She must be, in all respects, fit for the trade in which she is meant to be employed.* And it is a wholesome rule that the owners should be held to a pretty strict proof of this.

It has been already observed, that any defect in point of seaworthiness invalidates an insurance upon a ship. There is not only an express but an implied warranty in every policy, that the ship shall be "tight, staunch, and strong, &c.;" and the reason of this is plain. The insurer undertakes to indemnify the insured against the *extraordinary and unforeseen perils of the sea;* and it would be absurd to suppose that any man would insure against those perils, but in the confidence that the ship is in a condition to encounter the *ordinary perils* to which every ship must be exposed in the usual course of the proposed voyage.

By the old law of France it was directed, that every merchant ship, before her departure from the place of her outfit, should be surveyed by certain sea officers appointed for that purpose, and reported to be seaworthy, "*en bon état de navigation;*" and that previous to her return, before she took her homeward cargo on board, she should be again surveyed. Valin has shown—(Tit. *Fret*, art. 12.), that very little confidence could be placed in these surveys, which, he tells us, were only made upon the external parts, for the ship was not unsheathed; and, therefore, her internal and hidden defects could not be disclosed. This practice seems now to be abandoned by the French; at least, there is no allusion to it in the *Code de Commerce.* It is, one should think, much better to leave the question as to the seaworthiness of the ship to be ascertained, as in England, after a loss has happened, by an investigation of the true cause of such loss, than to permit so important a question to be decided upon the report of officers without any motive to enquire carefully into her actual condition. A ship may, to all appearance, be perfectly capable of performing a voyage; and it is only after a loss has happened, that her latent defects can be discovered, and her true state at the time of her departure rendered manifest. Indeed, the survey made by the French was not deemed a conclusive proof that the ship was, at her departure, really seaworthy: it merely raised a *presumption* that such was the case; but it was still open to the freighter or the insurer to show the contrary.

For further information upon this point, the reader is referred to the able and excellent works of *Chief Justice Abbott* (*Lord Tenterden*) on the *Law of Shipping*, part iii. c. 3., and of *Mr. Serjeant Marshall* on *Insurance*, book i. c. 5. § 1.

SEEDS, in commerce, the grains of several species of gramina. Those of most importance are clover seed, flax or linseed, hemp seed, mustard seed, rape seed, tares, &c.; for which, see the respective articles.

SEGARS, or CIGARS. See Tobacco.

SENNA (Fr. *Séné;* Ger. *Sennablater;* It. *Senna;* Sp. *Sen;* Lat. *Cassia Senna;* Arab. *Suna*). The plant (*Cassia Senna*) which yields the leaves known in commerce and the *materia medica* by the name of senna, is an annual, a native of Upper Egypt, and Bernou in Central Africa. The senna, after being collected in Upper Egypt, is packed up in bales, and sent to Boullac, where it is mixed with other leaves, some of which are nearly equally good, while others are very inferior. After being mixed, it is repacked in bales at Alexandria, and sent to Europe. A great deal of senna is imported from Calcutta and Bombay, under the name of East India senna; but it is originally brought to them from Arabia.—(*Thomson's Dispensatory.*) Senna is very extensively used in medicine. The total quantity imported in 1831 amounted to 250,296 lbs., of which 130,222 lbs. were retained for home consumption. Of the imports, 42,519 lbs. came directly from Egypt; 200,990 lbs. from the East Indies; and a small quantity at second hand from Italy and other places. The imports of senna from India in 1832 amounted to 464,917 lbs. The duty was reduced, in 1832, from 1*s.* 3*d.* to 6*d.* per lb.

SHAGREEN (Ger. *Schagrin;* It. *Chagrin;* Rus. *Schagrim, Schagren*), a kind of grained leather, used for various purposes in the arts. It is extensively manufactured at Astrakhan in Russia.—(See *Tooke's Russia*, vol. iii. p. 403.)

SHAMMY, or CHAMOIS LEATHER (Ger. *Sämischleder;* Fr. *Chamois;* It. *Camoscio;* Rus. *Samschaniii, Koshi*), a kind of leather dressed in oil, or tanned, and much esteemed for its softness, pliancy, and capability of bearing soap without hurt. The real shammy is prepared of the skin of the chamois goat. But leather prepared from the skins of the common goat, kid, and sheep, is frequently substituted in its stead.

SHARKS' FINS, form a regular article of trade to China; and are collected for this purpose in every country from the eastern shore of Africa to New Guinea. In the Canton Price Currents they are a[illegible] f

late years has been, according to quality, from 15 to 18 dollars per picul, equal to from 50*s.* to 60*s.* per cwt.

SHAWLS (Ger. *Schalen;* Fr. *Chals, Chales;* It. *Shavali;* Sp. *Schavalos*), articles of fine wool, silk, or wool and silk, manufactured after the fashion of a large handkerchief, used in female dress. The finest shawls are imported from India, where they are highly esteemed, and cost from 50 to 300 guineas. But the British shawls manufactured at Norwich, Paisley, and particularly Edinburgh, have recently been very much improved; and though still inferior, in point of quality, to the finest specimens brought from the East, they look well, and are much cheaper. The native shawl manufacture is of very considerable value and importance.

Cashmere Shawls. — The shawl manufacture is believed to have originated in the valley of Cashmere, the ancient Caspira, situated in the north-west of India, between the 34th and 35th degrees of N. latitude, and the 73d and 76th degrees of E. longitude. Though not so flourishing as it once was, the manufacture is still prosecuted in this province to a very considerable extent. The shawls are the very best that are made, possessing unequalled fineness, delicacy, and warmth. They are formed of the inner hair of a variety of the common goat (*capra hircus*), reared on the cold, dry table land of Thibet, elevated from 14,000 to 16,000 feet above the level of the sea. The goat thrives sufficiently well in many other countries; but in the sultry plains of Hindostan it has hardly more hair than a greyhound; and though in higher latitudes the hair is more abundant, it is for the most part shaggy and coarse. It is only in the intensely cold and dry climate of Thibet that it yields the peculiarly soft woolly hair that constitutes the material of the Indian shawl. We do not, therefore, suppose that the efforts to naturalise the shawl-goat in France will turn out well. On the contrary, we believe the chances of success would be about equal were an attempt made to breed beavers in a hot country, without water, or camels in a moist country, free from heat and drought.

The inner or fine wool is covered over and protected by a quantity of long shaggy hair, which is, of course, carefully separated from it before it is manufactured.

The genuine shawl wool has been imported into this country; and the finest Edinburgh and Paisley shawls have been produced from it. But it must be admitted that shawls have nowhere been made that can come, as respects quality, into successful competition with those of Cashmere. The manufacture has been established at Delhi and Lahore for some years; but notwithstanding it is carried on by native Cashmerians, and though the material employed be quite the same, the fabrics are said to want the fineness of those made in Cashmere, and to have a degenerated, coarse appearance. It is difficult to account for this superiority. It has been ascribed to some peculiar quality of the water in the valley of Cashmere; but it is most probably owing to a variety of circumstances, which, though each may appear of little importance, collectively give a character to the manufacture.

The following details as to the manufacture of Cashmere shawls are extracted from a recent number of an English paper published at Delhi: —

"The great mart for the wool of which shawls are made, is at Kilghet, which is said to be a dependency of Ladak, and situated 20 days' journey from the northern boundaries of Cashmere. There are 2 kinds of it: that which can be readily dyed is white; the other sort is of an ashy colour, which being with difficulty changed, or, at least, improved by art, is generally woven of its natural hue. About 2 lbs. of either are obtained from a single goat once a year. After the down has been carefully separated from the hairs, it is repeatedly washed with rice starch. This process is reckoned important; and it is to the quality of the water of their valley that the Cashmerians attribute the peculiar and inimitable fineness of the fabrics produced there. At Kilghet the best raw wool is sold for about 1 rupee a pound. By the preparation and washing referred to, it loses ½, and the remainder being spun, 3 rupees' weight of the thread is considered worth 1 rupee.

"Shawls are made of various forms, size, and borders, which are wrought separately, with the view of adapting them to the different markets. Those sent to Turkey used to be of the softest and most delicate texture. Carpets and counterpanes are fabricated of the hair or coarser part of the wool. From a variety of causes, among others the destruction of the Janissaries, who dressed much in shawls, the loss of royalty in Cabul, and the ruined finances of Lucknow, it is certain that the demand for this elegant commodity has greatly declined of late years. Under the Mogul emperors, Cashmere found work for 30,000 shawl looms. In the time of the Afghan kings, the number decreased to 18,000. There are now not more than 6,000 employed. I should attribute little of this diminution to the sale of English imitations among the Asiatic nations. When these counterfeits first appeared, the pretty patterns and brilliancy of the colours took the fancy of some, but their great inferiority in the softness and warmth which marks the genuine shawl, soon caused the new article to be neglected. A camel-load of them was lately put up at outcry in Delhi, when scarcely a native would bid for one!

"The average value of shawls exported from Cashmere amounts annually to 1,800,000 rupees. Runjeet Singh takes ⅔ in kind as part of the gross revenue of the province, which is about 25 lacks a year. His Highness is said to sell ¾ of what he thus receives, and to keep the remainder for his own court. Of the rest disposed of by him and left for sale in the valley, 7 lacks' worth go to Bombay and Western India; 3 to Hindostan, chiefly Oude; ½ a lack each to Calcutta, Cabul, Herat, and Balk, whence some pass on to neighbouring countries.

"A curious calculation of the successive exactions from Cashmere to Bombay inclusive, which magnify the price of shawls, is herewith subjoined.

"Actual cost for materials and labour in making a pair of reel shawls: —

	Fd. rs.
Four Furrukabad seers of wool	12 8
Cleaning, washing, and spinning	50 0
Dyeing	11 0
Wages to weavers	264 6
Total	337 14
Duties on the same. — On sale and importation to Cashmere	3 14
On the thread	8 4
While the fabric is in the loom	125 0
Fees to chowdries, brokers, assessors, &c.	35 0
Total amount of duties in Cashmere	171 18
Duties from Cashmere to Amritsir	12 6
From Amritsir to Bombay	3 6½
At Bombay	70 0
Total from Amritsir to Bombay	85 12½
Total from Kilghet to Bombay, 171 18 and 85 12½ =	252 30½
Prime cost	337 14
Proportion of carriage	0 12
Insurance	21 0
Total cost	610 56½

"A pair of such shawls might sell for 500 rupees at Amritsir, and in Bombay for 900. The amount of the imports, and the sums levied by each government, will appear more in relief if stated as they affect a camel-load in its progress. It consists of 14½ cutcha maunds, and contains, on an average, 2,000 shawls of different kinds, valued, on reaching Bombay, at 28,500 Furrukabad rupees.

"The government of Lahore exacts Fd. rs. 1,564 6; Patialah, 61 0; Bikeneer, 43 0; Joudpore, 121 4; Bhownuggur, 20 0; — total levied by native princes, 1,809 0; Bombay, (10 per cent. *ad valorem*) 2,850 0." — (Quoted in Mr. Montgomery Martin's *Asiatic Colonies*, vol. i. p. 231.)

SHEEP (Ger. *Schafe;* Fr. *Brebis, Bêtes à laine, Moutons;* It. *Pecore;* Sp. *Pecora, Ovejas;* Rus. *Owzii;* Lat. *Oves*). Of the domestic animals belonging to Great Britain, sheep, with the exception of horses, and, perhaps, cattle, are by far the most important.

They can be reared in situations and upon soils where other animals would not live. They afford a large supply of food, and one of the principal materials of clothing. Wool has long been a staple commodity of this country, and its manufacture employs an immense number of people. "The dressed skin," says Mr. Pennant, "forms different parts of our apparel; and is used for covers of books. The entrails, properly prepared and twisted, serve for strings for various musical instruments. The bones, calcined (like other bones in general), form materials for tests for the refiner. The milk is thicker than that of cows, and consequently yields a greater quantity of butter and cheese; and in some places is so rich, that it will not produce the cheese without a mixture of water to make it part from the whey. The dung is a remarkably rich manure; insomuch that the folding of sheep is become too useful a branch of husbandry for the farmer to neglect. To conclude; whether we consider the advantages that result from this animal to individuals in particular, or to these kingdoms in general, we may, with Columella, consider this, in one sense, as the first of the domestic quadrupeds."* —(*Pennant's British Zoology.*) The importation of sheep from a foreign country is prohibited under pain of forfeiture. —(6 *Geo.* 4. c. 107. § 52.) —(See CATTLE, and WOOL.)

The following Table exhibits a compendious view of the more prominent characteristics of the principal breeds of sheep in Great Britain:—

Names of Breeds.	Head.	Colour of Face and Legs.	Wool.	Wgt. of Fleece.	Wethrs. per Qr.	Age killed.
				Lbs.	*Lbs.*	*Years.*
1. Teeswater	No horns	White face and legs	Long wool	9	28	2
2. Lincoln	No horns	White face and legs	Long wool	10	25	2
3. Dishley, or New Leicester	No horns	White face and legs	Long wool (fine)	8	22	2
4. Cotswold	No horns	White face and legs	Long wool (fine)	9	24	2
5. Romney Marsh	No horns	White face and legs	Long wool (fine)	8	22	2
6. Dartmoor, or Bampton	No horns	White face and legs	Long wool (fine)	9	25	2
7. Exmoor	Horned	White face and legs	Long wool (coarse)	6	16	2½
8. Black-faced, or Heath	Horned	Black face and legs	Long wool (coarse)	3	15	3½
9. Hereford, Ryeland	No horns	White face and legs	Short wool (fine)	2½	14	3½
10. Morf, Shropshire	Horned	Black and speckled	Short wool (fine)	1¾	12	3½
11. Dorset	Horned	White and speckled	Short wool (fine)	3½	18	2
12. Wilts	Horned	White and speckled	Short wool (mid.)	3	20	3
13. Berks	No horns	Black and white	Long wool	7	18	2½
14. South Down	No horns	Speckled and white	Short wool	2½	18	2
15. Norfolk	Horned	Black and white	Short wool	2	18	3½
16. Herdwick	Horned	Speckled and white	Short wool	2	10	4½
17. Cheviot	No horns	White face and legs	Short wool	3	16	4½
18. Dun-faced	No horns	Dun face and legs	Short wool	1½	7	4½
19. Shetland	No horns	Various coloured ditto	Fine cottony	1¾	8	4½
20. Spanish	Rams horn'd	White	Short wool (super.)	3½	14	2½
21. Ditto, cross	——	—— ——	Short wool (fine)	2¾	16	2

For details as to the number of sheep, the quantity and quality of wool, &c., see WOOL.

SHERRY. See WINE.

SHIPS. Nautical men apply the term ship to distinguish a vessel having 3 masts, each consisting of a lower mast, a topmast, and top-gallant-mast, with their appropriate rigging. In familiar language, it is usually employed to distinguish any large vessel, however rigged: but it is also frequently used as a general designation for all vessels navigated with sails; and it is in this sense that we now employ it.

Merchant Ships. — It is hardly possible to divide merchant ships into classes, at least with any degree of precision. Their size, shape, the mode of their rigging, &c. depend not merely on the particular trade for which they are destined, but on the varying tastes and fancies of their owners. The ships employed in the China trade, by the East India Company, are the largest merchantmen belonging to this country; the private traders to the East and West Indies rank next; then follow the whale ships, those engaged in the trade to the Baltic and Canada, the Mediterranean, and a host of others of every variety of burden and shape.

The reader will find, in the articles NAVIGATION LAWS, and REGISTRY, an account of the peculiar privileges enjoyed by British ships, of the conditions and formalities necessary to be observed in order to acquire and preserve these privileges, of the mode of transferring property in ships, &c. And in the articles CHARTERPARTY, FREIGHT, MASTER, OWNERS, SEAMEN, &c., the law with respect to ships and ship-owners, in their capacity of carriers or public servants, and the reciprocal duties and obligations of the masters and crews, is pretty fully expounded. In this place, therefore, we shall content ourselves with laying before the reader some official statements exhibiting the progress and present magnitude of the mercantile navy of Great Britain.

Increase of Shipping in England. — It would be to no purpose, even if our limits permitted, to enter into any details with respect to the shipping of England previously to the Revolution. Those who wish to examine the subject, will find most of the scattered

* Post majores quadrupedes ovilli pecoris secunda ratio est; quæ prima sit si ad magnitudinem utilitatis referas. Nam id præcipue contra frigoris violentiam protegit, corporibusque nostris liberaliora præbet velamina; et etiam elegantiam mensas jucundis et numerosis dapibus exornat. —(*De Re Rustică*, lib. vii. cap. 2.)

notices of contemporary writers collected by Anderson, in his "Chronological History of Commerce." The mercantile navy of England first became considerable in the reign of Elizabeth; and gradually increased under her successors, James I. and Charles I. At the Restoration, the British shipping cleared outwards amounted to 95,266 tons; but such was the increase of navigation during the reigns of Charles II. and James II., that, at the Revolution, the British ships cleared outwards amounted to 190,533 tons. The war terminated by the treaty of Ryswick, in 1697, checked this progress. But commerce and navigation have steadily advanced, with the exception of 2 short periods during the war of 1739, and the American war, from the beginning of last century down to the present day.

The first really authentic account of the magnitude of the commercial navy of England was obtained in 1701–2, from returns to circular letters of the commissioners of customs, issued in January of that year. From these it appears that there belonged, at the period in question, to *all* the ports of England and Wales, 3,281 vessels, measuring (or rather estimated to measure) 261,222 tons, and carrying 27,196 men and 5,660 guns. Of these there belonged to

	Vessels.	Tons.	Men.		Vessels.	Tons.	Men.
London - -	560	84,882	10,065	Hull - -	115	7,564	187
Bristol - - -	165	17,338	2,359	Whitby - -	110	8,292	571
Yarmouth - -	143	9,914	668	Liverpool - -	102	8,619	1,101
Exeter - -	121	7,107	978	Scarborough - -	100	6,860	606

None of the other ports had 100 vessels; and there is some mistake in the returns as to the tonnage assigned to Newcastle and Ipswich. Of the Hull vessels, 80 were at the time laid up, which accounts for the small number of men in that port. — (*Macpherson's Annals of Commerce*, anno 1701.)

The following Table of the British and foreign shipping cleared outwards from 1663 to 1811, both inclusive, is taken from the last edition of *Mr. Chalmers's Comparative Estimate*. It gives a very complete view of the progress of the navigation of the country; and from the attention paid by the author to such subjects, and the facilities which his situation in the Board of Trade gave him for acquiring authentic information, its accuracy may be depended on.

I. Table of Ships cleared Outwards from 1663 to 1811.

Years.	English.	Foreign.	Total.	Years.	British.	Foreign.	Total.	Years.	British.	Foreign.	Total.
	Tons.	*Tons.*	*Tons.*		*Tons.*	*Tons.*	*Tons.*		*Tons.*	*Tons.*	*Tons.*
1663	95,266	47,634	142,900	1760	540,241	107,237	647,478	1786	1,115,024	121,197	1,236,221
1669				1761	582,020	122,735	704,755	1787	1,279,033	138,220	1,417,253
1688	190,533	95,267	285,800	1762	543,444	124,926	668,370	1788	1,411,689	128,997	1,540,686
1697	144,264	100,524	244,788	1763	631,724	91,593	723,317	1789	1,515,021	103,722	1,618,743
1760				1764	662,434	79,800	742,234	1790	1,424,912	148,919	1,573,831
1701	273,693	43,635	317,328	1765	726,402	72,215	798,617	1791	1,511,246	184,729	1,695,975
1702				1766	758,081	66,153	824,234	1792	1,561,158	175,405	1,736,563
1709	243,693	45,625	289,318	1767	725,835	68,006	793,841	1793	1,240,202	187,032	1,427,234
1712	326,620	29,115	355,735	1768	761,786	77,984	839,770	1794	1,382,166	218,077	1,600,243
1713				1769	805,305	68,420	873,725	1795	1,145,450	382,567	1,528,017
1714	421,431	26,573	448,004	1770	806,495	63,176	869,671	1796	1,254,624	478,356	1,732,980
1715				1771	877,004	66,898	943,902	1797	1,103,781	396,271	1,500,052
1726				1772	923,456	72,931	996,387	1798	1,319,151	365,719	1,684,870
1727	432,832	23,651	456,483	1773	874,421	57,994	932,415	1799	1,302,551	414,774	1,717,325
1728				1774	901,016	68,402	969,418	1800	1,445,271	685,051	2,130,322
1730				1775	882,579	68,034	950,613	1801	1,345,621	804,880	2,150,501
1731	476,941	26,627	503,568	1776	872,108	74,323	946,431	1802	1,626,966	461,723	2,088,689
1738				1777	827,067	102,638	929,705	1803	1,453,066	574,542	2,027,608
1739				1778	732,558	93,778	826,336	1804	1,463,286	587,849	2,051,135
1740	384,191	87,260	471,451	1779	642,981	149,040	791,021	1805	1,495,209	605,821	2,101,030
1741				1780	731,286	154,111	885,397	1806	1,486,302	568,170	2,054,472
1749				1781	608,219	170,775	778,994	1807	1,424,103	631,910	2,056,013
1750	609,798	51,386	661,184	1782	615,150	225,456	840,606	1808	1,372,810	282,145	1,654,955
1751				1783	865,967	170,938	1,037,905	1809	1,531,152	699,750	2,230,902
1755	British.			1784	932,219	118,268	1,050,487	1810	1,624,274	1,138,527	2,762,801
1756	496,254	76,456	572,710	1785	1,074,862	107,484	1,182,346	1811	1,507,353	696,232	2,203,585
1757											

II. Account of the Total Number of Vessels engaged in the Foreign and Colonial Trade of the United Kingdom, with the Amount of their Tonnage, and the Number of Men and Boys employed in navigating the same, that entered Inwards from all Parts of the World, in the several Years from 1814 to 1832, both inclusive; distinguishing British from Foreign.

Years.	British and Irish Vessels.			Foreign Vessels.		
	Vessels.	Tons.	Men.	Vessels.	Tons.	Men.
1814	8,975	1,209,248	83,793	5,286	599,287	37,375
1815	8,880	1,372,108	86,390	5,411	764,562	44,000
1816	9,744	1,415,723	90,119	3,116	379,465	25,345
1817	11,255	1,625,121	97,273	3,396	445,011	27,047
1818	13,006	1,886,394	111,880	6,230	762,457	43,936
1819	11,974	1,809,128	107,556	4,215	542,684	32,632
1820	11,285	1,668,060	100,325	3,472	447,611	27,633
1821	10,805	1,599,423	97,485	3,261	296,107	26,043
1822	11,087	1,663,697	98,980	3,389	469,151	28,421
1823	11,271	1,740,859	112,244	4,069	582,996	33,828
1824	11,731	1,797,089	108,686	5,655	759,672	42,126
1825	13,503	2,143,317	123,028	6,981	959,312	52,722
1826	12,473	1,950,650	113,093	5,729	694,116	39,838
1827	13,133	2,086,898	118,686	6,046	751,864	43,536
1828	13,436	2,094,557	119,141	4,955	634,620	36,733
1829	13,659	2,184,535	122,185	5,218	710,303	39,342
1830	13,548	2,180,642	122,103	5,359	758,828	41,670
1831	14,488	2,367,322	131,627	6,085	874,605	47,453
1832	15,372	2,485,980	139,594	4,546	639,979	35,399

III. A Statement of the Shipping employed in the Foreign and Colonial Trade of the United Kingdom, in the Year 1832, exhibiting the Number and Tonnage of Vessels entered Inwards and cleared Outwards (including their repeated Voyages), with the Number of their Crews; separating British from Foreign Ships, and distinguishing the Trade with each Country.—(*Parl. Paper*, No. 286. Sess. 1833.)

Countries.	Inwards.						Outwards.					
	British.			Foreign.			British.			Foreign.		
	Ships.	*Tons.*	*Men.*	*Ships.*	*Tons.*	*Men.*	*Ships.*	*Tons.*	*Men.*	*Ships.*	*Tons.*	*Men.*
Russia	1,419	277,527	12,487	117	32,132	1,560	1,003	202,610	9,307	90	24,978	1,100
Sweden	59	8,355	432	150	25,755	1,318	69	9,660	525	88	13,403	709
Norway	42	3,798	226	549	82,455	4,429	43	3,411	269	554	86,540	4,515
Denmark	60	7,268	367	439	35,272	2,179	393	65,658	3,154	626	70,413	3,731
Prussia	401	64,079	2,922	428	89,487	3,823	265	41,027	1,990	349	70,252	3,045
Germany	821	130,443	6,553	562	33,687	1,711	798	121,872	6,181	425	37,247	2,022
United Netherlands	1,673	195,473	10,879	771	90,492	4,798	1,571	176,471	9,722	733	88,069	5,041
France	1,396	110,793	10,554	1,133	65,340	7,009	1,408	116,688	10,800	882	50,161	5,055
Portugal, viz. Proper	370	41,634	2,420	41	4,571	318	317	35,013	2,153	62	10,532	601
Azores	133	9,752	615	-	-	-	201	16,348	1,134	2	408	22
Madeira	12	2,008	129	-	-	-	17	2,108	158			
Spain and the Balearic Islands	371	38,157	2,260	41	4,505	347	181	21,291	1,214	34	6,118	355
Canary Islands	22	2,318	139	-	-	-	20	2,248	129	1	89	8
Gibraltar	16	2,257	138	-	-	-	161	21,931	1,311	1	100	7
Italy and the Italian islands	292	42,992	2,382	20	3,481	249	332	51,649	2,875	23	4,384	275
Malta	6	726	43	-	-	-	54	5,873	309	1	150	10
Ionian Islands	48	6,694	373	-	-	-	23	3,143	176			
Turkey and Continental Greece	135	18,865	1,068	1	210	11	120	16,989	990			
Morea and Greek Islands	13	1,985	109	-	-	-	7	1,324	67			
Egypt (ports on the Mediterr.)	37	7,301	381	-	-	-	50	10,569	524	2	305	18
Tripoli, Barbary, and Morocco	10	1,067	59	-	-	-	3	380	20			
Coast of Africa from Morocco to the Cape of Good Hope	123	30,896	1,772	1	100	6	138	33,716	2,110	1	209	14
Cape of Good Hope	29	5,148	281	-	-	-	51	10,167	575			
Cape de Verd Islands	-	-	-	-	-	-	2	458	22	1	351	14
St. Helena and Ascension	-	-	-	-	-	-	2	285	18			
Mauritius	64	17,287	947	-	-	-	55	16,246	880			
East India Company's territories and Ceylon	168	72,895	4,021	-	-	-	193	85,260	5,832			
China	20	25,237	2,128	-	-	-	19	24,648	2,344	2	794	37
Java	2	600	38	3	1,342	73	8	1,855	108	2	802	39
Philippine Islands	7	1,942	119	-	-	-	7	2,158	115	1	147	13
Other islands of the Indian Seas	-	-	-	-	-	-	2	908	67			
New South Wales	38	12,231	696	-	-	-	89	30,494	1,979			
New Zealand and South Sea Is.	-	-	-	-	-	-	2	550	38			
British Northern colonies	1,872	504,211	23,333	-	-	-	1,872	489,233	23,570			
British West Indies	808	229,117	12,656	-	-	-	805	226,105	12,804			
Hayti	21	4,242	231	-	-	-	62	9,807	597	1	117	9
Cuba and other foreign West Indies	38	8,162	407	16	4,297	192	72	15,214	840	12	3,881	180
United States	284	93,203	4,251	452	167,359	7,141	458	147,902	6,959	471	176,771	7,761
Mexico	34	6,006	327	1	78	8	20	3,740	211	2	326	20
Guatemala	1	187	14									
Colombia	26	3,454	156	-	-	-	19	3,380	198			
Brazil	129	29,579	1,465	5	800	35	203	45,819	2,395	6	2,136	105
States of the Rio de la Plata	25	4,931	254	-	-	-	50	5,857	335	2	326	19
Chili	6	1,181	66	1	250	16	20	4,007	245			
Peru	15	2,615	150	-	-	-	4	778	51	1	357	20
The whale fisheries	106	34,900	4,143	-	-	-	116	38,240	4,797			
Islands of Guernsey, Jersey, Alderney, and Man	2,212	125,136	9,425	17	2,619	126	1,995	104,154	8,086	1	19	2
Foreign parts (the particular places cannot be specified)	-	-	-	-	-	-	11	1,697	79	15	1,868	84
Total	13,372	2,185,980	122,594	4,345	659,973	35,300	13,292	2,229,269	128,293	4,391	651,223	34,834

IV. Account of the Vessels employed in the Coasting Trade of Great Britain and Ireland in 1830, 1831, and 1832.

Years.	Coasting Trade, exclusive of the Intercourse between Great Britain and Ireland.						Coasting Trade between Great Britain and Ireland.						
	Inwards.			Outwards.			Inwards.			Outwards.			
	Ships.	*Tons.*	*Men.*	*Ships.*	*Tons.*	*Men.*	*Ships.*	*Tons.*	*Men.*	*Ships.*	*Tons.*	*Men.*	
1830	109,089	8,187,733	468,099	111,465	8,318,099	472,344	10,369	1,052,407	74,537	13,144	1,245,647	78,962	
1831	108,488	8,221,123	468,292	111,548	8,348,239	478,268	10,361	1,058,185	74,221	13,158	1,246,742	79,568	
1832	112,355	8,475,778	484,038	115,132	8,608,764	490,500	10,746	1,112,226	75,076	14,694	1,417,535	90,587	
1830	119,458	9,240,140	542,436	124,909	9,564,637	551,306	Total coasting trade of the United Kingdom.						
1831	118,849	9,279,308	542,513	124,506	9,488,981	557,796							
1832	123,081	9,588,004	559,114	129,826	10,026,297	580,187							

V. Account of the Number of Ships, with the Amount of their Tonnage, distinguishing between British and Foreign, which entered the under-mentioned Ports, from Foreign Parts, in each of the Three Years ending with 1832.—(*Papers published by Board of Trade*, vol. ii. p. 52.)

Ports.	1830.				1831.				1832.			
	British.		Foreign.		British.		Foreign.		British.		Foreign.	
	Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*
London	3,910	744,229	1,268	207,500	4,140	780,585	1,557	269,159	3,268	659,840	884	154,142
Liverpool	1,655	368,268	1,055	272,463	1,862	413,928	978	265,037	1,719	397,953	828	227,087
Bristol	357	66,479	50	7,818	404	76,837	97	12,387	240	46,871	29	4,352
Hull	906	166,263	556	51,015	989	189,388	725	73,547	819	148,701	460	43,960
Newcastle	373	58,764	329	35,346	432	68,975	323	33,402	506	80,285	261	31,804
Plymouth	275	29,205	52	6,125	375	43,286	45	6,824	286	32,183	14	2,910
Leith	227	37,268	163	16,118	283	43,216	170	17,156	228	36,279	106	9,949
Glasgow	101	9,110	4	710	92	8,702	10	1,637	78	8,123	1	51
Greenock	201	50,596	16	4,247	248	63,826	22	5,219	265	66,171	17	3,906
Cork	113	21,339	43	4,453	125	24,615	35	4,088	144	29,271	20	2,603
Belfast	153	27,970	18	4,276	120	22,519	28	5,425	145	26,947	13	2,537
Dublin	220	40,206	35	5,575	209	35,804	44	7,221	210	38,202	16	2,823

VI. An Account of the Number and Tonnage of the Vessels entering into and sailing from the Ports of Ireland in 1801, and the subsequent Years mentioned below, distinguishing between the Trade with Great Britain and that with Foreign Parts. — (*Papers published by the Board of Trade*, vol. i. p. 174.)

Years.	Trade with Great Britain.				Trade with Foreign Parts.				Total.			
	Inwards.		Outwards.		Inwards.		Outwards.		Inwards.		Outwards.	
	Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*
1801*	6,816	582,053	- -	- -	874	129,239	- -	- -	7,690	711,242		
1805	6,875	598,720	6,306	566,790	1,085	155,742	829	136,927	7,960	754,462	7,135	703,717
1809	7,011	580,587	7,041	600,898	853	115,356	696	103,212	7,864	695,943	7,737	704,110
1813	9,096	773,286	8,569	718,851	826	125,895	986	171,319	9,922	899,181	9,555	890,170
1817	10,142	845,260	9,186	770,547	748	108,752	723	116,973	10,890	954,012	9,909	887,520
1821	9,924	844,997	9,440	819,648	800	116,538	621	98,718	10,724	961,535	10,061	918,366
1825	11,542	984,754	8,922	741,182	1,116	182,660	767	136,991	12,658	1,167,414	9,689	878,173
1829	13,878	1,292,041	8,922	906,158	1,093	178,936	723	133,303	14,971	1,470,977	9,645	1,039,461
1830	13,339	1,241,501	8,455	880,965	968	166,482	690	135,248	14,307	1,407,983	9,145	1,016,213
1831	13,584	1,262,221	9,029	921,128	915	158,161	772	152,417	14,499	1,420,382	9,801	1,073,545

VII. Account of the Number of Vessels and of their Tonnage, built and registered in, and of those belonging to, the different Ports of the British Empire, from 1820 to 1832, both inclusive; specifying the Number of their Crews, and distinguishing between those of the British Islands and Possessions in Europe and those of the Colonies.

Years.	Vessels built and registered.						Vessels and their Crews belonging to the British Empire.						
	United Kingdom and Possessions in Europe.		Colonies.		Total.		United Kingdom and Possessions in Europe.		Colonies.		Total.		Crews.
	Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	
1820	655	68,142	248	16,440	883	84,582	21,969	2,439,029	3,465	209,564	25,374	2,648,593	174,514
1821	597	59,482	275	15,365	872	74,847	21,652	2,355,853	3,384	204,350	25,036	2,560,203	169,179
1822	571	51,533	209	15,611	780	64,144	21,238	2,315,403	3,401	203,641	24,642	2,519,044	166,533
1823	604	63,788	243	22,240	847	86,028	21,042	2,302,867	3,500	203,893	24,542	2,506,760	165,474
1824	857	93,219	312	50,522	1,179	143,741	21,280	2,348,314	3,496	211,273	24,776	2,559,587	168,637
1825	1,003	124,029	536	80,895	1,539	204,924	20,701	2,328,807	3,579	211,875	24,280	2,553,682	166,185
1826	1,131	119,086	588	86,554	1,719	205,640	20,968	2,411,461	3,657	224,183	24,625	2,635,644	167,636
1827	911	95,038	529	68,908	1,440	163,946	19,524	2,181,138	3,675	279,362	23,199	2,460,500	151,415
1828	857	90,069	464	50,844	1,321	140,913	19,646	2,193,300	4,449	324,891	24,095	2,518,191	155,576
1829	734	77,635	416	39,237	1,150	116,872	19,110	2,199,959	4,343	317,041	23,453	2,517,000	154,808
1830	750	77,411	367	32,719	1,117	110,130	19,174	2,201,592	4,547	330,227	23,721	2,531,819	154,812
1831	760	85,707	376	34,290	1,136	119,997	19,450	2,224,356	4,792	357,608	24,242	2,581,964	158,432
1832	759	92,915	221	25,470	980	118,385	19,664	2,261,860	4,771	356,208	24,435	2,618,068	161,734

N. B. — The falling off in the number of ships in 1827 is apparent only. The numbers returned in the previous years were those that appeared on the registers. But a ship, when once placed on them, remained till evidence was produced of her having been sold to foreigners, lost, or otherwise destroyed; so that a good many ships were at all times on the register, which, in fact, did not exist. The Registry Act passed in 1826 obliged all owners of ships to register them of new; when, of course, the names of those that had ceased to exist disappeared from the books. We have already noticed the enormous extent to which this sort of blunder was permitted to grow up in the United States. — (See *antè*, p. 845.)

VIII. An Account of the Number of Ships or Vessels belonging to the different Ports of the British Empire in 1832, stated in succession, agreeably to the Amount of Tonnage belonging to each; and specifying also the Number of the Crews. — (Obtained from the Custom-house, for this work.)

Ports.	Ships.	Tons.	Men.	Ports.	Ships.	Tons.	Men.	Ports.	Ships.	Tons.	Men.
London	2,669	565,174	32,786	Penzance	83	4,260	425	Banff	126	5,541	537
Newcastle	1,077	220,784	10,267	Padstow	80	4,187	288	Kirkwall	79	3,918	319
Liverpool	853	166,028	9,329	Rye	75	4,175	208	Lerwick	101	3,880	775
Sunderland	727	129,082	5,718	Blackney and Clay	59	4,008	258	Thurso	40	2,831	201
Whitehaven	475	69,013	3,672	Ilfracombe	61	4,002	220	Stornoway	63	2,782	269
Hull	557	68,892	4,518	Wells	67	3,889	270	Campbeltown	63	2,661	246
Bristol	296	46,567	2,460	Bridgewater	51	3,511	209	Stranraer	38	1,407	116
Yarmouth	576	43,509	3,232	Carlisle	42	3,291	190	Total Scotland	3,266	310,365	22,611
Whitby	258	41,317	2,089	Newport	43	3,281	219				
Scarborough	168	27,734	1,413	Shoreham	50	3,257	209	Belfast	255	23,151	1,526
Plymouth	356	27,524	1,668	Llanelly	66	3,198	205	Dublin	299	22,072	2,172
Dartmouth	377	26,389	1,737	Cardiff	44	2,951	179	Cork	275	18,619	1,465
Beaumaris	401	22,856	1,523	Wisbeach	47	2,923	161	Waterford	106	11,455	688
Poole	160	16,775	1,022	Chichester	66	2,852	185	Newry and Strangford	148	7,285	629
Lynn	122	16,404	741	Arundel	34	2,843	165	Londonderry	42	6,262	360
Exeter	192	16,169	912	Aldborough	49	2,713	199	Wexford	109	6,178	533
Cardigan	286	14,582	1,069	Woodbridge	56	2,608	252	Drogheda	55	2,715	194
Gloucester	225	12,209	1,025	Southwold	37	2,473	199	Limerick	47	2,607	177
Rochester	272	11,706	728	Truro	30	2,222	131	Baltimore	85	2,489	261
Ipswich	147	10,371	547	Barnstaple	37	1,980	121	Sligo	16	1,151	76
Portsmouth	183	10,057	646	Lyme	24	1,851	109	Galway	16	940	66
Bideford	117	9,658	548	Scilly	30	1,657	137	Dundalk	9	534	34
Lancaster	120	9,371	512	Bridport	15	1,552	79	Coleraine	11	292	32
Boston	174	9,138	540	Grimsby	39	1,489	116	Westport	5	97	15
Stockton	85	8,998	477	Newhaven	20	1,448	65				
Milford	134	8,932	571	Minehead	21	932	63	Total Ireland	1,456	108,128	8,228
Goole	119	8,545	472	Deal	23	601	121				
Swansea	131	8,233	545	Gweek	9	600	59	British islands,			
Southampton	174	8,061	698					Jersey	216	20,250	1,895
St. Ives	107	7,852	546	Total England	14,421	1,807,487	105,849	Guernsey	80	9,158	647
Colchester	233	7,688	952					Man	225	6,472	1,302
Faversham	218	7,555	562								
Cowes	168	7,418	703	Aberdeen	355	41,671	3,026	Total British islands	521	35,880	3,844
Weymouth	85	6,839	425	Glasgow	241	41,553	3,235				
Aberystwith	126	6,643	435	Dundee & Perth	349	37,990	2,619				
Maldon	140	6,439	412	Greenock	367	37,791	2,555				
Falmouth	81	6,213	413	Leith	246	25,629	1,942				
Fowey	89	5,930	381	Grangemouth	191	22,971	1,260	Total United Kingdom and Brit. islands	19,664	2,261,860	138,532
Harwich	95	5,726	520	Montrose	185	17,456	1,147				
Chepstow	72	5,359	347	Irvine & Ayr	133	13,918	919	British plantations	4,771	356,208	23,202
Dover	116	5,256	653	Kirkaldy	181	13,591	1,224				
Ramsgate	77	5,116	370	Dumfries	189	11,804	757				
Berwick	59	4,926	347	Borrowstoness	121	8,985	520				
Bridlington	52	4,888	224	Inverness	146	7,298	554	Grand total	24,435	2,618,068	161,734
Chester	74	4,794	268	Port Glasgow	50	6,905	374				

* No account of vessels cleared outwards was kept for this year.

IX. Account specifying the Number and Tonnage of the Ships built and registered in each Division of the British Empire in 1832; with their Classification according to the Amount of their Tonnage. — (*Papers published by Board of Trade*, vol. ii. p. 49.)

	Great Britain.		Ireland.		Isles of Guernsey Jersey, & Man.		British Plantations.		Total.	
	Ships.	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*	*Ships.*	*Tons.*
Under 50 tons -	189	5,544	15	414	11	299				
From 50 to 100 tons	200	13,868	3	208	4	306				
100 - 150 —	74	9,076	2	244	3	336				
150 - 200 —	68	11,679	2	377	- -	- -				
200 - 300 —	137	33,603	3	666	6	1,354	221	25,470	980	118,385
300 - 400 —	31	10,340	- -	- -	- -	- -				
400 - 500 —	7	3,018	- -	- -	1	440				
500 - 600 —	1	501	- -	- -	- -	- -				
Above 600 tons -	1	612	- -	- -	- -	- -				
Total -	708	88,271	25	1,909	25	2,735	221	25,470	980	118,385

Ship-building. — The cost, including the outfit, of the ships built in 1832, may, we believe, be taken, at a rough average, at from 10*l.* to 12*l.* per ton, or 11*l.* at a medium, making their total value 1,302,235*l.* London, Sunderland, Newcastle, Liverpool, Hull, Yarmouth, &c. are the principal building ports. The business has increased with extraordinary rapidity at Sunderland; so much so, that while only 60 ships, of the burden of 7,560 tons, were built in that port in 1830, no fewer than 109 ships, of the burden of 24,519 tons, were built in it in 1832. Ships built at London, Liverpool, Bristol, and other western ports, are, however, in higher estimation than those built on the Tyne and the Wear, at least for those branches of trade where the best ships are required. Within the last few years, a great many steam boats have been built on the Clyde.— (As to building in the Isle of Man, see next paragraph.)

State of the Shipping Interest. — A great deal of evidence was taken by the Committee of the House of Commons on Trade, Manufactures, &c., in 1833, on the state of the shipping interest. The statements made by some of the witnesses differ very materially from those of others; but, on the whole, they go to show that it was then, and had been for some years, very much depressed. It is difficult, however, seeing the number of new ships that are every year built, not to suspect that the complaints of the ship owners are very much exaggerated. No doubt their profits are a good deal lower than they were during the war; but this, if it be really an evil, is one that is not peculiar to them, but equally affects agriculturists, manufacturers, and merchants; and is not even confined to this country, but extends to others. We have already shown the groundlessness of the clamour raised against the reciprocity treaties (*antè*, p. 822.); which, far from being injurious, have been signally beneficial to our commercial and shipping interests. It is believed that, owing to the peculiar facilities afforded by means of docks and other devices for the loading and unloading of ships, the employment of steam tugs to bring them quickly to their moorings and to take them to sea, and the greater economy and despatch that now pervade every department of the business, 3 ships are able to perform, and do, in fact, perform, as much work as was done by 4 at the end of the war! There has, in this way, been a virtual addition of 400,000 or 500,000 tons to our mercantile navy. And this surely is enough, without looking at any thing else, to account for the decline in the rate of freight since 1815.

The fall in the value of ships has been a consequence of the still greater fall in the value of the timber, iron, hemp, &c. of which they are constructed; and, however injurious to those who happened to have bought or built ships during the high prices, it is in no ordinary degree advantageous to the public, and to the ship owners that are now engaging in the trade. The heavy discriminating duties on Baltic timber are, in fact, the only real grievance under which our shipping interest labours. Were it not for them, ships might be built cheaper in England than in any other country. Such, however, is the vast importance to a maritime nation like this of being able to build ships at the lowest possible rate, that we think they ought to be allowed to be built in bond, or, if that would be inconvenient, that a drawback should be allowed of the duty on every article used in their construction. A measure of this sort would give to the shipping of England the same superiority, in point of cheapness, that is now enjoyed by our cottons; and would do more than any thing else to consolidate and strengthen the foundations of our maritime ascendancy. It is entirely owing to the operation of the duties that so many ships are now built in the colonies. They are very inferior to those built in England; and were the latter built in bond, or were the duties on the articles used in their construction drawn back, they would also be the cheapest of the two.

It may be worth mentioning, as illustrative of the singular anomalies that have been allowed to insinuate themselves into our commercial system, that timber may be imported into the Isle of Man, or into any other British possession, without regard to its origin, on payment of an *ad valorem* duty of 10 per cent.! It is remarkable that advantage was not earlier taken of this anomaly, to build ships in the Isle of Man. Latterly, however, several vessels have been built in it; and it is clear that, unless it be placed on the same footing as the other parts of the empire, it will become the grand seat of the ship building business. We hope, however, that the equalisation will be made, not by extending our timber laws to the Isle of Man, but by giving to Britain and Ireland the same advantages as it enjoys. There cannot be a doubt that the equalisation of the timber duties would be one of the greatest improvements which it is possible to make in our commercial system.

Mercantile Navy of France. — We have elsewhere given (see *antè*, pp. 641, 642.) very full details with respect to the navigation and shipping of France; but the subjoined classified account of the shipping belonging to that kingdom on the 1st of January, 1830, 1831, and 1832, may not be unacceptable to our readers.

Account of the Mercantile Marine of France on the 1st of January of each of the Three Years ending with 1832.

Tonnage.	1830.	1831.	1832.	Tonnage.	1830.	1831.	1832.
	Ships.	*Ships.*	*Ships.*		*Ships.*	*Ships.*	*Ships.*
Ships of 800 tons and upwards	2	1	1	Ships of 100 to 200 tons	1,345	1,308	1,256
— 700 to 800 tons	6	6	6	— 60 — 100 —	1,556	1,544	1,520
— 600 — 700 —	3	2	1	— 30 — 60 —	1,101	1,086	1,071
— 500 — 600 —	14	15	15	— 30 and under	9,993	10,250	10,551
— 400 — 500 —	53	51	47				
— 300 — 400 —	201	198	196	Total - - -	14,852	15,031	15,224
— 200 — 300 —	578	570	560				

(*Archives du Commerce*, tome iv. p. 139.)

SHIPS' PAPERS, the papers or documents required for the manifestation of the property of the ship and cargo, &c. They are of 2 sorts; viz. 1st, those required by the law of a particular country — as the certificate of registry, licence, charterparty, bills of lading, bill of health, &c. — (see these titles) — required by the law of England to be

on board British ships; and, 2dly, those required by the law of nations to be on board neutral ships, to vindicate their title to that character. Mr. Serjeant Marshall, following M. Hubner (*De la Saisie des Bâtimens Neutres*, tome i. pp. 241—252.), has given the following description of the latter class of documents: —

1. *The Passport, Sea Brief, or Sea Letter.* — This is a permission from the neutral state to the captain or master of the ship, to proceed on the voyage proposed, and usually contains his name and residence; the name, property, description, tonnage, and destination of the ship; the nature and quantity of the cargo, the place whence it comes, and its destination; with such other matters as the practice of the place requires. This document is indispensably necessary for the safety of every neutral ship. Hubner says, that it is the only paper rigorously insisted on by the Barbary corsairs; by the production of which alone their friends are protected from insult.

2. *The Proofs of Property.* — These ought to show that the ship really belongs to the subjects of a neutral state. If she appear to either belligerent to have been built in the enemy's country, proof is generally required that she was purchased by the neutral before, or captured and legally condemned and sold to the neutral after, the declaration of war; and in the latter case the *bill of sale*, properly authenticated, ought to be produced. M. Hubner admits that these proofs are so essential to every neutral vessel, for the prevention of frauds, that such as sail without them have no reason to complain if they be interrupted in their voyages, and their neutrality disputed.

3. *The Muster Roll.* — This, which the French call *rôle d'équipage*, contains the names, ages, quality, place of residence, and, above all, *the place of birth*, of every person of the ship's company. This document is of great use in ascertaining a ship's neutrality. It must naturally excite a strong suspicion, if the majority of the crew be found to consist of foreigners; still more, if they be natives of the enemy's country. — (See SEAMEN.)

4. *The Charterparty.* — Where the ship is chartered, this instrument serves to authenticate many of the facts on which the truth of her neutrality must rest, and should therefore be always found on board chartered ships.

5. *The Bills of Lading.* — By these the captain acknowledges the receipt of the goods specified therein, and promises to deliver them to the consignee or his order. Of these there are usually several duplicates; one of which is kept by the captain, one by the shipper of the goods, and one transmitted to the consignee. This instrument, being only the evidence of a private transaction between the owner of the goods and the captain, does not carry with it the same degree of authenticity as the charterparty.

6. *The Invoices.* — These contain the particulars and prices of each parcel of goods, with the amount of the freight, duties, and other charges thereon, which are usually transmitted from the shippers to their factors or consignees. These invoices prove by whom the goods were shipped, and to whom consigned. They carry with them, however, but little authenticity; being easily fabricated where fraud is intended.

7. *The Log Book, or Ship's Journal.* — This contains a minute account of the ship's course, with a short history of every occurrence during the voyage. If this be faithfully kept, it will throw great light on the question of neutrality; if it be in any respect fabricated, the fraud may in general be easily detected.

8. *The Bill of Health.* — This is a certificate, properly authenticated, that the ship comes from a place where no contagious distemper prevails; and that none of the crew, at the time of her departure, were infected with any such disorder. It is generally found on board ships coming from the Levant, or from the coast of Barbary, where the plague so frequently prevails.

A ship using false or simulated papers is liable to confiscation. — (*Marshall on Insurance*, book i. c. 9. § 6.)

SHOES (Du. *Schoenen*; Fr. *Souliers*; Ger. *Schuhe*; It. *Scarpe*; Rus. *Baschmaki*; Sp. *Zapatos*), articles of clothing that are universally worn, and require no description. The shoe manufacture is of great value and importance. The finest sort of shoes is made in London; but the manufacture is carried on upon the largest scale in Northamptonshire and Staffordshire. The London warehouses derive considerable supplies from Nantwich, Congleton, and Sandbach, in Cheshire. During the late war, the contractor for shoes generally furnished about 600,000 pairs annually. — (For an estimate of the value of the shoes annually manufactured in Britain, see LEATHER.)

SHUMAC OR SUMACH (Ger. *Schmack*, *Sumach*; Fr. *Sumac*, *Roure*, *Roux*; It. *Sommaco*; Sp. *Zumaque*; Rus. *Sumak*). Common shumac (*Rhus Coriaria*) is a shrub that grows naturally in Syria, Palestine, Spain, and Portugal. That which is cultivated in Italy, and is improperly called *young fustic*, is the *Rhus Cotinus*. It is cultivated with great care: its shoots are cut down every year quite to the root; and, after being dried, they are chipped or reduced to powder by a mill, and thus prepared for the purposes of dyeing and tanning. The shumac cultivated in the neighbourhood of Montpellier is called *rédoul* or *roudou*. Shumac may be considered of good quality when its odour is strong, colour of a lively green, is well ground, and free from stalks. Italian shumac

is used in dyeing a full high yellow, approaching to the orange, upon wool or cloth; but the colour is fugitive. Common shumac is useful for drab and dove colours in calico printing, and is also capable of dyeing black. — (*Bancroft on Colours*, vol. ii. p. 100.)

The entries of shumac for home consumption amounted, at an average of 1832 and 1833, to 138,241 cwt. a year. The imports are almost entirely from Italy.

Shumac, the produce of Europe, may not be imported for home consumption except in British ships, or in ships of the country of which it is the produce, or from which it is imported, under penalty of confiscation, and forfeiture of 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54. §§ 2. and 22.)

SIERRA LEONE, an English settlement, near the mouth of the river of the same name, on the south-west coast of Africa, in lat. 8° 30′ N., lon. 13° 5′ W.

Objects of the Colony. — This colony was founded partly as a commercial establishment, but more from motives of humanity. It was intended to consist principally of free blacks, who, being instructed in the Christian religion, and in the arts of Europe, should become, as it were, a focus whence civilisation might be diffused among the surrounding tribes. About 1,200 free negroes, who, having joined the royal standard in the American war, were obliged, at the termination of that contest, to take refuge in Nova Scotia, were conveyed thither in 1792: to these were afterwards added the Maroons from Jamaica; and, since the legal abolition of the slave trade, the negroes taken in the captured vessels, and liberated by the mixed commission courts, have been carried to the colony. The total population of the colony in 1831 amounted to 31,627, of which 18,073 were males, and 13,554 females. The whites make but a very small fraction of the population.

Success of the Efforts to civilise the Blacks. — Great efforts have been made to introduce order and industrious habits amongst these persons. We are sorry, however, to be obliged to add, that these efforts, though prosecuted at an enormous expense of blood and treasure, have been signally unsuccessful. There is, no doubt, much discrepancy in the accounts as to the progress made by the blacks. It is, however, sufficiently clear, that it has been very inconsiderable, and we do not think that any other result could be rationally anticipated. Their laziness has been loudly complained of, but without reason. Men are not industrious without a motive; and most of those motives that stimulate all classes in colder climates to engage in laborious employments, are unknown to the indolent inhabitants of this burning region, where clothing is of little importance, where sufficient supplies of food may be obtained with comparatively little exertion, and where more than half the necessaries and conveniences of Europeans would be positive incumbrances. And had it been otherwise, what progress could a colony be expected to make, into which there are annually imported thousands of liberated negroes, most of whom are barbarians in the lowest stage of civilisation?

Influence of the Colony upon the illicit Slave Trade. — As a means of checking the prevalence of the illicit slave trade, the establishment of a colony at Sierra Leone has been worse than useless. That trade is principally carried on with the countries round the bight of Biafra and the bight of Benin, many hundred miles distant from Sierra Leone; and the mortality in the captured ships during their voyage to the latter is often very great. In fact, there is but one way of putting down this nefarious traffic; and that is, by the great powers declaring it to be *piracy*, and treating those engaged in it, wherever and by whomsoever they may be found, as sea robbers or pirates. Such a declaration would be quite conformable to the spirit of the declaration put forth by the Congress of Vienna in 1824. — (See Slave Trade.) And were it subscribed by England, France, the United States, Russia, &c., the Spaniards and Portuguese would be compelled to relinquish the trade; but unless something of this sort be done, we are afraid there are but slender grounds for thinking that humanity will speedily be relieved from the guilt and suffering inseparable from the traffic.

Climate of Sierra Leone. — The soil in the vicinity of Sierra Leone seems to be but of indifferent fertility, and the climate is about the most destructive that can be imagined. The mortality among the Africans sent to it seems unusually great; and amongst the whites it is quite excessive. Much as we desire the improvement of the blacks, we protest against its being attempted by sending our countrymen to certain destruction in this most pestiferous of all pestiferous places. It would seem, too, that it is quite unnecessary, and that instructed blacks may be advantageously employed to fill the official situations in the colony. But if otherwise, it ought to be unconditionally abandoned.

Commerce of Sierra Leone, and the West Coast of Africa. — Commercially considered, Sierra Leone appears to quite as little advantage as in other points of view. We import from it teak wood, camwood, ivory, palm oil, hides, gums, and a few other articles; but their value is inconsiderable, amounting to not more than from 40,000*l.* to 60,000*l.* a year. The great article of import from the coast of Africa is palm oil, and of this more than *fifty times* as much is imported from the coast to the south of the Rio Volta, several hundred miles from Sierra Leone, as from the latter. [illegible] ed,

whether the commerce with the western coast of Africa will ever be of much importance. The condition of the natives would require to be very much changed before they can become considerable consumers of European manufactures. It is singular, that speculative persons in this country should be so much bent on prosecuting, without regard to expense, a trade with barbarous uncivilised hordes, while they contribute to the neglect or oppression of the incomparably more extensive and beneficial intercourse we might carry on with the opulent and civilised nations in our immediate vicinity. The equalisation of the duties on Canadian and Baltic timber, and the abolition of the existing restraints on the trade with France, would do 10 times more to extend our commerce, than the discovery of 50 navigable rivers, and the possession of as many forts on the African coast. If, however, an establishment be really required for the advantageous prosecution of the trade to Western Africa, it is abundantly obvious that it should be placed much further to the south than Sierra Leone. The island of Fernando Po has been suggested for this purpose; but after the dear-bought experience we have already had, it is to be hoped that nothing will be done with respect to it without mature consideration.

Imports into the United Kingdom in 1829 from the Western Coast of Africa, distinguishing their Quantities and Values.

Articles imported.	Quantities imported.				Official Value of Imports.				
	Sierra Leone, the River Gambia, and the Coast between the Gambia and the Mesurada.	Windward Coast, from the River Mesurada to Cape Apollonia.	Cape Coast Castle and the Gold Coast, from Cape Apollonia to the Rio Volta.	CoastSouthward of the Rio Volta, with the Island of Fernando Po.	Sierra Leone, the River Gambia, and the Coast between the Gambia and the Mesurada.	Windward Coast, from the River Mesurada to Cape Apollonia.	Cape Coast Castle and the Gold Coast, from Cape Apollonia to the Rio Volta.	Coast Southward of the Rio Volta, with the Island of Fernando Po.	Total.
					L. s.	*L. s.*	*L. s.*	*L. s.*	*L. s.*
Coffee - - - *lbs.*	1,327	- -	- -	6,766	82 18	- -	- -	422 17	505 16
Dye and hard woods, viz. —									
Barwood - *tons, cwt. qr. lb.*	- -	- -	- -	246 15 2 13	- -	- -	- -	9,871 4	9,871 4
Camwood - *tons, cwt. qr. lb.*	103 4 1 3	- -	- -	15 18 0 19	825 14	- -	- -	127 5	952 19
Ebony - *tons, cwt. qr. lb.*	- -	- -	- -	12 4 2 20	- -	- -	- -	201 17	201 17
Red or Guinea wood - *tons, cwt. qr. lb.*	- -	- -	- -	3 1 3 15	- -	- -	- -	123 15	123 15
Elephants' teeth - *cwt. qr. lb.*	318 2 24	- -	636 3 6	1,238 2 22	1,912 5	- -	5,820 16	7,432 3	13,165 5
Grains, Guinea - - *lbs.*	9,007	- -	5,302	- -	131 7	- -	77 6	- -	208 13
Gum, copal - - - *lbs.*	12,576	- -	566	423	524 0	- -	23 11	17 12	565 4
Senegal - - *cwt. qr. lb.*	2,587 1 6	- -	- -	- -	5,498 0	- -	- -	- -	5,498 0
Hides, untanned - *cwt. qr. lb.*	3,696 2 25	- -	- -	- -	11,101 12	- -	- -	- -	11,101 12
Oil, palm - - *cwt. qr. lb.*	2,963 1 15	400 0 0	7,001 2 18	169,556 3 7	2,963 7	400 0	7,001 13	169,556 16	179,921 17
Skins, calf and kip - *cwt. qr. lb.*	827 1 21	0 3 6	- -	- -	2,606 8	2 10	- -	- -	2,608 19
Timber, viz. —									
Teak wood - *loads & feet.*	16,015 26	- -	- -	- -	10,207 15	- -	- -	- -	10,207 15
Wax, bees' - - *cwt. qr. lb.*	4,510 1 19	- -	- -	64 2 0	21,486 11	- -	- -	306 7	21,792 19
Other articles - *official value*	- -	- -	- -	- -	767 12	1 5	464 4	614 3	1,847 5
					58,107 15	403 15	11,387 12	188,674 3	258,573 6

II. Exports of British Produce and Manufactures from the United Kingdom, in 1829, to the Western Coast of Africa, distinguishing their Quantities and Values.

Articles exported.	Quantities exported.				Official Value of Exports.				
	Sierra Leone, the River, Gambia, and the Coast between the Gambia and the Mesurada.	Windward Coast, from the River Mesurada to Cape Apollonia.	Cape Coast Castle and the Gold Coast, from Cape Apollonia to the Rio Volta.	CoastSouthward of the Rio Volta, with the Island of Fernando Po.	Sierra Leone, the River Gambia, and the Coast between the Gambia and the Mesurada.	Windward Coast, from the River Mesurada to Cape Apollonia.	Cape Coast Castle and the Gold Coast, from Cape Apollonia to the Rio Volta.	Coast Southward of the Rio Volta, with the Island of Fernando Po.	Total.
					L. s.	*L. s.*	*L. s.*	*L. s.*	*L. s.*
Apparel and slops - -	- -	- -	- -	- -	7,172 14	10 0	670 2	1,333 15	9,186 11
Brass and copper - *cwt. qr. lb.*	328 2 0	10 0 0	77 2 0	242 0 7	1,637 9	45 0	360 7	1,162 10	3,205 6
Cottons, entered by the yard, *yds.*	558,187	119,484	551,908	681,361	41,501 18	8,961 6	40,049 6	51,068 9	141,581 1
Hosiery, lace, and small wares	- -	- -	- -	- -	218 15	- -	- -	- -	218 15
Glass and earthenware - -	- -	- -	- -	- -	878 11	13 15	139 7	931 0	1,962 14
Guns and pistols - - *No.*	21,151	2,960	14,585	37,955	15,783 5	2,220 0	10,938 15	28,466 5	57,408 5
Gunpowder - - - *lbs.*	357,604	25,000	230,400	1,549,350	10,802 12	755 4	6,960 0	46,803 5	65,321 2
Hardware and cutlery, *cwt. qr. lb.*	420 0 0	2 0 0	43 2 0	1,194 2 20	1,157 1	5 10	119 12	3,285 7	4,567 11
Iron, wrought and unwrought *tons, cwt. qr. lb.*	527 18 0 17	20 0 0 0	151 8 2 6	1,157 12 0 0	8,647 16	210 0	2,220 3	11,684 15	22,762 14
Lead and shot - *tons, cwt. qr. lb.*	8 3 2 0	4 7 0 0	35 3 0 0	4 6 2 0	85 16	47 13	569 1	45 8	548 0
Leather, wrought & unwrought	- -	- -	- -	- -	772 19	- -	174 3	- -	947 3
Linens - - - *yards*	36,502	- -	3,818	1,853	1,736 17	- -	178 0	79 10	1,994 7
Salt - - - *bushels*	38,440	- -	- -	141,700	1,279 16	- -		4,723 6	6,003 3
Soap and candles - *cwt. qr. lb.*	500 3 21	- -	20 2 26	270 0 16	1,795 16	- -	69 4	810 8	2,675 9
Stationery of all sorts - -	- -	- -	- -	- -	958 9	- -	44 10	- -	1,002 19
Sugar, refined - *cwt. qr. lb.*	199 1 2	- -	14 3 22	261 3 3	590 11	- -	41 2	478 14	1,110 7
Swords and cutlasses - *No.*	16,193	- -	400	12,162	4,048 5	- -	100 0	3,040 10	7,188 15
Wood, viz. —									
Staves and casks - *packs*	170	200	1,285	10,747	113 6	50 0	756 13	7,164 13	8,084 13
Woollens, entered by the piece - *pieces*	196	3	228	40	934 3	13 10	435 0	180 0	1,552 13
by the yard, *yards*	800	- -	80	650	53 10	- -	5 0	48 15	107 5
Hosiery and small wares -	- -	- -	- -	- -	161 19	3 0	66 6	1,323 10	1,554 15
All other articles - -	- -	- -	- -	- -	7,560 19	133 4	2,095 2	1,588 7	11,377 13
					107,882 13	12,468 3	65,791 18	164,218 11	350,361 7

Exclusive of the above, we exported, in 1829, to the western coast of Africa, 161,431*l.* worth of foreign and colonial merchandise: of this amount, 43,550*l.* worth went to the coast sou

Expenses incurred on account of Sierra Leone. — The pecuniary expense occasioned by this colony, and our unsuccessful efforts to suppress the foreign slave trade, have been altogether enormous. Mr. Keith Douglas is reported to have stated, in his place in the House of Commons, in July, 1831, that "down to the year 1824, the *civil* expenses of Sierra Leone amounted to 2,268,000*l.*; and that the same expenses had amounted, from 1824 to 1830, to 1,082,000*l.* The naval expenses, from 1807 to 1824, had been 1,630,000*l.* The payments to Spain and Portugal, to induce them to relinquish the slave trade, amounted to 1,230,000*l.* The expenses on account of captured slaves were 533,092*l.* The expenses incurred on account of the mixed commission courts were 198,000*l.* Altogether, this establishment had cost the country nearly 8,000,000*l.*!"

The prodigality of this expenditure is unmatched, except by its uselessness. It is doubtful whether it has prevented a single African from being dragged into slavery, or conferred the smallest real advantage on Africa. The kings of Spain and Portugal have certainly turned their spurious humanity to pretty good account. We hope there is now, at least, an end of all attempts to bribe such monarchs to respect the rights of humanity, or the treaties into which they have entered.

For further details with respect to Sierra Leone, and the trade of Western Africa, see the *Report of the Select Committee of the House of Commons*, No. 661. Sess. 1830.

SILK (Lat. *Sericum*, from *Seres*, the supposed ancient name of the Chinese), a fine glossy thread or filament spun by various species of caterpillars or larvæ of the *phalæna* genus. Of these, the *Phalæna atlas* produces the greatest quantity: but the *Phalæna bombyx* is that commonly employed for this purpose in Europe. The silkworm, in its caterpillar state, which may be considered as the first stage of its existence, after acquiring its full growth (about 3 inches in length), proceeds to enclose itself in an oval-shaped ball, or cocoon, which is formed by an exceedingly slender and long filament of fine yellow silk, emitted from the stomach of the insect preparatory to its assuming the shape of the chrysalis or moth. In this latter stage, after emancipating itself from its silken prison, it seeks its mate, which has undergone a similar transformation; and in 2 or 3 days afterwards, the female having deposited her eggs (from 300 to 500 in number), both insects terminate their existence. According to Reaumur, the *phalæna* is not the only insect that affords this material, — several species of the *aranea*, or spider, enclose their eggs in very fine silk.

Raw Silk is produced by the operation of winding off, at the same time, several of the balls or cocoons (which are immersed in hot water, to soften the natural gum on the filament) on a common reel, thereby forming one smooth even thread. When the skein is dry, it is taken from the reel and made up into hanks; but before it is fit for weaving, and in order to enable it to undergo the process of dyeing, without furring up or separating the fibres, it is converted into one of three forms; viz. *singles*, *tram*, or *organzine*.

Singles (a collective noun) is formed of *one* of the reeled threads, being twisted, in order to give it strength and firmness.

Tram is formed of 2 or more threads twisted together. In this state it is commonly used in weaving, as the *shoot* or *weft*.

Thrown Silk is formed of 2, 3, or more singles, according to the substance required, being twisted together in a *contrary* direction to that in which the singles of which it is composed are twisted. This process is termed organzining; and the silk so twisted, *organzine*. The art of throwing was originally confined to Italy, where it was kept a secret for a long period. Stow says it was known in this country since the 5th of Queen Elizabeth, "when it was gained from the strangers;" and in that year (1562), the silk throwsters of the metropolis were united into a fellowship. They were incorporated in the year 1629; but the art continued to be very imperfect in England until 1719. — (See *post.*)

1. *Historical Sketch of the Manufacture.* — The art of rearing silkworms, of unravelling the threads spun by them, and manufacturing the latter into articles of dress and ornament, seems to have been first practised by the Chinese. Virgil is the earliest of the Roman writers who has been supposed to allude to the production of silk in China, and the terms he employs show how little was then known at Rome as to the real nature of the article: —

Velleraque ut follis depectant tenula Seres. — (*Georg.* book ii. lin. 121.)

But it may be doubted whether Virgil do not, in this line, refer to cotton rather than silk. Pliny, however, has distinctly described the formation of silk by the *bombyx*. — (*Hist. Nat.* lib. xi. c. 17.) It is uncertain when it first began to be introduced at Rome: but it was most probably in the age of Pompey and Julius Cæsar; the latter of whom displayed a profusion of silks in some of the magnificent theatrical spectacles with which he sought at once to conciliate and amuse the people. Owing principally, no doubt, to the great dis-

tance of China from Rome, and to the difficulties in the way of the intercourse with that country, which was carried on by land in caravans whose route lay through the Persian empire, and partly, perhaps, to the high price of silk in China, its cost, when it arrived at Rome, was very great; so much so, that a given weight of silk was sometimes sold for an equal weight of gold! At first it was only used by a few ladies eminent for their rank and opulence. In the beginning of the reign of Tiberius, a law was passed, *ne vestis serica viros fœdaret* — that no man should disgrace himself by wearing a silken garment. — (*Tacit. Annal.* lib. ii. c. 33.) But the profligate Heliogabalus despised this law, and was the first of the Roman emperors who wore a dress composed wholly of silk (*holosericum*). The example once set, the custom of wearing silk soon became general among the wealthy citizens of Rome, and throughout the provinces. According as the demand for the article increased, efforts were made to import larger quantities; and the price seems to have progressively declined from the reign of Aurelian. That this must have been the case, is obvious from the statement of Ammianus Marcellinus, that silk was, in his time (anno 370), very generally worn, even by the lowest classes. *Sericum ad usum antehac nobilium, nunc etiam infimorum sine ulla discretione proficiens.* — (Lib. xviii. c. 6.)

China continued to draw considerable sums from the Roman empire in return for silk, now become indispensable to the Western World, till the 6th century. About the year 550, two Persian monks, who had long resided in China, and made themselves acquainted with the mode of rearing the silkworm, encouraged by the gifts and promises of Justinian, succeeded in carrying the eggs of the insect to Constantinople. Under their direction they were hatched and fed; they lived and laboured in a foreign climate; a sufficient number of butterflies was saved to propagate the race, and mulberry trees were planted to afford nourishment to the rising generations. A new and important branch of industry was thus established in Europe. Experience and reflection gradually corrected the errors of a new attempt; and the Sogdoite ambassadors acknowledged, in the succeeding reign, that the Romans were not inferior to the natives of China in the education of the insects, and the manufacture of silk. — (*Gibbon, Decline and Fall*, vol. vii. p. 99.)

Greece, particularly the Peloponnesus, was early distinguished by the rearing of silkworms, and by the skill and success with which the inhabitants of Thebes, Corinth, and Argos carried on the manufacture. Until the 12th century, Greece continued to be the only European country in which these arts were practised: but the forces of Roger, king of Sicily, having, in 1147, sacked Corinth, Athens, and Thebes, carried off large numbers of the inhabitants to Palermo; who introduced the culture of the worm, and the manufacture of silk, into Sicily. From this island the arts spread into Italy; and Venice, Milan, Florence, Lucca, &c. were soon after distinguished for their success in raising silkworms, and for the extent and beauty of their manufactures of silk. — (*Gibbon*, vol. x. p. 110.; *Biographie Universelle*, art. *Roger II.*)

The silk manufacture was introduced into France in 1480; Louis XI. having invited workmen from Italy, who established themselves at Tours. The manufacture was not begun at Lyons till about 1520; when Francis I., having got possession of Milan, prevailed on some artisans of the latter city to establish themselves, under his protection, in the former. Nearly at the same period the rearing of silkworms began to be successfully prosecuted in Provence, and other provinces of the south of France. Henry IV. rewarded such of the early manufacturers as had supported and pursued the trade for 12 years, with patents of nobility.

Silk Manufacture of England. — The manufacture seems to have been introduced into England in the 15th century. Silk had, however, been used by persons of distinction two centuries previously. The manufacture does not appear to have made much progress till the age of Elizabeth; the tranquillity of whose long reign, and the influx of Flemings occasioned by the disturbances in the Low Countries, gave a powerful stimulus to the manufactures of England. The silk throwsters of the metropolis were united, as already observed, in a fellowship, in 1562; and were incorporated in 1629. Though retarded by the civil wars, the manufacture continued gradually to advance; and so flourishing had it become, that it is stated in a preamble to a statute passed in 1666 (13 & 14 Cha. 2. c. 15.), that there were at that time no fewer than 40,000 individuals engaged in the trade! And it is of importance to observe, that though the importation of French and other foreign silks was occasionally prohibited during the reigns of James I. and Charles I., the Protectorate, and the reign of Charles II., the prohibition was not strictly enforced; and, generally speaking, their importation was quite free.

A considerable stimulus, though not nearly so great as has been commonly supposed, was given to the English silk manufacture by the revocation of the edict of Nantes, in 1685. Louis XIV. drove, by that disgraceful measure, several hundreds of thousands of his most industrious subjects to seek an asylum in foreign countries; of whom it is supposed about 50,000 came to England. Such of these refugees as had been engaged

in the silk manufacture established themselves in Spitalfields, where they introduced several new branches of the art. When the refugees fled to England, foreign silks were freely admitted; and it appears from the Custom-house returns, that from 600,000*l.* to 700,000*l.* worth were annually imported in the period from 1685 to 1692, being the very period during which the British silk manufacture made the most rapid advances. But the manufacture was not long permitted to continue on this footing. In 1692, the refugees, who seem to have been quite as conversant with the arts of monopoly as with those either of spinning or weaving, obtained a patent, giving them an exclusive right to manufacture lustrings and *à-la-modes*, — the silks then in greatest demand. This, however, was not enough to satisfy them; for, in 1697, Parliament passed an act, in compliance with their solicitations, prohibiting the importation of all French and other European silk goods; and, in 1701, the prohibition was extended to the silk goods of India and China.

These facts show the utter fallacy of the opinion so generally entertained, that we owe the introduction and establishment of the silk manufacture to the prohibitive system. So far from this being the case, it is proved, by statements in numerous acts of parliament, and other authentic documents, that the silk manufacture had overcome all the difficulties incident to its first establishment, had been firmly rooted, and had become of great value and importance, long before it was subjected to the trammels of monopoly; that is, before the manufacturers were taught to trust more to fiscal regulations, and the exertions of Custom-house officers, than to their skill and ingenuity, for the sale of their goods.

The year 1719 is an important epoch in the history of the British silk manufacture; a patent being then granted to Mr. (afterwards Sir Thomas) Lombe and his brother, for the exclusive property of the famous silk mill erected by them at Derby, for throwing silk, from models they had clandestinely obtained in Italy. At the expiration of the patent, Parliament refused the prayer of a petition of Sir Thomas Lombe for its renewal; but granted him 14,000*l.* in consideration of the services he had rendered the country, in erecting a machine which, it was supposed, would very soon enable us to dispense wholly with the supplies of thrown silk we had previously been in the habit of importing from Italy: but instead of being of any advantage, it is most certainly true that the establishment of throwing mills in England has proved one of the most formidable obstacles to the extension of the manufacture amongst us. These mills could not have been constructed unless oppressive duties had been laid on thrown or organzine silk; and the circumstance of their having been erected, and a large amount of capital vested in them, was successfully urged, for more than a century, as a conclusive reason for continuing the high duties!

From this period down to 1824, the history of the silk manufacture presents little more than complaints, on the part of the manufacturers, of the importation of foreign silks; impotent efforts on the part of parliament to exclude them; and combinations and outrages on the part of the workmen. Of the multitude of acts that have been passed in reference to this manufacture, from 1697 to the era of Mr. Huskisson, we believe it would be exceedingly difficult to point out one that is bottomed on any thing like a sound principle, or that was productive of any but mischievous consequences. The French writers estimate the average exportation of silks from France to England, during the period from 1688 to 1741, at about 12,500,000 francs, or 500,000*l.* a year! In 1763, attempts were made to check the prevalence of smuggling; and the silk mercers of the metropolis, to show their anxiety to forward the scheme, are said to have recalled their orders for foreign goods! It would seem, however, either that their patriotic ardour had very soon cooled, or that they had been supplanted by others not quite so scrupulous; for it appears from a report of a committee of the privy council, appointed, in 1766, to inquire into the subject, that smuggling was then carried on to a greater extent than ever, and that 7,072 looms were out of employment. The same committee reported, that though the French were decidedly superior to us in some branches of the trade, we were quite equal, and even superior to them in others; but instead of proposing, consistently with their report, to admit French silks on a reasonable duty, — a measure which would have proved very advantageous to those branches of the manufacture in which we were superior, or nearly equal, to the French, without doing any material injury to the others, which were already in the most depressed condition, — they recommended the continuance of the old system; substituting absolute prohibitions in the place of the prohibitory duties that formerly existed! Whatever immediate advantages the manufacturers might have reaped from this measure, the ultimate tendency of which could not fail of being most injurious, were effectually countervailed by the turbulent proceedings of the workmen, who succeeded, in 1773, in obtaining from the legislature an act which, by itself, was quite sufficient to have destroyed even a prosperous trade. This, which has been commonly called the Spitalfields Act, entitled the weavers of Middlesex to demand a fixed price for their labour, which should be settled by the magistrates; and while both masters and men

were restricted from giving or receiving more or less than the fixed price, the manufacturers were liable in heavy penalties if they employed weavers out of the district! The monopoly which the manufacturers had hitherto enjoyed, though incomplete, had had sufficient influence to render inventions and discoveries of comparatively rare occurrence in the silk trade; but the Spitalfields Act extinguished every germ of improvement. Parliament, in its wisdom, having seen fit to enact that a manufacturer should be obliged to pay as much for work done by the best machinery as if it were done by hand, it would have been folly to have thought of attempting any thing new! It is not, however, to be denied that Macclesfield, Manchester, Norwich, Paisley, &c. are under obligations to this act. Had it extended to the whole kingdom, it would have totally extirpated the manufacture; but being confined to Middlesex, it gradually drove the most valuable branches from Spitalfields to places where the rate of wages was determined by the competition of the parties, on the principle of mutual interest and compromised advantage. After having done incalculable mischief, the act was repealed in 1824. Had it continued down to the present day, it would not have left employment in the metropolis for a single silk weaver.

But, as the effects of this act did not immediately manifest themselves, it was at first exceedingly popular. About 1785, however, the substitution of cottons in the place of silk gave a severe check to the manufacture, and the weavers then began to discover the real nature of the Spitalfields Act. Being interdicted from working at reduced wages, they were totally thrown out of employment; so that, in 1793, upwards of 4,000 Spitalfields looms were quite idle. In 1798, the trade began to revive; and continued to extend slowly till 1815 and 1816, when the Spitalfields weavers were again involved in sufferings far more extensive and severe than at any former period.

It appears from this brief sketch of the progress of the English silk trade, that from the year 1695, down to our own times, it has been exposed to the most appalling vicissitudes. The reason is obvious. The monopoly enjoyed by the manufacturers, and the Spitalfields Act, effectually put a stop to all improvement; so that the manufacture continued stationary in England, while on the Continent it was rapidly advancing. Whenever, therefore, the markets were, either from the miscalculation of the manufacturers, or a change of fashion, overloaded with silks, there were no means of disposing of the surplus profitably abroad, and the distress became extreme. Notwithstanding the unparalleled advances we had made in other departments of manufacturing industry, it was affirmed, in 1826, by the member for Coventry (Mr. Ellice), in his place in the House of Commons, "that there were in that city 9,700 looms; 7,500 of which were in the hands of operative weavers, who applied their manual labour, as well as their machinery, to the manufacture of ribands. These looms were, for the most part, of the *worst possible construction;* and it would scarcely be believed that the improved loom in France would, in a given time, produce 5 times as much riband as the common loom in England with the same manual labour! He could also state that there existed an improved manufacture in Germany, by which one man could make *forty-eight times as much velvet as could be made in an equal time by an English machine.* What chance was there that the English manufacturer could maintain such a competition?"

Perhaps these statements may be somewhat exaggerated; but there can be no doubt that they are substantially well founded. Surely, however, no one believes that the inferiority of the machinery used by the English manufacturers is to be ascribed to any thing except that the protection they enjoyed had made them indifferent to improvements. No one believes that the French or Germans are superior to the English in the construction of machines; on the contrary, their inferiority is admitted by themselves, and by every body else. That that spirit of invention, which has effected such astonishing results in the cotton manufacture, should have been wholly unknown in that of silk, is entirely to be ascribed to the fact of the former never having been the object of legislative protection. The cotton manufacturers were not bribed into the adoption of a routine system; they could not rest satisfied with mediocrity; but being compelled to put forth all their powers—to avail themselves of every resource of science and of art—they have, in a few years, raised the British cotton manufacture from a subordinate and trifling, to the very first place amongst the manufactures, not of this country only, but of the world!

Change, in 1826, *of the Monopoly System.* — At length, however, the impolicy of the system by which the silk manufacture had been so long depressed, became obvious to every intelligent individual. The principal manufacturers in and about London subscribed, in 1824, a petition to the House of Commons, in which they stated that "this important manufacture, though recently considerably extended, is still depressed below its natural level, by laws which prevent it from attaining that degree of prosperity which, under more favourable circumstances, it would acquire." Fortified by this authority, by the experience of 130 years, during which the prohibitive system had been allowed to paralyse the energies of the manufacturers, and by the sanction of parliamentary

committees, Mr. Huskisson moved, on the 8th of March, 1824, that the prohibition of foreign silks should cease on the 5th of July, 1826, and that they should then be admitted for importation on payment of a duty of 30 per cent. *ad valorem*. On this occasion Mr. H. observed — "The monopoly had produced, what monopoly was always sure to produce, an indifference with regard to improvement. That useful zeal which gives life to industry, which fosters ingenuity, and which in manufactures occasions unceasing efforts to produce the article in the most economical form, had been comparatively extinguished. *To the prohibitive system it was to be ascribed, that in silk only, in the whole range of manufactures, we were left behind our neighbours!* We have here a proof of that chilling and benumbing effect which is sure to be produced when no genius is called into action, and when we are rendered indifferent to exertion by the indolent security derived from restrictive regulations. I have not the slightest doubt, that if the same system had been continued with respect to the cotton manufacture, it would have been at this moment as subordinate in amount to the woollen as it is junior in its introduction into the country." — (*Speeches*, vol. ii. p. 249.)

We have already alluded to the enormous duties imposed, in 1719, when Sir Thomas Lombe erected his throwing mill at Derby, on foreign organzine silk. These, though subsequently reduced, amounted, in 1824, to no less than 14*s*. 7½*d*. per lb.! There was also, at the same time, a duty of 4*s*. per lb. on raw silk imported from Bengal, and of 5*s*. 7½*d*. per lb. on that imported from other places. Even had the manufacture been otherwise in a flourishing condition, such exorbitant duties on the raw material were enough to have destroyed it. Mr. Huskisson, therefore, proposed, by way of preparing the manufacturers for the approaching change of system, that the duty on foreign thrown silk should be immediately reduced to 7*s*. 6*d*. (it was further reduced to 5*s*. in 1826), and the duty on raw silk to 3*d*. per lb. These proposals were all agreed to; and considerable reductions were at the same time effected in the duties charged on most of the dye stuffs used in the manufacture.

It is to be regretted that Mr. Huskisson did not propose that the reduction of the duties on raw and thrown silk, and the legalised importation of foreign silks, should be simultaneous and immediate. During the interval that was allowed our manufacturers to make preparations for the change, the French had been accumulating a large stock of goods to pour into our markets. To quiet the alarm occasioned by this circumstance, a singular device was fallen upon. — The French had long been accustomed to manufacture their goods of a certain length: and, in the view of rendering their accumulated stock unfit for our markets, a law was passed in 1826, prohibiting the importation of any silks except such as were of entirely different lengths from those commonly manufactured by the French! No one can regret that this wretched trick, for it deserves no better name, entirely failed of its object. The French manufacturers immediately commenced, with redoubled zeal, the preparation of goods of the legitimate length: and the others, having become unsaleable at any thing like fair prices, were purchased up by the smugglers, and imported, almost entirely, into this country.

But no permanent injury arose from this circumstance; and, on the whole, the effect of the opening of the trade has been such as to justify all the anticipations which the advocates of the measure had formed of its success.

Effects of the Change of 1826. — We do not exaggerate, we only state the plain matter of fact, when we affirm that the silk manufacture has made a more rapid progress during the last 8 years, or since the abolition of the prohibitive system in 1826, than it did during the preceding century. So unprecedented has been its advance, that "the once existing disparity in quality between goods of French and English make has, with some very unimportant exceptions, not merely disappeared, but actually ranged itself on the side of the British artisan." Some of our readers will, probably, be not a little surprised to learn, that the real or declared value of the silk goods of British manufacture exported to France, in 1832, amounted to 75,187*l*.

Most of the machines and processes known on the Continent have been introduced amongst us, and many of them have been materially improved. Nor, after what has taken place, can the least doubt remain in the mind of any one, that had the same freedom been given to the silk manufacture 50 years ago, that was given to it in 1826, it would now have ranked among the most important and valuable businesses in the kingdom, and would have had nothing whatever to fear from the admission of foreign silks, free of duty. It is the opinion of the most intelligent persons in the trade, that the existing duty of 30 per cent. on foreign silks ought to be reduced to 20 per cent.; and that it should be further reduced 1 per cent. per annum till it be brought to 12 or 15 per cent., at which it might be allowed to continue stationary, not as a protecting duty, but as a duty imposed for the sake of revenue. A measure of this sort, by increasing *fair* competition, would continue the impulse already given to the manufacture, and excite to new efforts of invention. Under such a system, we are well assured that, in a very few years, perhaps not more than 5 or 6, our superiority over France in

some important departments of the silk manufacture would be little less decided than in that of cotton.

"I maintain," said Mr. Poulett Thomson, in his excellent speech on the state of the silk trade (14th of April, 1829), — a speech equally distinguished for soundness of principle and beauty of illustration, — "I maintain, without fear of contradiction, that the very essence of commercial and manufacturing industry is freedom from legislative interference and legislative protection. Attempt to assist its course by legislative enactments, by fostering care, you arrest its progress, you destroy its vigour. Unbind the shackles in which your unwise tenderness has confined it — permit it to take unrestrained its own course — expose it to the wholesome breezes of competition, — you give it new life, you restore its former vigour. Industry has been well likened to the hardy Alpine plant; self-sown on the mountain side, exposed to the inclemency of the season, it gathers strength in its struggles for existence — it shoots forth in vigour and in beauty. Transplanted to the rich soil of the parterre, tended by the fostering hand of the gardener, nursed in the artificial atmosphere of the forcing-glass, it grows sickly and enervated, its shoots are vigourless, its flowers inodorous. In one single word lies the soul of industry — competition. The answer of the statesman and the economist to his sovereign inquiring what he could do to assist the industry of his kingdom was, 'Let it take its own way.' Such is my prayer. Relieve us from the chains in which your indiscreet tenderness has shackled us; remove your oppressive protection; give us the fair field we ask; and we demand no more. The talent, the genius, the enterprise, the capital, the industry of this great people will do the rest; and England will not only retain her present position, but she will take a yet more forward place in the race of competition for wealth and improvement which, by the nature of things, she is destined to run amongst the nations of the world. Place us in that condition, not by any violent change, but by slow and easy transition. Here we shall find security for our enterprise, and reward for our labours.

"'Hic patet ingeniis campus; certusque merenti
Stat favor; ornatur propriis industria donis.'"

It was not, however, to be supposed, that all departments of the silk manufacture would be equally benefited by the change of system that has taken place. — *Non omnia possumus.* The probability is, that the trade will in future be divided between the English and French. In point of substantial excellence, the plain silk goods manufactured in England are superior to those of France; and the difference in favour of the latter in point of *finish* is every day becoming less perceptible; while in all mixed manufactures, of silk and wool, silk and cotton, silk and linen, &c., our ascendancy is admitted by the French themselves. On the other hand, the ribands, figured gauzes, and light fancy goods, manufactured in France, are superior to those of this country. Even in this department we have made a very great progress; and fancy goods are now produced at Spitalfields, Coventry, and other places, contrasting most advantageously, in point of taste and beauty, with those produced previously to the introduction of the new system. Still, however, we are not sanguine in our expectations of our countrymen being able to maintain a successful competition with our neighbours in the manufacture of this class of articles. The greater attention paid to the art of designing in Lyons, the consequent better taste of the artists, and the superior brightness and lustre of their colours, give them advantages with which it will be very difficult to contend.

But, supposing that the trade is partitioned between the two countries in the way now stated, it is easy to see that the best share will belong to us, and that that share will be incomparably more valuable than the whole manufacture formerly was. The proofs of the accuracy of this statement are at hand. Notwithstanding the decline of the trade at Coventry and a few other places, the manufacture, taken as a whole, is rapidly increasing. During 1822 and 1823, when the restrictive system was in its vigour, the entries for consumption of all sorts of raw and thrown silk amounted at an average to 2,454,842 lbs. a year. But, in despite of all the sinister predictions indulged in with respect to the ruin of the manufacture, the entries amounted, at an average of 1832 and 1833, to 4,565,850 lbs.; being an increase of nearly 100 per cent. upon the quantity entered during the monopoly!

The increase in the exports of wrought silks affords, if possible, a still more decisive proof of the extraordinary improvement and extension of the manufacture. Instead of having any thing to fear from the competition of the French at home, we are actually underselling them in the heavier and more important species of goods, in every foreign market equally accessible to both parties. The exports of silks from France have been declining, while those from England have been increasing beyond all precedent. The declared value of our exports of silk goods, in 1823, amounted to 351,409*l.*, whereas in 1833 it amounted to 740,294*l.*, being *an advance of more than cent. per cent.!* Not only, therefore, are the statements as to the ruin of the silk manufacture proved to be wholly without even the shadow of a foundation, but the expectations of those who contended

that the repeal of the restrictive system would be the commencement of a new era of invention and improvement, have been realised to the fullest extent.

What has now been stated renders it obvious, that though the manufacturers of fancy goods may be obliged to change their employment, a new, and at the same time a more extensive and fruitful, field is opened for their exertions. We lament the hardships incident to the transition even from one department of the same business to another, but the suffering thence arising will speedily disappear; and when the change has been effected, the manufacturers will enter with fresh vigour on a new career of prosperity.

It is to be regretted, that it is not possible either to abandon a routine system, or to introduce new and improved methods of production, without injury to individuals. But because such is the fact — because the bridge cannot be built without displacing watermen, nor the plough introduced without superseding the spade, nor wine brought from abroad without diminishing the demand for ale and beer — is that any reason for proscribing inventions, and denying ourselves gratifications within our reach? To maintain the affirmative, would be evidently absurd, — it would be equivalent to maintaining that the interests of society are best promoted by perpetuating poverty, ignorance, and barbarism! The injury occasioned by the adoption of an improved method of production, or the opening of new markets whence cheaper supplies of any article may be obtained, is temporary only, and affects but a very small portion of the community; while the advantage is permanent, and benefits every individual, even those whom it may, in the first instance, have forced to resort to other businesses.

Those unacquainted with the history of the silk trade, who may have looked into the pamphlets and speeches of those opposed to the late alterations, will probably be disposed to think that, though more limited in point of numbers, the condition of the workmen engaged in the trade was better previously to 1825 than it has been since. But those who have looked, however cursorily, into the history of the trade, must know that such is not the fact; and that, speaking generally, the situation of those engaged in it has been materially improved since 1825. We have already adverted to the state of the trade in 1793 and 1816. At the last mentioned period, 7 years before any relaxation of the monopoly had been so much as thought of, the distress in the silk trade was infinitely more severe than it has ever been since the introduction of the new system. In proof of this, we may mention that, at a public meeting held for the relief of the Spitalfields weavers, at the Mansion-house, on the 26th of November, 1816, the secretary stated, that *two thirds* of them were without employment, and without the means of support; "that some had deserted their houses in despair, unable to endure the sight of their starving families; and many pined under languishing diseases brought on by the want of food and clothing." And Mr. Fowell Buxton, M.P., stated, at the same meeting, that the distress among the silk manufacturers was so intense, that "*it partook of the nature of a pestilence*, which spreads its contagion around, and devastates an entire district." Such was the state of the workmen under that monopoly system that has been the worthless theme of so much recent eulogy. But such, we are glad to say, is not their state at present. The trade, being now mostly diverted into those branches in which we have a superiority, is comparatively secure against revulsions; and it would be an absurdity to imagine, that measures that have about doubled the manufacture, should have reduced the rate of wages, or been otherwise than advantageous to the workmen.

We have already noticed the smuggling of foreign silks carried on in the early part and towards the middle of last century. The evil was not afterwards abated. The vigilance of the Custom-house officer was no match for the ingenuity of the smuggler; and at the very moment when the most strenuous efforts were made to exclude them, the silks of France and Hindostan were openly displayed in the drawing-rooms of St. James's, and in the House of Commons, in mockery of the impotent legislation which sought to exclude them. We doubt, indeed, whether the substitution of the *ad valorem* duty of 30 per cent., in place of the old system of prohibition, has been productive of any materially increased importation of foreign silks. "I have lately," said Mr. Huskisson, in his famous speech in vindication of his policy as to the silk trade, "taken some pains to ascertain the quantity of smuggled silks that has been seized inland throughout the kingdom during the last 10 years; and I find that the whole does not exceed 5,000*l.* a year. I have endeavoured, on the other hand, to get an account of the quantity of silk goods actually smuggled into this country. Any estimate of this quantity must be very vague; but I have been given to understand that the value of such goods as are regularly entered at the Custom-houses of France, for exportation to this country, is from 100,000*l.* to 150,000*l.* a year; and this, of course, is exclusive of the *far greater supply* which is poured in throughout all the channels of smuggling, without being subjected to any entry. In fact, to such an extent is this illicit trade carried, that there is scarcely a haberdasher's shop in the smallest village of the United Kingdom, in which prohibited silks are not sold; and that in the face of day, and to a very considerable extent.

"The honourable member for Coventry (Mr. Ellice) has mentioned the silk goods from India as those against which any thing but prohibition would prove an unavailing protection. Now, in my opinion, it is scarcely possible to conceive a stronger case than those very silks furnish against the honourable member's own argument. I believe it is universally known that a large quantity of Bandana handkerchiefs are sold every year, for exportation, by the East India Company. But does any gentleman suppose that these Bandanas are sent to the Continent for the purpose of remaining there? No such thing! They are sold at the Company's sales, to the number of about 800,000 or 1,000,000 a year, at about 4*s.* each; they are immediately shipped off for Hamburgh, Antwerp, Rotterdam, Ostend, or Guernsey, and from thence they nearly all illicitly find their way back to to this country.

"Mark, then, the effect of this beautiful system. — These Bandanas, which had previously been sold for exportation at 4*s.*, are finally distributed in retail to the people of England at about 8*s.* each; and the result of this prohibition is to levy upon the consumer a tax, and to give those who live by evading your law a bounty of 4*s.*, upon each handkerchief sold in this country!" — (*Speeches*, vol. ii. p. 510.)

Indeed, one of the principal objections to the present duty of 30 per cent. on foreign silks is, that it is high enough to enable a considerable smuggling trade to be still carried on; the facility for smuggling being increased by means of the legalised importation. A duty of 12 or 15 per cent. would not, however, be so high as to balance the risks run in smuggling; and would, therefore, really afford the manufacturer a more efficient protection than he derives from the existing duty, at the same time that it would place all classes of dealers on the same footing; whereas the advantage is at present on *the side of those who engage in fraudulent schemes.*

Regulations as to the Importation of Silks. — Silk manufactures are not to be imported in any vessel under 70 tons burden, except by licence from the commissioners of the customs to vessels belonging to Dover, to import such manufactures direct from Calais, though such vessels may not exceed 60 tons burden. Silk goods, the manufacture of Europe, not to be imported except into the port of London or the port of Dublin direct from Bordeaux, or the port of Dover direct from Calais. — (3 & 4 *Will.* 4. c. 52. § 58.; *antè*, p. 663.)

When the shoot or the warp only is of silk, the article is to be considered as composed of *not more* than one half part of silk, and subject to the *ad valorem* duty of 30 per cent.; but if the shoot or the warp be entirely of silk, and a portion of the other be of silk also, the article is to be considered to be composed of mode than one half part of silk, and subject to the rated duties at per lb., or to the *ad valorem* duties, at the option of the officers. — (*Min. Com. Cus.* 14th of August, 1829.) But in all cases where the duties charged by weight upon mixed articles would manifestly exceed 30 per cent., by reason of the weight of the wool, or other ingredient thereof besides silk, the article is to be admitted to entry at value. — (*Min. Com. Cus.* 19th of December, 1831.)

For the regulations as to the smuggling of silks, see SMUGGLING.

I. Account, illustrative of the Progress of the Silk Manufacture, showing the Quantities of Raw, Waste, and Thrown Silk imported at different Periods. — (*Report of* 1832 *on Silk Trade*, p. 10., and *Parl. Paper*, No. 9. Sess. 1834.)

Average Imports.	Raw.	Waste.	Thrown.	Total.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*
1765, 1766, 1767, being the commencement of the absolute prohibition	352,000	-	363,000	715,000
1785, 1786, 1787	554,000	-	337,000	891,000
1801 to 1812	760,000	-	350,000	1,110,000
1815, 1816, 1817, being 50 years after prohibition, and the first 3 years of peace	1,095,000	27,000	293,000	1,415,000
1821, 1822, 1823, being the years immediately previous to the abolition of the prohibition	1,970,000	74,000	355,000	2,399,000
1831, 1832, 1833, being the last 3 years	3,137,271	688,369	345,270	4,170,910

II. Account of the Quantities of Raw, Waste, and Thrown Silk *entered for Consumption* in each Year from 1814, with the total Amount of Duty received on the same in each Year from 1820. — (From the *Parl. Papers*, No. 678. p. 10. Sess. 1832, No. 9. Sess. 1834; and *Papers published by the Board of Trade.*)

Years.	Raw.	Waste.	Thrown.	Total of all Sorts.	Duty received.	Rates of Duty.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*L.*	
1814	1,504,235	29,234	586,505	2,119,974		*Rate of Duty, Raw.* — From India 4*s.* per lb., from other places 5*s.* 6*d.* per lb., to the 25th of March, 1824; 3*d.* per lb. from all places, to the 5th of July, 1826; 1*d.* per lb. from all places, from the 5th of July, 1826. *Rate of Duty, Waste.* — From India 3*s.* 9*d.* per lb., from other places 4*s.* per lb., to the 25th of March, 1824; 3*d.* per lb. from all places, to the 5th of July, 1826; 1*d.* per lb. to the 5th of July, 1829; 1*s.* per cwt. from all places, after the 5th of July, 1829. *Rate of Duty, Thrown.* — On all kinds, dyed, 2*l.* 5*s.* 6*d.*, and undyed, 14*s.* 8*d.* per lb., to the 25th of March, 1824; dyed and undyed, 7*s.* 6*d.* per lb., to the 5th of November, 1825; then 5*s.* per lb. on undyed, to the 5th of July, 1826; thereafter, 6*s.* 8*d.* on organzine and crape, and 4*s.* on tram and singles dyed, and 3*s.* on tram and singles not dyed, to the 5th of July, 1829; and then 5*s.* 2*d.* on organzine and crape, and 3*s.* on tram and singles dyed; 3*s.* 6*d.* on organzine and crapes, 2*s.* on tram, and 1*s.* 6*d.* on singles not dyed.
1815	1,069,596	27,921	377,822	1,475,339		
1816	873,414	4,162	208,014	1,085,580		
1817	1,343,051	49,055	294,553	1,686,659		
1818	1,444,881	86,940	391,166	1,922,987		
1819	1,446,097	71,331	331,125	1,848,553		
1820	1,621,590	96,092	309,953	2,027,635	614,478	
1821	1,864,425	105,135	360,248	2,329,808	732,542	
1822	1,993,509	65,176	382,878	2,441,563	772,451	
1823	2,051,895	52,362	363,864	2,468,121	768,650	
1824	3,414,520	133,257	463,271	4,011,038	306,984	
1825	2,848,506	195,910	559,642	3,604,058	246,430	
1826	1,814,138	150,000	289,325	2,253,513	84,487	
1827	3,559,138	200,000	454,015	4,213,153	128,509	
1828	3,912,550	250,000	385,262	4,547,812	111,907	
1829	2,419,962	300,000	172,239	2,892,201	45,248	
1830	3,771,969	485,013	436,535	4,693,517	89,544	
1831	3,020,045	758,746	514,240	4,293,031	49,378	
1832	3,382,619	660,696	329,932	4,373,247	66,551	
1833	3,834,244	665,965	268,244	4,758,453	59,682	

III. An Account of all Silks and Ribands (separately) imported from July, 1826, to the present Time.—
(*Report from Select Committee of Silk Trade*, p. 13. For Rates of Duty, see TARIFF.)

	Silk Manufactures imported into the United Kingdom for Home Consumption.						
	1826. From the 5th of July.	1827.	1828.	1829.	1830.	1831.	1832.
SILKS OF EUROPE.	*Lbs.* oz.	*Lbs.* oz.	*Lbs.* oz.	*Lbs.* oz.	*Lbs.* oz.	*Lbs.* oz.	*Lbs.*
Silk or satin	20,228 11½	38,549 6½	61,323 2½	64,612 3½	51,417 6½	82,246 5	70,148
in ribands	7,682 1½	20,958 11½	35,516 14				
Gauze	5,282 14¼	6,504 3¼	4,600 0½	20,052 3¾	30,241 3	33,488 7¾	46,838
in ribands	3,617 15	16,210 14½	11,917 13				
Crape	5,496 13¾	16,381 1	24,951 13	22,786 11½	28,880 4	19,667 0	15,092
Velvet	5,518 8½	15,403 15¾	18,470 7	13,743 0	14,847 6	12,210 0	11,987
in ribands	52 10	242 2	2,101 10¾				
Ribands embossed or figured with velvet	Not entered under this denomination until the 5th of July, 1829.			317 2	529 3	345 14	657
Fancy silk net or tricot	27 14	223 5	11 4	3 12	42 11	95 12	107
Silk mixed with metal	339 8	583 10½	512 7½	438 12½	412 7	464 8	127
in ribands	54 1	220 13	125 1				
Total entered by weight	48,301 1½	115,278 5½	169,550 9	121,953 13½	126,370 8½	148,516 10¾	144,956
Plain silk lace or net, called tulle — square yds.	40,676½	122,238½	171,005½	109,729½	114,381¼	54,117	38,727
Millinery, viz. turbans or caps No.	113	326	295	383	368	201	306
hats or bonnets —	119	428	414	528	535	412	546
dresses —	44	213	275	330	298	200	207
	L. s. d.	*L.* s. d.	*L.* s. d.	*L.* s. d.	*L.* s. d.	*L.* s. d.	*L.*
at value declared value	- -	50 12 0	13 10 0	30 12 0	154 4 0	27 16 0	32
Manufactures of silk, or of silk and any other materials, not particularly enumerated	21,489 5 0	54,128 9 10	77,189 0 8	85,258 19 5	44,923 15 10	35,636 0 0	43,173
SILKS OF INDIA.							
Bandanas, romals, and silk handkerchiefs — pieces	208,066	55,183	69,628	67,465	77,953	101,023	82,392
Silks & crapes, in pieces —	32,754	18,150	15,577	10,164	2,978	3,779	2,806
Crape shawls, scarfs, gown pieces, & handkerchiefs, No.	77,776	24,200	4,789	1,959	17,620	16,157	12,218

Note. — The distinction in the rates of duty between silks and ribands having ceased to exist in 1829, on the passing of the act 10 Geo. 4. c. 23., both articles have since been entered at the Custom-house under the general denominations of silk or satin, gauze and velvet, and are necessarily stated in the same manner in the above return.

IV. Account of the Official and of the Declared or Real Values of British Manufactured Silks exported from the United Kingdom since 1820, with the Bounty or Drawback paid thereon.

Years.	Total British Silks exported Official Value.	Goods all Silk. Declared Value.	Silk mixed with other Materials. Official Value.	Total British Silks exported. Declared Value.	Bounty or Drawback paid.
	L. s. d.	*L.*	*L.*	*L.*	*L.*
1820	- - -	205,666	168,109	371,775	23,601
1821	136,841 19 1	224,287	150,186	374,473	32,563
1822	141,174 17 6	215,898	165,805	381,703	33,353
1823	140,459 19 5	203,769	147,640	351,409	32,446
1824	159,670 17 6	183,635	258,961	442,596	34,252
1825	150,886 19 9	93,986	202,750	296,736	566
1826	106,931 10 1	73,247	95,554	168,801	57
1827	173,593 4 6	99,055	137,289	236,344	62
1828	179,053 19 11	97,346	158,524	255,870	
1829	221,998 1 3	143,635	124,296	267,931	4,844
1830	427,849 5 7	355,790	165,220	521,010	36,690
1831	471,119 0 0	388,826	190,048	578,048	46,659
1832	475,165 0 0	- -	- -	529,990	
1833	- -	- -	- -	740,294	

The United States is our best customer for silk goods. Of the total quantity exported in 1831, they took nearly ¼, or to the amount of 237,985*l.* of real value. During the same year, the exports to the British North American colonies were 93,013*l.*; to the British West Indies, 27,508*l.*; to France, 43,462*l.*; to Spain, 24,853*l.*, &c.

Sources of the Supply of Silk. — The following Table shows the sources whence we directly derive our supplies of raw and of foreign thrown silk, and the quantities brought from each in 1831 and 1832.

Imports of Silk.

Countries.	1831.	1832.	Countries.	1831.	1832.
	Lbs.	*Lbs.*		*Lbs.*	*Lbs.*
Raw silk from India	1,725,650	1,814,707	Waste and knubs from Italy	410,750	317,454
Cape of Good Hope	26,930	8,194	France	329,325	257,016
China	8,374	28,105	Other countries	16,743	50,727
Turkey	451,421	458,278	Total of waste and knubs	756,728	656,010
Italy	115,766	216,702			
France	821,349	749,117	Thrown silk from Italy	698	2,516
Other countries	86,375	116,318	France	612,590	145,284
			Other countries	15,993	29,336
Total of raw silk	3,235,865	3,391,721	Total of thrown silk	629,281	177,166
Waste and knubs from India	- -	112			
Turkey	- -	701			

It is necessary, however, to observe that this account does not exhibit the countries which really furnish us with silk, and the quantities we import from them. It merely exhibits the sources whence we *immediately derive our supplies*, without tracing them to their source. Hence it makes the imports of silk from China and Italy appear very much less than they really are, and those from India and France much larger. With respect to China, it would appear from this account that only 8,374 lbs. were imported from it in 1831; whereas it appears from another parliamentary paper, that the imports of Chinese silk in that year really amounted to 466,692 lbs.; and even this last is, we believe, under-rated—(see *antè*, p. 240.). The reason is, that by far the largest portion of the Chinese silk imported into England is carried, in the first instance, to Singapore, or to some port in India, and is thence imported under the name of Indian silk. During the year 1831-32, there were exported from Canton, in British ships, 8,451 piculs, or 1,126,800 lbs., of silk, costing at the port of shipment (Canton) 2,654,688 dollars; and of this, by far the largest portion

came to England. — (See *antè*, p. 237.) The silk exported from Canton consists of two leading varieties, known in commerce by the names of Canton and Nanking. The first, which is raised principally in the province of Canton, is divided into 5 sorts. At an average, the picul of Canton silk brought at Canton, in 1831–32, 158 dollars. The Nanking silk, produced in the province of Kiangnan, is divided into 2 sorts, known in commerce by the names of Tsatlee and Taysaam. It is very superior to the other, and usually fetches more than double its price. It cost at Canton, in 1831–32, 368 dollars a picul. We have no doubt, now that the trade to China is thrown open, that the exports of Chinese silk will be materially increased; and that it will become an article of great commercial importance.

East India native silk comes wholly from Bengal. About the year 1760, the East India Company introduced the Italian mode of reeling silk, which was productive of a very great improvement in the quality of the article; but we are not aware that any subsequent improvement has been effected. According to the *Parliamentary Paper*, No. 425. Sess. 1833, the imports of raw silk from all places to the eastward of the Cape of Good Hope, except China, were, in 1830, 1,736,231 lbs.; in 1831, 1,725,650 lbs.; and in 1832, 1,814,819 lbs. But, notwithstanding this exception, we believe that a very considerable quantity of the silk so imported was the produce of China; being brought to us partly from Singapore, and partly from the Indian ports. Some of it was also the produce of Persia, shipped, in the first instance, from Bushire for Bombay. The silk goods brought from India are not only inferior, in point of quality, to those of Europe, but also to those of China. The quantity imported of late years is specified in the Table, No. III.

A good deal of the silk brought from Turkey is supplied by Persia. Some considerable part of the Persian silk that used to be exported from Bushire and other ports on the Persian Gulf, is now exported by way of Trebisond; which promises to become an important emporium for Persian and Turkish silk.— (See TREBISOND.)

By far the greatest part of the raw and thrown silk that comes to us from France, is not the growth of that country, but of Italy; being principally conveyed by the canal of Languedoc and the Garonne to Bordeaux, whence it is shipped for England. So much is this the case, that it appears from the official accounts published by the French government, that while the aggregate value of the French and foreign raw and thrown silk exported from France in 1831 amounted to 45,102,054 fr., the value of the portion which was of French origin was only 2,092,776 fr.! — (*Administration des Douanes*, for 1831, p. 39.)

The reader will find, under the article VENICE, an account of the exports of silk from the Venetian provinces in 1829, 1830, and 1831. Since the article NAPLES was printed, we have obtained the following authentic statement of the exports of silk from that city during the 6 years ending with 1833, and of the stocks on hand: —

	Exports.					Stocks on the 31st of December.		
Years.	Raw.	Spun.	Sewing.	Total.	Waste.	Raw.	Spun.	Total.
	*Lbs.**	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
1828	189,091	46,604	95,196	330,847	38,718	107,100	3,600	110,700
1829	176,133	31,858	96,601	304,642	6,776	137,500	7,200	144,700
1830	217,312	39,286	132,647	389,245	12,036	118,200	1,800	120,000
1831	138,777	22,585	230,150	391,512	27,188	173,800	600	174,400
1832	310,635	32,786	127,874	471,295	19,243	130,100	3,000	133,100
1833	313,229	52,668	105,575	471,472	26,694	88,500	2,400	90,900
Total	1,345,183	225,787	788,043	2,359,013	130,655			

SILVER (Ger. *Silber*; Du. *Zilver*; Da. *Sölv*; Sw. *Silfver*; Fr. *Argent*; It. *Argento*; Sp. *Plata*; Port. *Prata*; Rus. *Serebro*; Pol. *Srebro*; Lat. *Argentum*; Gr. ἄργυρος; Arab. *Fazzeh*), a metal of a fine white colour, without either taste or smell; being in point of brilliancy inferior to none of the metallic bodies, if we except polished steel. It is softer than copper, but harder than gold. When melted, its specific gravity is 10·474; when hammered, 10·51. In malleability, it is inferior to none of the metals, if we except gold. It may be beaten out into leaves only $\frac{1}{100000}$ of an inch thick. Its ductility is equally remarkable: it may be drawn out into wire much finer than a human hair; so fine, indeed, that a single grain of silver may be extended about 400 feet in length. Its tenacity is such, that a wire of silver 0·078 inch in diameter is capable of supporting a weight of 187·13 lbs. avoirdupois without breaking. Silver is easily alloyed with copper by fusion. The compound is harder and more sonorous than silver, and retains its white colour even when the proportion of copper exceeds $\frac{1}{2}$. The hardness is at a maximum when the copper amounts to *one fifth* of the silver. The standard or sterling silver of Britain, of which coin is made, is a compound of $12\frac{1}{3}$ parts silver and 1 copper. Its specific gravity is 10·2. The specific gravity of Paris standard silver, composed of 137 parts silver and 7 copper, is 10·175. The French silver coin during the old government was not nearly so fine, being composed of 261 parts silver and 27 copper, or $9\frac{2}{3}$ parts silver to 1 part copper. The Austrian silver coin contains $\frac{13}{288}$ of copper. The silver coin of the ancients was nearly pure, and appears not to have been mixed with alloy. — (*Thomson's Chemistry.*)

The most productive silver mines are in America, particularly in Mexico and Peru. There are also silver mines in Hungary, Saxony, and other parts of Europe, and in Asiatic Russia. — (See PRECIOUS METALS.)

Besides being used as coin, or money, silver is extensively employed in the arts. The value of the silver plate annually manufactured is very considerable. Large quantities are also used in plating. — (See PLATE.) For an account of the quantity of silver coined at the British mint, since 1790, see *antè*, p. 320.

SINGAPORE, an island and recent British settlement at the eastern extremity of the Straits of Malacca. The town is in lat. 1° 17′ 22″ N., lon. 103° 51′ 45″ E.

The island is of an elliptical form, about 27 miles in its greatest length, and 15 in its greatest breadth, containing an estimated area of 270 square miles. The whole British settlement, however, embraces a circumference of about 100 miles; in which is included

* Two lbs. avoirdupois are equal to about $2\frac{7}{9}$ libri Napolitani.

about 50 desert islets, and the seas and straits within 10 miles of the coast of the principal island. Singapore is separated from the main land by a strait of the same name, of small breadth throughout, and scarcely, indeed, $\frac{1}{4}$ of a mile wide in its narrowest part. In the early period of European navigation, this channel was the thoroughfare between India and China. Fronting the island, on its southern side, and at the distance of about 9 miles, is an extensive chain of islands, all desert, or at least inhabited only by a few wild races, of which nothing is known but their mere existence. The intervening channel is now the grand route of the commerce between the eastern and western portions of maritime Asia; the safest and most convenient track being so near to Singapore, that ships in passing and repassing approach close to the roads. The town is on the south side of the island, and is situated on a river, or rather salt creek, navigable by lighters for about $\frac{3}{4}$ of a mile from the sea. Ships lie in the roads, or open harbour, at the distance of from 1 mile to 2 miles from town, according to their draught of water. The assistance of a number of convenient lighters, which are always in readiness, enables ships to load or unload, with scarcely any interruption, throughout the year. The river or creek is accessible to the lighters, and the goods are taken in and discharged at convenient quays, at the doors of the principal warehouses. — (See *Chart* of the *Island of Singapore* in the *Mercator's Chart* in this work.)

The climate of Singapore is hot, but healthy. Fahrenheit's thermometer ranges from 71° to 89°. In a place only about 80 miles from the equator there is, of course, very little variety in the seasons. There is neither summer nor winter; and even the periodical rains are short, and not very well marked — moderate showers of rain falling for about 150 days each year. The settlement of Singapore was formed in February, 1819, and its sovereignty and property, in their present extent, confirmed to the British government in 1825, by a convention with the king of the Netherlands, and a treaty with the Malay princes of Johore, to whom it belonged. When taken possession of by the English, it had been inhabited for about 8 years by a colony of Malays, half fishermen and half pirates. When the first census of the population was taken, in January, 1824, it was found to amount to 10,683. In 1828, it had increased to 15,834: in both cases, exclusive of troops, camp followers, Indian convicts, and a floating population of about 3,000. The following statement of the censuses taken on the 1st of January, 1832, and the 1st of January, 1833, shows the different classes of inhabitants, and their proportions to each other: —

	1832.		1833.			1832.		1833.	
	Males.	Females.	Males.	Females.		Males.	Females.	Males.	Females.
Europeans	83	22	91	28	Nat. of Hindostan	408	121	389	116
Indo-Britons	67	27	56	40	Javanese	391	253	361	234
Native Christians	274	146	167	133	Bugis, Baŭnese, &c.	735	692	794	952
Armenians	20	6	27	8	Caffres	7	1	23	14
Jews	5		2		Parsees	2			
Arabs	61	3	96						
Malays	3,748	3,467	3,763	3,368	Total	14,324	5,391	15,181	5,797
Chinese	7,149	613	7,650	867	Females	5,391		5,797	
Natives of the coast of Coromandel	1,374	40	1,762	57	Total inhabitants	19,715		20,978	

The principal merchants and agents are Englishmen, of whom also there are a few shopkeepers, auctioneers, &c. There are also some respectable Chinese merchants; and the bulk of the shopkeepers, with the most valuable part of the labouring population, consist of Chinese. About 5,000 adult males arrive annually from China by the junks; about 1,000 of whom remain at Singapore, the rest dispersing themselves among the neighbouring Dutch, English, and Malay settlements. The boatmen are chiefly natives of the Coromandel coast; and the Malays employ themselves as fishermen, in cutting timber, and in supplying the settlement with the rude produce of the neighbourhood. There are 2 good daily markets, open at all hours, and well supplied with vegetables, fruits, grain, fish, pork, and green turtle; the latter the cheapest animal food that can be procured. At Singapore there are no export or import duties levied, nor anchorage, harbour, light-house dues, or any fees; but a register is kept of all exports and imports. Reports must be made to the master attendant by the masters of vessels, and invoices delivered to the superintendent of imports and exports.

Currency, Weights, Language, &c. — The currency and weights are simple and convenient. Merchants' accounts are kept in Spanish dollars, divided into 100 parts, represented either by Dutch doits, or by English copper coins of the same value. The weights in use (and almost every thing is sold by weight, as in China) are the Chinese picul of 100 catties, or 133⅓ lbs. avoirdupois. Rice (the produce of Siam and the Archipelago) and salt are sold by the coyan of 40 piculs. Gold dust is sold by a Malay weight called the bungkal, which weighs 2 Spanish dollars, or 832 grains Troy. Bengal rice, wheat, and pulses of the same country, are sold by the bag, containing 2 Bengal maunds, or 164¼ lbs. avoirdupois. Piece goods, &c. are sold by the corge or score. English weights and measures are frequently used in reference to European commodities. The mode of transacting business among the European merchants is simple and efficient. Instead of trusting their affairs to native agents, as in other parts of India, they transact them in person, with the occasional assistance of a Chinese creole as an interpreter and broker. The European merchants transact business on their own account; but a great deal of their employment consists in acting as agents for houses in London, Liverpool, Glasgow, Amsterdam, Antwerp, Calcutta, Bombay, Madras, Canton, and Batavia. They are also agents for various insurance offices at Calcutta and elsewhere, and policies of insurance to any extent may be effected without difficulty. The language of commercial intercourse, where any of the natives of the East are concerned, is universally Malay, — a simple and easy dialect, of which all the resident merchants have a sufficient acquaintance for the transacting of ordinary business. A newspaper, the *Singapore Chronicle*, is published once a week, and contains a price current, an account of arrivals and departures of shipping, and an official detail of all the exports and imports of the preceding week. The administration of justice is entirely English, there being a recorder's court for the settlement, in common with the two neighbouring ones of Penang and Malacca.

Commodities and Prices. — Singapore is chiefly an *entrepôt*, having, with the exception of pearl sago manufactured on the spot from the raw material imported from the north coast of Sumatra, implements

of agriculture, and some others fabricated by the Chinese from European iron, and gambier or catechu grown and manufactured on the island, few commodities of its own exportation. The following price current of the 22d of August, 1833, will convey the best idea of the miscellaneous articles of which the commerce of the port consists: —

Articles.		Prices.	
Eastern Articles.		*From*	*To*
Bees' wax	per picul	28 dol.	32 dol.
Biche de mer, 1st sort	—	40	50
inferior	—	20	25
Isle of France	—	7	15
Benjamin	—	16	55
Betel nut	—	1½	1¾
Birds' nests, white	per catty	30	45
black	per picul	30	200
Camphor, Baras	per catty	12	30
China	per picul	30	35
Canvass, Bengal	per bolt	3	4
Coffee, Sumatra	per picul	9½	10
other descriptions	—	9	9½
Copper, Japan	—	27	30
Cordage, coir	—	3½	5
Cotton	per bale	18	22
Dammer, raw	per picul	1	1½
Dholl	per bag	2¾	3
Dragon's blood, inferior (block)	per picul	12	25
Ebony, Isle of France	—	3	3½
of other parts	—	2	3
Elephants' teeth, 1st sort	—	100	120
2d do.	—	95	100
3d do.	—	70	90
Gambier, Rhio and Singapore	—	4	
Siak	—	6	5
Gamboge	—	15	80
Ghee, cow	—	14	18
buffalo	—	12	14
Grain, rice, white	per coyan	55	60
cargo, 1st sort	—	45	0
do. inferior	—	40	45
Bengal	per bag	2½	2⅔
wheat	-	3	3⅓
gram, 2 maunds	-	2	2⅔
Gold dust, of Pahang and Siac	per bung.	30	31½
of other parts	—	27	30
Gunnies	per 100	7	9
Mother-o'-pearl shells	per picul	20	22
Nankeens, long junk	per 100	38	45
short do.	per corge	7	8
Oil, cocoa nut	per picul	6	6½
Opium, Patna	per chest	630	720
Benares	—	630	720
Malwa	—	530	580
Pepper, black	per picul	5½	6
long	—	4	
Piece goods, Bengal sannahs	per corge	33	34
Mahmoodies	—	28	30
Gurrahs	—	12	14
Baftas	—	20	22
chintz of 12 cubits	—	14½	16
chintz of 10 cubits	—	8	10
Madras, mories, wh.	—	22	25
blue	—	30	40
salempires, blue	—	40	50
brown	—	30	35
handkerchiefs	—	30	100
kolamkories	—	20	45
kambayas	—	12	13
bugis sarungs	—	16	30
Bali cloths	—	6	7
Batick handkfs.	—	8	16
Rattans	per picul	1½	2
Sago, pearl, in cases	—	2¾	3
Salt, Siam	per coyan	23	24
Saltpetre	per picul	7½	8
Sapan wood, Manilla	—	1¾	1½
Siam	—	1¾	2
Silk, raw, China, junk	72 cyts.	220	240
Canton, No. 3.	100 cyts.	320	330
Macao	95 cyts.	300	310
Spirits, arrack	per gal.	15 cts.	20 cts.
Stick lac	per picul	12	14
Segars, Manilla	per 1,000	6	6½
Sugar, Siam, 1st sort	per picul	5½	6
Sugar, Cochin-China	—	3½	4½
Sugar candy	—	6	10

Articles.		Prices.	
Eastern Articles.		*From*	*To*
Tin, Banca	—	-	15 dol.
Straits	—	13½ dol.	14½
Tobacco, Java	40 bskts.	120	190
China	per picul	14	16
Tortoiseshell	—	1,000	1,600
European Articles.			
Ale, Hodgson's	per hhd.	35	40
Allsop's	—	35	40
Barclay's	—	10	20
Anchors and grapnels	per picul	10	12
Bottles, English	per 100	3½	4
Canvass	per bolt	9	11
Copper nails & sheathing	per picul	35	40
Cordage	—	10	12
Cotton twist, No. 16. to 36.	—	38	40
No. 38. to 70.	—	50	60
Gunpowder	per 100 lbs.	25	35
Flints	per picul	30 cts.	-
Iron, Swedish, bar	—	5 dol.	5¼ d
English	—	2	2½
nails, spike	—	3	3¾
Lead, pig	—	5	5½
sheet	—	5½	6
Patent shot	per bag	1	2
Paint, oil	per gallon	1½	1¾
Provisions, beef, American	per brl.	2	3
English	—	30	
pork, English	—	25	
flour	—	4	5
Rosin	—	2	3
Spelter	per picul	4	4½
Steel, Swedish	per tub	6	10
Tar, Stockholm	per brl.	5	
Piece goods, Madapolams, 25 yds. by 32 to 36 inches	per piece	1¼	3
imitation Irish, 25 yds. by 36 in.	—	2¼	2½
long cloths, 38 to 40 yrds. by 36 to 37 in.	—	3½	6
38 to 40 yrds. by 38 to 40 in.	—	4	6½
38 to 40 yrds. by 44 inches	—	5	8
38 to 40 yrds. by 50 in.	—	6	8
38 to 40 yrds. by 54 in.	—		
38 to 40 yrds. by 60 in.	—	10	12
prints, 7-8, light grounds, single colours	—	2½	3
9-8, do. do.	—	3	4
7-8, dark, do.	—	2½	3
9-8, do. do.	—	3	3½
7-8 & 9-8, 2 colours	—	3½	5½
9-8, Turkey red ground, 24 yards	—	10	12
9-8, furniture, 24 yrds.	—	6	8
cambric, 12 yrds. by 42 to 44 in.	—	1¾	2
12 yrds. by 45 in.	—	1¾	2¼
jacconot, 20 yrds. by 44 to 46 in.	—	1¾	4
lappets, 20 yrds. by 40 to 44 in.	—	1¾	2
handkerchiefs, imitation Batick, dbl.	per corge	5	6½
Pulicat	per dozen	2½	3
Woollens, long ells	per piece	10	11
camlets	—	25	32
ladies' cloths (scarlet)	per yard	1¾	2¾
bombazettes	per piece	7	9
Wines & spirits — sherry	per dozen	6	8
port	—	9	10
claret, French	—	4	8
English	—	8	10
brandy	per gal.	¾	1
rum	—	30 cts.	45 cts.
gin	per case	6	7

The following are the rates of commission and warehouse rent charged at Singapore, except in cases of special agreement: —

Commission.

1. On all sales or purchases, except the following, 5 per cent.
2. On purchases of goods or produce for returns, 2½ per cent.
3. On sales or purchases of opium, 3 per cent.
4. On sale or purchase of ships, vessels, houses, or lands, 2½ per cent.
5. On sale, purchase, or shipment of bullion, 1 per cent.
6. On sale or purchase of diamonds, jewels, &c., 2 per cent.
7. On returns in treasure, bullion, or bills, 1 per cent.
8. On all goods consigned and withdrawn, ½ commission.
9. On sale, purchase, or negotiating of bills not serving for purchase of goods or produce, 1 per cent.
10. On all goods sold by auction by the agents themselves, in addition to the above, 2½ per cent.
11. On del credere, or guaranteeing sales when specially required, 2½ per cent.
12. Shroffage, 1 per cent, per mille.
13. On all advances of money for the purpose of trade, whether the goods are consigned to the agent or not, and where a commission of 5 per cent. is not charged, 2½ per cent.
14. On ordering goods, or superintending the fulfilment of contracts whence no other commission is derived, 2½ per cent.
15. On guaranteeing bills, bonds, or other engagements, and on becoming security for administrations of estates, or to government or individuals for contracts, agreements, &c., 2½ per cent.
16. On acting for the estates of persons deceased as executors or administrators, 5 per cent.
17. On the management of estates for others, on the amount received, 2½ per cent.
18. On procuring freight, or advertising as the agent of owner or commanders, on the amount of freight, whether the same passes through the hands of the agent or not, 5 per cent.
19. On chartering ships for other parties, 2½ per cent.
20. On making insurance, or writing orders for do., ½ per cent.
21. On settling insurance losses, total or partial, and on procuring return of premium, 1 per cent.
22. On debts, when a process at law or arbitration is necessary, 2½ per cent.—And if received by such means, 5 per cent.

23. On bills of exchange noted or protested, 2 per cent.
24. On collecting house rent, 5 per cent.
25. On ships' disbursements, 2½ per cent.
26. On negotiating loans on respondentia, 2 per cent.
27. On letters of credit granted for mercantile purposes, 2½ per cent.
28. On purchasing or selling government securities, or on exchanging or transferring the same, ½ per cent.
29. On delivering up do., ½ per cent.
30. On all advances not punctually liquidated, the agent to have the option of charging a second commission, as upon a fresh advance, provided the charge be only made once in the same year.
31. On transhipping all goods or produce, except the following, 1 per cent.
32. On transhipping whole chests of cassia, cassia buds, aniseed, camphor, nankeens, and gunny bags, per package, 1 dollar.
33. At the option of the agent, on the amount debited or credited within the year, including interest, and excepting only such items, on which at least 2½ per cent. has been charged, 1 per cent.

This charge not to apply to paying over a balance due on an account made up to a particular period, unless where such balance is withdrawn without reasonable notice.

Warehouse Rent per Month.

Chests of opium or silk, bales of woollens, pipes of wine or brandy, leaguers of arrack, &c., 1 dollar.
Bales of Indian piece goods, cotton, and gunny bags, 50 cents.
Cases of European piece goods, trusses of woollens, &c., 25 cents.
Hogsheads of liquor, ½ chests of wine, &c., 40 cents.
Pepper, rice, coffee, sugar, saltpetre, &c., 10 per cent.
Iron, tin, tutenague, spelter, copper, lead, &c., 5 per cent.
All other goods not mentioned, to pay accordingly, or by measurement, at the rate of, per ton of 50 cubic feet, 1 dollar.

Trade of Singapore. — The following Tables are taken from the official statements published in the *Singapore Chronicle*, 27th of September, 1832. The sums are expressed in sicca rupees, at the fixed exchange of 210½ sicca rupees per 100 Spanish dollars.

I. Total Account of Imports and Exports at Singapore for the Years 1823 to 1831-32.

Years.	Imports.	Exports.*	Years.	Imports.	Exports.
	Sicca Rupees.	*Sicca Rupees.*		*Sicca Rupees.*	*Sicca Rupees.*
1823	not stated.	117,21,518	1828-1829	196,11,203	180,46,604
1824	145,55,098	139,72,685	1829-1830	212,15,599	187,62,509
1825	132,59,178	122,87,863	1830-1831	187,53,505	182,66,349
1826-1827	136,19,786	138,83,062	1831-1832	178,09,948	156,51,573
1827-1828	148,85,999	138,72,010			

I. Total Value of Imports and Exports, with the Places stated, to show the general Channel of Transhipments.

Countries.	1826-1827.	1827-1828.	1828-1829.	1829-1830.	1830-1831.	1831-1832.
	Imports.					
	Sicca Rupees.	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*
From England and Foreign Europe	28,33,477	24,61,800	25,09,359	34,88,549	26,04,403	33,59,507
From China - - - -	15,15,555	17,92,675	56,22,136	71,84,407	60,15,040	51,23,483
From Java - - - - -	11,78,676	22,84,638	14,49,140	17,81,427	23,89,228	20,60,748
	Exports.					
To England and Foreign Europe -	26,89,576	30,61,745	68,60,717	77,63,176	76,52,126	64,38,988
To China - - - - -	24,64,815	15,19,897	18,12,729	13,82,328	18,93,037	15,48,042
To Java - - - - -	8,26,966	10,26,379	10,34,598	8,97,488	11,11,729	7,57,153

Note. — Japan copper from Batavia is an article of transhipment to Calcutta, and occasionally to Bombay.

III. Table showing the total Value of Cargoes exported to England, distinguishing Transhipments from Straits' Produce, in the Years 1829-30, 1830-31, and 1831-32.

Years.	Vessels.	Tons Register.	Straits' Produce.†	Transhipments.	Total.
			Sicca Rupees.	*Sicca Rupees.*	*Sicca Rupees.*
1829-1839	20	6,049	19,03,792	58,55,209	77,59,001
1830-1831	23	7,785	23,34,232	50,76,361	74,10,593
1831-1832	20	6,756	19,53,613	51,16,764	70,70,377

IV. Quantities of the principal Articles exported from Singapore, in the undermentioned Years.

Articles.	Year ending 1st of April, 1829.				Year ending 1st of April, 1830.				Year ending 1st of April' 1831.			Year ending 1st of April, 1832.		
	Piculs.	*Cases.*	*Bags.*	*Corges.*	*Piculs.*	*Cases.*	*Bags.*	*Corg.*	*Piculs.*	*Cases.*	*Bg.*	*Piculs.*	*Cases.*	*Corgs.*
Benjamin -	8	73	-	-	428	28	-	-	5,64½	6	-	842·69		
Cassia - -	3,461	-	-	-	- -	-	- -	-	5,521·1	- -	-	1,870		
buds -	224													
Camphor, China -	3,535	-	-	-	958	1,854	- -	-	467·3	- -	-	142		
Coffee - -	38,620	-	-	-	18,525½	-	1,211	-	31,770·38	- -	-	23,228·23		
Dragon's blood	26	25	-	-	8	-	- -	-	202·3	58	-	101·84		
Elephants' teeth - -	37½	-	-	-	70·65	1	teeth 17	-	77·12	- -	-	41·87		
Gold dust -	- -	-	-	-	3·94	3	bungk. 18 / purell 1		- 8·62	bungk. 12	-	8·20	mayams 12	
Nankeens -	- -	1,588	-	7,012	- -	8,524	260	6,335	- -	pieces 885,081	-	- -	pieces 286,654	
Pepper, black	8,395	-	-	-	31,814	-	559		32,051·84	- -		37,539 88		
white	6,009													
Raw silk -	150	234	bund. 3,810	-	98	191½	4,420	-	2,355	- -	-	1,554·16	- -	bund. 103
Rice - -	2,658	-	-	-	26,277	2	707	-	46,470	- -	-	38,784		
Rattans -	6,120	-		-	43,146	-	bundles 1,940	-	25,672	- -	34	15,232	10	
Spices - -	37	66	71	-	2,670	4,953	casks 38 / hhds. 10	lbs. 2,777	3,433½	4	311	3,052		
Sugar - -	34,356			-	38,409	10	79	-	63,917	- -	-	44,183		
Sago - -	2,305		-	-	4,965	75	- -	-	2,050½	- -	-	5,084⅜		
Tin - -	2,841		-	-	24,262	-	slabs 843	-	19,776	- -	-	25,063		
Tortoiseshell -	158	-	-	-	94·31	32	- -	-	218	sets 22	-	198¾	10	

* Penang and Malacca are included.

‡ Under this head is included Banca tin, which has been largely transhipped, but the state of the entries does not permit of its being distinguished.

V. General Trade with India for the Years 1826-27 to 1831-32.

(*Imports into Singapore from India.*)

	1826-1827.	1827-1828.	1828-1829.	1829-1830.	1830-1831.	1831-1832.
	Sicca Rupees.	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*	*Sicca Rupees.*
From Calcutta	19,53,120	25,16,466	29,77,086	27,96,415	25,59,592	22,58,523
Madras	4,03,802	4,14,698	10,90,278	5,74,586	1,02,583	2,96,908
Bombay	2,55,700	3,76,889	3,82,249	2,73,393	2,22,341	1,92,765
Total	26,11,822	31,08,053	44,49,613	36,44,394	28,84,516	27,48,026
	Exports to India.					
To Calcutta	20,39,762	16,31,349	23,58,894	20,35,747	22,34,743	18,51,471
Madras	2,78,928	11,38,099	3,93,599	2,06,877	2,85,678	3,12,752
Bombay	5,26,188	1,88,012	3,73,036	6,00,474	4,06,528	3,63,114
Total	28,44,878	29,57,460	31,25,529	28,43,098	29,26,949	25,27,337

VI. Corrected List of Cargoes to Europe, by Vessels which sailed from this Port during the Official Year 1831-32.

Vessels' Names.	Tons.	Straits' Produce.	Transhipt.	Total.	Vessels' Names.	Tons.	Straits' Produce.	Transhipt.	Total.
		Dollars.	*Dollars.*	*Dollars.*			*Dollars.*	*Dollars.*	*Dollars.*
Atwick	341	9,900	- -	9,900	Childe Harold	463	36,504	308,000	344,504
Helen Mar	255	86,117	198,159	284,276	Hebe	256	58,388	2,700	61,088
Madeline	256	6,066	- -	6,066	Aurora	550	63,795	61,003	124,798
Eliza	538	50,818	13,845	64,663	Batavia	360	32,060	- -	32,060
Victoria	375	85,191	37,681	122,872	Orynthia	318	54,581	4,039	58,620
Eagle	206	37,997	40,580	78,577	Spartan	237	2,091	- -	2,091
Edmond Castle	285	85,006	51,546	136,552	Duke of Roxburgh	417	33,239	654,530	687,769
Bencoolen	402	655	10,710	11,365	Edward	354	64,325	9,295	73,620
Lady Gordon	283	66,835	6,020	72,855	Irene	180	40,004	10,000	50,004
Fanny	280	49,453	295,205	344,658					
Runnymede	400	65,057	727,454	792,511	Totals	6,756	928,082	2,430,767	3,358,849

Trade of Java. — Since the article BATAVIA was printed, we have received a number of the *Singapore Chronicle*, containing the following account of the quantities of the principal articles exported from Java in 1830, 1831, and 1832. It shows a very rapid progress. There wants nothing but good management to render Java by far the most valuable of all the Eastern possessions belonging to any European power.

Articles.	1830.	1831.	1832.	Articles.	1830.	1831.	1832.
Coffee - piculs	288,742	299,086	314,173	Rattans - piculs	5,094	5,188	14,323
Sugar —	108,640	139,298	245,872	Tortoiseshell —	4,389	9,587	14,153
Tin —	21,426	30,255	47,801	Tripang —	4,908	4,059	5,378
Pepper —	6,061	7,836	7,075	Birds' nests —	261	246	322
Indigo - lbs.	22,063	42,841	168,211	Mace —	177	745	947
Rice - piculs	392,067	505,199	622,941	Nutmegs —	1,301	2,559	3,849
Arrack - leggers	1,927	1,497	2,000	Cloves —	893	1,531	5,144
Hides - No.	30,249	63,271	82,386				

(See *Journal of an Embassy to Siam and Cochin China*, by *John Crawfurd, Esq.*, chap. xix.; *Return of the Population of British India*, in *Report of the Select Committee of the Commons*, 1831; *Report of the Select Committee of the Commons, for* 1830; and *Singapore Chronicle*, passim.)

SINOPE, a town of Asia Minor, on the S. coast of the Black Sea, lat. 42° 2′ 30″ N., lon. 35° 9′ 45″ E. Population uncertain, probably from 8,000 to 10,000. Sinope is situated on a low narrow isthmus, connecting the high rocky promontory of Ada with the main land. Its port, which is the best on this coast, on the south side of the town, is protected from the N. and N.E. gales by the isthmus and promontory already mentioned. Ships anchor within $\frac{1}{3}$ mile of the town, in from 13 to 17 fathoms; or nearer to it, in from 5 to 7 fathoms. There is a roadstead on the north side of the isthmus, but it is open and exposed. Sinope is one of the principal stations of the Turkish fleet; and there are docks and arsenals for its accommodation and outfit. Its exports are inconsiderable, the principal being timber, salt, cordage, fish oil, &c.

In ancient times, Sinope was a city of great wealth, magnitude, and importance. It was the birthplace of Diogenes the Cynic; and Mithridates made it the capital of his dominions. After its conquest by the Romans under Lucullus, it became the seat of a colony; and continued for a lengthened period to enjoy a good deal of consideration.

Should civilisation and the arts once more revive in the ancient Pontus, and the other countries to the south of the Black Sea, the excellence of its port could not fail to restore to Sinope some portion of its former grandeur. Even now a considerable intercourse is beginning to take place with the countries E. and S. of Sinope. Diarbeker, on the Tigris, in lat. 37° 54′ N., lon. 39° 53′ 45″ E., is one of the principal seats of Eastern commerce; and caravans set out regularly from it for Aleppo, Smyrna, and Constantinople: but any one who consults a map of Asia Minor, and of the contiguous countries, will see at once that Trebisond and the neighbouring ports on the S. E. coast of the Black Sea are the natural channels through which Armenia, Koordistan, and the north-western parts of Persia may best maintain an intercourse with Europe. We shall afterwards show that the danger to vessels in the roads of Trebisond has been very much exaggerated. — (See TREBISOND.) In the event, however, of the commerce with the countries referred to becoming of any considerable importance, Sinope would be an advantageous *entrepôt* to which goods might be brought, and whence they might be conveyed in proper vessels, and at proper times, to the other ports. At all events, it is of material importance that a direct intercourse with the southern coast of the Black Sea should be established, and that the trade with it should not be carried on, as hitherto, through Odessa. — (For further particulars as to Sinope, see *Tournefort, Voyage du Levant*, tom. ii. pp. 202-212.; and *Norie's Sailing Directions for the Black Sea*. See also the article TREBISOND, in this work.)

SKINS. The term is applied in commercial language to the skins of those animals, as calves, deer, goats, lambs, &c., which, when prepared, are used in the lighter works of bookbinding, the manufacture of gloves, parchment, &c.; while the term hides is applied to the skins of the ox, horse, &c., which, when tanned, are used in the manufacture of

shoes, harness, and other heavy and strong articles. Lamb and kid skins are principally used in the glove manufacture; 120 skins being supposed to produce, at an average, 18 dozen pairs of gloves.

Account of the Skins imported in 1831, specifying the Countries whence they came, and the Numbers brought from each.—(*Parl. Paper*, No. 550. Sess. 1833.)

Countries from which imported.	Skins.						
	Calf and Kip, untanned.	Deer, undressd.	Goat, undressd.	Kid, undressd.	Kid, dressed.	Lamb, undressd.	Seal, undressd.
	Cwt. qrs. lbs.	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*
Russia	27,521 3 7						
Sweden	- - -	3					
Norway	3 0 5	3	18,219	617			
Denmark	220 0 19	- -	- -	- -	- -	13,205	
Prussia	2,289 3 8	- -	480	- -	- -	2,200	
Germany	8,014 0 9	1,073	12,181	1,658	16,944	114,288	20
The Netherlands	2,881 1 9	- -	10,303	- -	576	11,650	26
France	- - -	- -	38,746	30,780	599,973	231,789	
Portugal, Proper	- -	- -	186	150	- -	33,469	
Azores	- -	- -	26				
Spain and the Balearic Islands	- -	- -	855	43,312	200	296,740	
Gibraltar	- - -	1	- -	1,035	- -	18	
Italy and the Italian islands	- -	- -	5,032	516,457	4,032	2,113,678	
Malta	- - -	- -	798	- -	1		
Ionian Islands	- -	- -	- -	312	- -	265	
Turkey and Continental Greece, exclusive of the Morea	0 1 12	- -	- -	- -	- -	2,790	
Tripoli, Barbary, and Morocco	- -	- -	137,610				
Western Coast of Africa	575 1 22						
Cape of Good Hope	104 0 23	6	90,030	2	54	- -	8,474
St. Helena	- -	- -	1				
East India Company's territories and Ceylon	241 3 1	5	29,974	1,247			
New South Wales, Van Diemen's Land, and Swan River	1 2 0	- -	- -	- -	- -	- -	6,143
British Northern colonies	20 0 10	1,942	5	3	- -	- -	513,459
British West Indies	- -	14					
United States of America	7 1 13	122,151	- -	- -	- -	- -	51
Mexico	- -	12	- -	- -	- -	- -	398
Brazil	3 1 24	- -	- -	- -	- -	- -	10
States of the Rio de la Plata	678 0 18	89	- -	- -	- -	- -	635
Chili	- -	- -	- -	- -	- -	- -	2,658
Peru	- -	58	10,735	- -	- -	- -	4,866
The Whale Fisheries	- -	- -	- -	- -	- -	- -	4,952
Isles of Guernsey, Jersey, Alderney, and Man (foreign goods)	4 3 15	- -	3				
Total import	42,637 1 27	125,337	354,584	595,573	621,780	2,820,092	541,692
Quantity retained for home consumption, deducting the quantity exported subsequently to the payment of duty	40,193 3 19	31,079	212,422	486,527	621,780	2,819,709	528,206

SLATE (ROOF), Ger. *Schiefer*; Fr. *Ardoise*; It. *Lavagna, Lastra*; Sp. *Pizarra*), a fossil or compact stone (*argillaceous schistus*), that may be readily split into even, smooth, thin laminæ. There are several varieties of this valuable mineral, the prevailing colours being grey, blue, and brown. But the tints are very various; and slates are often marked with streaks of a different colour from the ground. Slate is principally used in the covering of houses, for which purpose it is infinitely superior to thatch or tiles, and is far less expensive than lead. Good roofing slate should not absorb water; and it should be so compact as not to be decomposed by the action of the atmosphere. When properly selected, roof slates are of almost perpetual duration; but those which are spongy and imbibe moisture speedily get covered with moss, and require, at no very distant period, to be renewed.

The use of slates in the covering of houses is entirely European. From the Hellespont to China inclusive there is not a single slated house; and this does not arise from any want of slate, which is as abundant in Asia as in Europe.

Slates carried by land have never been subjected to any duty; but those carried coastwise were, until 1831, charged with duties varying according to their size and species. The injustice of this distinction, and the impolicy of laying any duty on an article of this sort, are obvious. The revenue it produced was quite inconsiderable, not exceeding 35,000*l.* a year. It was repealed at the same time as the duty on coal carried coastwise.

Since the repeal of the duty, the consumption of slate has been materially increased; and it is now extensively employed for various purposes to which it was not formerly made applicable, such as the flooring of warehouses and vaults, the paving of streets, the formation of cisterns, the covering of worn or decayed floors, and of the walls of houses in exposed situations, &c. The slate used for these purposes is cut by the circular saw into pieces of from ½ an inch to 2 inches thick. Many hundred tons have been used in the course of the last 2 years in paving, flooring, &c. at the London Docks; and, we believe, with much advantage to the company. Large *depôts* of slates are now formed in London and other great towns.

The principal slate quarries in Great Britain are in Caernarvonshire. Those belonging to Mr. Pennant (formerly Lord Penrhyn's), near Bangor, employ about 1,500 men and boys, and are the most extensive and valuable in the empire. The other quarries in the same county employ about 1,620 men and boys:

and there are some in other parts of Wales. There are also extensive quarries at Ulverstone, in Lancashire; and others, of inferior magnitude, in various parts of Westmoreland and Cumberland.

The principal slate quarries in Scotland are at Easdale and Balachulish, in Argyleshire. Speaking generally, the Scotch quarries do not afford slates of the size and smoothness of those obtained from the Welsh quarries; and the wood-work of the roofs covered with them requires to be stronger.

Roofing slates are of different sizes, and are denominated Imperials, Queens, Princesses, &c. Their price, supposing their quality to be in other respects equal, depends partly on their size and partly on their weight. The subjoined account explains the mode in which it is determined.

Account of the Prices of the different Sorts of Slate on Shipboard at Bangor, in January, 1834.

	£.
Imperials, 20, 24, 27, and 30 inches long, and various breadths	55 per ton.
Queens, 27, 30, 33, and 36 inches long, and proportionate breadths, assorted	46 —
Queens, 30 and 33 inches	48 —
Princesses, 24 by 14 inches	44 —
Ton slates or rags	35 —
Duchesses, 24 in. by 12, weighing 60 cwt. per m.,	140 per m.
Countesses, 20 — 10, — 40 —	90 —
Ladies, 16 — 8, — 25 —	45 —
Doubles, 13 — 6½, — 18 —	18 —
Singles, 11 — 5½, — 12 —	10 —
Moss slates, 11 to 15 by 6 to 15 in. 22 —	15 —
Inferiors.	
Duchesses, 24 in. by 12, weighing 82 cwt. per m.,	100
Countesses, 20 10, 55	63
Ladies, 16 8, 35	30
Doubles, 13 6½, 20	13 6*d.*

	s.
Slabs, sawn, per ton of 158 ft. superficial, in. thick,	65 per ton.
Do., if under 2 feet long, or 1 ft. 6 in. wide	75 —
Grave stones, not less than 6 ft. by 3 ft. 2½ in. thick,	60 —
Ended blocks or slabs, sawn at the ends only	60 —
Unsawn do.	50 —
Shipping expenses, 6*d.* per ton; bills of lading, 3*s.* 6*d.*	
	s.
No. 1. plain jambs, mantel and turned blocking, with plain edge shelf	9 each.
2. moulded jambs, mantel with turned blocking, with plain edge shelf	16 —
3. moulded jambs, &c. with bead mould	19 —
4. Grecian fret jambs and mantel	20 —
5. moulded truss jambs and mantel	28 —
6. panelled jambs and mantel	28 —
Cisterns, with sides and ends, inch thick, 1*s.* 10*d.*	per foot cubic contents.
Do. do. 1½ in. thick, 2*s.* 2*d.*	——

The subjoined account shows a very material increase in the quantity of slates exported.

An Account of the Quantities of Slate exported from England to Foreign Parts in each of the Five Years ending with 1832.

Years.	Slate or Slates, rough.		Slates in Frames.	Years.	Slate or Slates, rough.		Slates in Frames.
	Tons.	*Number.*	*Number.*		*Tons.*	*Number.*	*Number.*
1828	2,741	3,250,929	37,034	1831	4,798	4,257,494	18,372
1829	3,925	4,768,953	62,106	1832	6,061	1,859,283	15,420
1830	2,536	3,999,594	35,160				

SLAVES AND SLAVE TRADE. A slave, in the ordinary sense of the term, is an individual at the absolute disposal of another, who has a right to employ and treat him as he pleases. But the state of slavery is susceptible of innumerable modifications; and it has been usual, in most countries where it has been long established, to limit in various ways the power of the master over the slave. The *slave trade* is, of course, the business of those who deal in slaves.

Origin of Slavery. — A great deal of learning has been employed in tracing the history of slavery, though the subject is still far from being exhausted. It seems most probable that it originally grew out of a state of war. In rude uncivilised communities, where the passion of revenge acquires a strength unknown in more advanced states of society, captives taken in war are adjudged to belong to the victors, who may either put them to the sword, or reduce them to a state of servitude. In antiquity the ideas of war and slavery were inseparable. Probably, in very remote ages, prisoners were most commonly put to death; but the selfish gradually predominated over the more passionate feelings, and for many ages it was usual to reduce them to the condition of slaves; being either sold by their captors to others, or employed by them as they might think fit. "*Jure gentium*," says Justinian, "*servi nostri sunt, qui ab hostibus capiuntur.*"—(*Instit.* lib. i. 5.)

The practice of reducing men to a state of slavery, having once begun, was extended in various ways. The progeny of slaves, or of women in a state of slavery, were slaves; men born free might sell themselves as slaves; and parents had authority, in Judæa and Rome, to dispose of their children for the same purpose. — (*Michaelis on the Laws of Moses*, vol. ii. p. 163. Eng. ed.) It was the law of Rome, and of most other ancient states, that the persons of debtors who had contracted obligations which they could not discharge, should become the property of their creditors.

Treatment of Slaves. — The treatment of slaves in antiquity, as in more modern times, differed very widely in different countries and periods, and among different classes of slaves in the same country and at the same time. A great deal also depended on the character of particular masters. Slaves bred up in the house or family of the masters were uniformly treated with greater indulgence than others, and became entitled, by custom, to several important privileges. At Athens, slaves appear to have been better treated than in any other ancient state; and Demosthenes mentions, in his second Philippic, that "a slave was better off at Athens than a free citizen in many other countries." In republican Rome, the masters had the power of life and death over their slaves, who were often treated with the most detestable barbarity. It was not an uncommon practice to expose old, useless, or sick slaves to starve in an island in the Tiber! We may, as Mr. Hume has justly remarked, "imagine what others would practise, when it was the professed maxim of the elder Cato, to sell his superannuated slaves at any price, rather than main[illegible] a useless burden." — (*Plutarch, in Vitâ Catonis.*)

Ergastula, or dungeons, where slaves were confined and chained at night, and where they were sometimes made to work in the day, were common all over Italy. Columella advises that they be always built under ground — (lib. i. c. 6.); and remains of them are still seen in the lower stories of ancient buildings in Italy and Sicily. Hundreds of slaves were sometimes put to death for the crime of one only; and they were exposed, when they committed any petty fault, to all the violence of the most capricious and unrestrained despotism.

It was not uncommon in the barbarous ages to immolate captives on the tomb of such chiefs as had fallen in battle; and magnificent games were celebrated on these occasions.* The gladiatorial exhibitions, so common at Rome after the Punic wars, seem to have grown out of this practice. These were contests between slaves, denominated gladiators, trained to fight in public for the amusement of a ferocious populace, who took the greatest delight in their sanguinary combats. Thousands of unfortunate wretches were annually sacrificed in this inhuman sport. After his triumph over the Dacians, Trajan exhibited spectacles, in which no fewer than 11,000 wild beasts of different kinds were killed, and 10,000 gladiators fought! — (*Adam's Roman Antiquities*, p. 317.)

The cruelties inflicted on the slaves occasioned frequent revolts, attended by the most dreadful excesses. Spartacus, a Thracian captive, destined for the profession of a gladiator, headed a rebellion of gladiators and slaves, which continued for 3 years, and required all the force of the republic to suppress. When finally defeated by Crassus, about 6,000 of his followers were nailed to the cross, in double rows, that extended almost from Capua to Rome. — (*Ferguson, Rom. Republic*, c. 16.) No one acquainted with the manners of the Romans can be surprised at the atrocities of so many of the emperors. The worst of them treated the citizens better than the latter treated the slaves. Humanity could not be looked for in the rulers of a state in which human life was held in contempt, and human suffering made the subject of popular sport.

In consequence partly of their ill usage, and partly of its being accounted cheaper to buy than to breed slaves, vast numbers were annually imported into Italy. Thrace and the countries round the Black Sea furnished large supplies of the best slaves; and numbers were obtained from Egypt, Syria, Cappadocia, and other places. Delus in Cilicia was the greatest slave market of antiquity; as many as 10,000 slaves have been sold there in a single day. — (*Strabo*, lib. xiv.)

Besides its brutalising influence on the manners of the people, the institution of slavery was in other respects productive of the worst effects. The best Roman writers bear testimony to the negligence, waste, and bad conduct of slaves. — (*Columella*, lib. i. § 8.; *Plin. Hist. Nat.* lib. xvii. § 3.) The inferiority of the ancients in most of the useful arts is principally to be ascribed to the prevalence of slavery, which not only extinguished all emulation and invention on the part of most of those engaged in industrious employments, but made the employments be considered in some measure disgraceful. In the ancient world agriculture and arms were the only occupations that were reckoned worthy of a freeman. The mechanical arts were carried on either wholly by slaves, or by the very dregs of the people; and remained for ages in the same stationary state.

The establishment of Christianity contributed more, perhaps, than any thing else, first to mitigate, and finally to suppress the abomination of slavery. But within no very long period after its abolition had been completely effected in every part of Europe, its horrors began to be inflicted on America.

African Slave Trade. — This infamous traffic was commenced by the Portuguese, in 1442. The trade, however, was but of trifling extent till the commencement of the sixteenth century. In consequence, however, of the rapid destruction of the Indians employed in the mines of St. Domingo or Hayti, Charles V. authorised, in 1517, the introduction into the island, of African slaves from the establishments of the Portuguese on the coast of Guinea. The concurrence of the emperor was obtained by the intercession of the celebrated Las Casas, bishop of Chiapa, who, contradictorily enough, laboured to protect the Indians by enslaving the Africans. The latter were certainly more vigorous and capable of bearing fatigue than the former. But this circumstance affords no real justification of the measure, which, at best, was nothing more than the substitution of one species of crime and misery in the place of another. — (*Robertson's Hist. America*, book iii.)

The importation of negroes into the West Indies and America, having once begun, gradually increased, until the extent and importance of the traffic rivalled its cruelty and guilt. Sir John Hawkins was the first Englishman who engaged in it: and such was the ardour with which our countrymen followed his example, that they exported from Africa more than 300,000 slaves between the years 1680 and 1700; and between 1700 and 1786, 610,000 Africans were imported into Jamaica only; to which adding the imports into the other islands and the continental colonies, and those who died on their passage, the

* Achilles sacrificed 12 Trojan captives on the tomb of Patroclus. — (*Iliad*, lib. 23.)

number carried from Africa will appear immense. — (*Bryan Edwards, Hist. West Indies*, vol. ii. p. 64.) The importations by other nations, particularly the French and Portuguese, were also very great.

It is not easy to say whether this traffic has been more injurious to Africa or America. In the former it has perpetuated and multiplied every sort of enormity and abuse. The petty princes have been tempted to make war on each other, that they might obtain captives to sell to the European traders; and when these could not be found, have seized and sold their own subjects. Many, too, have been kidnapped by the crews of the slave ships; nor is there any sort of crime known among pirates and banditti, which, for more than 3 centuries, the civilised inhabitants of Europe have not perpetrated upon the unoffending natives of Central Africa. In the West Indies, and those parts of America into which slaves have been largely imported, its effect has been equally disastrous. It has led to the most violent antipathy between the whites and the blacks; and been the fruitful source of crimes, convulsions, and disorders, of which it is difficult to see the termination. — (There are some good remarks on slavery as it exists in America, and on the multiplied evils of which it is productive, in a volume entitled "Excursion of an English Gentleman through the United States and Canada," published in 1824.)

It would be to no purpose to enter into any examination of the sophisms by which it was formerly attempted to justify the slave trade. We shall not undertake to pronounce any opinion upon the question as to the inferiority of the blacks; though it does not appear to us that the statements of Mr. Jefferson on this subject, in his "Notes on Virginia," and similar statements made by others, have received any sufficient answer. But supposing the inferiority of the negroes were established beyond all question, that would be no justification of the infamous cruelties inflicted upon them. Did any one ever think of vindicating a robber, because he happened to be stronger or cleverer than his victim?

Abolition of the Slave Trade. — Notwithstanding the sanction it received from parliament, and the supineness of the public, the slave trade was frequently denounced by distinguished individuals, in this and other countries, as essentially cruel and unjust. Of these, Montesquieu is, perhaps, the most conspicuous. He successfully exposed the futility of the different pleas put forth by the advocates of slavery — (*Esprit des Loix*, liv. xv.); and the extensive circulation of his great work, and the deference paid to the doctrines advanced in it, contributed powerfully to awaken the public to a just sense of the iniquity of the traffic. The Quakers early distinguished themselves by their hostility to the trade; of which they were always the consistent and uncompromising enemies.

The first motion on the subject in parliament was made in 1776; but without success. The subject was not taken up systematically till 1787, when a committee was formed, of which Mr. Granville Sharp and Mr. Clarkson, whose names are imperishably associated with the history of the abolition of the slave trade, were members. This committee collected evidence in proof of the enormities produced by the trade, procured its circulation throughout the country, and succeeded in making a very great impression on the public mind. After a number of witnesses on both sides had been examined before the privy council, Mr. Wilberforce, on the 12th of May, 1789, moved a series of resolutions condemnatory of the traffic. They were supported by Mr. Burke in one of his best speeches; and by Mr. Pitt and Mr. Fox. But, notwithstanding the resolutions were carried, nothing was done to give them effect. The friends of the trade having obtained leave to produce evidence at the bar of the house, contrived to interpose so many delays that the session passed off without any thing being done. In the following sessions the great struggle was continued with various success, but without any definite result. At length the triumph of humanity and justice was finally consummated in 1807; a bill for the total and immediate abolition of the slave trade, having been carried in both houses by immense majorities, received the royal assent on the 25th of March, being the last act of the administration of Mr. Fox and Lord Grenville. "Thus ended," says Mr. Clarkson, "one of the most glorious contests, after a continuance of 20 years, of any ever carried on in any age or country: a contest, not of brutal violence, but of reason; a contest between those who felt deeply for the happiness and the honour of their fellow creatures, and those who, through vicious custom, and the impulse of avarice, had trampled under foot the sacred rights of their nature, and had even attempted to efface all title of the divine image from their minds."

America abolished the slave trade at the same time as England.

But notwithstanding what had been done, further measures were soon discovered to be necessary. The Spaniards and the Portuguese continued to carry on the trade to a greater extent than ever; and British subjects did not hesitate, under cover of their flags, to become partners in their adventures. An effectual stop was put to this practice is 1811, by the enactment of a law introduced by Mr. (now Lord) Brougham, that made trading in slaves punishable by transportation for 14 years, or by confinement to hard labour for a term of not more than 5 years nor less than 3 years.

The British laws relative to the slave trade were consolidated by the act 5 Geo. 4. c. 113. But, as the greater part of this act has been superseded by the late statute for the extinction of slavery (3 & 4 Will. 4. c. 73.), we shall merely lay before our readers the clauses still in force relating to the dealing in slaves.

Dealing in Slaves in the High Seas, &c. to be deemed Piracy. — And if any subject or subjects of his Majesty, or any person or persons residing or being within any of the dominions, forts, settlements, factories, or territories, now or hereafter belonging to his Majesty, or being in his Majesty's occupation or possession, or under the government of the United Company of Merchants of England trading to the East Indies, shall, except in such cases as are by this act permitted, after the 1st day of January, 1825, upon the high seas, or in any haven, river, creek, or place, where the admiral has jurisdiction, knowingly and wilfully carry away, convey, or remove, or aid or assist in carrying away, conveying, or removing, any person or persons as a slave or slaves, or for the purpose of his, her, or their being imported or brought as a slave or slaves into any island, colony, country, territory, or place whatsoever, or for the purpose of his, her, or their being sold, transferred, used, or dealt with as a slave or slaves; or shall, after the said 1st day of January, 1825, except in such cases as are by this act permitted, upon the high seas, or within the jurisdiction aforesaid, knowingly and wilfully ship, embark, receive, detain, or confine, or assist in shipping, embarking, receiving, detaining, or confining, on board any ship, vessel, or boat, any person or persons for the purpose of his, her, or their being carried away, conveyed, or removed as a slave or slaves, or for the purpose of his, her, or their being imported, or brought as a slave or slaves into any island, colony, country, territory, or place whatsoever, or for the purpose of his, her, or their being sold, transferred, used, or dealt with as a slave or slaves; then and in every such case the *persons so offending shall be deemed and adjudged guilty of piracy*, felony and robbery, *and being convicted thereof shall suffer death without benefit of clergy*, — and loss of lands, goods, and chattels, as pirates, felons, and robbers upon the seas ought to suffer. — § 9.

Persons dealing in Slaves, or exporting or importing Slaves, &c. guilty of Felony. — And (except in such special cases as are by this act permitted) if any persons shall deal or trade in, purchase, sell, barter, or transfer, or contract for the dealing or trading in, purchase, sale, barter, or transfer of slaves, or persons intended to be dealt with as slaves; or shall, otherwise than as aforesaid, carry away or remove, or contract for the carrying away or removing of slaves or other persons, as or in order to their being dealt with as slaves; or shall import or bring, or contract for the importing or bringing into any place whatsoever, slaves, or other persons, as or in order to their being dealt with as slaves; or shall, otherwise than as aforesaid, ship, tranship, embark, receive, detain, or confine on board, or contract for the shipping, transhipping, embarking, receiving, detaining, or confining on board of any ship, vessel, or boat, slaves or other persons, for the purpose of their being carried away or removed, as or in order to their being dealt with as slaves; or shall ship, tranship, embark, receive, detain, or confine on board, or contract for the shipping, transhipping, embarking, receiving, detaining, or confining on board of any ship, vessel, or boat, slaves or other persons, for the purpose of their being imported or brought into any place whatsoever, as or in order to their being dealt with as slaves; or shall fit out, man, navigate, equip, despatch, use, employ, let or take to freight or on hire, or contract for the fitting out, manning, navigating, equipping, despatching, using, employing, letting, or taking to freight or on hire, any ship, vessel, or boat, in order to accomplish any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall knowingly and wilfully lend or advance, or become security for the loan or advance, or contract for the lending or advancing, or becoming security for the loan or advance of money, goods, or effects, employed or to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall knowingly and wilfully become guarantee or security, or contract for the becoming guarantee or security, for agents employed or to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful, or in any other manner to engage, or contract to engage, directly or indirectly therein, as a partner, agent, or otherwise; or shall knowingly and wilfully ship, tranship, lade, or receive or put on board, or contract for the shipping, transhipping, lading, receiving, or putting on board of any ship, vessel, or boat, money, goods, or effects, to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall take the charge or command, or navigate, or enter and embark on board, or contract for the taking the charge or command, or for the navigating or entering and embarking on board of any ship, vessel, or boat, as captain, master, mate, surgeon, or supercargo, knowing that such ship, vessel, or boat is actually employed, or is in the same voyage, or upon the same occasion, in respect of which they shall so take the charge or command, or navigate or enter and embark, or contract so to do as aforesaid, intended to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall knowingly and wilfully insure, or contract for the insuring of any slaves, or any property or other subject matter engaged or employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; or shall wilfully and fraudulently forge or counterfeit any certificate, certificate of valuation, sentence, or decree of condemnation or restitution, copy of sentence or decree of condemnation or restitution, or any receipt [such receipts being required by this act], or any part of such certificate, certificate of valuation, sentence or decree of condemnation or restitution, copy of sentence or decree of condemnation or restitution, or receipt as aforesaid; or shall knowingly and wilfully utter or publish the same, knowing *it* to be forged or counterfeited, with intent to defraud his Majesty, or any other person or persons whatsoever, or any body politic or corporate; then, and in every such case the persons so offending, and their procurers, counsellors, aiders, and abettors, *shall be felons, and shall be transported* for a term not exceeding 14 years, or shall be confined and kept to hard labour for a term not exceeding 5 nor less than 3 years, at the discretion of the court before whom such offenders shall be tried. — § 10.

Seamen, &c. serving on Board such Ships guilty of Misdemeanour. — And (except in such special cases, or for such special purposes as are by this act permitted) if any persons shall enter and embark on board, or contract for the entering and embarking on board of any ship, vessel, or boat, as petty officer, seaman, marine, or servant, or in any other capacity not herein-before specifically mentioned, knowing that such ship, vessel, or boat is actually employed, or is in the same voyage, or upon the same occasion, in respect of which they shall so enter and embark on board, or contract so to do as aforesaid, intended to be employed in accomplishing any of the objects, or the contracts in relation to the objects, which objects and contracts have herein-before been declared unlawful; then, and in every such case, the persons so offending, and their procurers, counsellors, aiders, and abettors, shall be guilty of a misdemeanour only, and shall be punished by imprisonment for a term not exceeding 2 years. — § 11.

Abolition of Slavery. — We have already alluded (*antè*, p. 336.) to the ever memorable act of 1833, for the Abolition of Slavery throughout the British colonies. In enacting this celebrated statute, parliament endeavoured, and, we think successfully, to reconcile the apparently conflicting claims of humanity and justice, by providing for the emancipation of the slaves, without prejudice to the just rights and claims of their pro-

prietors. This was effected by assigning to the latter the sum of *twenty millions* sterling, which is to be distributed amongst them on their complying with the provisions of the act. This is the greatest sacrifice ever voluntarily made by any nation in vindication of the right of property. But it was not too great for the object in view; for had that right been violated in this instance, a precedent would have been set for its violation in others, and the consequences would have been most disastrous. The measure, in fact, reflects quite as much credit on the wisdom and honesty, as on the generosity, of the British nation.

We subjoin a full abstract of such parts of this important statute as seem to be of general interest.

ACT 3 & 4 WILL. 4. C. 73., FOR THE ABOLITION OF SLAVERY THROUGHOUT THE BRITISH COLONIES; for promoting the Industry of the manumitted Slaves; and for compensating the Persons hitherto entitled to the Services of such Slaves.

Slaves to become apprenticed Labourers from 1st of August, 1834. — After reciting, that it is expedient that the slaves in the British colonies should be manumitted and set free on compensation being made to those entitled to their services, the act goes on to declare, that from and after the 1st day of August, 1834, all persons who, in conformity with the laws now in force in the said colonies, shall, on or before the 1st day of August, 1834, have been duly registered as slaves in any such colony, and who, on the said 1st day of August, 1834, shall be actually within any such colony, and who shall by such registries appear to be, on the said 1st day of August, 1834, of the full age of 6 years or upwards, shall by force and virtue of this act, and without the previous execution of any indenture of apprenticeship, or other deed or instrument for that purpose, become and be apprenticed labourers; provided that, for the purposes aforesaid, every slave engaged in his ordinary occupation on the seas shall be deemed and taken to be within the colony to which such slave shall belong. — § 1.

Who entitled to Services of the Slave. — During the continuance of the apprenticeship of any such labourer, such person or persons shall be entitled to the services of such labourer as would for the time being have been entitled to his or her services as a slave if this act had not been made. — § 2.

All Slaves brought into U. K. with Consent of Possessors, free. — All slaves who may at any time previous to the passing of this act have been brought with the consent of their possessors, and all apprenticed labourers who may hereafter with the like consent be brought, into any part of the United Kingdom, shall from and after the passing of this act be absolutely and entirely free to all intents and purposes whatsoever. — § 3.

Apprenticed Labourers to be divided into prædial attached, prædial unattached, and non-prædial. — And whereas it is expedient that such apprenticed labourers should, for the purposes herein-after mentioned, be divided into 3 distinct classes; the first consisting of prædial apprenticed labourers attached to the soil, and comprising all persons who in their state of slavery were usually employed in agriculture, or in the manufacture of colonial produce or otherwise, upon lands belonging to their owners; the second consisting of prædial apprenticed labourers not attached to the soil, and comprising all persons who in their state of slavery were usually employed in agriculture, or in the manufacture of colonial produce or otherwise, upon lands not belonging to their owners; and the third consisting of non-prædial apprenticed labourers, and comprising all apprenticed labourers not included within either of the 2 preceding classes: be it therefore enacted, that such division shall be carried into effect in such manner and form, and subject to such rules and regulations, as shall for that purpose be established by such acts of assembly, ordinances, or orders in council as are herein-after mentioned: provided always, that no person of the age of 12 years and upwards shall be included in either of the said 2 classes of prædial apprenticed labourers, unless such person shall for 12 calendar months at the least next before the passing of this act have been habitually employed in agriculture or in the manufacture of colonial produce. — § 4.

Apprenticeship of the prædial Labourers limited. — No person who, by virtue of this act, or of any act of assembly, ordinance, or order in council, shall become a prædial apprenticed labourer, whether attached or not to the soil, shall continue in such apprenticeship beyond the 1st day of August, 1840; and during such apprenticeship, no such prædial apprenticed labourer shall be bound or liable to perform any labour in the service of his or her employer or employers for more than 45 hours in one week. — § 5.

Apprenticeship of the non-prædial Labourers. — No person who, by virtue of this act, or of any act of assembly, ordinance, or order in council, shall become a non-prædial apprenticed labourer, shall continue in such apprenticeship beyond the 1st day of August, 1838. — § 6.

Labourer may be discharged by his Employer. — If before such apprenticeship shall have expired, the person or persons entitled during the remainder of any such term to the services of such apprenticed labourer shall be desirous to discharge him or her from such apprenticeship, it shall be lawful for such person or persons so to do by deed or instrument; which deed or instrument shall be in such form, and shall be executed and recorded in such manner and with such solemnities, as shall be prescribed under authority: provided that, if any person so discharged from apprenticeship by voluntary act as aforesaid shall at that time be of the age of 50 years or upwards, or shall be then labouring under any such disease or mental or bodily infirmity as may render him or her incapable of earning his or her subsistence, the person or persons so discharging such apprenticed labourer shall continue and be liable to provide for his or her support and maintenance during the remaining term of the apprenticeship, as fully as if such labourer had not been discharged. — § 7.

Apprenticed Labourer may purchase his Discharge. — It shall be lawful for any apprenticed labourer to purchase his or her discharge from such apprenticeship, even without the consent, or in opposition, if necessary, to the will of the person or persons entitled to his or her services, upon payment to such person or persons of the appraised value of such services; the appraisement being effected, the purchase money being paid and applied, and the discharge being given and executed, in such manner and form, and subject to such conditions, as shall be prescribed by competent authority. — § 8.

Apprenticed Labourers not removable from the Colony. — No apprenticed labourer shall be subject or liable to be removed from the colony to which he may belong; and no prædial apprenticed labourer who may become attached to the soil shall be subject or liable to perform any labour in the service of his or her employer or employers except upon the works and business of the plantations or estates to which he or she had been attached, or on which he or she had been usually employed previously to the said 1st day of August, 1834: provided that, with the consent in writing of any 2 or more justices of peace holding such special commission as herein-after mentioned, it shall be lawful for those entitled to the services of any prædial apprenticed labourer or labourers to transfer his or their services to any other estate or plantation within the same colony belonging to them; which written consent shall in no case be given, or be of any validity, unless such justices of the peace shall first have ascertained that such transfer would not separate any such apprenticed labourer from his or her wife or husband, parent or child, or from any one reputed to bear such relation to him or her, and that such transfer would not probably be injurious to the health or welfare of such labourer; and such written consent to such removal shall be expressed in such terms, and be in each case given, attested, and recorded in the manner prescribed for that purpose. — § 9.

Right to the Services of apprenticed Labourers to be transferable. — The right or interest of any employer or employers to the services of any apprenticed labourers shall be transferable by bargain and sale, contract, deed, &c., according to such rules and in such manner as shall for that purpose be provided as herein-after mentioned; provided that no apprenticed labourer shall, by virtue of any such bargain, sale, &c., be subject to separation from his or her wife or husband, parent or child, or from any one reputed to bear such relation to him or her. — § 10.

Employer to supply the Labourer with Food, &c. — During the continuance of such apprenticeship, the person or persons entitled to the services of every apprenticed labourer shall be and is required to supply him or her with such food, clothing, lodging, medicine, medical attendance, and such other maintenance and allowances as, by any law now in force in the colony to which such apprenticed labourer may belong, an owner is required to supply to any slave of the age and sex as such apprenticed labourer; and in cases in which the food of such apprenticed labourer shall be supplied, not by the delivery to him or her of provisions, but by the cultivation by such labourer of ground set apart for the growth of provisions, those entitled to his or her services shall and are required to provide such apprenticed labourer with ground adequate, both in quantity and quality, for his or her support, and within a reasonable distance of his or her usual place of abode, and to allow such labourer, from and out of the time during which he or she may be required to labour, after the rate of 45 hours per week, in the service of his or her employers, such a portion of time as shall be adequate for the proper cultivation of such ground, and for the raising and securing the crops thereon grown; the actual extent of which ground, and the distance thereof from the place of residence of the apprenticed labourer for whose use it is allotted, and the length of time to be deducted for the cultivation of the said ground from the said annual time, shall, in each of the colonies aforesaid, be regulated as herein-after mentioned. — § 11.

All Slaves in the British Colonies emancipated from the 1st of August, 1834. — Subject to the obligations imposed by this act, or to be imposed by any act of general assembly, ordinance, or order in council as herein-after mentioned, upon such apprenticed labourers, *all and every the persons who, on the 1st day of August, 1834, shall be holden in slavery within any British colony, shall, from and after the said 1st day of August, 1834, become and be to all intents and purposes free and discharged of and from all manner of slavery, and shall be absolutely and for ever manumitted; and the children thereafter to be born to any such persons, and the offspring of such children, shall in like manner be free from their birth; and from and after the said 1st day of August, 1834, slavery shall be and is hereby utterly and for ever abolished and declared unlawful throughout the British colonies, plantations, and possessions abroad.* — § 12.

Children may be apprenticed. — Whereas it may happen that children who have not attained the age of 6 years on the 1st of August, 1834, or that children who after that day may be born to female apprenticed labourers, may not be properly supported by their parents, and that no other person may be disposed voluntarily to undertake their support, and it is necessary that provision should be made for the maintenance of such children; be it enacted, that if any child who, on the 1st of August, 1834, had not completed his or her 6th year, or if any child to which any female apprenticed labourer may give birth on or after the said 1st of August, 1834, shall be brought before any justice of the peace holding such special commission as herein-after mentioned, and if it be made to appear to the satisfaction of such justice that such child is unprovided with adequate maintenance, and that such child hath not completed his or her age of 12 years, it shall be lawful for such justice, and he is hereby required, to execute an indenture of apprenticeship, binding such child as an apprenticed labourer to the person or persons entitled to the services of its mother, or who had been last entitled to her services; but in case it be made to appear to such justice that such person or persons is or are unable or unfit to enter into such indenture, and properly to perform the conditions thereof, then such justice is required to bind such child to any other person or persons approved by him, who may be willing and able properly to perform such conditions; and every indenture of apprenticeship shall declare whether such child shall thenceforward belong to the class of attached prædial apprenticed labourers, or to the class of unattached prædial apprenticed labourers, or to the class of non-prædial apprenticed labourers; and the term of apprenticeship of such child shall be made to continue in force until such child shall have completed his or her 21st year, and no longer; and every child so apprenticed shall, during his or her apprenticeship, be subject to all rules and regulations respecting work or labour, and respecting food and other supplies, as any other apprenticed labourers: provided always, that the indenture of apprenticeship shall contain sufficient words of obligation upon the employer to allow reasonable time and opportunity for the education and religious instruction of such child. — § 13.

His Majesty, or any Governor, may appoint Justices of the Peace. — This clause authorises his Majesty, or any governor of any colony, to appoint special justices of the peace for carrying this act into effect. — § 14.

His Majesty may grant Salaries to special Justices. — This clause authorises his Majesty to grant salaries, not exceeding 300*l.* a year, to such special justices; providing that no person in the receipt of half-pay from his Majesty's land or naval forces shall forfeit or lose the same on being appointed a justice under this act. It also directs lists of such justices to be laid before parliament. — § 15.

Recital of various Regulations necessary for giving Effect to this Act. — Whereas it is necessary that various rules and regulations should be established for ascertaining, with reference to each apprenticed labourer, to what class he or she belongs, and for determining the manner in and the solemnities with which the voluntary discharge of any apprenticed labourer may be effected, and for prescribing the manner in and the solemnities with which the purchase by any apprenticed labourer of his or her discharge from such apprenticeship, without, or in opposition, if necessary, to, the consent of those entitled to his or her services, shall be effected, and how the necessary appraisement of the future value of such services shall be made, and how and to whom the amount of such appraisement shall be paid and applied, and in what manner and by whom the discharge shall be given, executed, and recorded; and it is also necessary, for the preservation of peace throughout the said colonies, that proper regulations should be established for the maintenance of order and good discipline amongst the said apprenticed labourers, and for insuring the punctual discharge of the services due by them to their employers, and for the prevention and punishment of indolence, or the neglect or improper performance of work by any apprenticed labourer, and for enforcing the due performance by such labourer of any contract into which he or she may voluntarily enter for any hired service during the time in which he or she may not be bound to labour for his or her employer, and for the prevention and punishment of insolence and insubordination on the part of such apprenticed labourers towards their employers, and for the prevention or punishment of vagrancy, or of any conduct on the part of any such apprenticed labourers injuring or tending to the injury of the property of any employer, and for the suppression and punishment of any riot or combined resistance of the laws on the part of such apprenticed labourers, and for preventing the escape of such apprenticed labourers, during their term of apprenticeship, from the colonies to which they may belong: and whereas it will also be necessary for the protection of such apprenticed labourers, that various regulations should be framed and established in the said colonies for securing punctuality and method in supplying them with food, clothing, lodging, medicines, medical attendance, and such other maintenance and allowances as they are entitled to receive, and for regulating the amount and quality of all such articles in cases where the laws at present existing may not have made any regulation or any adequate regulation for that purpose; and it is also necessary that proper rules should be established for the prevention and punishment of any frauds which might be practised, or of any omissions or neglects which might occur, respecting the quantity or the quality of the supplies so to be furnished, or respecting the periods for the delivery of the same: and whereas it is necessary, in those cases in which the food of any such prædial apprenticed

labourers as aforesaid may either wholly or in part be raised by themselves by the cultivation of ground set apart and allotted for that purpose, that proper regulations should be made and established as to the extent of such grounds, and as to the distance at which such grounds may be so allotted from the ordinary place of abode of such prædial apprenticed labourers, and respecting the deductions to be made from the cultivation of such grounds from the annual time during which such prædial apprenticed labourers are declared liable to labour: and whereas it may also be necessary, by such regulations, to secure to apprenticed labourers the enjoyment for their own benefit of that portion of their time during which they are not required to labour in the service of their respective employers, and for securing exactness in the computation of the time during which such labourers are required to labour in the service of their employers; and it is also necessary that provision should be made for preventing the imposition of task-work on any apprenticed labourer without his or her free consent to undertake the same; but it may be necessary by such regulations in certain cases to require and provide for the acquiescence of the minority of the prædial apprenticed labourers attached to any plantation or estate in the distribution and apportionment amongst their whole body of any task-work which the majority of them shall be willing and desirous collectively to undertake; and it is also necessary that regulations should be made respecting any voluntary contracts into which any apprenticed labourers may enter with their respective employers or with any other person for hired service for any future period, and for limiting the greatest period of time to which such voluntary contract may extend, and for enforcing the punctual performance of such contracts on the part both of such labourers and of those engaging for their employment and hire; and it is also necessary that regulations should be made for the prevention or punishment of any cruelty, injustice, or other wrong or injury done to or inflicted upon any such apprenticed labourers by those entitled to their services; and it is also necessary that proper regulations should be made respecting the manner and form in which indentures of apprenticeship shall be made on behalf of children, and respecting the registering and preservation of such indentures: and whereas it is also necessary that provision should be made for insuring promptitude and despatch, and for preventing unnecessary expense, in the discharge by the justices of the peace of the jurisdiction and authorities committed to them, and for enabling such justices to decide in a summary way such questions as may be brought before them in that capacity, and for the division of the colonies into districts for the purposes of such jurisdiction, and for the frequent and punctual visitation by such justices of the apprenticed labourers within their respective districts; and it is also necessary that regulations should be made for indemnifying and protecting such justices of the peace in the upright execution and discharge of their duties: and whereas such regulations could not without great inconvenience be made except by the respective governors, councils, and assemblies, or other local legislatures of the said respective colonies, or by his Majesty, with the advice of his privy council, in reference to those colonies to which the legislative authority of his Majesty in council extends; be it therefore enacted and declared, that nothing in this act contained extends or shall be construed to extend to prevent the enactment by the respective governors, councils, and assemblies, or by such other local legislatures as aforesaid, or by his Majesty, with the advice of his privy council, of any such acts of general assembly, or ordinances, or orders in council as may be requisite for making and establishing such rules and regulations, or for carrying the same into full and complete effect: provided nevertheless, that it shall not be lawful for any such governor, council, and assembly, or for any local legislature, or for his Majesty in council, to make or establish any enactment, regulation, provision, rule, or order in anywise repugnant or contradictory to this present act, but that every such enactment, regulation, &c. shall be and is declared to be absolutely null and void. — § 16.

Such Colonial Acts may not authorise the whipping or Punishment of the Labourer. — It shall not be lawful for any such governor, &c., or other colonial legislature, or for his Majesty in council, by any such act, ordinance, &c., to authorise any one entitled to the services of any apprenticed labourer, or any person or persons other than justices of the peace holding special commissions as aforesaid, to punish any apprenticed labourer for any offence committed or alleged to have been committed, by the whipping, beating, or imprisonment of his or her person, or by any other personal correction or punishment whatsoever, or by any addition to the hours of labour herein-before limited; nor to authorise any court, judge, or justice to punish any apprenticed labourer, being a female, for any offence by her committed, by whipping or beating her person; and that every enactment, regulation, &c. for any such purpose is hereby declared to be absolutely null and of no effect: provided always, that nothing in this act contained doth or shall extend to exempt any apprenticed labourer from the operation of any law or police regulation in force for the prevention or punishment of any offence, such law or police regulation being in force against and applicable to all persons of free condition. — § 17.

The next 2 sections provide that none but special justices, holding commissions as aforesaid, shall act in execution of this act, or interfere between apprenticed labourers and their employers; but reserving to the supreme courts such powers in relation hereto as may now be vested in them.

Apprenticed Labourers not to be subject to Prolongation or Renewal of Apprenticeship. — No apprenticed labourer shall, by act of assembly, ordinance, or order in council, be rendered liable, in respect of any offence, or upon any pretext whatsoever, except as hereafter is mentioned, to any prolongation of his or her term of apprenticeship, or to any new or additional apprenticeship, or to any such additional labour as shall impose upon such apprenticed labourer the obligation of working in the service or for the benefit of those entitled to his or her services for more than 15 extra hours in the whole in any 1 week, but every such enactment, regulation, provision, &c. shall be and is null and void and of no effect: provided nevertheless, that any act of assembly, ordinance, or order in council, may contain provisions for compelling any apprenticed labourer, who shall, during his or her apprenticeship, wilfully be absent from the service of his or her employer, either to serve such employer after the expiration of his or her apprenticeship for so long a time as he or she shall have so been absent from such service, or to make satisfaction to his or her employer for the loss sustained by such absence (except so far as he or she shall have made satisfaction for such absence, either out of such extra hours as aforesaid, or otherwise), but nevertheless so that such extra service or compensation shall not be compellable after the expiration of 7 years next after the termination of the apprenticeship of such apprentice. — § 20.

Apprenticed Labourers not to be compelled to work on Sundays. — Neither under the provisions or obligations imposed by this act, or any act of general assembly, ordinance, or order in council, shall any apprenticed labourer be compelled to labour on Sundays, except in works of necessity, or in domestic services, or in the protection of property, or in tending of cattle, nor shall any apprenticed labourer be hindered from attending anywhere on Sundays for religious worship, at his or her free will or pleasure, but shall be at full liberty so to do without let, denial, or interruption whatsoever. — § 21.

Nothing herein to interfere with certain Colonial Laws. — Nothing in this act extends or shall be construed to extend to interfere with or prevent the enactment by the governors, councils, and assemblies, or by such other local legislature of any colonies, or by his Majesty in council in reference to such colonies as are subject to the legislative authority of his Majesty in council, of any acts, ordinances, &c. for exempting any apprenticed labourers, during the continuance of their apprenticeship, from any civil or military service, or for disqualifying them during the continuance of any such apprenticeships from the enjoyment or discharge of any political franchise, or for exempting them during the continuance of such apprenticeships from being arrested or imprisoned for debt. — § 22.

Acts passed by local Legislatures with similar but improved Enactments to this Act to supersede this Act. — In case the governor, council, and assembly of one or more colonies shall, by any act or acts of general assembly for that purpose, substitute for the several enactments herein contained, or any of them, any enactments accomplishing the several objects in such enactments respectively contemplated as fully and to the like effect, but in a manner and form better adapted to the local circumstances of such colonies

or colony, and in case his Majesty shall, by any order in council, confirm and allow such act or acts of assembly, and shall in such order recite and set forth the provisions and enactments of this present act for which such other enactments shall have been substituted, then and in such case so much and such parts of this present act as shall be so recited and set forth in any such order in council shall be suspended and cease to be of any force in such colony from and after the arrival and proclamation therein of any such order or orders in council, and shall continue to be so suspended so long as any such substituted enactments shall continue in force, and no longer. — § 23.

The Treasury may raise Loans, not exceeding 20,000,000l. — This section recites, that towards compensating the persons at present entitled to the services of the slaves to be manumitted and set free by virtue of this act for the loss of such services, the Commons of Great Britain and Ireland in parliament assembled have resolved to give and grant to his Majesty the sum of 20,000,000*l.* sterling. Authority is then given to raise such 20,000,000*l.*, and to grant annuities for the same. Directions are also given how the same is to be paid; and the interest and charges are made chargeable upon the consolidated fund. — §§ 24—32.

Commissioners to be appointed for distributing Compensation. — It shall be lawful for his Majesty from time to time, by a commission under the great seal, to constitute and appoint such persons, not being less than 5, as to his Majesty shall seem meet, to be commissioners of arbitration for inquiring into and deciding upon the claims to compensation which may be preferred to them under this act. — § 33.

Sections 34. to 43. inclusive, regulate the appointment of, meetings, and manner of proceeding before, the commissioners.

No Part of Compensation to be applicable to any Colony unless his Majesty declare that adequate Provision has been made by the Legislature thereof. — No part of the said sum of 20,000,000*l.* sterling shall be applied for the benefit of any person now entitled to the services of any slave in any of the colonies, unless an order shall have been first made by his Majesty in council, declaring that adequate and satisfactory provision hath been made by law in such colony for giving effect to this present act by such further and supplementary enactments as aforesaid, nor unless a certified copy of such order in council shall have been transmitted to the commissioners of his Majesty's treasury for their guidance or information; and every such order shall be published 3 several times in the *London Gazette*, and shall be laid before both houses of parliament within 6 weeks next after the date thereof, if parliament shall be then in session, and if not, within 6 weeks from the next ensuing session. — § 44.

The Commissioners to apportion the Compensation Fund. — The said commissioners shall proceed to apportion the said sum into 19 different shares, which shall be respectively assigned to the several British colonies or possessions, viz. the Bermuda Islands, the Bahama Islands, Jamaica, Honduras, the Virgin Islands, Antigua, Montserrat, Nevis, St. Christopher's, Dominica, Barbadoes, Grenada, St. Vincent's, Tobago, St. Lucia, Trinidad, British Guiana, the Cape of Good Hope, and Mauritius; and in making such apportionment of the said funds among the several colonies, the commissioners shall and are required to have regard to the number of slaves belonging to or settled in each of such colonies, as the same may appear and are stated according to the latest returns made in the office of the registrar of slaves in England, appointed under the authority of the act 59 Geo. 3. c. 120., intituled "An Act for establishing a Registry of Colonial Slaves in Great Britain, and for making further Provision with respect to the Removal of Slaves from British Colonies;" and the said commissioners are further required, in making such apportionment, to have regard to the prices for which, on an average of 8 years ending the 31st day of December, 1830, slaves have been sold in each colony, excluding from consideration any sales in which they shall have sufficient reason to suppose that slaves were sold or purchased under any reservation, or subject to any express or tacit condition affecting their price; and the said commissioners shall then proceed to ascertain, in reference to each colony, what amount of sterling money will represent the average value of a slave therein for the said period of 8 years; and the total number of the slaves in each colony being multiplied into the amount of sterling money so representing such average value of a slave therein, the product of such multiplication shall be ascertained for each colony separately; and the said 20,000,000*l.* sterling shall then be assigned to and apportioned amongst the said several colonies rateably and in proportion to the product so ascertained for each respectively. — § 45.

No Compensation to be allowed for Persons illegally held in Slavery. — In case it shall appear that any persons in respect of whom claims for compensation shall have been made have been registered and held in slavery in any colony mentioned in this act contrary to law, in every such case the commissioners shall deduct from the sum to be appropriated as compensation to the proprietors in such colony, such sums as shall correspond with the estimated value and number of the persons so illegally registered and held in slavery; and all such sum or sums which may be deducted as herein-before provided shall be applied towards defraying the general expenses of the commission: provided always, that for the purpose of ascertaining in what cases such deductions shall be made, every question arising in any colony respecting the servile condition of any persons registered as slaves shall be inquired of and determined by the commissioners to be appointed under this act, according to such rules of legal presumption and evidence as are or shall be established by any law in force or which shall be in force in any such colony. — § 46.

Commissioners to institute Inquiries, &c. — It shall be the duty of said commissioners, and they are hereby required, to institute a full and exact inquiry into all the circumstances connected with each of the said several colonies which in their judgment ought, in justice and equity, to regulate or affect the apportionment within the same of that part of the general compensation fund which shall be assigned to each of the said colonies; and especially such commissioners shall have regard to the relative value of prædial slaves and of unattached slaves in every such colony; and they shall distinguish such slaves, whether prædial or unattached, into as many distinct classes as, regard being had to the circumstances of each colony, shall appear just; and such commissioners shall, with all practicable precision, ascertain and fix the average value of a slave in each of the classes into which the slaves in any such colony shall be divided; and the commissioners shall also inquire and consider of the principles according to which the compensation to be allotted in respect to any slave or body of slaves ought, according to the rules of law and equity, to be distributed amongst persons who, as owners or creditors, legatees or annuitants, may have any joint or common interest in any such slave or slaves, or may be entitled to or interested in such slave or slaves, either in possession, remainder, reversion, or expectancy; and the commissioners shall also inquire and consider of the principles and manner in which provision might be most effectually made for the protection of any interest in any such compensation money which may belong to or be vested in any married women, infants, lunatics, or persons of insane or unsound mind, or persons beyond the seas, or labouring under any other legal or natural disability or incapacity, and according to what rules, and in what manner, and under what authority, trustees should, when necessary, be appointed for the safe custody, for the benefit of any person or persons, of such compensation fund, or of any part thereof, and for regulating the duties of such trustees, and providing them with a fair and reasonable indemnity; and the commissioners shall also inquire and consider upon what principles, according to the established rules of law and equity in similar cases, the succession to such funds should be regulated upon the death of any person entitled thereto who may die intestate; and the commissioners are also required to consider of any other question which it may be necessary to investigate in order to establish just and equitable rules for the apportionment of such compensation money amongst the persons seised of, or entitled to, or having any mortgage, charge, incumbrance, judgment, or lien upon, or any claim to, or right or interest in, any slave or slaves to be manumitted as aforesaid, at the time of such their manumission; and having made all such inquiries, and having taken all such matters and things as aforesaid into their consideration, the said commissioners shall draw up and frame such general rules, regard being had to the laws and usages in force in each colony respectively, as to them may seem best adapted in each colony for securing the just and equitable distribution of the said

funds amongst or for the benefit of the several persons aforesaid, and for the protection of such funds, and for the appointment and indemnification of such trustees as aforesaid; and such general rules, when framed, and agreed upon by the commissioners, shall be subscribed with their respective hands and seals, and transmitted to the president of council, to be laid before his Majesty; and so from time to time as often as any further general rules should be so framed and agreed to for the purposes aforesaid, or any of them. — § 47.

Rules to be published in the London Gazette. — The general rules to be transmitted as aforesaid to the said Lord President shall be forthwith published in the *London Gazette* on 3 several occasions at least, together with a notice that all persons interested in or affected by them may, by a time to be in such notice limited, appeal against any such rules to his Majesty in council; and it shall be lawful for the Lords of his Majesty's privy council, or for any 3 or more of them, by any further notice or notices published in the *London Gazette*, to enlarge the time for receiving any such appeals. — § 48.

Section 49. enacts that his Majesty in council may hear such appeals, and thereupon confirm or disallow any general rule so appealed against.

Section 50. enacts that, in absence of appeal, his Majesty in council may confirm, rescind, or amend such rules.

The remaining sections respect the enrolment of rules, and the proceedings under appeal to his Majesty in council; the mode in which sums awarded by the commissioners are to be paid, &c.

Foreign Slave Trade. — At the congress of Vienna, in 1814, the plenipotentiaries of the great powers agreed to a declaration that the slave trade was "repugnant to the principles of humanity and of universal morality; and that it was the earnest desire of their sovereigns to put an end to a scourge which had so long desolated Africa, degraded Europe, and afflicted humanity."

But notwithstanding this memorable declaration, the immediate abolition of the trade was not agreed to. France was allowed to continue it for *five* years. It is, besides, abundantly certain that, though the trade nominally ceased in 1819, it has since been clandestinely carried on to a great extent in French ships, if not with the connivance, at least without much opposition, on the part of the late government of France. There is now, however, reason to hope that it will be effectually suppressed; for according to a recent arrangement (Nov. 30. 1831) made with his Majesty Louis-Philippe, the right of search is reciprocally conceded, within certain limits, by the French and English; so that French ships suspected of being engaged in the trade may be stopped by British cruisers.

Considering the efforts Great Britain made in behalf of Spain and Portugal, and the influence she might have been supposed to have acquired with the restored monarchs of those countries, it may well excite astonishment that our negotiators (whether from the intractability of those with whom they had to deal, or from want of address and firmness on their parts, we leave it to others to decide), were unable to prevail on these powers to renounce the trade till after the lapse of a considerable period. They succeeded, indeed, in inducing them to exempt that portion of the African coast north of the Equator from their piratical attacks; and for this concession, and damages alleged to have been sustained by their slave ships from our cruisers, Great Britain has paid them no less than 1,230,000*l.*! — (See Sierra Leone.)

The Spanish slave trade was to have finally ceased, according to the stipulations in the treaty between Spain and this country of the 5th of July and 28th of August, 1814, in 1820. But within these 2 years, and, perhaps, at this very moment, slave ships have been publicly fitted out from Cuba, and immense numbers of slaves have been imported into that island, with the open connivance of the authorities. A mixed commission court, consisting of British and Spanish commissioners, has been established at Havannah, for the condemnation of vessels proved to have been engaged in the slave trade. But we are officially informed by Mr. Macleay, one of the commissioners, that since the establishment of the court no seizure of a slave vessel has ever taken place, but on the interference and denunciation of the British commissioners; and even then *such seizure has only been made, to be instantly followed by a perfect acquittal in the Spanish tribunals!*" — (*Parl. Paper*, No. 120. Sess. 1831, p. 53.)

Slaves were freely imported in immense numbers into Brazil, till February, 1830, when the trade was to cease, conformably to the convention entered into with this country on the 23d of June, 1826. — (See Rio de Janeiro.) But whether the clandestine and illegal, as well as the open and legitimate importation of slaves, be at an end is more than we can undertake to say.

On the whole, we are afraid that nothing short of a declaration by the great powers, making the slave trade piracy, will be sufficient entirely to rid humanity of its guilt and horrors.

SMALTZ, or SMALT (Ger. *Schmalz*; Du. *Smalt*; Fr. *Smalt*; It. *Smalto azzurro, Smaltino*; Sp. *Esmalte, Azul azur*; Rus. *Lasor*), an oxide of cobalt, melted with siliceous earth and potash. It is a sort of glass, of a beautiful deep blue colour; and being ground very fine, is known by the name of powder blue. The colour of smaltz is not affected by fire; and it is consequently in great demand in the painting of earthenware. It is also employed in the colouring of paper, and for other purposes in the arts. Beckmann has proved that the process used in the preparation of smaltz was invented about the end of the 15th or the beginning of the 16th century; and that the blue

glass of the ancients owes its colour, not to the presence of cobalt or of smaltz, but to that of iron. — (*Hist. of Inventions*, vol. ii. art. *Cobalt.*)

Smaltz is principally manufactured in Germany and Norway. Of 391,523 lbs. imported into Great Britain in 1831, 206,840 lbs. came from Norway, 161,705 from Germany, and 23,958 from the Netherlands. At an average of 1831 and 1832, the entries of smaltz for home consumption amounted to 319,408 lbs. a year. The duty on smaltz has recently been reduced from 6*d.* to 4*d.* per lb.

SMUGGLING, the offence of defrauding the revenue by the introduction of articles into consumption, without paying the duties chargeable upon them. It may be committed indifferently either upon the excise or customs revenue.

Origin and Prevention of Smuggling. — This crime, which occupies so prominent a place in the criminal legislation of all modern states, is wholly the result of vicious commercial and financial legislation. It is the fruit either of prohibitions of importation, or of oppressively high duties. It does not originate in any depravity inherent in man; but in the folly and ignorance of legislators. A prohibition against importing a commodity does not take away the taste for it; and the imposition of a high duty on any article occasions a universal desire to escape or evade its payment. Hence, the rise and occupation of the smuggler. The risk of being detected in the clandestine introduction of commodities under any system of fiscal regulations may always be valued at a certain average rate; and wherever the duties exceed this rate, smuggling immediately takes place. Now, there are plainly but two ways of checking this practice, — either the temptation to smuggle must be diminished by lowering the duties, or the difficulties in the way of smuggling must be increased. The first is obviously the more natural and efficient method of effecting the object in view; but the second has been most generally resorted to, even in cases where the duties were quite excessive. Governments have uniformly almost consulted the persons employed in the collection of the revenue with respect to the best mode of rendering taxes effectual; though it is clear that the interests, prejudices, and peculiar habits of such persons utterly disqualify them from forming a sound opinon on such a subject. They cannot recommend a reduction of duties as a means of repressing smuggling and increasing revenue, without acknowledging their own incapacity to detect and defeat illicit practices; and the result has been, that, instead of ascribing the prevalence of smuggling to its true causes, the officers of customs and excise have almost universally ascribed it to some defect in the laws, or in the mode of administering them, and have proposed repressing it by new regulations, and by increasing the number and severity of the penalties affecting the smuggler. As might have been expected, these attempts have, in the great majority of cases, proved signally unsuccessful. And it has been invariably found, that no vigilance on the part of the revenue officers, and no severity of punishment, can prevent the smuggling of such commodities as are either prohibited or loaded with oppressive duties. The smuggler is generally a popular character; and whatever the law may declare on the subject, it is quite ludicrous to expect that the bulk of society will ever be brought to think that those who furnish them with cheap brandy, geneva, tobacco, &c. are guilty of any very heinous offence.

"To pretend," says Dr. Smith, "to have any scruple about buying smuggled goods, though a manifest encouragement to the violation of the revenue laws, and to the perjury which almost always attends it, would, in most countries, be regarded as one of those pedantic pieces of hypocrisy, which, instead of gaining credit with any body, seems only to expose the person who affects to practise them to the suspicion of being a greater knave than most of his neighbours. By this indulgence of the public, the smuggler is often encouraged to continue a trade, which he is thus taught to consider as, in some measure, innocent; and when the severity of the revenue laws is ready to fall upon him, he is frequently disposed to defend with violence what he has been accustomed to regard as his just property; and from being at first rather imprudent than criminal, he, at last, too often becomes one of the most determined violators of the laws of society." — (*Wealth of Nations*, vol. iii. p. 491.)

To create by means of high duties an overwhelming temptation to indulge in crime, and then to punish men for indulging in it, is a proceeding completely subversive of every principle of justice. It revolts the natural feelings of the people; and teaches them to feel an interest in the worst characters — for such smugglers generally are — to espouse their cause, and avenge their wrongs. A punishment which is not proportioned to the offence, and which does not carry the sanction of public opinion along with it, can never be productive of any good effect. The true way to put down smuggling is to render it unprofitable; to diminish the temptation to engage in it: and this is not to be done by surrounding the coasts with cordons of troops, by the multiplication of oaths and penalties, and making the country the theatre of ferocious and bloody contests in the field, and of perjury and chicanery in the courts of law; but by repealing prohibitions, and reducing duties, so that their collection may be enforced with a moderate degree of vigilance; and that the forfeiture of the article may be a sufficient penalty

upon the smuggler. It is in this, and in this only, that we must seek for an effectual check to illicit trafficking. Whenever the profits of the fair trader become nearly equal to those of the smuggler, the latter is forced to abandon his hazardous profession. But so long as prohibitions or oppressively high duties are kept up, or, which is, in fact, the same thing, so long as *high bounties* are held out to encourage the adventurous, the needy, and the profligate, to enter on this career, we may be assured that armies of excise and custom-house officers, backed by the utmost severity of the revenue laws, will be insufficient to hinder them.

Smuggling in France and England. — The recently printed *Report* of Messrs. Villiers and Bowring, on the commercial relations between France and Great Britain, contains some very curious and instructive details as to the smuggling carried on between them. They afford the most satisfactory and convincing proofs of the incapacity of restrictions and prohibitions to secure a real monopoly of any extensive market; and show that their principal effect is to promote illicit traffic; and to make that ingenuity and invention be exerted in devising means to defeat and elude the law, which, under a more liberal system, would be exerted to improve the methods of production. The introduction of prohibited goods is more easily effected by land than by sea; and smuggling into France is, in consequence, carried on principally through her north and east frontiers. Considerable quantities of prohibited or overtaxed goods are, however, introduced by sea. A regular tariff of risks is established; and persons of undoubted solidity contract, for certain premiums, which for the most part are abundantly moderate, to deliver any prohibited article in any part of France. Owing to the system of *octrois*, or of the collection of duties at the gates of large towns, where an inspection of the goods may also be made, the cost of smuggling into Paris and other populous places is considerably greater than that of smuggling into villages. At an average, however, most foreign goods may be delivered in Paris at a charge of from 25 to 30 per cent. *ad valorem* on their real value.

Notwithstanding the advantage of a sea frontier, a coast guard, and a most efficient Custom-house establishment, the facts embodied by Messrs. Villiers and Bowring in their *Report* show that smuggling is in quite as flourishing a condition on the shores of England as on the land frontier of France. The premium on the illicit introduction amongst us of prohibited or overtaxed goods varies from 15 to 40 per cent. *ad valorem*, according to the description of the article. The parties employing the smugglers run no risk. The latter, or their agents, attend regularly upon 'Change; and "it is their constant practice to deposit the value of the goods confided to their care in a banker's acceptance, as a security to the owner!" — (*Report*, p. 54.) It could hardly, indeed, have been otherwise. Brandy, which is the favourite article for smuggling speculations, may be bought for shipment in France at from 3*s.* 6*d.* to 5*s.* a gallon. It is highly popular amongst us; but instead of admitting it to consumption under a moderate duty, or even under the high duty of 8*s.* or 10*s.*, we load it with the oppressive and exorbitant duty of 22*s.* 6*d.*; that is, with a duty varying from 450 to 650 per cent. *ad valorem!* Had those who originally imposed this duty, and those by whom it has been kept up, been deeply interested in smuggling adventures, their conduct would have been intelligible; but, as no such excuse can be made for them, it has been in the last degree irrational and absurd. The temptation to the illicit introduction of brandy, occasioned by the exorbitancy of the duty, has roused all the energies of the smuggler, who has defeated the utmost vigilance of the revenue officers, and eluded or defied the multiplied pains and penalties of the customs laws! Messrs. Villiers and Bowring estimate, from a comparison of the shipments of different articles from France for England with the imports into the latter, and other authentic data, that the total amount of duties evaded by the fraudulent importation of overtaxed French articles (exclusive of tobacco, whole cargoes of which are sometimes introduced into Ireland) into this country amounts to about 800,000*l.* a year. — (p. 54.) Of this sum, the loss on brandy makes by far the largest item; and is said to be "*considerably more than* 500,000*l.*!" — (p. 57.) It is plain, therefore, that, as a means of raising revenue, this system is signally unsuccessful; but it is so in a far greater degree than appears even from the above statements: for, in addition to the vast quantity of overtaxed articles clandestinely introduced, and on which a reasonable duty would be paid, it occasions the overloading of the market with spurious, counterfeit articles, by which the public health as well as the revenue is materially injured. Nor is this all. In order to render oppressive duties productive of any revenue, it is necessary to organise and keep constantly on foot a very numerous and costly customs establishment. It is abundantly certain that we lose, by the clandestine importation of brandy, geneva, and tobacco, from France, Belgium, and Holland, above 1,500,000*l.* a year of revenue; and it is admitted, on all hands, that, but for the oppressive duties on these articles, a saving of 500,000*l.* a year might be effected in the customs department. Nothing, therefore, can be more futile than to attempt vindicating exorbitant duties on the pretence of their being required to keep up

the revenue. In point of fact, such duties are about the most efficient engines that can be devised for its reduction. The revenue derived from coffee has been trebled by reducing the duty from 1*s.* 7*d.* to 6*d.* per lb.—(see COFFEE); the revenue derived from British spirits was materially increased by reducing the duty from 5*s.* 6*d.* to 2*s.* 6*d.* the wine gallon—(see SPIRITS); and Mr. Pitt increased the duty derived from brandy, geneva, &c., in 1786, not by adding to, but by taking 50 per cent. from, the duties with which they had previously been loaded! There cannot, indeed, be the shadow of a doubt that the revenue derived from brandy and geneva would be very largely increased by reducing the duties to 8*s.* or 10*s.* a gallon. A measure of this sort, coupled as it ought to be with a reduction of the duties on tobacco—(see TOBACCO),—would do what neither coast guards, preventive services, revenue cruisers, or customs acts will ever do,—it would go far to annihilate smuggling; and would enable the services of a large number of revenue officers to be dispensed with.

But the demoralising influence of an extensive smuggling system is the worst consequence of oppressive duties and prohibitions. They make the smuggler be regarded as a public benefactor, and procure for him the sympathy of all classes, and the strenuous support of those in the lower walks of life. No one acquainted with the state of the peasantry in extensive districts of Kent and Sussex, will believe that it is easy to exaggerate the evils that spring from this source. The whole body of labourers may be said to be in combination with the smugglers; and numbers of them are every now and then withdrawn from their usual employments to assist in their desperate adventures. Lawless, predatory, and ferocious habits are thus widely diffused; and thousands, who, but for this moral contamination, would have been sober and industrious, are trained to despise and trample on the law, and to regard its functionaries as enemies whom it is meritorious to waylay and assault.

Such being the operation and result of those oppressive duties and absolute prohibitions to which smuggling owes its origin, it is not surely too much to hope that the former may be modified, and the latter repealed. When this has been done, smuggling will cease; but not one moment sooner. Till then it will continue, in despite of all the impotent efforts that may be made for its suppression, to scatter its seeds, and spread its roots on all sides; impoverishing the fair and enriching the illicit dealer—emptying the public treasury of the state, and filling its gaols with criminals!

Smuggling by Dogs.—The following extract from the *Report* of Messrs. Villiers and Bowring developes one of those ingenious devices by which mischievous customs laws are sure to be defeated.

"The director of the Custom-house made, on the 30th of July, 1831, some very curious statements to the minister of finance on the subject of the fraudulent introduction of articles by means of dogs. He says, that since the suppression of smuggling by horses, in 1825, dogs have been employed; that the first attempts were made in the neighbourhood of Valenciennes, and that it afterwards spread to Dunkirk and Charleville; that it has since extended to Thionville and Strasburgh; and, last of all, in 1828, to Besançon.

"In 1823, it was estimated that 100,000 kilogrammes of goods were thus introduced into France; in 1825, 187,315; and in 1826, 2,100,000 kilogrammes; all these estimates being reported as rather under the mark: the calculation has been made at 2½ kilogrammes '*pro rata*' per dog. The dogs sometimes carry 10 kilogrammes, and sometimes even 12. The above estimate supposes that 1 dog in 10 in certain districts, and in others 1 in 20, is killed; but these calculations must necessarily be very vague. In the opinion of many of the Custom-house officers, not more than 1 dog in 75 is destroyed, even when notice has been given, and the dogs are expected.

"Tobacco and colonial produce are generally the objects of this illicit trade; sometimes cotton twist and manufactures. In the neighbourhood of Dunkirk, dogs have been taken with burdens of the value of 600, 800, and even 1,200 francs. Publications hostile to the government have not unfrequently been so introduced.

"The dogs which are trained to these 'dishonest habits' are conducted in packs to the foreign frontier; they are kept without food for many hours; they are then beaten and laden, and at the beginning of the night started on their travels. They reach the abodes of their masters, which are generally selected at 2 or 3 leagues from the frontiers, as speedily as they can, where they are sure to be well treated and provided with a quantity of food. It is said they do much mischief by the destruction of agricultural property, inasmuch as they usually take the most direct course across the country. They are dogs of a large size for the most part.

"The *Report* states, that these carrier dogs, being so tormented by fatigue, hunger, and ill usage, and hunted by the Custom-house officers in all directions, are exceedingly subject to madness, and frequently bite the officers, one of whom died in consequence in 1829. They have also been trained to attack the Custom-house officers in case of interference."—(p. 47.)

Various efforts have been made to suppress this species of smuggling, but hitherto without success. It is ludicrous, indeed, to suppose, seeing the vast extent of the land frontier of France, that any means should ever be adopted capable of excluding cheap foreign products in extensive demand. Nothing short of surrounding the country by Bishop Berkeley's wall of brass could accomplish such an object. The director-general of the French customs says that smuggling is carried on to an extent that is *vraiment effrayante*; and he may truly say so, when it is estimated that English bobbinet, though prohibited, is introduced into France to the extent of 10,000,000 fr., or 400,000*l.*, a year; cotton twist, and various other prohibited articles of British produce and manufacture, are also every where met with.

Thus it is that the two greatest and most civilised nations of Europe, by upholding vicious and destructive systems of commercial and financial legislation, mutually injure

each other. France and England, by their proximity, and the difference and variety of their products, are fitted to carry on a far more extensive and beneficial commerce than is carried on by any other two nations. But owing to their jealousy of each other's advancement, and the prevalence of unfounded theories as to the causes of national wealth, their intercourse has been subjected to the most oppressive fetters, and confined within the narrowest limits; most part, too, of what is actually carried on, has been diverted into illegitimate channels; so that what would, if left to itself, have been the most prolific source of wealth, and the most powerful incentive to genius and invention, has been made principally productive of crime and demoralisation. This conduct is as much opposed to their duty as to their interest. *Homines hominum causâ sunt generati, ut ipsi inter se aliis prodesse possint. . . Sed ut magnas utilitates adipiscimur conspiratione hominum ac consensu, sic nulla tam detestabilis pestis est, quæ non homini ab homine nascatur.* — (*Cic. De Officiis*, lib. ii. c. 5.)

Law as to Smuggling in England. — The penalties imposed on illicit dealing in commodities subject to duties of excise have been specified in the articles on such commodities. The following formidable statute, with its mutiplied provisions and penalties, refers entirely to customs duties. The importance of the subject has induced us to give it nearly entire.

Act 3 & 4 Will. 4. c. 53., for the Prevention of Smuggling.

Vessels and Boats.

Commencement of the Act. — First of September, 1833. — § 1.

Certain Vessels found within certain Distances of the U. K. to be forfeited. — If any vessel not being square-rigged, or any boat, belonging in the whole or in part to his Majesty's subjects, or having ½ the persons on board subjects of his Majesty, shall be found or discovered to have been within 100 leagues of the coast of the United Kingdom; or if any vessel belonging in the whole or in part to his Majesty's subjects, or having ½ the persons on board subjects of his Majesty, or any foreign vessel not being square-rigged, or any foreign boat, in which there shall be 1 or more subjects of his Majesty, shall be found or discovered to have been within 4 leagues of that part of the United Kingdom which is between the North Foreland on the coast of Kent, and Beachy Head on the coast of Sussex, or within 8 leagues of any other part of the coast of the United Kingdom; or if any foreign vessel or boat shall be found or discovered to have been within 1 league of the coast of the United Kingdom; or if any vessel or boat shall be found or discovered to have been within 1 league of the islands of Guernsey, Jersey, Alderney, Sark, or Man respectively, or within any bay, harbour, river, or creek of or belonging to any one of the said islands; any such vessel or boat so found or discovered, having on board or in any manner attached thereto, or having had on board or in any manner attached thereto, or conveying or having conveyed in any manner, any spirits not being in a cask or package containing 40 gallons at the least, or any tea exceeding 6 lbs. weight in the whole, or any tobacco or snuff not being in a cask or package containing 450 lbs. weight at least, or being packed separately in any manner within any cask or package, or any cordage or other articles adapted and prepared for slinging or sinking small casks, or any casks or other vessels whatsoever of less size or content than 40 gallons, of the description used for the smuggling of spirits, then and in every such case the said spirits, tea, tobacco, or snuff, together with the casks or packages containing the same, and the cordage or other articles, casks, and other vessels of the description aforesaid, and also the vessel or boat, shall be forfeited. — § 2.

Any Vessel or Boat arriving within any Port of the U. K. having prohibited Goods on board, forfeited, unless there was no Want of Care in the Master or Owner. — If any vessel or boat whatever shall arrive or shall be found or discovered to have been within any port, harbour, river, or creek of the United Kingdom, not being driven thereinto by stress of weather or other unavoidable accident, having on board or in any manner attached thereto, or having had on board or in any manner attached thereto, or conveying or having conveyed in any manner, within any such port, harbour, river, or creek, any spirits not being in a cask or package containing 40 gallons at the least, or any tobacco or snuff not being in a cask or package containing 450 lbs. weight at least, or being packed separately in any manner within any cask or package, every such vessel or boat, together with such spirits or tobacco or snuff, shall be forfeited: provided always, that if it shall be made appear to the satisfaction of the commissioners of his Majesty's customs that the said spirits, tobacco, or snuff were on board without the knowledge or privity of the owner or master of such vessel or boat, and without any wilful neglect or want of reasonable care on their or either of their behalves, that then and in such case the said commissioners shall and they are hereby authorised and required to deliver up the said vessel or boat to the owner or master of the same. — § 3.

Certain Cases in which Vessels shall not be forfeited. — Nothing herein contained shall extend to render any vessel liable to forfeiture on account of any tobacco or snuff from the East Indies being in packages of 100 lbs. weight each at least, or on account of any segars being in packages of 100 lbs. weight each at least, or on account of any tobacco made up in rolls, being the produce of and imported from the State of Colombia, and in packages containing 320 lbs. weight each at least, or on account of any tobacco of the dominions of the Turkish empire which may be separated or divided in any manner within the outward package, provided such package be a hogshead, cask, chest, or case containing 450 lbs. weight nett at least, or on account of any rum of and from the British plantations in casks containing 20 gallons at the least, or on account of any spirits, tea, or tobacco really intended for the consumption of the seamen and passengers on board during their voyage, and not being more in quantity than is necessary for that purpose, or to render any square-rigged vessel liable to forfeiture on account of any tea, or of any spirits in glass bottles, being really part of the cargo of such ship, and included in the manifest of such ship, or to render any vessel liable to forfeiture if really bound from one foreign port to another foreign port, and pursuing such voyage, wind and weather permitting. — § 4.

Vessels belonging to his Majesty's Subjects, &c. throwing overboard any Goods during Chase, forfeited. — When any vessel or boat belonging in the whole or in part to his Majesty's subjects, or having ½ of the persons on board subjects of his Majesty, shall be found within 100 leagues of the coast of this kingdom, and shall not bring to upon signal made by any vessel or boat in his Majesty's service, or in the service of the revenue, hoisting the proper pendant and ensign, in order to bring such vessel or boat to, and thereupon chase shall be given, if any person or persons on board such vessel or boat so chased shall, during the chase or before such vessel or boat shall bring to, throw overboard any part of the lading of such vessel or boat, or shall stave or destroy any part of such lading, to prevent seizure thereof, then and in such case the said vessel or boat shall be forfeited; and all persons escaping from such vessels or boats, or from any foreign vessel or boat, during any chase made thereof by any vessel or boat in his Majesty's service or in the service of the revenue, shall be deemed and taken to be subjects of his Majesty, unless it shall be proved to the contrary. — § 5.

Vessels in Port with a Cargo, and afterwards found in Ballast, and Cargo unaccounted for, forfeited. — If any vessel or boat whatever shall be found within the limits of any port of the United Kingdom with a cargo on board, and such vessel or boat shall afterwards be found light or in ballast, and the master is unable to give a due account of the port or place within the United Kingdom where such vessel or boat shall have legally discharged her cargo, such vessel or boat shall be forfeited. — § 6.

Regulations as to Vessels sailing from Guernsey, Jersey, &c. — No vessel or boat belonging wholly or in part to his Majesty's subjects shall sail from Guernsey, Jersey, Alderney, Sark, or Man, without a clearance, whether in ballast or having a cargo; and if with a cargo, the master shall give bond to his Majesty, in double the value of the vessel or boat and of the cargo, for duly landing the same at the port for which the vessel clears; and every such vessel or boat not having such clearance, or which, having a clearance for a cargo, shall be found light or with any part of the cargo discharged before delivery thereof at the port specified in the clearance (unless through necessity or for preservation of the vessel or boat, to be proved to the satisfaction of the commissioners of his Majesty's customs), shall be forfeited. — § 7.

Vessels to bring to on being chased by Vessels or Boats of the Navy or in Preventive Service. — In case any vessel or boat liable to seizure or examination under any act or law for the prevention of smuggling shall not bring to on being required so to do, on being chased by any vessel or boat in H. M. navy having the proper pendant and ensign of H. M. ships hoisted, or by any vessel or boat duly employed for the prevention of smuggling, having a proper pendant and ensign hoisted, it shall be lawful for the captain, master, or other person having charge or command of such vessel or boat in H. M. navy, or employed as aforesaid, (first causing a gun to be fired as a signal,) to fire at or into such vessel or boat; and such captain, master, or other person acting in his aid or assistance, or by his direction, shall be indemnified and discharged from any indictment, penalty, action, or other proceeding for so doing. — § 8.

Vessels belonging to his Majesty's Subjects not to hoist any Pendant, Ensign, or Colours usually worn by his Majesty's Ships. — If any person or persons shall, from and after the passing of this act, wear, carry, or hoist in or on board any vessel or boat whatever belonging to any of his Majesty's subjects, whether the same be merchant or otherwise, without particular warrant for so doing from his Majesty, or the High Admiral of Great Britain, or the commissioners for executing the office of High Admiral of Great Britain, H. M. jack, commonly called the Union jack, or any pendant, ensign, or colours usually worn by H. M. ships, or any flag, jack, pendant, ensign, or colours resembling those of his Majesty, or those used on board H. M. ships, or any other ensign or colours than the ensign or colours by any proclamation of his Majesty now in force or hereafter to be issued prescribed to be worn, then and in every such case the master or other person having the charge or command thereof, or the owner or owners on board the same, and every other person so offending, shall forfeit and pay the sum of 50*l.*; and it shall be lawful for any officer or officers of H. M. navy on full pay, or for any officer or officers of customs or excise, to enter on board any such vessel or boat, and to seize any such flag, jack, pendant, ensign, or colours, and the same shall thereupon be forfeited. — § 9.

Vessels and Boats used in Removal of run Goods to be forfeited. — All vessels and boats made use of in the removal, carriage, or conveyance of any goods liable to forfeiture under this or any other act relating to the revenue of customs, shall be forfeited. — § 10.

Boats of Vessels to have thereon the Name of Vessel, Port, and Master. — The owner of every vessel belonging in the whole or in part to any of his Majesty's subjects shall paint or cause to be painted upon the outside of the stern of every boat belonging to such vessel, the name of such vessel, and the port or place to which she belongs, and the master's name withinside the transom, in white or yellow Roman letters, not less than 2 inches in length, on a black ground, on pain of the forfeiture of such boat not so marked, wherever the same shall be found. — § 11.

Boats not belonging to Ships to have Name of Owner, &c. thereon. — The owner of every boat not belonging to any vessel shall paint or cause to be painted upon the stern of such boat, in white or yellow Roman letters of 2 inches in length, on a black ground, the name of the owner or owners of the boat, and the port or place to which she belongs, on pain of the forfeiture of such boat not so marked, wherever the same shall be found. — § 12.

Vessels and Boats used in piloting or fishing to be painted Black. — The owner or owners of every vessel or boat employed on the coasts of the United Kingdom in piloting or fishing shall paint or tar every such vessel or boat, or cause the same to be painted or tarred, entirely black, except the name or other description now required by law to be painted on such vessel or boat; and every such vessel or boat not so painted or tarred, and every boat so painted as to resemble any boat usually employed for the prevention of smuggling or in any other employment in H. M. service, shall be forfeited: provided always, that nothing herein contained shall extend to prevent any distinguishing mark being placed on any vessel or boat, or to be otherwise painted, if the commissioners of customs think proper to allow the same, expressing it so in the licence of said vessel or boat. — § 13.

British Vessels having secret Places, &c. forfeited. — All vessels and boats belonging in the whole or in part to H. M. subjects, having false bulkheads, false bows, double sides or bottoms, or any secret or disguised place whatsoever in the construction of the said vessel or boat adapted for the purpose of concealing goods, or having any hole, pipe, or other device in or about the vessel or boat adapted for the purpose of running goods, shall be forfeited, with all the guns, furniture, ammunition, tackle, and apparel belonging to such vessel or boat; and all foreign vessels or boats, not being square-rigged, coming to any port of the United Kingdom, having on board any goods liable to the payment of duties, or prohibited to be imported, concealed in false bulkheads, false bows, double sides or bottoms, or any secret or disguised place in said vessel or boat, shall be forfeited. — § 14.

Goods concealed on board forfeited, and all Goods packed therewith. — If any goods which are subject to any duty or restriction in respect of importation, or which are prohibited to be imported into the United Kingdom, shall be found concealed in any manner on board any vessel, or shall be found, either before or after landing, to have been concealed in any manner, in such case all such goods, and all other goods packed with them, shall be forfeited. — § 15.

Licences. — *N. B.* The clauses of this act, with respect to the licensing of ships, from § 16. to § 27., both inclusive, are given under the word Licences.

Vessels and Goods.

Goods unshipped without Payment of Duty, and prohibited Goods, liable to Forfeiture. — If any goods liable to the payment of duties be unshipped from any vessel or boat in the United Kingdom or the Isle of Man (customs or other duties not being first paid or secured), or if any prohibited goods whatsoever be imported into any part of the United Kingdom or of the Isle of Man, or if any goods warehoused or otherwise secured in the United Kingdom, for home consumption or exportation be clandestinely or illegally removed from any warehouse or place of security, then and in every such case all such goods shall be forfeited, together with all horses and other animals, and all carriages and other things, made use of in the removal of such goods. — § 28.

Spirits and Tobacco found without a Permit to be deemed run. — All spirits or tobacco which shall be found removing without a legal permit for the same shall be deemed to be spirits or tobacco liable to and unshipped without payment of duty, unless the party in whose possession the same be found or seized prove to the contrary. — § 29.

Restricted Goods to be deemed run. — All goods the importation of which is in any way restricted, which are of a description admissible to duty, and which shall be found and seized in the United Kingdom under any law relating to the customs or excise, shall, for the purpose of proceeding for the forfeiture

of them, or for any penalty incurred in respect of them, be described in any information exhibited on account of such forfeiture or penalty as goods liable to and unshipped without payment of duties. — § 30.

Prohibited Goods shipped or waterborne, with intent to be exported, &c. forfeited, &c. — If any goods prohibited to be exported be put on board any vessel or boat with intent to be laden or shipped for exportation, or be brought to any quay, wharf, or other place in the United Kingdom to be put on board any vessel or boat for the purpose of being exported, or if any goods prohibited to be exported be found in any package produced to the officer or officers of the customs as containing goods not so prohibited, then and in every such case, not only all such prohibited goods, but also all other goods packed therewith, shall be forfeited. — § 31.

Vessels, Boats, and Goods may be seized by Officers and Persons herein mentioned, &c. — All vessels and boats, and all goods whatsoever, liable to forfeiture under this or any other act relating to the revenue of customs, may be seized in any place, either upon land or water, by any officer or officers of the army, navy, or marines, duly employed for the prevention of smuggling, and on full pay, or by any officer or officers of customs or excise, or by any person having authority to seize from the commissioners of customs or excise; and all vessels, boats, and goods so seized shall, as soon as conveniently may be, be delivered into the care of the proper officer appointed to receive the same. — § 32.

Penalty on Officers, &c. making collusive Seizures or taking Bribes, and on Persons offering them. — If any officer or officers of the customs or excise, or of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or any other person or persons whatsoever duly employed for the prevention of smuggling, make any collusive seizure, or deliver up, or make any agreement to deliver up or not to seize, any vessel or boat or any goods liable to forfeiture, or take any bribe, gratuity, recompence, or reward for the neglect or non-performance of his duty, every such officer or other person shall forfeit for every such offence 500*l.* and be rendered incapable of serving his Majesty in any office whatever, either civil or military; and every person who shall give or offer, or promise to give or procure to be given, any bribe, recompence, or reward to, or shall make any collusive agreement with, any such officer or person as aforesaid, to induce him in any way to neglect his duty, or to do, conceal, or connive at any act whereby any of the provisions of any act of parliament relating to the revenue of customs may be evaded, shall forfeit the sum of 200*l.* — § 33.

Vessels and Persons may be searched within the Limits of the Ports. — It shall and may be lawful for any officer or officers of the army, navy, or marines, duly employed for the prevention of smuggling, and on full pay, or for any officer or officers of customs, producing his or their warrant or deputation (if required), to go on board any vessel within the limits of any of the ports of this kingdom, and to rummage and search the cabin and all other parts of such vessel for prohibited and uncustomed goods, and to remain on board such vessel during the whole time that the same shall continue within the limits of such port, and also to search any person or persons either on board or who shall have landed from any vessel, provided such officer or officers have good reason to suppose that such person or persons hath or have any uncustomed or prohibited goods secreted about his, her, or their person or persons; and if any person obstruct any officer or officers in going or remaining on board, or in entering or searching such vessel or person, every such person shall forfeit and lose the sum of 100*l.* — § 34.

Before Persons are searched, they may require to be taken before a Justice, &c. — Before any person shall be searched by any such officer or officers, it shall be lawful for such person to require the officer or officers to take him or her before a justice of the peace, or before the collector, comptroller, or other superior officer of the customs, who shall determine whether there is reasonable ground to suppose that such person has any uncustomed or prohibited goods about his or her person; and if it appear to such justice, collector, &c. that there is reasonable ground to suppose that such person has any uncustomed or prohibited goods about his or her person, such justice, collector, comptroller, or other superior officer of customs shall direct such person to be searched in such manner as he shall think fit; but if it shall appear to such justice, collector, comptroller, &c. that there is not reasonable ground to suppose that such person has any uncustomed or prohibited goods about his or her person, then such justice, collector, &c. shall forthwith discharge such person, who shall not in such case be liable to be searched; and every such officer or officers is and are authorised and required to take such person, upon demand, before any justice, collector, &c., detaining him or her in the meantime: provided always, that no person being a female shall be searched except by a female duly authorised by the commissioners of customs. — § 35.

Penalty on Officers for Misconduct with respect to Search. — If any such officer or officers shall not take such person with reasonable despatch before such justice, collector, comptroller, or other superior officer of customs, when so required, or shall require any person to be searched by him, not having reasonable ground to suppose that such person has any uncustomed or prohibited goods about his or her person, such officer shall forfeit and pay the sum of 10*l.* — § 36.

Penalty on Persons denying having Foreign Goods about them. — If any passenger or other person on board any vessel or boat shall, upon being questioned by any officer of customs, whether he or she has any foreign goods upon his or her person, or in his or her possession, deny the same, and any such goods shall, after such denial, be discovered upon his or her person, or in his or her possession, such goods shall be forfeited, and such person shall forfeit treble the value of such goods. — § 37.

Officers, authorised by Writ of Assistance, may search Houses for prohibited Goods, &c. — It shall and may be lawful for any officer or officers of customs, or person acting under the direction of the commissioners of customs, having a writ of assistance under the seal of the Court of Exchequer, to take a constable, headborough, or other public officer inhabiting near the place, and in the daytime to enter into and search any house, shop, cellar, warehouse, room, or other place, and in case of resistance to break open doors, chests, trunks, and other packages, there to seize and from thence to bring any uncustomed or prohibited goods, and to put and secure the same in the Custom-house warehouse in the port next to the place whence such goods shall be taken: provided always, that for the purposes of this act any such constable, headborough, or other public officer, duly sworn as such, may act as well without the limits of any parish, ville, or other place for which he shall be so sworn as within such limits. — § 38.

Duration of Writs. — All writs of assistance so issued from the Court of Exchequer shall continue and be in force during the whole of the reign in which such writs have been granted, and for 6 months from its conclusion. — § 39.

Officers may, on probable Cause, stop Carts, &c., and search for Goods. — It shall be lawful for any officer of customs or excise, or other person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, upon reasonable suspicion, to stop and examine any cart, wagon, or other means of conveyance, for the purpose of ascertaining whether any smuggled goods are contained therein; and if no such goods be found, the officer or other person stopping and examining such cart, wagon, &c. having had probable cause to suspect that smuggled goods were contained therein, shall not, on account of such stoppage and search, be liable to any action at law on account thereof; and all persons driving or conducting such cart, wagon, &c. refusing to stop when required so to do in the King's name, shall forfeit 100*l.* — § 40.

Police Officers seizing Goods to carry them to Warehouse. — If any goods subject or liable to forfeiture under this or any other act relating to the customs be stopped or taken by any police officer or other person acting by virtue of any act of parliament, or otherwise duly authorised, such goods shall be carried to the Custom-house warehouse next to the place where the goods were stopped or taken, and there delivered to the proper officer appointed to receive the same, within 48 hours after the said goods were stopped and taken. — § 41.

Goods stopped by Police Officers may be retained until Trial of Persons charged with stealing them. —

If any goods be stopped or taken by a police officer on suspicion that the same have been feloniously stolen, it shall be lawful for the said officer to carry the same to the police office to which the offender is taken, there to remain to be produced at the trial of said offender; and in such case the officer is required to give notice in writing to the commissioners of customs of his having so detained the goods, with the particulars of the same; and immediately after the trial all such goods are to be deposited in the Custom-house warehouse, to be proceeded against according to law; and in case any police officer making detention of any such goods neglect to convey the same to such warehouse, or to give notice of having stopped the same as before described, he shall forfeit 20*l.* — § 42.

Commissioners of Treasury, &c. may restore Seizures. — It shall and may be lawful for the commissioners of the treasury, or any 3 or more of them, or for the commissioners of customs or excise, by an order for that purpose, to direct any vessel, boat, goods, or commodities seized under this or any act relating to the customs or excise, or to the trade or navigation of the United Kingdom, or to any of his Majesty's possessions abroad, to be delivered to the proprietor or proprietors, whether condemnation have taken place or not, upon such terms and conditions as they may deem expedient, and which shall be mentioned in the said order; and it shall be also lawful for the said commissioners of the treasury, and of the customs and excise, to mitigate or remit any penalty or fine which shall have been incurred, or any part of such penalty or fine incurred under any such act: provided always, that no person shall be entitled to the benefit of any order for delivery or mitigation unless the terms and conditions expressed in the said order are fully and effectually complied with. — § 43.

PENALTIES.

Persons unshipping, &c. any prohibited or uncustomed Goods, to forfeit Treble the Value, or 100*l.* — Every person who shall, either in the U. K. or the Isle of Man, assist or be concerned in the unshipping of any goods prohibited to be imported into the U. K. or into the Isle of Man, or the duties for which have not been paid or secured, or who shall knowingly harbour, keep, or conceal, or knowingly permit or suffer to be harboured, kept, or concealed, any goods which have been illegally unshipped without payment of duties, or which have been illegally removed, without payment of the same, from any warehouse or place of security in which they may have been deposited, or any goods prohibited to be imported, or to be used or consumed in the U. K. or in the Isle of Man, and every person, either in the U. K. or the Isle of Man, to whose possession any such uncustomed or prohibited goods shall knowingly come, or who shall assist or be in anywise concerned in the illegal removal of any goods from any warehouse or place of security in which they have been deposited, shall forfeit either the treble value thereof, or the penalty of 100*l.*, at the election of the commissioners of customs. — § 44.

How Value is to be ascertained. — In all cases where any penalty, the amount of which is to be determined by the value of any goods, is directed to be sued for under any law now in force or to be made for the prevention of smuggling, or relating to the revenue of customs or excise, such value shall be taken to be according to the rate and price which goods of the like sort or denomination and of the best quality bear at such time, and upon which the duties due upon importation have been paid. — § 45.

Persons insuring the Delivery of prohibited or uncustomed Goods to forfeit 500*l.* — Every person who by way of insurance or otherwise shall undertake or agree to deliver any goods to be imported from beyond the seas into any port or place in the U. K. without paying the duties due on such importation, or any prohibited goods, or who in pursuance of such insurance shall deliver or cause to be delivered any uncustomed or prohibited goods, and every aider or abettor of such person, shall for every such offence forfeit 500*l.* over and above any other penalty to which he may be liable; and every person who shall agree to pay any money for the insurance or conveyance of such goods, or shall receive or take them into his custody or possession, or suffer them to be so received or taken, shall also forfeit 500*l.* over and above any penalty to which he may be liable on account of such goods. — § 46.

Penalty on Persons offering Goods for Sale under Pretence of being run or prohibited. — If any person or persons offer for sale any goods under pretence that the same are prohibited, or have been unshipped and run on shore without payment of duties, in such case all such goods (although not liable to any duties or prohibited) shall be forfeited, and the person or persons, and every of them, offering the same for sale shall forfeit the treble value of such goods, or the penalty of 100*l.*, at the election of the commissioners of customs. — § 47.

Persons found to have been on board Vessels liable to Forfeiture subject to a Penalty of 100*l.* — Every person, being a subject of his Majesty, who shall be found or discovered to have been on board any vessel or boat liable to forfeiture under this or any other act relating to the customs for being found or discovered to have been within any of the distances, ports, or places in this act mentioned, from or in the United Kingdom, or from or in the Isle of Man, having on board or in any manner attached thereto, or having had on board or in any manner attached thereto, or conveying or having conveyed in any manner, such goods or things as subject such vessel or boat to forfeiture, or who shall be found or discovered to have been, within any such distance as aforesaid, on board any vessel or boat from which any part of the cargo or lading of such vessel or boat shall have been thrown overboard, or staved or destroyed, to prevent seizure, shall forfeit 100*l.*; and every person, not being a subject of his Majesty, who shall have been on board any vessel or boat liable to forfeiture for any of the causes aforesaid, within 1 league of the coast of the United Kingdom or of the Isle of Man, or within any bay, harbour, river, or creek of the said island, shall forfeit for such offence 100*l.*; and it shall be lawful for any officer or officers of the army, navy, or marines, being duly employed for the prevention of smuggling, and on full pay, or any officer or officers of customs or excise, or other person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, and he and they is and are hereby authorised, empowered, and required, to detain and to carry and convey every such person before any justice of the peace, to be dealt with as herein-after directed: provided always, that any such person proving, to the satisfaction of any justice or justices before whom he may be brought, that he was only a passenger in such vessel or boat, and had no interest whatever either in the vessel or boat, or in the cargo or goods on board the same, shall be forthwith discharged by such justices. — § 48.

Persons unshipping, &c. Spirits or Tobacco, to forfeit 100*l.*, *&c.* — Every person whatsoever who shall unship, or be aiding or concerned in the unshipping, of any spirits or tobacco liable to forfeiture under this or any other act relating to the customs or excise, in the U. K. or the Isle of Man, or who shall carry, convey, or conceal, or be aiding, assisting, or concerned in the carrying, conveying, or concealing of any such spirits or tobacco, shall forfeit for such offence 100*l.*; and every such person may be detained by any officer of the army, navy, or marines, duly employed for the prevention of smuggling, and on full pay, or by any officer or officers of customs or excise, or other person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, and taken before any justice of the peace, to be dealt with as herein-after directed. — § 49.

Persons carrying, &c. Tea or manufactured Silk to forfeit Treble the Value, &c. — Every person whatsoever who shall unship, or be aiding, assisting, or otherwise concerned in the unshipping, of any tea or foreign manufactured silk of the value of 20*l.*, liable to forfeiture under any act relating to the customs or excise, or who shall carry, convey, or conceal, or be aiding, assisting, or concerned in the carrying, conveying, or concealing of such tea or silk, shall forfeit for every such offence treble the value thereof; and every such person shall and may be detained by any officer of the army, navy, or marines, duly employed for the prevention of smuggling, and on full pay, or by any officer of customs or excise, or by any other person acting in his aid or assistance, or duly employed for the prevention of smuggling, and taken before any justice of the peace, to be dealt with as herein directed: provided always, that it shall be lawful for such detained person to give security in treble the amount of the goods seized, to the satis-

faction of such justice, to appear at a time and place appointed; and that no such person shall be liable to serve his Majesty in his naval service. — § 50.

A Justice may order Persons taken before him for Offences relating to the Customs to be detained a reasonable Time. — Where any person or persons shall have been detained by any officer of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or by any officer of customs or excise, or any person or persons acting in his or their aid or assistance, or duly employed for the prevention of smuggling, for any offence under this or any other act relating to the customs, and shall have been taken and carried before any justice of the peace, if it shall appear to such justice that there is reasonable cause to detain such person or persons, he may and he is authorised and required to order such person or persons to be detained a reasonable time, and at the expiration of such time to be brought before any 2 justices, who are authorised and required finally to hear and determine the matter. — § 51.

Any Person liable to Arrest making his Escape, may be detained by any Officer of Customs. — If any person or persons liable to be detained under the provisions of this or any other act relating to the customs shall not be detained at the time of so committing the offence, or after detention shall make his or their escape, it shall be lawful for any officer or officers of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or for any officer of customs or excise, or any other person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, to detain such person at any time afterwards, and to carry him before any justice of the peace, to be dealt with as if detained at the time of committing the said offence. — § 52.

Persons making Signals to Smuggling Vessels at Sea, on Conviction to forfeit 100*l.*, *&c.* — No person shall, after sunset and before sunrise between the 21st day of September and the 1st day of April, or after the hour of 8 in the evening and before the hour of 6 in the morning at any other time in the year, make, aid or assist in making, any signal in or on board or from any vessel or boat, or on or from any part of the coast or shore of the United Kingdom, or within 6 miles of any part of such coasts or shores, for the purpose of giving any notice to any person on board any smuggling vessel or boat, whether any person so on board such vessel or boat be or be not within distance to notice such signal; and if any person, contrary to the intent and meaning of this act, make or cause to be made, or aid or assist in making, any such signal, such person shall be guilty of a misdemeanour; and it shall be lawful for any person to stop, arrest, and detain the person or persons who shall so offend, and to carry and convey such person or persons before any 1 or more justices of the peace residing near the place where such offence shall be committed, who, if he sees cause, shall commit the offender to the next county gaol, there to remain until the next court of oyer or terminer, great session, or gaol delivery, or until such person or persons shall be delivered by due course of law; and it shall not be necessary to prove on any indictment or information that any vessel or boat was actually on the coast; and the offender or offenders being duly convicted thereof shall, by order of the court before whom they are convicted, either forfeit and pay the penalty of 100*l.*, or, at the discretion of such court, be committed to the common gaol or house of correction, there to be kept to hard labour for any term not exceeding 1 year. — § 53.

Proof of a Signal not being intended, to lie on the Defendant. — In case any person be charged with or indicted for having made or caused to be made, or been aiding or assisting in making, any such signal, the burden of proof that such signal so charged as having been made with intent and for the purpose of giving such notice as aforesaid was not made with such intent and for such purpose shall be upon the defendant. — § 54.

Any Person may prevent Signals. — It shall be lawful for any person whatsoever to prevent any signal as aforesaid being made, and to enter upon any lands for that purpose, without being liable to any indictment, suit, or action for the same. — § 55.

Persons resisting Officers, or rescuing or destroying Goods to prevent Seizure, forfeit 100*l.* — If any person whatsoever shall obstruct any officer or officers of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or any officer or officers of customs or excise, or any person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, in the execution of his or their duty, or in the due seizing of any goods liable to forfeiture, or shall rescue or cause to be rescued any goods which have been seized, or shall attempt or endeavour to do so, or shall before or at or after any seizure, stave, break, or otherwise destroy any goods, to prevent the seizure thereof or the securing the same, then and in such case the party or parties offending shall forfeit for every such offence 100*l.* — § 56.

Penalty on Persons procuring others to assist in unshipping prohibited Goods. — Any person or persons who shall by any means procure or hire any person or persons, or who shall depute, authorise, or direct any person or persons to procure or hire any person or persons, to assemble for the purpose of being concerned in the landing or unshipping or carrying or conveying any goods prohibited to be imported, or the duties for which have not been paid or secured, shall for every person so procured or hired forfeit 100*l.* — § 57.

Felonies.

Three or more armed Persons assembled to assist in the illegal Landing of Goods, &c. deemed guilty of Felony. — If any persons to the number of 3 or more, armed with fire-arms or other offensive weapons, shall, within the U. K., or within any port, harbour, or creek thereof, be assembled in order to aid and assist in the illegal landing, running, or carrying away of any prohibited goods, or any goods liable to any duties which have not been paid or secured, or in rescuing or taking away any goods, after seizure, from the officer of the customs or other officer authorised to seize the same, or from any person or persons employed by or assisting them, or from the place where the same have been lodged by them, or in rescuing any person who shall have been apprehended for any of the offences made felony by this or any act relating to the customs, or in the preventing the apprehension of any person guilty of such offence, or in case any persons to the number of 3 or more, so armed, shall, within the U. K., or within any port, harbour, or creek thereof, be so aiding or assisting, every person so offending, and every person aiding, abetting, or assisting therein, shall, being thereof convicted, be adjudged guilty of felony, and suffer death as a felon. — § 58.

Persons shooting at any Boat belonging to the Navy, &c. deemed guilty of Felony. — If any person shall maliciously shoot at any vessel or boat belonging to H. M. navy, or in the service of the revenue, within 100 leagues of any part of the coast of the U. K., or shall maliciously shoot at, maim, or dangerously wound any officer of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or any officer of customs or excise, or any person acting in his aid or assistance, or employed for the prevention of smuggling, in the due execution of his office or duty, every person so offending, and every person aiding, abetting, or assisting therein, shall, being lawfully convicted, be adjudged guilty of felony, and suffer death as a felon. — § 59.

Any Person in company with 4 *others having prohibited Goods, or with* 1 *other armed or disguised, guilty of Felony.* — If any person being in company with more than 4 other persons be found with any goods liable to forfeiture, or in company with 1 other person, within 5 miles of the sea coast or of any navigable river leading therefrom, with such goods, and carrying offensive arms or weapons, or disguised in any way, every such person shall be adjudged guilty of felony, and shall, on conviction of such offence, be transported as a felon for the space of 7 years. — § 60.

Officers.

Persons assaulting Officers by Force or Violence may be transported. — If any person shall by force or violence assault, resist, oppose, molest, hinder, or obstruct any officer of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or any officer of customs or excise, or other

person acting in his or their aid or assistance, or duly employed for the prevention of smuggling, in the due execution of his or their office or duty, such person, being thereof convicted, shall be transported for 7 years, or sentenced to be imprisoned in any house of correction or common gaol, and kept to hard labour, for any term not exceeding 3 years, at the discretion of the court before whom the offender shall be tried and convicted as aforesaid. — § 61.

Commanding Officers of Vessels in the Service may haul their Vessels on Shore without being liable to any Action for so doing. — It shall be lawful for the commanding officer of any vessel or boat employed for the prevention of smuggling to haul any such vessel or boat upon any part of the coasts of the United Kingdom, or the shores, banks, or beaches of any river, creek, or inlet of the same (not being a garden or pleasure ground, or place ordinarily used for any bathing machine or machines), which shall be deemed most convenient for that purpose, and to moor any such vessel or boat on such part of the aforesaid coasts, shores, &c. below high water mark, and over which the tide flows on ordinary occasions, and to continue such vessel or boat so moored for such time as said commanding officer shall deem proper; and such officer, or person or persons acting under his direction, shall not be liable to any indictment, action, or suit for so doing, any law, statute, custom, or usage to the contrary notwithstanding. — § 62.

Officer, if wounded in the Service of the Customs, to be provided for, &c. — In all cases where any officer or seaman employed in the service of the customs or excise shall be killed, maimed, wounded, or in any way injured in the due execution of his office, or if any person acting in his aid, or duly employed for the prevention of smuggling, shall be so killed, maimed, wounded, or in any way injured while so aiding such officer or seaman, or so employed, it shall be lawful for the commissioners of customs and excise to make such provision for the officer or person so maimed, wounded, or injured as aforesaid, or for the widows and families of such as shall be killed, as they shall be authorised and empowered to do by warrant from the Lord High Treasurer or commissioners of the treasury. — § 63.

Vessels and Goods seized to be disposed of as the Commissioners direct. — All vessels and boats, and all goods whatsoever, seized and condemned for breach of any law relating to the customs, shall be disposed of as soon as conveniently may be after the condemnation thereof, in such manner as the commissioners of customs shall direct. — § 64.

Rewards.

Rewards to Officers for detaining Smugglers. — It shall be lawful for the commissioners of customs, and they are hereby authorised and empowered, to award, to any officer or other person detaining any person liable to detention under this or any other act relating to the revenue of customs, to be paid upon the conviction of such person, any reward they may think fit to direct, not exceeding the sum of 20*l.* for each person. — § 65.

Rewards to Officers where pecuniary Penalties are recovered. — It shall be lawful for the commissioners of customs, and they are hereby authorised, to order the following reward to be paid to any officer or officers or persons by whose means any pecuniary penalty or composition is recovered; (that is to say,) ⅓ part of the penalty or sum recovered, except in seizures of silk goods, in which case the officers may receive ⅛ the penalty or sum recovered. — § 66.

Rewards to Officers making Seizures. — It shall be lawful for the commissioners of customs, and they are hereby authorised, to order to be paid, in respect of any seizure made under this or any act relating to the customs or to trade and navigation, to the person or persons making the same, the following rewards; (that is to say,)

In the case of seizures of spirits or tobacco: —
- If all the parties concerned in the act which occasions the seizure, being above the age of 15 years, are detained and convicted, the whole value thereof, such value to be fixed and settled by the Lords of the Treasury, or by the commissioners of his Majesty's customs, as herein-after directed:
- If 2 or more of such parties, not being the whole, are so detained and convicted, 7-8ths of such value:
- If 1 such party, not being the whole of them, but being a seafaring man, is so detained and convicted, 3-4ths of such value:
- If 1 such party, not being the whole of them, is detained and convicted, and the vessel or means of conveyance is or are seized and condemned, 3-4ths of such value:
- If 1 such party, not being the whole of them, nor being a seafaring man, is so detained and convicted, 5-8ths of such value:
- If the vessel or means of conveyance is seized and condemned without any person being detained, 1-3d of such value:
- If all the goods are seized, and all the parties concerned as aforesaid are subsequently convicted in consequence of such seizure, and by the exertion of the seizors, ½ of such value:
- If the goods only are seized, 1-8th, or such other part as the commissioners of the customs shall think proper, not exceeding 1-4th of such value:

In the case of seizures of other goods, not silks: —
- If the vessel or other means of conveyance is or are seized and condemned, or if any person is prosecuted to conviction on account of the same, ½ of the produce, exclusive of the duties:
- If the goods only, 1-4th of such produce:

In the case of damaged tobacco, snuff, or other goods destroyed, such reward as the Lords of the Treasury or the commissioners of his Majesty's customs may think proper to direct, not exceeding a moiety of the duty payable on such goods in case the same had been sold for home consumption:

In the case of seizures of silk goods, the whole value of such goods, exclusive of the duty thereon:

In the case of seizures of vessels and boats: —
- If sold, a moiety of the produce:
- If taken into the public service or broken up, a moiety of the value:

In the case of seizures of cattle and carriages, in all cases 3-4ths of the produce of the sale. — Sect. 67.

The Treasury, &c. to fix the Value of Spirits & Tobacco. — The value of spirits and tobacco seized as aforesaid shall in all cases be deemed and taken to be such as the Lords of the Treasury or the commissioners of customs may think fit to fix the same at per gallon or per pound weight, for the purpose of rewarding the officer; and all the before-mentioned rewards shall be paid subject to a deduction of 10*l.* per cent. on account of law charges and other expenses. — § 68.

All Rewards, &c. payable to Officers of Army, &c. to be regulated by H. M. Orders in Council. — Every such reward, or part or share of any such seizure or of the value thereof, as shall be payable to any officer or officers, non-commissioned officers, petty officers, seamen, or privates of the army, navy, or marines, or acting under the orders of the Lord High Admiral or commissioners of the admiralty, shall be divided and distributed in such proportions, and according to such rules, regulations, and orders, as his Majesty shall be pleased to direct and appoint. — § 69.

Commissioners may distribute Shares of Seizures so as to reward Persons not actually present. — It shall be lawful for the commissioners of customs or excise respectively, in case of any seizure of vessels, boats, or goods, or of the apprehension of any parties, under this or any other act relating to the customs, to direct the distribution of the seizor's share of such vessels, boats, or goods, or of any penalties or rewards that may be recovered on account of any seizure, in such manner as to enable any officer or officers, or other person or persons through whose information or means such seizure shall have been made, or penalty recovered, or party apprehended, and who may by them be deemed to be so entitled, to participate in such proportion as the said commissioners shall respectively deem expedient. — § 70.

In case Officers act negligently or collusively. — Upon proof being made to the satisfaction of the commissioners of customs or excise that any officer or officers or person or persons as aforesaid have acted collusively or negligently in the making of any seizure, the said commissioners may direct that the whole or any part of the proportion of such seizure be applied to the use of his Majesty. — § 71.

None except Officers to take up Spirits in small Casks sunk or floating upon the Sea. — No person or persons whatsoever, being a subject or subjects of his Majesty, other than an officer or officers of the navy, customs, or excise, or some person or persons authorised in that behalf, shall intermeddle with or take up any spirits, being in casks of less content than 40 gallons, found floating upon or sunk in the sea within 100 leagues of the United Kingdom; and if any spirits shall be so intermeddled with or taken up, the same shall be forfeited, together with any vessel or boat in which they are found. — § 72.

Rewards to Persons giving Information of Goods floating or sunk in the Sea. — If any person or persons shall discover any spirits, being in casks of less content than 40 gallons, floating upon or sunk in the sea, and give information to any officer of the customs, or other person or persons authorised to make seizure of such spirits, so that seizure be made of the same, the person or persons giving such information shall be entitled to and shall receive such reward as the commissioners of customs may deem expedient to direct. — § 73.

Allowance to poor Persons confined for Offences against Laws of Customs and Excise. — For the necessary subsistence of any poor person confined in the United Kingdom or in the Isle of Man, under or by virtue of any exchequer or other process for the recovery of any duties or penalties, upon bond or otherwise, sued for, under or by virtue of any order of the commissioners of customs or excise, it shall be lawful for said commissioners respectively to cause an allowance, not exceeding the sum of 7½*d.* and not less than 4½*d.* per day, to be made to any such poor person, out of any money in their hands arising from the duties of customs or excise, as the case may require. — § 74.

JURISDICTION.

Penalties and Forfeitures how to be sued for. — All penalties and forfeitures incurred or imposed by this or any other act relating to the customs, or to trade or navigation, shall and may be sued for, prosecuted, and recovered by action of debt, bill, plaint, or information in any court of record at Westminster, or at Dublin, or at Edinburgh, or in the royal courts of the islands of Guernsey, Jersey, Alderney, Sark, or Man, in the name of the attorney-general or of the lord advocate of Scotland, or in the name or names of some officer or officers of customs, or by information before any 2 or more justices of the peace in the U. K., or before any governor, deputy governor, or deemster in the Isle of Man. — Sect. 75.

Vessels, Boats, and Goods seized, shall be deemed to be condemned, unless the Owner gives Notice that he intends to claim. — All vessels, boats, and goods which have been or shall be hereafter seized as forfeited under any law relating to the customs, and which have been or shall hereafter be ordered to be prosecuted by the commissioners of customs, shall be deemed and taken to be condemned, and may be sold in the manner directed by law in respect to vessels, boats, and goods seized and condemned for breach of any law relating to the customs, unless the person from whom such vessels, boats, and goods have been seized, or the owner of them, or some person authorised by him, shall, within 1 calendar month from the day of seizing the same, give notice in writing, if in London, to the person seizing the same or to the secretary or solicitor for the customs, and if elsewhere, to the person seizing the same or to the collector and comptroller or other chief officer of the customs at the nearest port, that he claims the vessel, boat, or goods, or intends to claim them. — Sect. 76.

Offences on the High Seas deemed to have been committed at the Place into which the Offender is brought, or in which he is found. — In case any offence be committed upon the high seas against this or any other act relating to the customs, or any penalty or forfeiture be incurred upon the high seas for any breach of such acts, such offence shall, for the purpose of prosecution, be deemed and taken to have been committed, and such penalties and forfeitures to have been incurred, at the place on land in the U. K. or the Isle of Man into which the person committing such offence or incurring such penalty or forfeiture shall be taken, brought, or carried, or in which such person shall be found; and in case such place on land is situated within any city, borough, liberty, division, franchise, or town corporate, as well any justice of the peace for such city, borough, liberty, division, franchise, or town corporate, as any justice of the peace of the county within which such city, borough, liberty, division, franchise, or town corporate is situated, shall have jurisdiction to hear and determine all cases of offences against such act so committed upon the high seas, any charter or act of parliament to the contrary notwithstanding: provided always, that where any offence shall be committed in any place upon the water not being within any county of the U. K., or where any doubt exists as to the same being within any county, such offence shall, for the purposes of this act, be deemed and taken to be committed upon the high seas. — Sect. 77.

Justices may summon Offender, and the Summons may be left at his last Place of Residence, or on board any Ship to which he belongs. — Upon the exhibiting any information before any justice of the peace for any offence against this or any act relating to the customs or to trade or navigation, for which the party charged is not liable to be detained in manner hereinbefore mentioned, such justice is hereby required to issue a summons for the appearance of the party against whom such information is exhibited before 2 justices of the peace; and such summons, directed to such party, being left either at his or her last known place of residence, or on board any ship or vessel to which such party may belong, shall be deemed to have been sufficiently served. — Sect. 78.

Two Justices may, upon Appearance or Default of the Party, proceed to the Hearing. — Upon the appearance or default of any party so summoned, it shall be lawful for any 2 justices of the peace to proceed to the examination of the matter contained in such information, and upon due proof thereof, either upon the confession of such party or upon the oath of 1 or more credible witness or witnesses, to convict such party in the penalty or penalties sued for by such information; and in case of nonpayment thereof, such justices, or 1 of them, or some other justices or justice of the peace, are hereby authorised and required, by warrant under hand and seal, to commit such party to any of his Majesty's gaols within their or his jurisdiction, there to remain until the penalty or penalties shall be paid. — Sect. 79.

Warrants shall and may be executed in any part of the United Kingdom. — Sect. 80.

Justices empowered to mitigate Penalty. — Where any party shall or may be convicted before any 2 or more of his Majesty's justices of the peace in any penalty or penalties incurred as aforesaid, except as is herein-after provided, it shall and may be lawful for the said justices, in cases where upon consideration of the circumstances they shall deem it expedient so to do, to mitigate the payment of the said penalty or penalties, so as the sum to be paid by such party be not less than 1-4th of the amount of the penalty in which such party shall have been convicted. — Sect. 81.

As to Persons committed for Penalties under 100l. — Where any person shall have been so committed by any justices or justice of the peace to any prison for nonpayment of any penalty less than 100*l.*, the gaoler or keeper of such prison is hereby authorised and required to discharge such person at the end of 6 calendar months from the commencement of such imprisonment. — Sect. 82.

Married Women may be committed to Prison. — Where any party so convicted before 2 justices of the peace shall be a married woman, such party shall be liable to be committed to prison in manner herein-before mentioned, notwithstanding her coverture. — Sect. 83.

Mode of Proceeding before Justices. — When any information shall have been exhibited before any justice of the peace for the forfeiture of any goods seized under this or any act relating to the customs, it shall be lawful for the said justice, and he is hereby authorised and required, to summon the party to whom such goods belonged, or from whom they were seized, to appear before any 2 justices of the peace; and such summons, directed to such party, being left either at his or her last known place of residence or on board any ship to which such party may belong, shall be deemed to have been sufficiently served; and upon his, her, or their appearance or default, any 2 justices may proceed to the examination of the matter, and, upon due proof that the said goods are liable to forfeiture under this or any act relating to the customs, may condemn the said goods. — Sect. 84.

Persons on Conviction to forfeit 100l., or if seafaring Men to be sent into the Navy for 5 Years. — It shall be lawful for any 2 or more justices of the peace before whom any person liable to be detained, and who shall have been detained, for any offence against any act relating to the customs, shall be brought, either on the confession of such person of such offence, or on proof thereof upon the oaths of 1 or more credible witness or witnesses, to convict such person of any such offence; and every such person so convicted shall, immediately upon such conviction, pay into the hands of such justices, for the use of his Majesty, the penalty of 100*l.*, without any mitigation whatever, for any such offence of which he shall be so convicted as aforesaid; or in default thereof the said justices shall be authorised and required, by warrant under their hands and seals, to commit such person so convicted, and making such default, to any gaol or prison, there to remain until such penalty be paid: provided, that if the person convicted of such offence or offences be a seafaring man, and fit and able to serve in his Majesty's naval service, and shall not prove that he is not a subject of his Majesty, it shall be lawful for any such justices, and they are hereby required, in lieu of such penalty, to order any officer of the army, navy, or marines, employed for the prevention of smuggling, and on full pay, or any officer of customs or excise, to carry or convey, or cause to be carried or conveyed, such person on board any of his Majesty's ships, in order to his serving in the naval service for the term of 5 years; and if such person shall at any time within that period escape or desert from such custody or service, he shall be liable at any time afterwards to be again arrested and detained, and delivered over to complete his service of 5 years: provided also, that if it shall be made to appear to any such justices that convenient arrangement cannot be made at the time of the conviction of the said party for immediately carrying or conveying such seafaring man so convicted on board any of his Majesty's ships, it shall be lawful for such justices to commit such convicted seafaring man to any prison or gaol, there to remain in safe custody for any period not exceeding 1 month, that time may be given to make arrangements for conveying him to one of H. M. ships: provided also, that the commissioners of the treasury, or any 3 or more of them, shall have full power to remit or mitigate any such penalty, punishment, or service, whether the parties be seafaring men or otherwise. — Sect. 85.

Justices may amend Informations. — If any person shall be proceeded against under this or any other act relating to the customs or excise, and the information exhibited against such person shall charge him as being a seafaring man, and fit and able to serve his Majesty in his naval service, and it shall appear to the justices before whom such person is brought that he is guilty of the offence with which he is charged, but that he is not fit for the naval service, then and in such case it shall be lawful for such justices, and they are hereby required, to amend such information accordingly, and to convict such person in the penalty of 100*l.*, as if proceeded against as not being a seafaring man or fit for the naval service. — Sect. 86.

If Persons convicted, and sent on board H. M. Ships, be found unfit, they may be again conveyed before Magistrates, and convicted in the Penalty of 100l. — If any person so convicted as a seafaring man, and carried on board any ship of war, shall, on examination by any surgeon or surgeons of H. M. navy, within 1 month after being so carried on board, be deemed to be unfit, and shall be refused on that account to be received into H. M. service, such person shall, as soon as convenient, be conveyed before any justice of the peace, and upon proof that he has been refused to be received on board any of H. M. ships as unfit for H. M. service, such justice shall and he is hereby authorised and required to call upon the said person to pay the penalty of 100*l.*, without hearing any evidence other than such proof as last aforesaid; and in default of immediate payment of the same to the said justice, for the use of his Majesty, to commit the said person to any gaol or prison till such penalty be paid: provided always, that no person so convicted, and ordered to serve on board any of H. M. ships, shall be sent away from the U. K. on board such ship in less than 1 month from the date of such conviction. — Sect. 87.

As to Jurisdiction in Boroughs. — Where any offence against this or any other customs act shall be committed in any city

borough, liberty, division, franchise, or town corporate, any justices of said city, borough, &c., and any justices of any county in which such city, borough, &c. is situated, shall have jurisdiction to hear and determine upon the same. — Sect. 88.

Magistrate of an adjoining County may act with One of the County where Offence committed. — Where the attendance of 2 magistrates having jurisdiction in the county where the offence is committed cannot be conveniently obtained, a magistrate of any adjoining county, with 1 magistrate of the county in which the offence was committed, may hear and determine any information exhibited before them, and have the same powers and authorities in all respects as to any proceeding had under any act relating to the customs, as if they were both magistrates for the county in which the offence was committed. — Sect. 89.

Writs of Certiorari and Habeas Corpus not to be issued except on Affidavit. — No writ of *certiorari* shall issue from the Court of King's Bench to remove any proceedings before any justice or justices of the peace under any act for the prevention of smuggling or relating to the customs, nor shall any writ of *habeas corpus* issue to bring up the body of any person convicted before any justice or justices of the peace under any such act, unless the party against whom such proceeding shall have been directed, or who shall have been so convicted, or his attorney or agent, shall state in an affidavit in writing, to be duly sworn, the grounds of objection to such proceedings or conviction, and that upon the return to such writ of *certiorari* or *habeas corpus* no objection shall be taken or considered other than such as shall have been stated in such affidavit; and it shall be lawful for any justice or justices of the peace to amend any information, conviction, or warrant of commitment for any offence under any such act at any time, whether before or after conviction. — Sect. 90.

Informations, &c. to be in the Form given in the Schedule. — All informations before justices of the peace for any offences committed against this or any other act relating to the customs, and all convictions for such offences, and warrants of justices of the peace founded upon such convictions, shall be in the form or to the effect in the schedule to this act annexed. — Sect. 91.

Informations, &c. deemed valid if Offence is set forth in the Words of the Act. — Every information for any penalty or forfeiture, and every conviction or warrant of commitment for any penalty, shall be deemed valid and sufficient, in which the offence for which such penalty shall have been inflicted, or the cause of such forfeiture, is set forth in the words of this act. — Sect. 92.

Powers of Justices to be exercised by Governors or Deemsters of the Isle of Man. — All the powers vested in any justices or justice of the peace by virtue of this act are hereby vested in and may be exercised, in the Isle of Man, by any governor, deputy governor, or deemster of the Isle of Man, so far as regards offences committed against or penalties or forfeitures incurred by this or any other act relating to the customs. — Sect. 93.

Penalties, &c. to be paid to Commissioners of Customs, &c. — All penalties and forfeitures which may be recovered before any justices of the peace under this or any other act relating to the customs or excise, on any prosecution by order of the commissioners of customs, shall be paid to said commissioners of customs, and on any prosecution by order of the commissioners of excise shall be paid to said commissioners of excise, or to the person appointed by them respectively to receive the same; and such penalties and forfeitures shall be applied by the said commissioners respectively in such manner as the law directs, any thing contained in an act passed in the 3 Geo. 4. c. 55., intituled "An Act for the more effectual Administration of the Office of a Justice of the Peace in and near the Metropolis, and for the more effectual Prevention of Depredations on the River Thames and its Vicinity, for Seven Years," or any other act now in force or hereafter to be made, to the contrary in anywise notwithstanding. — Sect. 94.

Capias may issue against Persons sued under this Act, who are to give Bail. — Whenever any penalty shall be sued for as aforesaid by information against any person in any court of record at Westminster Dublin, or Edinburgh, a *capias* may thereupon issue as the first process, specifying the amount of the penalty sued for; and such person against whom such *capias* shall issue shall be obliged to give sufficient bail or security, by natural-born subjects or denizens, to the person or persons to whom such *capias* shall be directed, to appear in the court out of which such *capias* shall issue, at the day of the return of such writ, to answer such suit and prosecution, and shall likewise at the time of such appearing give sufficient bail or security, by such persons as aforesaid, in the said court, to answer and pay all the forfeitures and penalties incurred for such offence or offences in case he, she, or they shall be convicted thereof, or to yield his, her, or their body or bodies to prison. — Sect. 95.

Persons in Gaol not appearing or pleading to the Information, Judgment may be entered by Default. — If any person against whom a capias shall issue out of any court of record shall be arrested upon such capias, and taken to prison for want of sufficient bail, a copy of the information exhibited against such person shall be served upon him or her in gaol, or delivered to the gaoler, keeper, or turnkey of the prison in which such person shall be confined; and if such person shall neglect or refuse to appear or plead to the said information for the space of 20 days, judgment shall be entered by default; and in case judgment shall be obtained against any such person or persons by default, verdict, or otherwise, and he or they shall not pay the sum recovered for his or their offence, execution shall be issued, not only against the body or bodies of the person or persons, but against all their real and personal estates, for the sum or sums recovered against him, her, or them. — Sect. 96.

Persons not worth 5l. may defend Suits in formâ pauperis. — In case any person arrested and imprisoned by virtue of any writ of *capias* shall make affidavit before the court where the information is brought, or before any other person commissioned to take affidavits in such court, that he or she is not worth, over and above his or her wearing apparel, the sum of 5*l.* (which affidavit the judge or judges of such court, and such person so commissioned, is authorised and required to take,) and such person shall petition such court to defend himself or herself *in formâ pauperis*, then the judge or judges of such court shall, according to their discretion, admit such person to defend himself or herself against such information in the same manner and with the same privileges as they are by law directed and authorised to admit poor subjects to commence actions for the recovery of their rights; and for that end and purpose the judges of such courts shall assign counsel learned in the law, and appoint an attorney and clerk, to advise and carry on any legal defence that such person can make against such action or information, and which said counsel, attorney, and clerk, is and are hereby required to give his and their advice and assistance to such person, and to do their duties without fee or reward. — Sect. 97.

Sheriff to grant special Warrant on Writ of Capias. — Where any writ of *capias* or other process shall issue out of any court, directed to any sheriff, mayor, bailiff, or other person having the execution of process in any county, city, or liberty, against any person guilty of any offence against this or any act relating to the customs, every such sheriff, mayor, or bailiff, and other person having execution of process as aforesaid, and their under-sheriffs, deputies, and other persons acting for them, shall and are hereby enjoined and required, upon the request or application of the solicitor for the customs, (such request to be in writing, and indorsed upon the back of the said process, and signed by such solicitor with his name, and addition of solicitor for the customs,) to grant a special warrant or warrants to the person or persons named to them by such solicitor, for apprehending such offender or offenders; or in default thereof every such sheriff, mayor, &c. acting in said office or offices shall be subject to such process of contempt, fines, &c. as they or any of them are now by any law, custom, or usage liable to in case of refusing or neglecting to execute the like process where the defendant might have been taken in the common and usual method of proceeding. — Sect. 98.

Sheriff indemnified from Escapes. — All and every such sheriff, mayor, bailiff, under-sheriff, and other persons so granting or making out such special warrant as aforesaid, are hereby indemnified against his Majesty, his heirs and successors, and against all and every other person whomsoever, of and from all escapes of any person or persons taken by virtue of any such warrant as aforesaid, which shall happen from the time of taking such offender or offenders till he, she, or they be committed to the proper gaol or prison, or offered and tendered to the gaol-keeper or other person having charge of such gaol or prison, (who is hereby enjoined and required to receive every such person or persons, and give a receipt for his, her, or their body or bodies,) and of and from all actions, prosecutions, process of contempt, and other proceedings for or by reason of such escape, any law, custom, or usage to the contrary notwithstanding. — Sect. 99.

No Claim or Appearance to be entered unless in the Name of the Owner. — No claim shall be permitted to be entered to, and no appearance shall be permitted to be entered to, any information filed for the forfeiture of any vessel, boat, or goods seized for any cause of forfeiture, and returned into any court of record, unless such claim or appearance is entered in the true and real name or names of the owner or owners, proprietor or proprietors of such vessel, boat, or goods, describing the place of residence and the business or profession of such person or persons; and if such person or persons shall reside at London, Edinburgh, or Dublin, or within the liberties thereof, oath shall be made by him, her, or them before 1 of the judges of the court into which the said vessel, boat, or goods are returned, or in which such information is filed, that the said vessel, boat, or goods was or were really and truly the property of him, her, or them at the time of such seizure; but if such person or persons shall not be resident in London, Edinburgh, or Dublin, or the liberties thereof, then and in such case oath shall be made in like manner by the agent or attorney or solicitor by whom such claim or appearance shall be entered, that he has full power and legal authority and directions from such owners or proprietor to enter such claim or appearance, and that to the best of his knowledge and belief such vessel, boat, or goods were, at the time of the seizure thereof, *bond fide* and truly the real property of the person or persons in whose name or names such claim or appearance is entered; and on failure thereof, the vessel, boat, or goods shall be absolutely condemned, and judgment shall be entered thereon by default, in the same manner as if no claim or appearance had been entered thereto; and every person who shall be convicted of making or taking a false oath to any of the facts herein-before directed or required to be sworn shall be deemed guilty of perjury, and shall be liable to the pains and penalties to which persons are liable for wilful and corrupt perjury. — Sect. 100.

Owners to give Security for Costs. — Upon the entry of any claim to any boat or vessel, or to any goods, seized for any cause of forfeiture, or of any appearance to any information filed for such forfeiture, the person or persons who enter the claim or appearance as the owner or proprietor thereof (in case such claimant shall reside in the U. K.) shall be bound, with 2 other sufficient sureties, in the penalty of 100*l.*, to answer and pay the costs occasioned by such claim or appearance; and if such owner or proprietor shall not reside in the U. K., then the attorney or solicitor by whose direction such claim shall be entered, shall be bound, with 2 other sufficient sureties, in the like penalty, to answer and pay the costs occasioned by such claim or appearance. — Sect. 101.

If Suit brought on account of Seizure, and Judge certify there was probable Cause, Plaintiff to have 2d. Damages, without Costs. — In case any information or suit be commenced or brought to trial on account of the seizure of any vessel, boat, or goods, merchandises, or commodities whatsoever, or any horses or other animals, or any carriage, seized as forfeited by this or any act relating to the customs, wherein a verdict shall be found for the claimant thereof, and it shall appear to the judge or court before whom the same is tried, that there was a probable cause of seizure, such judge or court shall certify in the record that there was such probable cause, and in such case the person who made such seizure shall not be liable to any action, indictment, or other suit or prosecution on account of such seizure; and in case any action, indictment, or other suit or prosecution shall be commenced and brought to trial against any person or persons whatsoever, on account of any such seizure as aforesaid, wherein a verdict shall be given against the defendant or defendants, if the court or judge before whom such information or suit be tried shall have certified that there was a probable cause for such seizure, then the plaintiff, besides the things seized, or the value thereof, shall not be entitled to above 2*d.* damages, nor to any costs of suit, nor shall the defendant in such prosecution be fined above 1*s.* — Sect. 102.

No Process to be sued out against any Officer, until 1 Calendar Month after Notice. — No writ shall be sued out against, nor a

copy of any process served upon, any officer of the army, navy, marines, customs, or excise, or against any person acting under the direction of the commissioners of customs, for any thing done in the execution of or by reason of his office, until 1 calendar month next after notice in writing has been delivered to him, or left at his usual place of abode, by the attorney or agent for the party who intends to sue out such writ or process, in which notice shall be clearly and explicitly contained the cause of action, the name and place of abode of the person who is to bring such action, and the name and place of abode of the attorney or agent; and a fee of 20*s.* shall be paid for preparing or serving every such notice, and no more. — Sect. 103.

No Evidence to be adduced but what is contained in the Notice. — No plaintiff in any case where an action shall be grounded on any act done by the defendant shall be permitted to produce any evidence of the cause of such action, except such as shall be contained in the notice to be given as aforesaid, or shall receive any verdict against such officer or person, unless he prove on the trial of such action that such notice was given; and in default of such proof, the defendant shall receive a verdict and costs. — Sect. 104.

Officer may tender Amends. — It shall be lawful for any officer or other person to whom such notice has been given, at any time within 1 calendar month after such notice, to tender amends to the party complaining, or to his, her, or their agent or attorney, and in case the same is not accepted, to plead such tender in bar to any action brought against him, grounded on such writ or process, together with the plea of Not Guilty, and other pleas, with leave of the court; and if, upon issue joined thereon, the jury shall find the amends so tendered to have been sufficient, then they shall give a verdict for the defendant; and in such case, or in case the plaintiff shall become nonsuited, or discontinue his, her, or their action, or in case judgment shall be given for such defendant upon demurrer, then such defendant shall be entitled to the like costs as he would have been entitled to in case he had pleaded the general issue only; but if, upon issue joined, the jury shall find that no amends were tendered, or that the same were not sufficient, or shall find against the defendant in such other plea or pleas, then they shall give a verdict for the plaintiff, and such damages as they shall think proper, together with his, her, or their costs of suit. — Sect. 105.

Neglecting to tender Amends, may pay Money into Court. — In case such officer or other person shall neglect to tender any amends, or shall have tendered insufficient amends, before the action brought, it shall be lawful for him, by leave of the court, at any time before the trial of the said action, to pay into court such sum of money as he shall see fit, whereupon such proceedings, orders, and judgments shall be had, made, and given in and by such court as in other actions where the defendant is allowed to pay money into court. — Sect. 106.

Action to be commenced within 6 Months after Cause of Action has arisen. — If any action or suit be brought or commenced as aforesaid, such action or suit shall be brought or commenced within 6 months next after the cause of action shall have arisen, and not afterwards, and shall be laid and tried in the county or place where the facts were committed, and not in any other county or place; and the defendant or defendants shall and may plead the general issue, and give the special matter in evidence, at any trial had thereupon; and if the plaintiff or plaintiffs be nonsuited, or discontinue, his, her, or their action or suit, or if, upon a verdict or demurrer, judgment be given against them, the defendant or defendants shall or may receive treble costs, and have such remedy for the same as any defendant or defendants in other cases where costs are given by law. — Sect. 107.

Judges of the King's Bench may issue Warrants for apprehending Offenders. — Whenever any person shall be charged with any offence against this or any act relating to the customs, or for which he or she may be prosecuted by indictment or information in the Court of King's Bench, and the same shall be made appear to any judge of the same court, by affidavit or by certificate of an information or indictment being filed against such person in the said court for such offence, it shall and may be lawful for such judge to issue his warrant under his hand and seal, and thereby to cause such person to be apprehended, and brought before him or some other judge of the same court, or before some 1 justice of the peace, in order to his or her being bound, with 2 sufficient sureties, in such sum as in the said warrant shall be expressed, with condition to appear in the said court at the time mentioned in such warrant, and to answer to all and singular indictments or informations for any such offence; and in case any such person shall neglect or refuse to become bound as aforesaid, it shall be lawful for such judge or justice to commit such person to the common gaol of the county, city, or place where the offence has been committed, or where he or she shall have been apprehended, to remain until he or she shall become bound, or be discharged by order of the court in term time, or of 1 of the judges of the court in vacation; and the recognizance to be taken shall be returned and filed in the said court, and shall continue in force until such person shall be acquitted of such offence, or in case of conviction shall have received judgment for the same, unless sooner ordered by the court to be discharged; and where any person, either by virtue of such warrant of commitment aforesaid, or by virtue of any writ of *capias ad respondendum* issued out of the said court, is now detained, or shall be committed to and detained in any gaol for want of bail, it shall be lawful for the prosecutor of such indictment or information to cause a copy thereof to be delivered to such person, or to the gaoler, keeper, or turnkey of the gaol wherein such person is detained, with a notice thereon indorsed, that unless such person shall, within 8 days from the time of such delivery of said copy, cause an appearance and also a plea or demurrer to be entered in court to such indictment or information, an appearance and the plea of Not Guilty will be entered thereto in the name of such person; and in case he or she shall, for the space of 8 days after the delivery of a copy of such indictment or information, neglect to cause an appearance, and also a plea or demurrer, to be entered in the said court to such indictment or information, it shall be lawful for the prosecutor, upon affidavit being made and filed in the court of the delivery of a copy of such indictment or information, with such notice indorsed thereon as aforesaid, to such person, or to such gaoler, keeper, or turnkey, as the case may be, which affidavit may be made before any judge or commissioner of the court authorised to take affidavits, to cause an appearance and the plea of Not Guilty to be entered to such indictment or information for such person; and such proceedings shall be had thereupon as if the defendant appeared and pleaded Not Guilty, according to the usual course of the court; and if, upon trial, any defendant so committed and detained be acquitted of all the offences therein charged upon him or her, it shall be lawful for the judge before whom such trial shall be had, although he may not be one of the judges of the King's Bench, to order that such defendant be discharged out of custody, as to his or her commitment as aforesaid, and such defendant shall be thereupon discharged accordingly. — Sect. 108.

When Recognizance is given, and the Party shall not plead, a Copy of the Information or Indictment may be delivered to his Attorney or Agent. — Where any person, arrested by virtue of a warrant issued as aforesaid, enters into a recognizance, and appears in court at the return of the said recognizance, but does not afterwards plead to the information or indictment, it shall be lawful for the prosecutor to cause a copy thereof to be delivered to such person, or to his or her attorney or agent, or to be left at his or her last place of abode, with a notice thereon indorsed, that unless such person shall, within 8 days from the time of such delivery, cause a plea to be entered in court to such information or indictment, the prosecutor will enter a plea of Not Guilty on his or her behalf; and upon affidavit being made and filed in the court of the delivery of a copy of such information or indictment, with notice indorsed thereon as aforesaid, to such person, or to his or her attorney or agent, or at his or her last place of abode, as the case may be, it shall be lawful for the prosecutor to cause the plea of Not Guilty to be entered to such information or indictment for such person, and such proceedings shall be had thereupon as if the defendant had pleaded according to the usual course of the said court. — Sect. 109.

Certain Articles not to be landed until the Dues of the City of London are paid. — If all or any of the goods of the description herein-after mentioned, (that is to say,) firkins of butter, tons of cheese, fish, eggs, salt, fruit, roots eatable, and onions, brought coastwise into the port of the said city, and which are liable to the said dues, shall be landed or unshipped at or in the said port before a proper certificate of the payment of the said duties shall have been obtained, such goods shall be forfeited, and may be seized by any officer of customs empowered to seize goods landed without due entry; and such forfeiture may be sued for, prosecuted, and recovered by action of debt, bill, plaint, or information in any court of record at Westminster, in the name of the chamberlain of the said city, on behalf of the mayor, commonalty, and citizens. — Sect. 110.

When Offenders are arrested and give Bail, the Bail Bond to be assigned to his Majesty. — If any person shall be arrested by a writ of *capias ad respondendum* issuing out of any court of record, or out of any of the superior courts of record of either of the counties palatine, at the suit of his Majesty, and the sheriff or other officer shall take bail from such person, he shall, at the request and costs of the prosecutor, assign to his Majesty, his heirs and successors, the bail bond taken from such person, by indorsing the same, and attesting it under his hand and seal, in the presence of 2 or more credible witnesses, which may be done without any stamp, provided the assignment so indorsed be duly stamped before any suit be commenced thereupon; and if such bail bond be forfeited, such process shall thereupon issue as on bonds originally made to his Majesty, his heirs and successors; and the court in which such bail bond is put in suit may give such relief to the defendant or defendants as is agreeable to justice and reason. — Sect. 111.

Indictments to be preferred by Order of the Commissioners. — No indictment shall be preferred or suit commenced for the recovery of any penalty or forfeiture under this or any other act relating to the customs or excise (except in the cases of persons detained and carried before 1 or more justices in pursuance of this act) unless such suit be commenced in the name of the attorney-general, or of the lord advocate of Scotland, or unless such indictment be preferred under the direction of the commissioners of customs or excise, or unless such suit be commenced in the name of some officer of customs or excise, under the direction of the said commissioners respectively. — Sect. 112.

The Attorney-general or Lord Advocate may sign a Noli prosequi. — If any prosecution whatever be commenced for the recovery of any fine, penalty, or forfeiture incurred under this or any other act relating to the customs or excise, it shall be lawful for the attorney-general, or for the lord advocate of Scotland, if he is satisfied that such fine, &c. was incurred without any intention of fraud, or that it is inexpedient to proceed in the said prosecution, to stop all further proceedings by entering a *noli prosequi*, or otherwise, on such information, as well with respect to the share of such fine, penalty, or forfeiture to which any officer or officers may be entitled, as to the king's share thereof. — Sect. 113.

Proof of Payment of Duties, or of the lawful Importation of Goods, to be on the Owner. — If any goods be seized for nonpayment of duties, or other cause of forfeiture, and any dispute arise whether the customs, excise, or inland duties have been paid for the same, or the same have been lawfully imported, or concerning the place whence such goods were brought, the proof thereof shall be on the owner or claimer of such goods, and not on the officer seizing and stopping the same. — Sect. 114.

No Justice connected with the Collection of the Revenue to interfere in summary Convictions. — No justice of the peace being a collector or comptroller, or otherwise connected with the customs or excise, shall take cognizance of any matter relating to summary convictions of persons offending against this or any other customs act. — Sect. 115.

Averment of certain Matters to be sufficient. — In case of any information or proceedings had under any act relating to the customs, the averment that the commissioners of customs or excise have directed or elected such information or proceedings to be instituted, or that any vessel is foreign, or belonging wholly or in part to H. M. subjects, or that any person detained or found on board any vessel or boat liable to seizure is or is not a subject of his Majesty, or that any person detained is or is not a seafaring man, or fit or able to serve in the naval service, or that any person is an officer of customs, and where the offence is committed in any port in the U. K., the naming of such port in any information or proceedings, shall be sufficient

without proof as to such fact or facts, unless defendant prove to the contrary. — Sect. 116.

Persons preventing Smuggling to be deemed duly employed. — All persons employed for the prevention of smuggling under the commissioners of customs, or of any officer or officers in the service of the customs, shall be deemed and taken to be duly employed for the prevention of smuggling; and the averment, in any information or suit, that such party was so duly employed, shall be sufficient proof thereof, unless the defendant prove to the contrary. — Sect. 117.

Viva voce Evidence may be given. — If upon any trial a question shall arise whether any person is an officer of the army, navy, or marines, duly employed for the prevention of smuggling, and on full pay, or an officer of customs or excise, evidence of his having acted as such shall be deemed sufficient, and such person shall not be required to produce his commission or deputation, unless sufficient proof be given to the contrary; and every such officer, and any person acting in his aid or assistance, shall be a competent witness upon the trial of any suit or information on account of any seizure or penalty, notwithstanding such officer or person may be entitled to the whole or any part of such seizure or penalty, or to any reward upon conviction of the party charged in such suit or information. — Sect. 118.

What deemed sufficient Evidence of an Order of Commissioners of Customs or Excise. — Upon the trial of any issue, or upon any judicial hearing or investigation touching any penalty or forfeiture under any law or laws relating to the customs or excise, or to the law of navigation, where it may be necessary to give proof of any order issued by the commissioners of the treasury, or by the commissioners of customs or excise, the letter or instructions officially received by the officer of customs or excise at the place or district where such penalty or forfeiture was incurred, or shall be alleged to have been incurred, for his government, and in which such order is mentioned or referred to, and under which instructions he shall have acted, shall be admitted and taken as sufficient evidence and proof of such order to all intents and purposes whatsoever. — Sect. 119.

Within what Time Suits, &c. are to be exhibited. — All suits, indictments, or informations exhibited for any offence against this or any other act relating to the customs in any court of record at Westminster, or in Dublin, or in Edinburgh, or in the royal courts of Guernsey, Jersey, Alderney, Sark, or Man, shall and may be had, brought, sued, or exhibited within 3 years next after the date of the offence committed, and shall and may be exhibited before 1 or more justices of the peace within 6 months next after the date of the offence committed. — Sect. 120.

Information may be exhibited any Time after 6 Months. — Where any person shall have been detained for any offence against this or any other customs act, and shall have made his escape from custody, an information may be exhibited before 1 or more justices of the peace against such person, for such offence, at any time afterwards, although more than 6 months have expired. — Sect. 121.

Indictments or Informations may be tried in any County. — Any indictment or information for any offence against this or any other customs act shall be inquired of, examined, tried, and determined in any county of England where the offence is committed in England, and in any county in Scotland where the offence is committed in Scotland, and in any county in Ireland where the offence is committed in Ireland, in such manner and form as if the offence had been committed in the said county where the said indictment or information shall be tried. — Sect. 122.

SMYRNA, a large city and sea-port of Asiatic Turkey, on the western side of Asia Minor, lat. 38° 25′ 36″ N., lon. 27° 6′ 45″ E. Population, probably, about 120,000; of whom 60,000 may be Turks, 40,000 Greeks, and the remainder Armenians, Franks, Jews, &c. Smyrna is situated at the bottom of a deep gulf; the entrance to which lies between the island of Mytilene on the north, and Cape Carabourun, in lat. 38° 41′ 30″ N., lon. 26° 21 E., on the south. The woodcut on the next page gives a better idea of the gulf of Smyrna than could be derived from any description. The dotted line shows the course inwards. The passage between James' Castle (D) on the south and the opposite sand-bank is narrow; but there is from 9 to 10 fathoms water, with a blue clay bottom. Merchant ships anchor abreast of the city in from 7 to 8 fathoms; but the water is so deep that they may come close to the quays. The *inbat*, or sea breeze, blows from morning till evening, and is always waited for by ships going up to the city. There is excellent anchorage in most parts of the gulf, merely avoiding the shoals on the north side. Smyrna is a place of great antiquity. The excellence of its port, and its admirable situation, have made it be several times rebuilt, after being destroyed by earthquakes. On approaching it from the sea, it has the appearance of an amphitheatre: the castle is at the back of the town, which it commands, on the top of the hill; but it is in a state of decay, and could oppose no resistance to an invading force. The interior of the city does not correspond to its external appearance; the streets being, for the most part, narrow, dirty, and ill paved. Owing to the want of cleanliness, and of all sorts of precautions, on the part of the Turks, Smyrna is frequently visited by the plague. So late as 1814, from 50,000 to 60,000 of the inhabitants are said to have been cut off by this dreadful scourge. The trade of this city is more extensive than that of any other in the Turkish empire. The caravans from Persia are chiefly composed of Armenians. They arrive and depart at fixed periods, which are nearly identical with those of the arrival and departure of most of the foreign ships frequenting the port. Bargains are principally effected by Jew brokers, many of whom have amassed considerable fortunes. The principal articles of import consist of grain, furs, iron, butter, &c. from Odessa and Taganrog; and of cotton stuffs and twist, silk and woollen goods, coffee, sugar, cochineal, and dye woods, iron, tin and tin plates, rum, brandy, paper, cheese, glass, wine, &c. from Great Britain, France, Italy, the United States, &c. The exports consist principally of raw silk and cotton, fruits — particularly raisins; opium, rhubarb, and a variety of drugs and gums; olive oil, madder roots, Turkey carpets, valonia, sponge, galls, wax, copper, hare skins, goats' wool, safflower, &c. — (For further details, see *Tournefort, Voyage du Levant*, tome ii. pp. 495—507. 4to edit.; and *Macgill's Travels in Turkey*, vol. i. Letters 5, 6, 7, 8, and 9.)

References to Plan. — A, Partridge Island, on the south side of which there is excellent anchorage in from 15 to 7 fathoms, muddy bottom. B, a mud point. C, Pelican Point. D, James' Castle. E, Low narrow islands. Soundings, except where otherwise marked, in fathoms.

Monies, Weights, and Measures, same as at Constantinople; which see. Accounts are kept in piastres of 40 paras, or medini. The value of the piastre fluctuates according to the exchange. It has been very much degraded; and is at present worth about 4*d*. The oke is the principal weight used. It is equivalent to 2 lbs. 13 oz. 5 dr. avoirdupois; 45 okes = 1 kinta = 100 rottolos = 127·48 lbs. avoirdupois. The kintal of Constantinople is only 44 okes. A teffee of silk = $4\frac{3}{8}$ lbs. avoirdupois. A chequee of opium = $1\frac{1}{8}$ lb.; a chequee of goats' wool = $5\frac{1}{8}$ lbs. Corn is measured by the killow = 1·456 Winch. bushel. The pic, or long measure, = 27 Eng. inches. — (*Kelly's Cambist, &c.*)

Long or English I.
A
B
C
D
12 ft.
18 ft.
15 ft.
18 ft.
SMYRNA
Nautic Leagues
0
1
2
3

Commerce of Smyrna. — The following details with respect to the commerce of Smyrna with Western Europe are copied from a letter addressed by an intelligent English merchant, established in Smyrna, to his correspondent in London, to whom we are indebted for it. Nothing so complete or satisfactory has ever been published as to the trade of this emporium. It is right, however, to mention, that since 1828, when this paper was drawn up, the commerce of Smyrna has lost some of its importance. Syria, the islands of the Archipelago, the eastern parts of Greece, &c. used formerly to derive a considerable part of their supplies of foreign produce at second hand from Smyrna; but they now, for the most part, are either supplied direct from England, Marseilles, &c., or indirectly from Syra, which is become a considerable *depôt*.

Charges on Selling and Buying. — As we conceive that a correct list of selling and buying charges is an essential piece of information for those interested in the commerce of the Levant, we annex the same, including every item of expense, namely: —

On Selling.

	Per cent.
Freight (according to the rate agreed upon in England) say	2
Custom duty (on general goods)	3
Porterage from 1 to 2 piastres per package (according to the size).	
Shroffage	0½
House and street brokerage	2
Commission for effecting sale	3
Ditto, if proceeds are remitted by bill or specie	1½
Del credere ditto (when required to be charged)	2
Warehouse rent	0½

On Buying.

	Per cent.
Custom duty (according to the quality of the article)	1 to 3
Porterage (included in the cost of packages, which vary according to the quality of the goods packed).	
House and street brokerage	1½
Commission (except on figs, which is 6 per cent.)	3
Warehouse rent	0½

With regard to the cost of packages, those for silk are about 24 piastres each; for galls, 18 do.; gums mastic, tragacanth, &c., 20 do.; scammony, 18 do.; opium, 30 to 36 do.; raisins, 12 to 14 do.; figs, 25 to 30 paras; cotton wool, from 12 to 20 piastres, &c.

We learn from ———, that your firm deals largely in skins and furs, but he does not state the quality of either; the latter article is, however, of a very limited and ordinary nature with us, and chiefly consists of hare skins, which are abundant and shipped in considerable quantities for the German and French markets. They are most plentiful during the winter season, when they are also cheaper and keep better than in the hot months of the year. Sheep, goat, lamb, and kid skins are plentiful, and are often in request for America; particularly the 2 latter when in season, which is, for lamb skins from the middle of March to the beginning of June, and for goat skins from November until April. We have no want of ox and cow hides, both dried and salted, the leather of which is said to be more pliable than those of Europe. They are now and then sent to Marseilles in small parcels; but as it would be difficult to convey, by a written description, the exact quality of those skins, we intend making up a little bale of such kinds as may for the moment be met with, and to forward it by an early vessel to London, when it shall be submitted to your inspection, with an invoice, and remain, if you think proper, at your disposal.

We now proceed to make you acquainted with the manner in which our sales, purchases, and barters are effected, together with the nature of sales made on credit or for cash, &c.

Sales are effected in this country between our house's brokers, and what is termed a street or out-door broker; the former receiving their instructions from us, and the latter acting on behalf of the buyer. When the terms are mutually agreed upon, the real buyer and seller personally meet; and a bond or obligatory note stating the terms and amount of the transaction is drawn out and signed by the buyer, and when not much approved of, one or more signatures are required to the bond, who individually and collectively become responsible for the fulfilment of it.

Purchases are similarly made, except that the purchaser or agent himself, in the first instance, and his brokers, inspect the goods he is about to treat for: cash down is generally expected; and it is but seldom that a short credit of 1 or 2 couriers is obtained: it not unfrequently happens, also, that ¼ or even ½ of the purchase amount is advanced to the seller, when an insufficient quantity of the article wanted by the buyer is in the place, and which must then be procured from the interior or place of growth. The money advanced (which is to be returned if the quality does not suit) is sent by a confidential person on the part of the purchaser, accompanied either by the seller in person, or by some one representing him.

Barters are generally attended with delay, impediments, and sacrifices to the European agent who exchanges his constituents' goods for native produce, and are never completed without his paying a large portion in cash, which is mostly ¼, sometimes even ⅔, but never less than ½ of the full amount; besides always paying a higher price for the produce than if it were bought for ready money. On the other hand, so far as the agent's transaction goes in goods, the price of which he also advances, it is equal to an advantageous cash sale, deducting a discount; but still he loses, as we have just stated, on that part of the operation which subjects him to the necessity of giving ready money for such part of the produce as remains above the counter-value given in goods, at a higher rate than it is worth in the open market. Thus the advantage is all in favour of this country, and against the agent. Indeed, barters are seldom undertaken unless when a profitable result is anticipated, when European goods are difficult to be placed upon saving conditions, either from the want of demand or a glutted market, or when (which is mostly the case) the holder of such goods has orders from the owners of them to remit them in produce, and thus realise their property, if not upon profitable terms, at least without the risk arising from bad debts; sometimes, also, outstanding bonds are taken in part payment, to the extent occasionally of ⅓; another ⅓ is taken in goods at an advance of from 5 to 10 or 12 per cent. above current prices; and the remaining ⅓ in cash against produce, at from 5 to 10 per cent. more than it fetches in the bazaars. However, it is by barter alone that any extensive transaction ever takes place, or that it can be either readily or safely effected.

Sales on Credit. — The terms of credit vary considerably, and depend entirely upon the quality of the goods which the agent sells: for current or demanded merchandise, 2 couriers (or 2 periods of 15 days), and two and three 31 days, are the present terms; which are extended to four, five, and six 31 days for articles not much in request. Couriers mean post days; of which we have 2 in each month: at each courier, and 31 days, a proportionate payment becomes payable; for instance, on a credit of six 31 days, ⅙th falls due at the expiration of the first month; and if paid, is noted accordingly on the bond, and so on until the remaining 5 periods are expired: it must, however, be observed, that payments are by no means punctually made, except by a few of our more wealthy bazaar buyers, although for the first 3 or 4 periods of a long credit some regularity is observed; but as the time begins to shorten, payments are proportionably retarded, so that two 31 days on a bond of credit for 6 months may be considered as a fair average of time in addition to the limited term.

Sales for Cash. — These very seldom occur, indeed, and then only when money is abundant, or the article sold scarce and in great demand; in fact, not 1 sale in 100 is made on these terms; and in about the same ratio is a discount taken off from a bazaar bond at even an exorbitant rate, however

short the period may be that it has to run: occasionally a sale is, however, effected for ⅓ cash, and the other ⅔ short credit, for some very current goods.

Character of Dealers. — Before entering upon the articles of commerce, we are desirous of making you acquainted with the character and customs of our bazaar dealers. The Greek dealers are in general petty shopkeepers, very cunning, and very bad payers. The Jews have similar defects, but are well supported by their brethren, who generally become guarantee for each other. The Armenians are by far the largest traffickers both for buying and selling; and though hard bargainers, are mostly all solvent, and honourable as well as honest. The Turks are, however, as far superior to the foregoing races in all moral qualities, as they are inferior to them in means and commercial abilities; yet they sometimes deal largely, and their bond is as punctually discharged, in general, as the day comes when it falls due. The laws in this country mostly favour the debtor at the expense of the creditor; and so far they encourage dishonesty. The number of insolvent native dealers was at one time excessive; but of late the means of each individual buyer have been so carefully investigated, that at present we are not aware that there is one bazaar dealer who is not able to meet the demands of those from whom he has purchased. The European consuls, who enjoy much consideration by the Turks, protect the interests of their countrymen in disputed points; and, in general, questions of a commercial nature are submitted to the decision of a Turkish tribunal, where very little pleading, but a good deal of plain straight-forward justice, goes forward; except that, *perhaps*, the European is, if any thing, rather less favoured than the native.

We now proceed to offer some observations on the leading articles of our imports and exports for your government, the correctness of which may be relied upon.

Imports.

Coffee. — This is by far the most current article received here, and is sent from England, France, Holland, Trieste, Marseilles, Leghorn, Genoa, and America; but first, and principally of late years, from the latter country; the vessels of which are frequently laden with coffee, and always partly so: the next in point of quantity comes from England; but is shipped mostly in small parcels at a time, of from 300 to 600 sacks, although occasionally that amount is doubled. France follows, but on a less extensive scale; and Austria, Holland, and the small ports in the south of Europe, do not together export more than what is received from England alone. We have 4 different qualities of coffee in our markets; namely, Mocha, St. Domingo, Havannah, and Brazil: the first is sent from Alexandria, and by American vessels, and but seldom from Europe; the consumption is, however, limited, and does not exceed 60,000 okes annually. At Constantinople, about 3 times that quantity is sold yearly. We never remember to have known such heavy importations of West India coffee as within these last 6 months (written in November, 1827); the consequence of which has been such an excess beyond the wants of the place, that not only buyers are fully supplied for some time to come, but also the heavy stock in first hands can only be diminished either by forced or ruinous sales, or must wait for 2 or 3 months, until the demand again comes round; which is, however, certain to take place, as coffee forms one of the necessaries of life in this country: in short, an Asiatic cannot do without his coffee; and it is well known that in Smyrna alone not less than perhaps 400,000 cups of it are daily drunk, which, computed at the cost price of 2 paras each, amount to 20,000 piastres! The St. Domingo and Havannah coffee are preferred to the Brazil, although, when the latter is of a fair round quality, there is not more than 5 per cent. difference in price; the small green West India berry certainly commands a ready sale; but, for the finest sort, not more than 6 or 8 per cent. can be obtained above the middling and sound quality. Coffee is amongst the very few articles which occasionally meet with a partial and entire cash sale and short credit; and is, moreover, from the means and character of the dealers in it, the least liable to risk from insolvency. It is also the easiest through which an advantageous barter can be effected, as a much larger quantity of coffee will be taken in exchange for produce than almost any other item of European merchandise. Annual consumption, about 3,000,000 okes.

Sugar is the next in consequence. This article is supplied from the same sources as coffee, and is attended in its disposal with similar results. We receive the following qualities: — White crushed, white Havannah, brown do., white East India, refined in small loaves of 4 lbs. and in large of 8 lbs. each: the 2 latter are mostly shipped from America and England. The brown and ordinary sorts are not so current. Annual consumption, 10,000 kintals.

Indigo follows the 2 preceding articles, not so much in extent as meeting a ready sale always, and not unfrequently a profitable one: it is attended likewise with all the advantages and facilities attached to coffee and sugar, and is furnished by Europe and America, but principally by England. The qualities we receive consist of East India purple and copper, ditto common, and Guatemala. The first of the 3 is the kind best adapted for our markets, and is placed sooner and better than the other 2; but, as is the case with coffee, the *very fine* will not pay cost price, and ought therefore never to be sent. The pieces suited for our buyers ought to be good sized, with about an equal proportion of purple and copper in each piece. The few chests on sale are all ordinary, and consequently dull; and the first arrival of 15 or 20 chests (and not more ought ever to be shipped at one time) of fair East India will meet with a ready and favourable sale at 20 piastres per oke. Annual consumption, 80 chests.

Manufactures. — This is, in point of amount, the most extensive branch of trade carried on in Turkey. We have, as you will perceive from our price current, a numerous assortment of British and East India cotton goods and English shalloons. The white or unprinted cotton goods are most in demand during the warm weather, and the coloured or printed stuffs during winter, although a considerable quantity of all sorts is regularly and largely sold throughout the whole year. The East Indian manufactures are supplied by America and England exclusively; the latter country also sends fair imitations of the East India loom, in long cloths, seersuckers, &c. The native consumers are exceedingly fastidious in their choice of designs and colours, which ought very frequently to be altered, in order to meet their capricious taste. Manufactured goods are always sold at long credits, but large barters are often effected through them. A person desirous of entering into this item of our commerce is almost certain ultimately to reap an advantage; but he must have patience, a large capital, and must not be disheartened at the first or second result of his enterprise, should it disappoint his hopes of profit. He must also enter into the thing with spirit, and keep his agent always supplied with the goods he may recommend; and he is to remember that many months must elapse before he can expect a return by bills of exchange, but sooner if he order a barter. The capital employed must also at least be to the amount of 20,000*l.* to do any good; and further, this sum ought to be disbursed by him without any pecuniary embarrassment or inconvenience. For a person willing to undertake such a step, he would require to be regularly furnished with patterns, and advices of the manner in which they ought to be printed and varied; and we again repeat, that with *competent means*, a real desire to follow the branch up firmly, and full information hence of what is required, a most extensive and finally lucrative business would be done: and we recommend the matter strongly to your best consideration. Annual consumption of all kinds (British), about 367,300 pieces.

Cotton Twist forms no inconsiderable article in our trade, and is supplied exclusively from England. Mule twist has, however, superseded, in some degree, the demand which formerly existed for water twist, and is consequently more in request. Water twist is nevertheless saleable, and both qualities ought to be of rather high numbers. This article is often given in barter, but mostly sold at rather long credits, and hardly ever for cash. Annual consumption of water twist, 10,000 okes; ditto of mule ditto, 28,000 okes.

Iron in Bars, English, was formerly largely consumed; but from the buyers being plentifully supplied,

it is at present but little demanded, even at the losing price of the day. Barters are very frequently effected through irons of all descriptions, and command a short credit, and sometimes a cash sale. Annual consumption, 16,000 to 18,000 kintals.

Iron Plates are generally employed for building purposes, and store doors.

Iron Rods are always saleable.

Iron Hoops are most saleable in August, September, and October, for fruit and other export barrels.

Iron, Russia, and Swedish Bars. — These kinds are sent in rather large parcels, particularly the former, and fetch a higher price than the English, owing to their malleable qualities, which render labour easier, and by that advantage command a preference: though the high price, beyond the English make, puts the two qualities upon a level, and commands a larger consumption of the latter. Annual consumption, 3,500 kintals.

Tin in Bars is a good, steady, saleable article; is often given on fair terms in barter, always disposed of on short credit, and now and then placed for cash. It comes from England exclusively. Annual consumption, 830 to 1,000 barrels of 4 cwt. each.

Tin in Plates is attended with the foregoing advantages, and is also supplied by England alone. Annual consumption, 1,200 double boxes.

Lead in Sheets, Pigs, and Shot. — These 3 items have lately, particularly shot, been sent from Germany, and prove dangerous competitors with the English; in consequence of which the thing is overdone, and we have more in market than meets the demand at losing prices.

Lead, Red and White. — These 2 articles have lately been much in request for the formation of paint. Some large parcels of red have lately arrived, and sell well and currently, but we are altogether without white. The consumption of all sorts of lead has, however, considerably decreased of late years, and no longer forms an item of any great consequence in our trade.

Rum and Brandy. — Leeward Island and Jamaica are furnished by America and England; the former particularly in the lower qualities, of which we have a full market at low prices. The better kind and brandy are supplied from England, but do not obtain a proportionate advance compared with the common sorts. Brandy is but of limited demand, and 2 or 3 puncheons are sufficient at a time. It ought, as well as rum, to be deeply coloured. Annual consumption of rum, 300 puncheons.

Spices are all saleable in small parcels at a time, particularly pepper and pimento; the latter of which, in small sound berries, is demanded at good prices. Nutmegs are very abundant, and offering very low without finding purchasers. France, America, and England supply us with spices, but France more so in cloves than in other kinds; and it may be remarked that the qualities received from England are preferred. Credit on selling is generally short.

Cochineal is a fair article now and then in small qualities; and, when in demand, at times fetches good prices, occasionally a cash sale, and always one of the shortest credits. Annual consumption, 4,500 okes.

In concluding our observations on imports, we could wish to impress the conviction, that a poor man's purpose cannot be answered in speculating *to* this country; for, should his circumstances require a speedy remittance in bills, he must submit to a heavy sacrifice, in order to meet his wants, by selling his property for whatever it may fetch in cash; and such a measure cannot but be attended with very heavy loss. On the contrary, when an opulent person finds that his property cannot be realised at saving prices, he can afford to wait until a more favourable moment presents itself; and such a moment, in less than 12 months, is almost certain to arrive, when he retires his money with an advantage more than equal to any interest he could obtain for it in Europe.

That the rate of exchange has regularly advanced, and will continue to advance, is the natural result of the continual deterioration of the Turkish specie. We remember when the piece of money denominated 'Mahmoudia,' passed at about its value, or nearly so, of 10 piastres: it rose to 25 soon afterwards; and the few which remain are at present worth 38 each. At the period we allude to (1812), the exchange on London was at 25 piastres the pound sterling; and until lately (owing to the great stagnation of trade, and to political events, which have lowered it), the rate has been up to 60! It cannot, however, increase beyond that rate more than 5 per cent., as it then will nearly be on a par with the value of the gold and silver current coin of the realm, when it will be better to remit in specie than by a bill at 63 piastres for 61 days' sight.* The rates of exchange fluctuate considerably, and a difference of ½ to 1 per cent. often occurs between one post day and another, and are attributable to the quantity or scarcity of paper in market: it is for this reason that the rate always decreases during the fruit season, which takes place at the latter end of August, and continues until the middle of October; when it rises again to meet the limited wants of drawers, and the larger demands of those remitters who did not ship fruit, and invest the funds of their employers in that article. These observations lead us to submit the question of the advantage which a person in Europe has in receiving *from* this country, instead of sending *to* it. Late extensive barters have proved to us, and which we have endeavoured to show you, the unprofitable terms upon which they are conducted, were it only in paying, and that in cash too, for at least ⅓ of the amount, at a higher rate than was current; now this higher rate is, in itself, supposing the produce taken in barter to meet with a saving sale in Europe, of no small consideration; — then you have the advantage of drawing at a high exchange in making a purchase; and again you have the choice of selecting the good part of the produce, and of rejecting the inferior, — a choice which is not allowed in taking it in barter; lastly, the principal advantage in buying over bartering is, that you can avail yourself of a depression in the produce market, and effect your purchase upon easy terms; whereas, when a barter is proposed, it has the immediate effect of producing a general rise in the whole market, and also of engendering the most absurd pretensions on the part of produce holders, who are too conversant with commerce not to see that either the European house, wishing to barter, is in want of procuring returns for his principal, or else that the articles of produce wanted are in great demand in Europe — without which, the European agent would never submit to take produce at so much higher a price than he could procure it for with cash! The only time in which the person sending *to* this country can calculate upon a profitable return, is during the fruit season; and for that reason he ought to forward his shipments from Europe so as to meet the demand, and to be cashed by the beginning of August. A vessel from England hence is in general from 40 to 50 days in performing her voyage; sometimes much less, and but seldom longer: goods ought, if possible, always to be shipped in a fast and first class ship.

We now continue our remarks on the articles of our trade, and the following are some of them sent hence, and deserving of serious attention.

Exports.

Silk. — This is the richest raw article in our export trade with Europe in general, but almost exclusively with England, which consumes nearly our entire produce. There are 3 different qualities, viz. fine, middling, and coarse. Bales, adapted for the English market, are composed of the 3 qualities, but the lesser quantity is of the coarse kind; at one time, all coarse was in request in London, but at present an assortment of the 3 qualities is preferred. When an order is given, it ought to be accompanied by a

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* The exchange, partly from the further degradation of the coin, and partly from the balance of payments being against Smyrna, is now (February, 1834) 98 piastres to the pound sterling! This variation of the exchange renders the holding of property upon a speculation for an advance very hazardous.

description of the quality required; and it is necessary to state that, for *all* of the finest, without being mixed, a higher price is demanded. A bale contains 40 teffees; and, before being packed, is carefully examined and approved of by competent native judges. Silk is produced at Brussa, a large city about 200 miles distant from Smyrna, whence it is forwarded by caravans to the different places of consumption, which are Constantinople and this town. Until very lately, almost the entire crop of silk came for sale to Smyrna, but at present the most considerable part is sent to Constantinople, where the price is higher; we have therefore here an advantage, not only in price, but also in our manner of packing, which fetches 5 or 6 per cent. more in England than if packed in the capital. Silk is mostly a ready money article, though it sometimes may be had in small quantities at a short credit; or half cash and half 1 or 2 couriers: it is also now and then given in barter. Annual average produce, 2,500 bales, or about 480,000 lbs.*

Opium, in point of value, and as an article of speculation, hardly gives way to silk; but as it is largely shipped by Americans, and sent in smaller quantities to Holland, and the south of Europe, it is subject to much competition and variation of price, although we have invariably observed that the opening price of the new crop is always the lowest, which, however, is in some measure counterbalanced by the decrease in weight which occurs by keeping. This is also a cash article, and indeed subject to the same conditions as purchasing or bartering for silk; it nevertheless has one inferiority, which the silk is not liable to — namely, a difference in the quality of the crops: last year, for instance, opium was of a very bad kind, and hardly saleable in England; this year, though small, it is fine. On the Continent and in America, the small sort is preferred to the larger sized. We observe that, in England, the prices of opium fluctuate considerably; but we are not aware that, by holding it, any loss has ever happened, — another reason why a wealthy man only should embark in the Turkey trade. It would be impossible, or at least difficult, and attended with much expense, to obtain a monopoly of the opium crop, as it is produced through some thousands of individuals, each one (and they are all poor) adding his produce; and when collected in sufficient quantities, it is brought to market by the natives, having each of them 1 or 2 baskets for sale. What might be done is this: — Send a person to the place of growth with ready money to purchase a certain but limited quantity, and which he can do easily, if not hurried, to the extent of 50, or even 100 baskets, and upon terms of advantage, from the simple fact that the collectors of it prefer to receive a remunerating price on the spot of growth, rather than perform a long and expensive journey, with the chance of not finding purchasers immediately. Opium is produced at sundry places in the interior, of from 10 to 30 days' distance hence; but that grown at Caissar, about 600 miles from Smyrna, is the most esteemed, from its cleanness and good quality; it comes to market in June, and finishes about December or January. Annual average produce, 3,000 baskets, or about 400,000 lbs.*

Drugs and Gums form one of our principal branches of commerce, and is almost entirely in the hands of the Jews. At present, gum Arabic and mastic are exceedingly scarce; and it is only when that is the case, or the demand for exportation is very brisk, that much variation exists in the price of drugs. Trieste, and occasionally America, consume a considerable portion of gums, but the largest quantity goes to the English markets. Barters are often effected through this medium; but it is not attended with much advantage, as they are conducted by a race who never lose in any transaction they undertake. It is impossible to ascertain the quantities of drugs received in Smyrna, and equally so to know the quantity remaining, as they are dispersed all over the city, and consumed so irregularly in Europe, as bids defiance to all regular calculation.

Sponges have been, and still are, an article of considerable moment, particularly for the English markets, and are found about the islands in the Grecian Archipelago, brought here, and cleaned for exportation. They vary in price from 6 to 90 piastres per oke, according to fineness and quality: the better sort alone answers for speculation, and which, it would appear, from the considerable quantity sent to London, turns to good account. The produce depends so entirely on chance, that no correct estimate of the yearly quantity can be formed; however, we are seldom in want of a moderate supply.

Galls are shipped in considerable quantities for the English, German, and French markets; the two former, however, being the largest consumers: for England, the blue galls are those principally sent; though the market there for their sale being dull and low, prices with us, moderate as they are compared to last year, will still further decline, should a demand not spring up, of which there is no appearance. Annual produce of all sorts, 5,500 kintals.

Cotton Wool, of which we have several qualities, is chiefly exported to Trieste and Marseilles. The demand at present for all kinds of this produce is extremely limited, and we expect that prices will go lower with us before long, when perhaps something good might be done in Soubougeas to England, which generally receives only that quality. Barters are made to a large extent in cottons. Annual average produce of all sorts, 60,000 kintals.

Valonia employs more British shipping for full cargoes of only one article, than any other species of produce, if we except, perhaps, fruit: it is also sent to Dublin and to the German markets in considerable quantities. Almost any supply can be obtained, and it is shipped generally near the places of growth, which are numerous, although there is never any want of it in the Smyrna market. It is much resorted to as a means of making barters, which perhaps are as easily effected, upon pretty fair terms, as with any other article of produce. The annual produce is sufficient to meet the wants of all Europe. It can be had to any extent, and at all periods.

Fruit. — This is an article which occupies the attention of all Smyrna, more or less, and produces, during the season, great interest and activity. Figs come to market early in September, and raisins are ready for shipping early in October: the former are procurable only at Smyrna, where the latter in all their qualities may be procured; but the shipments are generally made at Cesmé, Vouria, Carabourna, Usbeck, &c., from which ports the name of the raisin takes its origin. Large sums are frequently gained in fruit speculations; and when the demand in England is brisk, and the prices and quality fair with us, it very seldom happens, indeed, that any loss is sustained: it is, however, attended with risk; must be shipped dry; and ought only to go in a very fast, sound vessel, as much depends upon a first, or at least an early arrival, which obtains in general a higher price than the later arrivals. The quantity produced is always uncertain.

For the remaining articles of exports hence, we refer you to our price current. Carpets are produced to the extent of about 80,000 to 100,000 pikes a year. Oil (olive), to the amount of 10 to 15 middling sized cargoes, from the islands of Mytilene, Candia, &c., is generally shipped for America and France; seldom

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* Since the period when this paper was drawn up, a considerable change has taken place in the silk and opium trade of Smyrna. A few years ago, the Turkish government so far receded from the free principles which pervade its commercial policy — (see CONSTANTINOPLE), — as to attempt the establishment of monopolies of silk and opium; by compelling the producers of these articles to sell them at a fixed and low price to the government agents, by whom they were afterwards disposed of at an advanced rate. But a plan of this sort could not be carried into effect in such a country as Turkey; and had, consequently, to be abandoned. A duty of nearly 10 per cent. has, however, been imposed on the silk and opium exported to foreign parts. And in order to facilitate the collection of this duty, the whole of these articles intended for exportation are required to be brought to Constantinople! This regulation has done considerable injury to Smyrna; but it seems so very absurd, and its enforcement is so obviously impossible, that it is not likely it will be maintained for any considerable period. — (*Urquhart on Turkey and its Resources*, p. 189.)

for England: the season commences in September, but the crops of olives fluctuate exceedingly in point of quantity; hence arise dear and cheap years: last year was a high one, and it is expected to be lower this. Copper, old and new, may be computed at 30,000 okes, which are generally bought up as soon as offered, for Europe. Hare skins are computed at from 350,000 to 400,000 annually. Madder roots at 12,000 kintals. Peletons, at 12,000 to 15,000 chequees. Goats' wool of all kinds may be calculated per year at 45,000 to 50,000 chequees; sheep's wool at 25,000 kintals. Wax (yellow), 1,600 kintals.

We have now finished our general remarks on the exports and imports of the place; and in concluding them, we beg to state that, upon an average of all of them, (with the exception of fruit from, and of iron to, Turkey,) the selling charges may (excluding del credere commission) be calculated at about 12 per cent., and on purchasing at about 8 per cent.

SNUFF (Ger. *Schnupftaback*; Fr. *Tabac en poudre*; It. *Tabacco da naso*; Sp. *Tabaco de polvo*; Rus. *Nosowoi tabak*), a powder in very general use as an errhine. Tobacco is the usual basis of snuff; but small quantities of other articles are frequently added to it, to vary its pungency, flavour, scent, &c. Though substantially the same, the kinds and names of snuff are infinite, and are perpetually changing. There are, however, 3 principal sorts: the first, granulated; the second, an impalpable powder; and the third, the bran, or coarse part remaining after sifting the second sort. Unless taken in excess, no bad consequences result from its use.

Dealers in tobacco and snuff are obliged to take out a licence, renewable annually, which costs 5*s*. They are also obliged to enter their premises, and have their names written in large legible characters over their door, or on some conspicuous part of their house, under a penalty of 50*l*. The dyeing of snuff with ochre, amber, or any other colouring matter except water tinged with colour, is prohibited under a penalty of 100*l*.; and its intermixture with fustic, yellow ebony, touchwood, sand, dirt, leaves, &c. is prohibited under a penalty of 100*l*. and the forfeiture of the article.—(1 & 2 *Geo.* 4. c. 109.) If snuff be found to contain 4 per cent. of any substance, not being tobacco, and other than water only, or water tinged with colour, or flavoured only, such snuff shall be deemed adulterated, and shall be forfeited, and the parties subjected to a penalty of 100*l*. over and above all other penalties and forfeitures.—(*Ib.*) No quantity of snuff weighing above 2 lbs. shall be removed by land or water without a permit.—(29 *Geo.* 3. c. 68.)—(See TOBACCO.)

SNUFF-BOXES are made of every variety of pattern, and of an endless variety of materials. We only mention them here for the purpose of giving the following details, not to be met with in any other publication, with respect to the manufacture of Laurencekirk or Cumnock boxes. These are made of wood, admirably jointed, painted, and varnished.

These beautiful boxes were first manufactured at the village of Laurencekirk, in Kincardineshire, about 40 years since. The original inventor was a cripple hardly possessed of the power of locomotion. In place of curtains, his bed (rather a curious workshop) was surrounded with benches and receptacles for tools, in the contrivance and use of which he discovered the utmost ingenuity. The inventor, instead of taking out a patent, confided his secret to a joiner in the same village, who in a few years amassed a considerable property; while the other died, as he had lived, in the greatest poverty. The great difficulty of the manufacture lies in the formation of the hinge, which, in a genuine box, is so delicately made as hardly to be visible. Peculiar, or, as they are called, secret tools, are required in its formation; and though they must have been improved by time and experience, the mystery attached to their preparation is still so studiously kept up, that the workmen employed in one shop are rigorously debarred from having any communication with those employed in another.

About the beginning of this century, an ingenious individual belonging to the village of Cumnock, in Ayrshire, of the name of Crawford, having seen one of the Laurencekirk snuff-boxes, succeeded, after various attempts, by the assistance of a watchmaker of the same village, who made the tools, in producing a similar box; and by his success, not only laid the foundation of his own fortune, but greatly enriched his native parish and province. For a while, the Laurencekirk boxes were most in demand; but Mr. Crawford and his neighbours in Cumnock not only copied the art, but so improved and perfected it, that, in a very few years, for every box made in the north there were, probably, 20 made in the south. In 1826, the Cumnock trade was divided amongst 8 master manufacturers, who employed considerably more than 100 persons. The demand at that time equalled the supply, and it was calculated that the trade yielded from 7,000*l*. to 8,000*l*. annually,—a large product for a manufacture seemingly so insignificant, and consisting almost exclusively of the wages of labour. Plane is the wood in common use, and the cost of the wood in an ordinary sized box does not exceed 1*d*.; the paints and varnish are rated at 2*d*.; and though something is lost by selecting timber of the finest colour, the whole expense of the raw material falls considerably short of ¼ per cent. on the return it yields!

Snuff-box, like pin making, admits of subdivision of labour; and in all workshops of any size 3 classes of persons are employed,—painters, polishers, and joiners. At the period alluded to, an industrious joiner earned from 30*s*. to 40*s*. weekly, a painter from 45*s*. to 3*l*., and a polisher considerably less than either. When Mr. Crawford first commenced business, he obtained almost any price he chose to ask; and many instances occurred, in which ordinary sized snuff-boxes sold at 2*l*. 12*s*. 6*d*., and ladies' work-boxes at 25*l*. But as the trade increased, it became necessary to employ apprentices, who first became journeymen and then masters; and such have been the effects of improvement and competition, that articles such as are specified above may now be obtained at the respective prices of *six* and *twenty-five shillings*. While the joiner's part of the art has remained pretty stationary, that of the painter has been gradually improving. By means of the *Pentagraph*, which is much employed, the largest engravings are reduced to the size most convenient for the workman, without injuring the prints in the slightest degree; and hence a snuff-box manufacturer, like a Dunfermline weaver, can work to order by exhibiting on wood his employer's coat of arms, or, in short, any object he may fancy within the range of the pictorial art. Some of the painters display considerable talent, and as often as they choose to put forth their strength, produce box-lids, which are really worthy of being preserved as pictures. At first, nearly the whole subjects chosen as ornaments, were taken from Burns's poems; and there can be no doubt, that the "Cotter's Saturday Night," "Tam O'Shanter," "Willie brewed a peck o' maut," &c. &c., have penetrated in this form into every quarter of the habitable globe. Now, however, the artists of Cumnock take a wider range; the studios of Wilkie, and other artists, have been laid under contribution; landscapes are as often met with as figures; and there is scarcely a celebrated scene in the country that is not pictured forth more or less perfectly on the lid of a Cumnock snuff-box. A few years ago, the art in question was much affected by the long-continued depression of the weaving business; so much so, that many left it for some other employment: and some of those who emigrated, having made a good deal of money, instead of being cooped up in a workshop, are now thriving proprietors in Upper Canada. But after a brief interval the trade rallied; and though prices are low, it is now more flourishing than ever. In Cumnock, the number of hands has increased considerably, and in Mauchline there is one workshop so extensive that it may almost be compared to a cotton mill or factory. In other quarters the trade is extending, such

as Helensburgh near Greenock, Catrine, Maxwelltown, Dumfries, &c. The principal markets for the snuff-boxes are London, Liverpool, Glasgow, and Edinburgh. At one time, large lots of boxes were exported to South America, and probably are so at present. Cumnock, in a word, in regard to its staple manufacture, is in that palmy state so well described by a modern writer: — "The condition most favourable to population is that of a laborious frugal people ministering to the demands of opulent neighbours; because this situation, while it leaves them every advantage of luxury, exempts them from the evils which accompany its admission into a country. Of the different kinds of luxury, those are the most innocent which afford employment to the greatest number of artists and manufacturers; or those in which the price of the work bears the greatest proportion to that of the raw material." Some very wretched imitations of Cumnock boxes have been produced in different parts of England; but they can deceive no one who ever saw a genuine box. The hinge, as well as the finishing, is clumsy in the extreme.

*** We are indebted for this curious and instructive article to our esteemed friend, John M'Diarmid, Esq., Editor of the *Dumfries Courier*, one of the best provincial papers in the empire.

SOAP (Ger. *Seife*; Fr. *Savon*; It. *Sapone*; Sp. *Jabon*; Rus. *Mülo*; Lat. *Sapo*). The soap met with in commerce is generally divided into 2 sorts, *hard* and *soft*: the former is made of soda and tallow or oil, and the latter of potash and similar oily matters. Soap made of tallow and soda has a whitish colour, and is, therefore, sometimes denominated *white* soap: but it is usual for soap makers, in order to lower the price of the article, to mix a considerable portion of rosin with the tallow; this mixture forms the common *yellow* soap of this country. Soap made of tallow, &c. and potash does not assume a solid form; its consistence is never greater than that of hog's lard. The properties of soft soap as a detergent do not differ materially from those of hard soap, but it is not nearly so convenient for use. The alkali employed by the ancient Gauls and Germans in the formation of soap was potash; hence we see why it was described by the Romans as an unguent. The oil employed for making soft soap in this country is whale oil. A little tallow is also added, which, by a peculiar management, is dispersed through the soap in fine white spots. The soap made in countries which produce olive oil, as the south of France, Italy, and Spain, is preferable to the soap of this country, which is usually manufactured from grease, tallow, &c. — (*Thomson's Chemistry.*)

London, Liverpool, Newcastle, Bristol, Brentford, Frodsham, and Glasgow, are the great seats of the British soap manufacture. Thus, of 119,379,037 lbs. of hard soap made in Great Britain in 1832, London furnished 29,627,735 lbs.; Liverpool, 28,878,466 lbs.; Newcastle, 6,982,049 lbs.; Bristol, 6,861,407 lbs.; Brentford, 5,573,074 lbs.; Frodsham, 4,933,335 lbs.; and Glasgow, 4,607,354 lbs. Of 10,350,703 lbs. of soft soap, made during the same year, Liverpool furnished above ½; the rest being supplied by Glasgow, London, Bristol, Hull, &c.

The use of soap as a detergent is well known: it may, in fact, be considered as a necessary of life. Its consumption in most civilised countries is immense. Pliny informs us, that soap was first invented by the Gauls; that it was composed of tallow and ashes; and that the German soap was reckoned the best. — (Lib. xviii. c. 51.)

Regulations as to the Manufacture.— Soap is charged with a duty of excise, and its manufacture is consequently regulated by several provisions intended for the protection of the revenue. No person is permitted to make soap within the limits of the head office of excise in London, unless he occupy a tenement of 10*l.* a year, and is assessed to and pays the parish rates; nor elsewhere, unless he is assessed and pays to church and poor; and every soap-maker is required to take out a licence to be renewed annually, for which he is to pay 4*l.*; but persons in partnership require only 1 licence for 1 house. They are also required to provide sufficient wooden covers for all coppers and other utensils wherein they boil hard soap: which covers are to be locked and sealed down by the officer whenever any soap is left in the same; and the furnace door, cover, and the ash-hole door is also to be locked and sealed at all times except when the same is at work. Regulations are also made for preventing the use of any private conveyances or pipes; empowering officers to break up the ground to search for the same, and cut them up if found; if not, the officers must make compensation for the injury done. On cleansing or taking soap out of the coppers, the makers are required to give notice; and certain spaces of time are limited for completing the cleansing and taking out of the soap, according to the kind of soap, and the number of frames into which the same is put. Coppers and other utensils must be cleansed once in every month. The frames used in making hard soap, for cleansing and putting the same into when taken out of the vessel when boiled and prepared, must be either square or oblong, and the bottom, sides, and end of such frames are to be 2 inches thick and not more than 45 inches long, and 15 inches broad, the same being marked and numbered at the expense of the soap-maker. The making of yellow or mottled soap is regulated by 59 Geo. 3. c. 90., by which every maker is required, as soon as the same is cleansed or taken out of the vessel in which it has been made, to add and put into the copper or vessel all the fob and skimmings taken out of the same, and also grease, in the proportion of at least 10 cwt. of grease for every ton of yellow or mottled soap which the copper or vessel shall be by the officer computed to boil or make, and immediately remelt such grease in the presence of the officer of excise. No lees fit for the making of soap may be manufactured for sale; nor may any barilla be ground or pounded for sale; nor when ground or pounded be sold exceeding the weight of 28 lbs. of such barilla at one time. In the removal of soap exceeding the quantity of 28 lbs., the word "soap" must be painted or marked in large letters of at least 2 inches long on every chest, basket, box, cask, or package containing the same; and the same word must be painted or marked in letters of at least 3 inches in length on every wagon, cart, or other carriage carrying more than 28 lbs., in some conspicuous and open part of the same, unless it is carried by a person being a known and public or common carrier of goods and merchandise from one part to another; officers may inspect the soap and the accompanying certificate. Soap-makers are also to keep books, and enter therein all quantities of soap sold exceeding 28 lbs. Every barrel of soap must contain 256 lbs. avoirdupois; every ½ barrel 128 lbs.; every firkin 64 lbs.; and every ½ firkin 32 lbs.; besides the weight and tare of the cask. Soap-makers must keep scales and weights, and assist the excise officers in the use of them, and must weigh their materials for making soap before the officer, on penalty of 50*l.* — (*Chitty's Com. Law*, vol. ii. pp. 418—420.)

Exports of Soap and Candles. — We annually export from 10,000,000 to 12,000,000 lbs. of soap and candles, worth from 250,000*l.* to 300,000*l.* Nearly ⅔ are exported to the British West Indian and American colonies. A very large quantity is also exported to Brazil.

Oppressiveness of the Duty. — The direct duty charged on hard soap, which is by far the most extensively used, amounted, till June, 1833, to 3*d.* per lb., or 28*s.* per cwt., while the price of soap rarely exceeded 6*d.* per lb., or 56*s.* per cwt., so that the direct duty was fully 100 per cent.! But besides this enormous duty, the substances of which soap is made, viz. tallow, barilla, and turpentine, or rosin, were respectively charged with duties of 3*s.* 4*d.*, 2*s.*, and 4*s.* 4*d.* a cwt.; and taking these indirect taxes into account, it may be truly stated that soap was taxed from 120 to 130 per cent. *ad valorem!* The imposition of so exorbitant a duty on an article that is indispensable to the prosecution of many branches of manufacture, and to the comfort and cleanliness of all orders of persons, was in the last degree inexpedient. There were good reasons, too, for thinking that in consequence of the encouragement which this excessive duty gave to smuggling and fraud, the revenue derived from it was not much greater than it will be now that it is reduced to ½ its former amount. During the 5 years ending with 1832, the consumption of duty-paid soap was nearly stationary; though there can be no doubt, from the increase of manufactures and population during that period, that it would have been very considerably extended, but for the increase of smuggling. This baneful practice is facilitated by the total exemption which Ireland enjoys from this duty; for it not unfrequently happens that the soap made in this country, and sent to Ireland under a drawback, is again clandestinely introduced into Great Britain. It is, perhaps, needless to say that nothing but the effectual

reduction of the duty could put a stop to the smuggling and fraud that has been so generally practised. So long as the profit to be made by breaking the law was so high as 120 or 130 per cent., so long was it sure to be broken, in despite of the multiplication of penalties and the utmost activity and vigilance of the officers. But now that the duty has been reduced ⅓, the temptation to smuggle will be most materially diminished. And it may be fairly concluded that the increased consumption that will, no doubt, follow this reduction of duty, will go far to render the low duty as productive as the higher one; so that the advantages resulting from the diminished temptation to smuggling and fraud, and the influence of the reduced price of the article in facilitating manufacturing industry, and in promoting habits of cleanliness, will, most probably, be obtained without any considerable loss of revenue.

The entire repeal of the soap duty would be a popular measure; but, seeing that a large amount of revenue must be raised, and that those taxes only are productive which affect all classes of the community, we should not be disposed to recommend such a measure. It is not the tax itself, but the oppressive extent to which it was carried that made it objectionable. Instead of proposing its repeal, we think it ought to be extended to Ireland. The exemption of one part of the empire from a duty of this sort imposed on another part, is contrary to all principle, and is fraught with the most pernicious results. It will be impossible to get rid of smuggling so long as this unjust distinction is suffered to exist. Were the duty extended to Ireland, the necessity for granting drawbacks on the soap exported to it, and of laying countervailing duties on that imported from it, would, of course, fall to the ground. And we feel confident that, though a still further deduction were made from the rate of duty, its productiveness would not, under such circumstances, be impaired even in England.

I. Account of the Quantity of *Hard* and *Soft Soap* charged with Excise Duty in Great Britain, in each of the Eleven Years ending 5th of January, 1833; the Rates of Duty; and the *Gross* and *Nett* Produce of the Duties. — (Compiled from different *Parliamentary Papers*.)

Years.	Pounds' Weight of Soap.		Rates of Duty.		Gross Produce of the Duties.	Nett Produce of the Duties.
	Hard.	Soft.	Hard, per lb.	Soft, per lb.		
	Lbs.	*Lbs.*	*d.*	*d.*	£ s. d.	£ s. d.
1822	89,168,934	7,583,938	3	1¼		
1823	92,901,382	8,073,803	—	—		
1824	97,071,456	8,226,922	—	—		
1825	100,261,353	9,297,485	—	—		
1826	102,623,165	8,910,504	—	—	1,347,761 19 10	1,179,612 2 4
1827	96,859,694	7,278,446	—	—	1,263,818 3 8	1,147,060 7 10½
1828	104,372,807	9,646,477	—	—	1,374,998 19 7	1,199,409 18 0¼
1829	108,110,198	10,024,665	—	—	1,425,516 11 9	1,210,754 11 1¾
1830	103,041,961	9,068,918	—	—	1,354,152 0 9	1,151,909 15 4½
1831	117,324,320	10,909,519	—	—	1,513,149 19 9½	1,249,684 13 10¾
1832	119,379,037	10,350,703	—	—	1,550,344 15 4¼	1,186,219 11 11¾

II. Account of all Soap exported to Ireland and Foreign Countries, on which a Drawback was allowed, during the Nine Years ending with 5th of January, 1833. — (*Parl. Paper*, No. 23. Sess. 1831.)

Years.	Ireland.			Foreign Countries.		
	Pounds' Weight of Soap exported.		Drawback allowed thereon.	Pounds' Weight of Soap exported.		Drawback allowed thereon.
	Hard.	Soft.		Hard.	Soft.	
	Lbs.	*Lbs.*	£ s. d.	*Lbs.*	*Lbs.*	£ s. d.
1824	116,401	72,814	1,985 18 11¼	4,993,694	3,729	62,448 7 3¾
1825	146,855	83,041	2,441 3 10¾	5,764,070	3,526	72,076 11 8½
1826	210,912	88,890	3,284 11 1½	4,073,973	2,773	50,944 17 7¾
1827	301,642	89,280	4,421 10 6	7,445,467	6,491	93,115 13 4¼
1828	947,326	90,875	12,504 4 1¼	7,936,569	12,734	99,299 19 3½
1829	2,751,558	140,673	35,420 4 3¾	6,884,061	4,467	86,083 6 8¼
1830	6,559,461	120,992	82,875 9 11	8,098,205	10,324	101,302 16 10
1831						
1832	10,714,263	120,256	134,805 3 1			

SODA. See Alkali.

SOUTH SEA DUTIES. The act of the 9 Ann. c. 21., establishing the South Sea Company, conveyed to them the exclusive privilege of trading to the Pacific Ocean, and along the east coast of America, from the Orinoco to Cape Horn.

This privilege was taken away by the 47 Geo. 3. c. 23.; and in order to raise a guarantee fund for the indemnification of the Company, a duty of 2 per cent. *ad valorem* was imposed by the 55 Geo. 3. c. 57. on all goods (with the exception of those from Brazil and Dutch Surinam*; and with the exception of blubber, oil, &c. of whales, or fish caught by the crews of British or Irish ships) imported from within the aforesaid limits. A duty of 1*s.* 6*d.* per ton was also imposed on all vessels (except in ballast or importing the produce of the fishery of British subjects) entering inwards or clearing outwards from or to places within the said limits. The duties are to cease when the guarantee fund is completed.

SOY, a species of sauce prepared in China and Japan from a small bean, the produce of the *Dolichos soja*. It is eaten with fish and other articles. It should be chosen of a good flavour, not too salt nor too sweet, of a good thick consistence, a brown colour, and clear; when shaken in a glass, it should leave a coat on the surface, of a bright yellowish brown colour; if it do not, it is of an inferior kind, and should be rejected. Japan soy is deemed superior to the Chinese. It is worth, in bond, from 6*s.* to 7*s.* a gallon. It is believed to be extensively counterfeited. — (*Milburn's Orient. Com.*)

SPELTER, a name frequently given to Zinc; which see.

SPERMACETI (Ger. *Wallrath*; Fr. *Blanc de Baleine, Sperme de Baleine*; It. *Spermaceti*; Sp. *Esperma de Ballena*; Rus. *Spermazet*), a product obtained from the

* The provinces of the Rio de la Plata have since been added. — (*Treas. Order*, 12th of March, 1828.)

brain of the *physeter macrocephalus*, a species of whale inhabiting the Southern Ocean. The brain being dug out from the cavity of the head, the oil is separated from it by dripping. The residue is crude spermaceti, of which an ordinary sized whale will yield 12 barrels. After being brought to England, it is purified. It then concretes into a white, crystallised, brittle, semitransparent, unctuous substance, nearly inodorous and insipid. On being cut into small pieces it assumes a flaky aspect. It is very heavy; its specific gravity being 9·433. It is used in the manufacture of candles, in medicine, &c.

SPICES (Ger. *Spezereyen*; Du. *Speceryen*; Fr. *Epiceries, Epices*; It. *Spezj, Spezierie*; Sp. *Especias, Especerias*; Port. *Especiaria*; Rus. *Pränüe korenja*). Under this denomination are included all those vegetable productions which are fragrant to the smell and pungent to the palate; such as cloves, ginger, nutmegs, allspice, &c. These will be found under their proper heads.

SPIRIT OF WINE. See Alcohol.

SPIRITS. All inflammable liquors obtained by distillation, as brandy, rum, geneva, whisky, gin, &c., are comprised under this designation. The term *British spirits* is applied indiscriminately to the various sorts of spirits manufactured in Great Britain and Ireland. Of these, gin and whisky are by far the most important.

The manufacture of spirits is placed under the *surveillance* of the excise, and a very large revenue is obtained from it. The act 6 Geo. 4. c. 80. lays down the regulations to be followed by the distillers in the manufacture, and by the officers in charging the duties. This act is of great length, having no fewer than 151 clauses; it is, besides, exceedingly complicated, and the penalties in it amount to many thousand pounds. It would, therefore, be to no purpose to attempt giving any abstract of it in this place. Every one carrying on the business of distillation must have the act in his possession, and must be practically acquainted with its operation.

1. *Spirit Duties. Consumption of British Spirits in Great Britain and Ireland.* — There are, perhaps, no better subjects for taxation than spirituous and fermented liquors. They are essentially luxuries; and while moderate duties on them are, in consequence of their being very generally used, exceedingly productive, the increase of price which they occasion has a tendency to lessen their consumption by the poor, to whom, when taken in excess, they are exceedingly pernicious. Few governments, however, have been satisfied with imposing moderate duties on spirits; but partly in the view of increasing the revenue, and partly in the view of placing them beyond the reach of the lower classes, have almost invariably loaded them with such oppressively high duties as have entirely defeated both objects. The imposition of such duties does not take away the appetite for spirits; and as no vigilance of the officers or severity of the laws has been found sufficient to secure a monopoly of the market to the legal distillers, the real effect of the high duties has been to throw the supply of a large proportion of the demand into the hands of the illicit distiller, and to superadd the atrocities of the smuggler to the idleness and dissipation of the drunkard.

During the latter part of the reign of George I., and the earlier part of that of George II., gin drinking was exceedingly prevalent; and the cheapness of ardent spirits, and the multiplication of public houses, were denounced from the pulpit, and in the presentments of grand juries, as pregnant with the most destructive consequences to the health and morals of the community. At length, ministers determined to make a vigorous effort to put a stop to the further use of spirituous liquors, except as a cordial or medicine. For this purpose, an act was passed in 1736, the history and effects of which deserve to be studied by all who are clamorous for an increase of the duties on spirits. Its preamble is to this effect: — "Whereas the drinking of spirituous liquors, or strong water, is become very common, especially among people of lower and inferior rank, the constant and excessive use of which tends greatly to the destruction of their health, rendering them unfit for useful labour and business, debauching their morals, and inciting them to perpetrate all vices; and the ill consequences of the excessive use of such liquors are not confined to the present generation, but extend to future ages, and tend to the destruction and ruin of this kingdom." The enactments were such as might be expected to follow a preamble of this sort. They were not intended to repress the vice of gin-drinking, but to root it out altogether. To accomplish this, a duty of *twenty shillings* a gallon was laid on spirits, exclusive of a heavy licence duty on retailers. Extraordinary encouragements were at the same time held out to informers, and a fine of 100*l.* was ordered to be rigorously exacted from those who, were it even through inadvertency, should vend the smallest quantity of spirits which had not paid the full duty. Here was an act which might, one should think, have satisfied the bitterest enemy of gin. But instead of the anticipated effects, it produced those directly opposite. The respectable dealers withdrew from a trade proscribed by the legislature; so that the spirit business fell almost entirely into the hands of the lowest and most profligate characters, who, as they had nothing to lose, were not deterred by penalties from breaking through all its provisions. The populace having in this, as in all similar

cases, espoused the cause of the smugglers and unlicensed dealers, the officers of the revenue were openly assaulted in the streets of London and other great towns; informers were hunted down like wild beasts; and drunkenness, disorders, and crimes, increased with a frightful rapidity. "Within 2 years of the passing of the act," says Tindal, "it had become *odious and contemptible*, and policy as well as humanity forced the commissioners of excise to mitigate its penalties." — (*Continuation of Rapin*, vol. viii. p. 358. ed. 1759.) The same historian mentions (vol. viii. p. 390.), that during the 2 years in question, no fewer than 12,000 persons were convicted of offences connected with the sale of spirits. But no exertion on the part of the revenue officers and magistrates could stem the torrent of smuggling. According to a statement made by the Earl of Cholmondeley, in the House of Lords — (*Timberland's Debates in the House of Lords*, vol. viii. p. 388.), it appears, that at the very moment when the sale of spirits was declared to be illegal, and every possible exertion made to suppress it, upwards of SEVEN MILLIONS of gallons were annually consumed in London, and other parts immediately adjacent! Under such circumstances, government had but one course to follow — to give up the unequal struggle. In 1742, the high prohibitory duties were accordingly repealed, and such moderate duties imposed, as were calculated to increase the revenue, by increasing the consumption of legally distilled spirits. The bill for this purpose was vehemently opposed in the House of Lords by most of the bishops, and many other peers, who exhausted all their rhetoric in depicting the mischievous consequences that would result from a toleration of the practice of gin-drinking. To these declamations it was unanswerably replied, that whatever the evils of the practice might be, it was impossible to repress them by prohibitory enactments; and that the attempts to do so had been productive of far more mischief than had ever resulted, or could be expected to result, from the greatest abuse of spirits. The consequences of the change were highly beneficial. An instant stop was put to smuggling; and if the vice of drunkenness was not materially diminished, it has never been stated that it was increased.

But it is unnecessary to go back to the reign of George II. for proofs of the impotency of high duties to take away the taste for such an article, or to lessen its consumption. The occurrences that took place in the late reign, though they would seem to be already forgotten, are equally decisive as to this question.

Duties in Ireland. — Perhaps no country has suffered more from the excessive height to which duties on spirits have been carried than Ireland. If heavy taxes, enforced by severe fiscal regulations, could make a people sober and industrious, the Irish would be the most so of any on the face of the earth. In order to make the possessors of property join heartily in suppressing illicit distillation, the novel expedient was here resorted to, of imposing a heavy fine on every parish, town land, manor land, or lordship, in which an unlicensed still was found; while the unfortunate wretches found working it were subjected to *transportation for seven years*. But instead of putting down illicit distillation, these unheard-of severities rendered it universal, and filled the country with bloodshed, and even rebellion. Is is stated by the Rev. Mr. Chichester, in his valuable pamphlet on the *Irish Distillery Laws*, published in 1818, that "the Irish system seemed to have been formed in order to perpetuate smuggling and anarchy. It has culled the evils of both savage and civilised life, and rejected all the advantages which they contain. The calamities of civilised warfare are, in general, inferior to those produced by the Irish distillery laws; and I doubt whether any nation of modern Europe, which is not in a state of actual revolution, can furnish instances of legal cruelty commensurate to those which I have represented." — (Pp. 92—107.)

These statements are borne out to the fullest extent by the official details in the *Reports of the Revenue Commissioners*. In 1811, say the commissioners (*Fifth Report*, p. 19.), when the duty on spirits was *2s. 6d.* a gallon, duty was paid in Ireland on 6,500,361 gallons (Irish measure); whereas, in 1822, when the duty was *5s. 6d.*, only 2,950,647 gallons were brought to the charge. The commissioners estimate, that the annual consumption of spirits in Ireland was at this very period not less than TEN MILLIONS of gallons; and, as scarcely *three* millions paid duty, it followed, that *seven* millions were illegally supplied; and "taking *one* million of gallons as the quantity fraudulently furnished for consumption by the licensed distillers, the produce of the unlicensed stills may be estimated at *six millions of gallons*." — (*Ib.* p. 8.) Now, it is material to keep in mind, that this vast amount of smuggling was carried on in the teeth of the above barbarous statutes, and in despite of the utmost exertions of the police and military to prevent it; the only result being the exasperation of the populace, and the perpetration of revolting atrocities both by them and the military. "In Ireland," say the commissioners, "it will appear, from the evidence annexed to this Report, that parts of the country have been absolutely disorganised, and placed in opposition not only to the civil authority, but to the military force of the government. The profits to be obtained from the evasion of the law have been such as to encourage nu-

merous individuals to persevere in these desperate pursuits, notwithstanding the risk of property and life with which they have been attended."

To put an end to such evils, the commissioners recommended that the duty on spirits should be reduced from 5*s.* 6*d.* to 2*s.* the wine gallon (2*s.* 4*d.* the Imperial gallon), and government wisely consented to act upon this recommendation. In 1823, the duties were accordingly reduced; and the following official account will show what has been the result of this measure: —

An Account of the Quantities of Spirits made in Ireland, which have paid the Duties of Excise for Home Consumption; stating the Rate of Duty paid, and also the Nett Amount of Revenue received in each Year, since the Year 1820.—(*Parl. Paper*, No. 340. Sess. 1829, No. 61. Sess. 1831, &c.)

Years.	Number of Gallons.	Rate per Gallon.	Nett Amount of Revenue.		
	Imperial Measure.		£	*s.*	*d.*
1821	2,649,179	5*s.* 6*d.* per Irish gallon.	912,288	7	5
1822	2,328,387	Ditto.	797,518	13	3
1823	3,348,505	Ditto; from 10th of Oct. 1823, 2*s.* per English wine gallon.	634,460	7	2
1824	6,690,315	Ditto.	771,690	16	0
1825	9,262,744	Ditto.	1,084,191	6	5
1826	6,837,408	2*s.* 10*d.* per Imperial gallon.	964,509	10	8
1827	8,260,919	Ditto.	1,122,096	14	10
1828	9,937,903	Ditto.	1,395,721	12	11
1829	9,212,223	Ditto.	1,305,064	18	6
1830	9,004,539	2*s.* 10*d.*, 3*s.*, and 3*s.* 4*d.* per ditto.	1,409,128	3	7
1831	8,710,672	3*s.* 4*d.*	1,451,580	7	1
1832	8,657,756	Ditto.	1,442,845	9	11
1833	8,168,596	Ditto.	1,360,769	6	8

It may appear, on a superficial view of this Table, as if the consumption of spirits in Ireland had been nearly trebled since 1823; but, in point of fact, it has not been in any degree increased. The reduction of the duties substituted legal for illicit distillation, and freed the country from the perjuries and other atrocities that grew out of the previous system; but it would be wholly erroneous to say that it increased drunkenness. We have already seen that the commissioners, who had the best means of obtaining accurate information, estimated the consumption of spirits in Ireland, in 1823, at TEN millions of gallons; and it was not more in 1828 and 1829. The measure was, therefore, in every point of view most successful; and it is much to be regretted that it was interfered with in 1830, by raising the duties from 2*s.* 10*d.* to 3*s.* 4*d.* The above Table shows that this increase has materially diminished the quantity of spirits brought to the charge. We do not, however, believe that it has occasioned any diminution of consumption. The truth is, that 2*s.* 10*d.* was as high a duty as the article would bear; and the additional 6*d.* has again thrown the balance in favour of the smuggler, and led to a partial revival of illicit distillation. The evidence taken before the commissioners of excise inquiry has completely established this fact; and sound policy would, therefore, suggest that the duty should be once more reduced to 2*s.* 10*d.* At all events, we trust that no senseless, though well-meant clamour about the prevalence of drunkenness, and no pecuniary necessity, will ever tempt ministers to add further to the duties on spirits. Such a measure would not bring a shilling into the public treasury, nor cause any diminution of the vice of drinking; it would merely add smuggling and its attendant evils to the other disorders with which Ireland is afflicted.

Duties in Scotland. — The experience of Scotland is hardly less decisive as to this question. The exorbitancy of the duties produced nearly the same effects there as in Ireland. Mr. John Hay Forbes, formerly sheriff-depute of Perthshire, now one of the Lords of Session, stated in evidence before the commissioners, that, according to the best information he could obtain, the quantity of illegally distilled spirits annually produced in the Highlands could not amount to less than TWO *millions of gallons.* In corroboration of this he stated, that, in 1821, only 298,138 gallons were brought to the charge in the Highlands; and of these, 254,000 gallons were permitted to the Lowlands, leaving only 44,000 gallons for the consumption of the whole country;—a supply which, we are well assured, would hardly be sufficient for the demand of 2 moderately populous parishes. In a letter of Captain Munro of Teaninich to the commissioners, it is stated that, "at Tain, where there are upwards of 20 licensed public houses, *not one gallon had been permitted from the legal distilleries for upwards of twelve months,*" though a small quantity of smuggled whisky had been purchased at the excise sales, to give a colour of legality to the trade. The same gentleman thus expresses himself in another part of his letter:—"The moral effects of this baneful trade of smuggling on the lower classes is most conspicuous, and increasing in an alarming degree, as evidenced by the multiplicity of crimes, and by a degree of insubordination formerly little known in this part of the country. In several districts, such as Strathconon, Strathcarron, &c., the excise officers are now often deforced, and dare not attempt to do their duty; and smuggled whisky is often carried to market by smugglers escorted by *armed* men, in defiance of the laws. In short, the Irish system is making progress in the Highlands of Scotland."

To arrest the progress of demoralisation, government, pursuant to the judicious advice of the commissioners, reduced the duties on Scotch to the same level as those on Irish whisky; and the consequences were equally salutary. The subjoined official statement shows the effect of the reduction of the duty in 1823, and of its subsequent increase in 1830: —

An Account of the Quantities of Spirits made in Scotland, which have paid the Duties of Excise for Home Consumption; stating the Rate of Duty paid, and also the Nett Amount of Revenue received in each Year, since the Year 1820. — (*Parl. Paper*, No. 340. Sess. 1829, No. 61. Sess. 1831, &c.)

Years.	Number of Gallons.	Rate per Gallon.	Nett Amount of Revenue.		
	Imperial Measure.		£	s.	d.
1821	2,929,435	5*s.* 6*d.* per English wine gallon.	727,650	19	7
1822	2,079,556	Ditto.	691,136	6	6
1823	2,232,728	Ditto; from 10th of Oct. 1823, 2*s.* per English wine gallon.	536,654	17	8
1824	4,350,301	Ditto.	520,624	18	4
1825	5,981,550	Ditto.	682,848	11	1
1826	3,988,788	2*s.* 10*d.* per Imperial gallon.	563,263	4	0
1827	4,752,199	Ditto.	672,441	6	6
1828	5,716,180	Ditto.	809,559	6	7
1829	5,777,280	Ditto.	818,448	0	0
1830	6,007,631	2*s.* 10*d.*, 3*s.*, and 3*s.* 4*d.* per ditto.	939,258	6	0
1831	5,700,689	3*s.* 4*d.*	950,041	4	3
1832	5,407,097	Ditto.	901,182	16	8
1833	5,988,556	Ditto.	998,051	3	3

This Table sets the impolicy of the increase of duty in 1830 in nearly as striking a point of view as it does the policy of its reduction in 1823. There is no denying the fact, that this uncalled-for measure has diminished the consumption, and given a powerful stimulus to illicit distillation. We understand that the commissioners of excise inquiry mean to recommend that the duty be again reduced to 2*s.* 10*d.*; and every one, not anxious for the prevalence of smuggling, will be desirous that this recommendation should be carried into effect.

Duties in England. — Previouly to the reduction of the duty on Irish and Scotch spirits, the duty on English spirits had been as high as 10*s.* 6*d.* a gallon. This high duty, and the restrictions under which the trade was placed, were productive of the worst effects. They went far to enable the distillers to fix the price of spirits, "and consequently," (we quote the words of the commissioners) "to raise it much beyond that which was sufficient to repay, with a profit, the cost of the manufacture and the duty advanced to the Crown." And, in proof of this, the commissioners mention, that in November, 1823, "when corn spirits might be purchased in Scotland for about 2*s.* 3*d.* a gallon, raw spirits could not be purchased in England for less than 4*s.* 6*d.* ready money, and 4*s.* 9*d.* credit, omitting, in both cases, the duty." In consequence of this state of things, the adulteration of spirits was carried on to a great extent in England; and the large profits made by the smuggler occasioned clandestine importation in considerable quantities from Scotland and Ireland. To obviate these inconveniences, and at the same time to neutralise the powerful additional stimulus that the reduction of the duties in Scotland and Ireland would have given to smuggling, had the duties in England been continued at their former amount, the latter were reduced, in 1825, to 7*s.* a gallon, facilities being at the same time given to the importation of spirits from the other parts of the empire. It is of the effects of this measure that so many complaints have been made, though nothing can well be imagined more completely destitute of foundation. The commissioners estimated the consumption of British spirits in England and Wales in 1823, at 5,000,000 gallons — (*Sup. to Fifth Report*, p. 8.); and it appears from the subjoined account, that it amounted, for the year ending the 5th of January, 1834, to 7,717,303 gallons; producing 2,893,988*l.* 12*s.* 6*d.* of revenue: so that, making allowance for the increase of population, and the check given to adulteration and smuggling, the increase must appear very trifling indeed; and we are warranted in affirming that the reduction of the duties has been as eminently successful in England as in either Scotland or Ireland.

Account of the Quantities of British, Colonial, and Foreign Spirits, which paid the Home Consumption Duty for England, Scotland, and Ireland, from the Year 1821 to 1832 inclusive. — (*Parl. Paper*, No. 186. Sess. 1831.)

Years.	England.			Scotland.			Ireland.		
	Foreign.	Colonial.	British.	Foreign.	Colonial.	British.	Foreign.	Colonial.	British.
	Imp. Gal.	*Imp. Gal.*	*Imp. Gal.*	*Imp. Gal.*	*Imp. Gal.*	*Imp. Gal.*	*Imp. Gal.*	*Imp. Gal.*	*Imp. Gal.*
1821	969,474	2,166,441	3,820,015	34,601	138,189	2,229,435	9,325	19,685	2,649,170
1822	1,054,540	2,100,925	4,346,348	35,739	130,879	2,079,556	10,225	15,035	2,328,387
1823	1,131,099	2,222,923	3,521,586	34,297	108,562	2,232,728	25,282	18,175	3,348,505
1824	1,268,609	2,407,207	4,067,233	47,710	134,986	4,350,301	1,352	9,453	6,690,315
1825	1,348,482	1,980,807	3,443,554	56,554	104,752	5,981,549	4,550	10,128	9,262,743
1826	1,498,230	3,982,053	7,407,205	42,092	295,505	3,988,789	9,452	27,758	6,837,408
1827	1,321,221	3,080,152	6,671,562	42,756	185,214	4,752,200	9,179	23,240	8,260,919
1828	1,325,197	3,064,856	7,759,687	45,749	188,089	5,716,180	9,779	24,708	9,937,903
1829	1,293,523	3,202,143	7,700,766	43,228	152,461	5,777,280	10,374	21,262	9,212,223
1830	1,267,397	3,503,141	7,732,101	38,967	137,806	6,007,631	10,406	18,011	9,004,539
1831	1,217,971	3,479,911	7,434,047	39,744	125,702	5,700,689	10,483	18,984	8,710,672
1832	1,530,988	3,377,507	7,259,287	69,236	112,026	5,407,097	33,413	24,432	8,657,756

Account of the Number of Gallons of British, Colonial, and Foreign Spirits, which have paid the Home Consumption Duty; specifying the Quantities separately entered for England, Scotland, and Ireland, and the Total Nett Revenue derived from the same; during the Year ended the 5th of January, 1834.

	England.		Scotland.		Ireland.		The United Kingdom.	
	Number of Gallons.	Nett Revenue.	Number of Gallons.	Nett Revenue.	Number of Gallons.	Nett Revenue.	Number of Gallons.	Nett Revenue.
	Gallons.	*L.* *s.* *d.*	*Gallons.*	*L.* *s.* *d.*	*Gallons.*	*L.* *s.* *d.*	*Gallons.*	*L.* *s.* *d.*
British spirits -	7,717,303	2,893,889 12 6	5,988,556	998,051 3 3	8,168,596	1,360,769 6 8	21,874,455	5,252,809 2 5
Colonial ditto -	3,344,976	1,504,537 0 0	124,357	55,931 0 0	22,888	10,299 0 0	3,492,221	1,570,797 0 0
Foreign ditto -	1,319,852	1,483,868 0 0	46,698	52,029 0 0	21,262	23,963 0 0	1,387,812	1,559,860 0 0
Totals - -	12,382,131	5,882,393 12 6	6,159,611	1,106,241 3 3	8,212,746	1,395,031 6 8	26,754,488	8,383,466 2 5

The following Table exhibits in detail the consumption of, and revenue from, the different sorts of spirits in the United Kingdom, during the 3 years ended with the 5th of January, 1833: —

An Account of the Quantity of each of the different Sorts of Spirits that paid Duty in 1830, 1831, and 1832; distinguishing England, Scotland, and Ireland; with the Amount of Duty thereon.

	England.		Scotland.		Ireland.		United Kingdom.	
	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.
Year 1830.	*Imp. Gals.*	*L.*	*Imp. Gals.*	*L.*	*Imp. Gals.*	*L.*	*Imp. Gals.*	*L.*
Brandy - -	1,239,113	1,391,874	27,997	31,495	7,693	8,655	1,274,803	1,432,024
Geneva - -	19,573	21,813	9,633	10,837	1,793	2,018	30,799	34,668
Rum - - -	3,503,144	1,531,821	156,520	60,017	19,294	8,493	3,658,958	1,600,331
Home-made spirits -	7,732,101	2,857,148	6,007,631	939,554	9,004,539	1,412,917	22,744,271	5,209,599
Total -	12,493,731	5,802,656	6,181,781	1,041,883	9,033,319	1,432,083	27,708,831	8,276,622
Year 1831.								
Brandy - -	1,194,717	1,342,735	31,563	35,509	8,821	9,923	1,235,101	1,388,167
Geneva - -	15,079	16,971	7,431	8,361	1,388	1,562	23,898	26,894
Rum - - -	3,479,911	1,564,775	125,702	56,566	18,984	8,540	3,624,597	1,629,881
Home-made spirits -	7,434,047	2,787,767	5,700,689	950,115	8,710,672	1,451,779	21,845,408	5,189,661
Total -	12,123,754	5,712,248	5,865,385	1,050,551	8,739,865	1,471,804	26,729,004	8,234,603
Year 1832.								
Brandy - -	1,508,924	1,697,095	61,151	68,794	31,577	35,512	1,601,652	1,801,401
Geneva - -	13,833	15,567	7,066	7,947	1,402	1,577	22,301	25,091
Rum - - -	3,377,507	1,518,994	112,026	50,408	24,432	10,978	3,513,965	1,580,380
Home-made spirits -	7,259,287	2,722,233	5,407,097	901,183	8,657,756	1,442,959	21,324,140	5,076,375
Total -	12,159,551	5,953,889	5,587,340	1,028,332	8,715,167	1,491,026	26,462,058	8,483,247

The extraordinary increase in the consumption of brandy in 1832 is wholly ascribable to the alarm occasioned by the breaking out of the cholera, and the prevalent, but now exploded, notion that brandy potations were an antidote to the disease. As soon as the alarm subsided, the consumption of brandy declined to its old level; the entries for home use in 1833 not having exceeded 1,356,620 gallons.

Trade in Spirits. — No spirits made in England, Scotland, or Ireland, shall be conveyed from England to Scotland or Ireland, or from Scotland or Ireland to England, otherwise than in casks containing *eighty* gallons at the least, and in vessels of not less than *fifty* tons burden.

All persons whatsoever, not being licensed distillers, rectifiers, or compounders, having more than *eighty* gallons of spirits in their possession, shall be deemed dealers in spirits, and subject to the survey of the officers of excise, and to all the regulations, penalties, &c. to which such persons are liable. — (6 *Geo.* 4. c. 80. sect. 122.)

Dealers in British spirits are prohibited selling or having in their possession any plain British spirits, except spirits of wine, of any strength exceeding the strength of 25 per cent. above hydrometer, or of any strength below 17 per cent. under hydrometer proof; or any compounded spirits, except shrub, of any greater strength than 17 per cent. under hydrometer, under pain of forfeiting all such spirits, with the casks, &c. — Sect. 124.

Dealers in foreign and British spirits are to keep them separate, in cellars, vaults, or other places specially entered for that purpose, under a heavy penalty; and any person mixing, selling, or sending out any British spirits mixed with foreign or colonial spirits, shall forfeit 100*l.* for every such offence. — Sect. 126.

No retailer of spirits, or any other person licensed or unlicensed, shall sell or send out from his stock or custody any quantity of spirits exceeding 1 gallon, unless the same be accompanied by a true and lawful permit, under pain of forfeiting 200*l.*; and any rectifier, compounder, or dealer in spirits, receiving the same into their stock, or allowing any one else to receive it, and any carrier, boatman, or other person, knowingly carrying the same, shall forfeit the sum of 200*l.*, with the boat, horse, cart, &c. used in the carriage. — Sect. 116.

No licence to be granted for retailing spirits within gaols, houses of correction, or workhouses for parish poor; nor are spirits to be used there, except medicinally prescribed by a regular physician, surgeon, or apothecary. Penalty for a first offence of this sort committed by goalers, &c., 100*l.*; a second offence to be deemed a forfeiture of their office. — Sect. 134.

Persons *hawking spirits* to forfeit them and 100*l.*; and if the penalty be not immediately paid, they are to be committed to the house of correction for 3 months, or until paid. — (Sect. 138.) Any person is authorised to detain a hawker of spirits, and give notice to a peace officer, who is to carry the offender before a justice. — Sect. 140.

Any officer of excise, or other person employed in the excise, taking any sum of money or other reward from, or entering into any collusive agreement with, any person, to act contrary to his duty, to forfeit 500*l.*, and be incapacitated; and any person offering such reward or proposing such agreement, to forfeit 500*l.* — Sect. 145.

For the regulations as to the importation, &c. of foreign spirits, see BRANDY, GENEVA, and RUM.

SPONGE (Ger. *Schwamm*; Fr. *Eponge*; It. *Spugna*; Sp. *Esponja*), a soft, light, very porous, and compressible substance, readily imbibing water, and as readily giving it out again. It is found adhering to rocks, particularly in the Mediterranean Sea, about the islands of the Archipelago. It was formerly supposed to be a vegetable production, but is now classed among the zoöphytes; and analysed, it yields the same principles as animal substances in general. The inhabitants in several of the Greek islands have been trained from their infancy to dive for sponges. They adhere firmly to the bottom; and are not detached without a good deal of trouble. The extraordinary clearness of the water facilitates the operations of the divers. Smyrna is the great market for sponge. The price varies from 6 to 16 piastres per oke for ordinary and dirty, and from 80 to 100 piastres per oke, for fine and picked specimens. Sponge is also fished in the Red Sea. — (*Ure's Dictionary*; *Savary's Letters on Greece*, Eng. ed. p. 109.; and *private communications.*)

Sponge is used in surgery, and for a variety of purposes in the arts. The duty on it, in 1832, produced 2,097*l.* 4*s.* 1*d.*; but it has since been judiciously reduced from 2*s.* to 6*d.* per lb. when brought from a foreign country, and from 6*d.* to 1*d.* per lb. when brought from a British possession. The far greater portion comes from the former. No deduction is made from the duty on account of sand or dirt, unless it exceed 7 per cent., and then only for the excess above 7 per cent.

SQUILL (Ger. *Meerzwiebel*; Fr. *Scille, Oignon marin*; It. *Scilla, Cipolla marina*; Sp. *Cebolla albarrana*), or, as it is sometimes denominated, the *Sea onion*, is a plant with a large bulbous root, which is the only part that is used. It grows spontaneously on sandy shores in Spain, and the Levant; whence we are annually supplied with the roots. They should be chosen large, plump, fresh, and full of a clammy juice: some are of a reddish colour, and others white; but no difference is observed in the qualities of the 2 sorts. The root is very nauseous, intensely bitter, and acrimonious; much handled, it ulcerates the skin. The bulbs are brought to England, preserved fresh in sand. The acrimony of the roots, on which their virtue depends, is partially destroyed

by drying and long keeping, and is completely destroyed by exposure to heat above 212°. Squill is one of the most powerful and useful remedies in the materia medica. — (*Lewis's Mat. Med.*; *Thomson's Dispensatory.*)

STADE, a small city of Hanover, on the Schwinge, 22 miles W. by N. of Hamburgh, lat. 53° 36′ 32″ N., lon. 9° 28′ 34″ E. It has very little trade; and would be quite unworthy of notice in a work of this sort, except for the circumstance that a toll or duty, charged by the Hanoverian government on all goods imported into Hamburgh, whether for consumption or transit, is paid at the castle of Brunshausen, contiguous to this town. The duty is generally about ½ per cent. *ad valorem.* It is rated according to a tariff; and is computed from the ship's manifest, bills of lading, cockets, &c., which must be left at Brunshausen for that purpose. The duties are paid in Hamburgh; and no vessel is allowed to unload, till a receipt, subscribed by the Hanoverian authorities in that city, be produced for the duties. We have already — (see HAMBURGH) — expressed our surprise that an obstruction of this sort should have been tolerated for so long a period. The duties fall heavily on certain descriptions of goods; particularly on some manufactured articles; and are, at an average, decidedly higher than the duties charged in Hamburgh. They are most objectionable, however, from their requiring many troublesome regulations to be complied with; the unintentional deviation from any one of which exposes the cargo to confiscation, and never fails to occasion a great deal of delay, trouble, and expense. As the principal part of the foreign trade of the Elbe is in our hands, we are, of course, principally affected by the Stade toll; and, considering the source of the nuisance, it is really not a little astonishing it should not have been abated long ago. The sum which the Hanoverian government derives from the duties is but trifling compared with the injury they inflict on our trade; it would, consequently, be good policy for the former to sell, and for the British government to buy, an exemption from so vexatious a duty; and we are well assured that few things would do more to extend our trade with Hamburgh than the completion of an arrangement of this sort.

Previously to 1736, English ships passing up the Elbe had to come to an anchor opposite Brunshausen: but they were then allowed, under certain conditions, to pass on to Hamburgh. The proclamation to this effect, and which contains an epitome of the regulations that have still to be observed, is subjoined.

1. That all English vessels be exempted from coming to an anchor before the river Schwinge, and allowed to sail directly up to Hamburgh.

2. Such English vessels shall be obliged, at their approach, within about ¼ of a league thereof, to hoist their colours, to lower their sails, and only to drive, till the legitimation is made at the king's frigate lying there.

3. The master of the ship, or a proper person fully provided with the necessary documents, is to go on board the frigate, and afterwards to the Custom-house at Brunshausen and Stade; and there to produce an exact manifest, and the original bills of lading, cockets, &c.

4. The documents being produced, the accounts shall be stated, and all duties must be paid at Brunshausen, Stade, or Hamburgh.

5. The clearance shall be given at Brunshausen to the person sent thither by the master of the vessel; by whom it must be delivered to the king's commissary in Hamburgh, together with the documents of the cargo, and a specification of the parcels, bales, casks, &c. which were received on board at the port of lading, whether designed for Hamburgh or other places.

6. Bulk must not be broken till all this has been performed, except the king's commissary in Hamburgh permits, in urgent cases, the unloading.

7. The vessels being thus allowed to pass the frigate without being searched, in case of suspecting any fraud, the masters shall be obliged to sign a proper oath; and the merchants in Hamburgh, who receive effects by those vessels, shall make an exact report thereof, and give a certificate in lieu of an oath — that they neither have received nor expected more goods than have been specified, — which must be delivered to his Majesty's commissary in Hamburgh, to enable him to examine the report made by the master.

8. No master is to depart from Hamburgh before he has taken a certificate from his Majesty's commissary, proving that all has been duly performed; which is to be sent to the king's frigate, near Brunshausen.

9. The signals mentioned in the second article are likewise to be made when the ship repasses Stade.

10. The taking cognizance of, and punishing misdemeanours, frauds, and mismanagements, as well as the neglecting of the preceding articles, remains in the Court of the King's Customs at Stade: so that both merchants and masters of ships, who may be called to an account, shall, when summoned, appear before the said court, and submit to its decisions; but they have the liberty of appeal to the superior courts for a revision and relief.

11. As to all other points not expressly mentioned in the foregoing articles, they shall be observed at the king's Custom-houses at Brunshausen, Stade, and Hamburgh, according to the regulations and customs heretofore practised.

12. This gracious concession is hereby granted only *durante bene placito*; the king reserving to himself and his successors in his German dominions the right of revoking it, and making any alterations or new orders, whenever they shall see reason.

The following statement, taken from the books of a Hamburgh merchant, shows, in parallel columns, the amount of the Stade and Hamburgh duties paid on certain articles imported into Hamburgh. It is clear from it, that, even though there were no burdensome regulations to be complied with, the amount of the Stade duties must be a very serious drawback on the trade of the Elbe.

A List, showing the Amount of Stade Duties, and the Amount of Hamburgh Duties paid on the same Goods imported into Hamburgh.

Articles.	Stade Duty.		Town Duty.		Articles.	Stade Duty.		Town Duty.	
	Bco.	Marcs.	Bco.	Marcs.		Bco.	Marcs.	Bco.	Marcs.
40 Bales cotton	17	13	16	12	353 Casks coffee	419	3		
1,300 Bags coffee	385	15	225	8	155 Hogsheads ditto	138	1	603	8
2,000 Rio Grande hides	37	2	107	8	341 Barrels ditto	101	4		
10 Chests indigo	13	5	28	4	314 and 46 tierces rice	27	0	95	12
131 Bags saltpetre	19	8	21	8	330, 150, and 5 boxes segars	72	12	16	4
102 Bundles whalebone	15	2	13	4	40 Hogsheads tobacco	136	1	25	10
1,009 Boxes Havannah sugar	112	6	288	0	50 Ditto	71	4	27	12
105 Hogsheads sugar	23	6	56	10	4 Ditto	0	4	4	4
444 Cases Bahia sugar	49	7	374	14	121 Bales ditto	70	6	7	8
25 Tons logwood	20	13	10	6	14 Casks tobacco stems	2	10	4	10
33 Puncheons rum	8	4	21	5	100 Chests souchong tea	77	8	10	4
118 Bags pimento	18	7	16	8	95 Hogsheads quercitron bark	21	2	28	4
30 Hogsheads refined sugar	6	12	29	2					

STARCH (Ger. *Amidan*; Fr. *Amidon*; It. *Amodi, Amito*; Sp. *Amidon, Almidon*; Rus. *Kruchmal*), a substance obtained from vegetables. It has a fine white colour, and

is usually concreted in longish masses; it has scarcely any smell, and very little taste. When kept dry, it continues for a long time uninjured, though exposed to the air. It is insoluble in cold water; but combines with boiling water — forming with it a kind of jelly. It exists chiefly in the white and brittle parts of vegetables, particularly in tuberose roots, and the seeds of the gramineous plants. It may be extracted by pounding these parts, and agitating them in cold water; when the *parenchyma*, or fibrous parts, will first subside; and these being removed, a fine white powder, diffused through the water, will gradually subside, which is the starch. Or the pounded or grated substance, as the roots of potatoes, acorns, or horse chestnuts, for instance, may be put into a hair sieve, and the starch washed through with cold water, leaving the grosser matters behind. Farinaceous seeds may be ground and treated in a similar manner. Oily seeds require to have the oil expressed from them before the farina is extracted. Potato starch goes a good deal further than wheat starch — a less quantity of it sufficing to form a paste of equal thickness, with water. It has a very perceptible crystallised appearance, and is apparently heavier than common starch. — (*Thomson's Chemistry; Ure's Dictionary.*)

Starch is charged with a duty of 3¼*d.* per lb.; and its manufacture is, consequently, placed under the control of the excise. Every maker of starch for sale must take out an annual licence, which costs 5*l.* Notice must be given to the excise of the erection, and of all changes in the construction, of workshops, implements, &c. used in the manufacture of starch, under a penalty of 200*l.* All starch, before it is put into any stove or place to dry, must be papered and sealed or stamped by the officer, under a penalty of 100*l.* Any person forging or counterfeiting such stamp or seal is guilty of felony, but with the benefit of clergy. Any person knowingly selling any starch with a forged or counterfeit stamp, &c. forfeits 500*l.* No quantity of starch exceeding 28 lbs. to be removed from one place to another, unless the word *starch* be marked on the package in legible letters 3 inches long, under forfeiture of the package, and of the cattle and carts conveying the same. Any dealer in starch receiving any quantity exceeding 28 lbs. not marked as above, shall forfeit 200*l.* Starch-makers are to make weekly entries of the starch made by them, under a penalty of 50*l.*; and are to make payment of the duties within a week of such entry. Cockets granted for shipping starch to be carried coastwise are to express the quality, quantity, weight, the mark of the package, by whom made and sold, and to whom consigned; and if shipped without such cocket, it may be seized. No starch is to be imported, unless in packages containing at least 224 lbs. stowed openly in the hold, on pain of forfeiture and of incurring a penalty of 50*l.* No starch is to be exported, unless the package as originally sealed or stamped by the officer be entire, and unless the officer mark the word *exportation* upon it. The duties must have been paid on all starch exported; but the exporter is entitled to an excise drawback of 3¼ per lb. — (*Burn's Justice of the Peace*, Marriott's ed., tit. *Starch.*)

An Account of the Number of Pounds of Starch that paid the Home Consumption Duty in Great Britain, the Rate of Duty, and the Gross and Nett Produce of the Duty, in each of the Three Years ending with the 5th of January, 1833.

Years ended 5th Jan.	Rate per lb.	Lbs.	Gross Produce.			Nett Produce.		
	d.		£	*s.*	*d.*	£	*s.*	*d.*
1831	3¼	7,645,486	103,532	12	5	86,453	9	4
1832	—	7,553,469	102,286	11	2	76,414	3	8
1833	—	8,070,026	109,281	12	0	85,105	18	8

STEEL (Fr. *Acier;* Ger. *Stahl;* It. *Acciajo;* Lat. *Chalybs;* Rus. *Stal;* Sp. *Acero;* Sw. *Stål*), is iron combined with a small portion of carbon; and has been, for that reason, called carburetted iron. The proportion of carbon has not been ascertained with much precision. It is supposed to amount, at an average, to $\frac{1}{140}$th part. Steel is so hard as to be unmalleable while cold; or at least it acquires that property by being immersed, while ignited, in a cold liquid: for this immersion, though it has no effect upon iron, adds greatly to the hardness of steel. It is brittle, resists the file, cuts glass, affords sparks with flint, and retains the magnetic virtue for any length of time. It loses this hardness by being ignited, and cooled very slowly. It is malleable when red hot, but scarcely so when raised to a white heat. It may be hammered out into much thinner plates than iron. It is more sonorous; and its specific gravity, when hammered, is greater than that of iron — varying from 7·78 to 7·84. Steel is usually divided into 3 sorts, according to the method in which it is prepared; as *natural steel, steel of cementation,* and *cast steel.* The latter is the most valuable of all, as its texture is the most compact, and it admits of the finest polish. It is used for razors, surgeons' instruments, and similar purposes. Steel is chiefly employed in the manufacture of swords, knives, and cutting instruments of all sorts used in the arts; for which it is peculiarly adapted by its hardness, and the fineness of the edge which may be given to it. — (*Thomson's Chemistry;* and see IRON.)

STOCKHOLM, the capital of Sweden, situated at the junction of the lake Maelar with an inlet of the Baltic, in lat. 59° 20′ 31″ N., lon. 17° 54′ E.; a well-built, handsome city. Population 80,000. The entrance to the harbour is intricate and dangerous, and should not be attempted without a pilot; but the harbour itself is capacious and excellent, the largest vessels lying in safety close to the quays. Stockholm possesses half the foreign trade of Sweden; but this is confined within comparatively narrow limits, in consequence of the impolitic efforts of the government to promote industry by excluding foreign products. Iron, timber, and deals form the great articles of export. Swedish iron is of very superior quality, and is extensively used in Great Britain; the

imports of it amounting, in ordinary years, to about 10,000 tons, exclusive of 500 tons of steel. In addition to the above leading articles, Stockholm exports pitch, tar, copper, &c. The timber is inferior to that from the southern ports of the Baltic. The imports principally consist of colonial products, cotton, dye stuffs, salt, British manufactured goods, hides, fish, wine, brandy, wool, fruit, &c. In seasons of scarcity corn is imported, but it is generally an article of export.

Pilotage. — Vessels bound for Stockholm take a pilot at the small island of Oja. Lands-hort light-house, 70 feet high, and painted white, is erected on the southern extremity of this island, in lat. 58° 44′ 30″ N., lon. 17° 52′ 15″ E. It is furnished with a fixed light, which may be seen, under favourable circumstances, 5 leagues off. The signal for a pilot is a flag at the fore-topmast head, or firing a gun.

Money. — Accounts are kept here, at Gottenburgh, and generally throughout Sweden, in rixdollars, or crowns, of 48 skillings, each of 12 rundstycks; or in rixdollars, skillings, and rundstycks, banco. The latter currency is at present (1834) 50 per cent. more valuable than the former. A rixdollar banco is worth, at the current rates of exchange, from about 1*s.* 5*d.* to 1*s.* 8*d.* sterling. Except copper, there are no coins in circulation, nor have there been any for 30 years past.

Weights and Measures. — The victuall or commercial weights are punds, lispunds, and skippunds; 20 punds being equal to 1 lispund, and 20 lispunds = 1 skippund; 100 lbs. Swedish commercial weight = 93¾ lbs. avoirdupois = 42½ kilog. = 87½ lbs. of Hamburgh.

The iron weights are 3-5ths of the victuall or commercial weights; 20 marks = 1 mark pund; 20 mark punds = 1 skippund; and 7½ skippunds = 1 ton English. Hence, 100 punds Swedish iron weight = 75 lbs. avoirdupois, and 100 lbs. avoirdupois = 133 1/3 lbs. Swedish iron weight.

In corn measure: —

4 Quarts	=	1 Spann.
2 Spann	=	1 Tun or barrel.
1 Tun	=	4 1-6th Winch. bush.
A last of rye from Riga	=	18 Tuns.
Ditto Liebau	=	19½ —
Ditto Stettin	=	22½ —
Ditto Stralsund	=	24 —

The tun of 32 kappor contains 4 1-6th Winchester bushels.

In liquid measure: —

2 Stup	=	1 Kanna.
15 Kannor	=	1 Anker.
2 Ankers	=	1 Eimer.
2 Eimers	=	1 Ahm.
1½ Ahm	=	1 Oxhoft.
2 Oxhoft	=	1 Pipe.

The pipe = 124½ English wine gallons; and, consequently, the ahm = 41 5-12ths ditto, and 100 kannor = 69 1-5th ditto.

The Swedish foot = 11·684 English inches; the ell or alna = 2 feet; the fathom = 3 ells; the rod = 8 ells.

In estimating by lasts: —

1 Last of pitch, ashes, &c.	=	12 barrels.
1 ditto tar, oil, &c.	=	13 ditto.
1 Last of hemp, flax, tallow, &c.	=	6 skippunds.
1 Ton of Liverpool common salt	=	7 tuns Swed.

Metals, &c. exported from Stockholm during the year 1833.

Total, 281,986½ skippunds = 37,598 tons; consisting of —

	Skippunds.
Bar Iron	242,839
Hoop ditto	2,602
Bolt ditto	2,176
Bundle ditto	1,896
Saltpan plates, &c.	706
Iron plates	4,722
Nails	5,080
Steel	6,265
Cutlery	2,005
Cast articles	2,358
Scroop iron	1,453
Brass	485
Copper	3,674
Brimstone, vitriol, and alum	5,718

Pro formâ Invoice of 150 Sklb. equal to 20 Tons, Iron, shipped at Stockholm, per Captain ——, for London.

712 bars iron, weighing, sklb. 150 0 0 at bo. r. 13		2,250 0 0	Brought forward		2,458 29 0
			Commission, 2 per cent.		49 8 0
Charges.					2507 37 0
Duty and shipping charges 1 1/3 rd. per sklb.	Bo. r. 200 0 0		Bill brokerage, 1/8 per cent.		3 6 0
Brokerage on purchase ½ per cent.	6 6 0			Bo. r.	2,510 43 0
Stamps and postages	2 23 0				
		208 29 0		At exchange R. 13.	L.193 2 11
	Bo. r.	2,458 29 0	*Stockholm*, 1833.	E. E.,	

Quantities of some of the principal Articles imported into Stockholm, in 1833.

Rum, and other foreign spirits	kannor	125,869	Salt	tunnor	88,555	Ditto stalks	lbs. 153,668
Coffee	lbs.	2,203,137	Indigo	lbs.	17,194	Silks	alnar 13,163
Fish (dry)	lispund	132,133	Sugars	—	6,017,137	Cottons	— 414,296
Herrings	barrels	45,431	Tobacco	—	310,855	Woollens	— 304,799

Trade of Sweden.

Official Account of the principal Articles, with their Values, exported from, and imported into, Sweden, in 1831.

Country.	Exports.	Official Value.	Imports.	Official Value.
		Rixd. ba.		*Rixd. ba.*
Finland	Pig iron, ore, herrings, deals, salt, limestone, &c.	788,200	Corn, tar, tallow, butter, flour, deals, fire wood	1,093,195
Prussia	Iron, steel, tar, pitch, lime, cannon, copper, wood, paper, flooring stones, iron plates, &c.	559,171	Corn, wool, hides	160,178
Mecklenburgh, Hanover, &c.	Wood, lime, iron, paper, staves, stones, steel, manufactured iron, tar, pitch, colours, alum, &c.	439,773	Corn, wool, hides, furs, fruit, &c.	110,092
Denmark	Corn, staves, wood, paper, iron, copper, mill and flooring stones, tar, pitch, alum, nails, lime, cutlery, fire wood, oak bark, steel, brass wire	1,556,814	Sugar, cotton, coffee, wine, rum, spices, chalk, salt, manufactures, corn, oil, wool, herrings, hides, lead, fish	1,155,412
Netherlands	Wood, rock moss, tar, pitch	339,381	Manufactures, cork, hops	202,520
Great Britain	Iron, steel, tar, pitch, corn, wood, cobalt, rock moss, bones, bark, manganese, oil-cakes, &c.	3,236,700	Sugar, coffee, spices, mahogany, manufactures, cotton, dyes, wine, cognac, rum, coals, cotton yarn, earthenware, &c.	1,745,131
France	Iron, wood, tar, pitch, copper, porphyry, staves, bricks, colours	706,071	Wine, cognac, oil, cork, salt, spices, fruit, lead, soap, &c.	387,472
Portugal	Wood, iron, steel, tar, pitch, staves	570,120	Salt, fruit, leather, hides, cork, &c.	300,502
Gibraltar	Wood and iron	13,989		
Sardinia	Wood, iron, tar, pitch	55,170		
Tuscany	Ditto	133,920		
Austria	Tar	18,700		
Algiers	Wood	5,200		
Egypt	Wood, tar, copper	41,366		
United States of America	Iron and iron plates	3,199,255	Tobacco, cotton, sugar, hides, rice, dye woods	905,547
Norway	Corn, copper, bricks, &c.	524,372	Fish	1,547,170
Hamburgh and Lubeck	Iron, cutlery, copper, steel, tar, wood, cobalt, pitch, staves, brass wire, alum, lime, colours	875,255	Manufactures, &c.	2,024,471
Spain	Wood, tar	41,236	Salt, fruit, wine, oil, lead, &c.	154,543
Both Sicilies	Iron and wood	6,554	Salt, fruit, oil, &c.	31,960
Brazils	Iron, wood, beer, steel, tar, pitch, ale, porter, &c.	339,744	Sugar, coffee, tobacco, hides, horn, &c.	1,395,096
Russia	Alum, colours, coffee, indigo, wine, steel, salt, herrings	113,447	Bristles, corn, seeds, hemp, tallow, soap, hides, oil, &c.	1,089,393
	Rixdollars banco	13,364,518	Rixdollars banco	12,302,682

Shipping of Sweden. — Swedish vessels employed in foreign trade, as per official returns: —

1830. 704 vessels = 45,173·96 lasts; navigated by 4,725 mariners, exclusive of masters.

1831. 671 vessels = 44,161·78 lasts; navigated by 4,635 mariners, exclusive of masters.

Vessels reported inwards from foreign places: —

		Vessels.	
1830.	Swedish	2,290	= 67,896 lasts.
—	Foreign	1,781	= 70,754 —
1831.	Swedish	2,427	= 69,099 —
—	Foreign	1,658	= 67,343 —

Vessels entered outwards for foreign places: —

		Vessels.	
1830.	Swedish	2,292	= 72,879 lasts.
—	Foreign	1,755	= 78,868 —
1831.	Swedish	2,379	= 74,117 —
—	Foreign	1,576	= 68,258 —

Or together —

Reported inwards,	1830	4,071	= 138,650 lasts.
—	1831	4,085	= 136,442 —
Entered outwards,	1830	4,047	= 148,727 —
—	1831	3,955	= 142,375 —

Regulations as to the working of Mines in Sweden. — The following paper, which we have received from Sweden, and on the authenticity of which our readers may rely, shows the nature of the obstructions laid on the principal branch of industry carried on in that kingdom. They appear to us to be in the last degree absurd and oppressive. It might be proper to enact regulations to prevent the waste of the forests; but having done this, every one ought to be at liberty to produce as much iron as he pleased, without being subject to any sort of regulation or control. We are surprised that so intelligent a government as that of Sweden should think of imposing such preposterous regulations.

"Sweden has at present from 330 to 340 smelting furnaces, which produce annually from 90,000 to 95,000 tons of pig iron. In converting the pig into bar iron, about 23 per cent. is allowed for waste; and as near as can be ascertained, the annual manufacture of bar iron is from 63,000 to 65,000 tons. The number of iron works is between 420 and 430, having about 1,100 forges (hearths). The annual exportation of bar iron, at an average of the 10 years ending 1831, was 49,568 tons; of which were, for —

Great Britain	10,000 tons.
United States	20,000 —
Germany, Holland, France, and Portugal	15,000 —
The remainder to Brazil, and a very little to the Mediterranean	4,568 —
Total	49,568

"The smelting furnaces and iron works are licensed for particular quantities, some being as low as 50 tons, and others as high as 400 or 500 tons; and some fine bar iron works have licences for 1,000 tons each. These licences are granted by the College of Mines, which has a control over all iron works and mining operations. The iron masters make annual returns of their manufacture, which must not exceed the privileged or licensed quantity, on pain of the overplus being confiscated. The College has subordinate courts, called Courts of Mines, in every district, with supervising officers of various ranks. All iron sent to a port of shipment must be landed at the public weigh-house, the superintendent of which is a delegate of the college; and his duty is to register all that arrives, and transmit a quarterly report thereof to the college, so that it is impossible for an iron master to send more iron to market than his licence authorises. Many, however, sell iron to inland consumers at the forges, of which no returns are ever made out, and in so far the licences are exceeded; but we do not suppose that the quantity so disposed of exceeds 2,000 or 3,000 tons a year. Every furnace and forge pays a certain annual duty to the Crown. Its amount is fixed by the College when the licence is granted; and care is taken not to grant a licence to any one, unless he has the command of forests equal to the required supply of charcoal, without encroaching on the supply of this material required for the existing forges in the neighbourhood. As the supply of pig iron is limited *, the quantity licensed to be made being never exceeded, the College, in granting new licences to bar iron works, always takes into consideration how far this may be done without creating a scarcity of pig iron. Hence, the erection of new forges depends — 1st, on having a supply of charcoal, without encroaching on the forests which supply your neighbours; and, 2dly, on the quantity of pig iron which the College knows to be disposable. The courts of the mines decide all disputes that arise among the iron masters regarding the exceeding of their licences, encroachments, &c.; an appeal to the College lying from their decision, and ultimately to the king in council, or to the supreme court of the kingdom. In 1824 the mines produced 850 tons of copper, 50 tons of brass, 40 tons of lead, 1,700 tons of alum, 46,629 lbs. of cobalt, 3,000 lbs. of silver; and of late years several mines of manganese have been worked, the produce of which may be from 300 to 400 tons."

STOCKINGS, as every one knows, are coverings for the legs. They are formed of only 1 thread entwined, so as to form a species of tissue, extremely elastic, and readily adapting itself to the figure of the part it is employed to cover. This tissue cannot be called cloth, for it has neither warp nor woof, but it approaches closely to it; and for the purposes to which it is applied, it is very superior.

1. *Historical Sketch of the Stocking Manufacture.* — It is well known that the Romans and other ancient nations had no particular clothing for the legs. During the middle ages, however, hose or *leggins*, made of cloth, began to be used; and at a later period, the art of knitting stockings was discovered. Unluckily, nothing certain is known as to the individual by whom, the place where, or the time when, this important invention was made. Howell, in his *History of the World* (vol. iii. p. 222.), says, that Henry VIII. wore none but cloth hose, except there came from Spain by great chance a pair of silk stockings; that Sir Thomas Gresham, the famous merchant, presented Edward VI. with a pair of long silk stockings from Spain, and that the present was much taken notice of; and he adds, that Queen Elizabeth was presented, in the third year of her reign, with a pair of black knit silk stockings, and that from that time she ceased to wear cloth hose. It would appear from this circumstantial account, that the art of knitting stockings, or at least that the first specimens of knit stockings, had been introduced into England from Spain about the middle of the 16th century; and such seems to have been the general opinion, till an allusion to the practice of knitting, in the pretended poems of Rowley, forged by Chatterton, caused the subject to be more strictly investigated. The result of this investigation showed clearly that the practice of knitting was well known in England, and had been referred to in acts of parliament, a good many years previously to the period mentioned by Howell. But it had then, most probably, been applied only to the manufacture of woollen stockings; and the general use of cloth hose

* We do not mean that the manufacture of pig iron is limited; for any one can get a licence to smelt, who can prove he has a sufficiency of charcoal at his disposal; but the quantity licensed is never exceeded, but is often less

shows that even these had not been numerous. There is no evidence to show whether the art is native to England, or has been imported. — (See *Beckmann's Inventions*, vol. iv. art. *Knitting Nets and Stockings.*)

It is singular that the stocking frame, which, even in its rudest form, is a very complex and ingenious machine, that could not be discovered accidentally, but must have been the result of deep combination and profound sagacity, should have been discovered so early as 1589, before, in fact, the business of knitting was generally introduced. The inventor of this admirable machine was Mr. William Lee, of Woodborough, in Nottinghamshire. He attempted to set up an establishment at Calverton, near Nottingham, for the manufacture of stockings, but met with no success. In this situation he applied to the queen for assistance; but, instead of meeting with that remuneration to which his genius and inventions so well entitled him, he was discouraged and discountenanced! It need not, therefore, excite surprise that Lee accepted the invitation of Henry IV. of France, who, having heard of the invention, promised him a magnificent reward if he would carry it to France. Henry kept his word, and Lee introduced the stocking frame at Rouen with distinguished success; but after the assassination of the king, the concern got into difficulties, and Lee died in poverty at Paris. A knowledge of the machine was brought back from France to England by some of the workmen who had emigrated with Lee, and who established themselves in Nottinghamshire, which still continues the principal seat of the manufacture. — (See *Beckmann's Inventions*, vol. iv. pp. 313—324.; and *Letters on the Utility and Policy of Machines*, Lond. 1780.)

During the first century after the invention of the stocking frame, few improvements were made upon it, and 2 men were usually employed to work 1 frame. But in the course of last century, the machine was very greatly improved. The late ingenious Mr. Jedediah Strutt, of Derby, was the first individual who succeeded in adapting it to the manufacture of *ribbed* stockings.

Statistical View of the Stocking Trade. — We subjoin, from a paper by Mr. Felkin, of Nottingham, who is very advantageously known by his statistical researches, the following view of the present state of the British hosiery trade.

Worsted hosiery is chiefly made in Leicestershire; silk hosiery in Derby and Nottingham; and cotton hosiery throughout the counties of Nottingham and Derby, at Hinckley, and at Tewkesbury. The analysis furnished by Blackner, in 1812, may be, perhaps, modified as follows, so as to show the kinds and qualities of goods which the frames are now employed upon, viz. —

Plain cotton, 14 to 22-gauge, 1,600; 24 to 28-gauge, 1,600; 30 to 34-gauge, 2,790; 36 to 60-gauge, 1,600 frames	7,590
Gauze, 600; gloves and caps, 1,000; drapers, 500; sundries, 560	2,660
Wide frames, making cut-ups and various other kinds	6,030
Worsted, 12 to 20 gauge, 4,400; 22 to 26-gauge, 3,600; 28 to 34-gauge, 1,450 frames	9,450
Angola, 1,350; lambs' wool, 1,900; shirts, 500 frames	3,750
Wide frames, on with worsted goods	520
Silk, 2,300; gloves, 350; and knots, 350	3,000
Total of frames	33,000

The following statement, it is believed, presents a sufficiently accurate approximation to the annual amount in quantity and value of the goods manufactured in this trade, to answer all practical purposes: —

Each narrow cotton frame produces about 40 dozen of hose a year, if of women's size; wide cotton frames, 300; narrow worsted, 75; wide worsted, 150; and silk, 30. There are —

Frames.			*Dozen.*	*Lbs.*		*L.*	*L.*	*L.*	*L.*
10,300	making	fashioned cotton hose	420,000	880,000 cotton yarn	valued at	73,000	wages for making 220,000	finishing 32,000	makes in all 325,000
6,000	making	cut up, &c.	1,960,000	2,940,000 —	valued at	172,000	wages for making 285,000	finishing 98,000	makes in all 555,000
9,500	making	fashioned worsted	710,000	2,840,000 worsted	valued at	284,000	wages for making 215,000	finishing 41,000	makes in all 540,000
1,000	making	cut up, &c.	100,000	400,000 —	valued at	40,000	wages for making 30,000	finishing 10,000	makes in all 80,000
1,300	making	Angola	95,000	532,500 —	valued at	45,000	wages for making 40,000	finishing 19,000	makes in all 104,000
1,900	making	lambs' wool	155,000	659,500 —	valued at	80,000	wages for making 50,000	finishing 16,000	makes in all 146,000
3,000	making	silk	90,000	105,000 silk	valued at	120,000	wages for making 108,000	finishing 13,000	makes in all 241,000
33,000			3,510,000	8,137,000		814,000	948,000	229,000	1,991,000

According to this calculation, the value of the cotton hosiery annually made is 880,000*l.*; that of worsted, &c. is 870,000*l.*; and that of silk is 241,000*l.*—To produce these goods, it is probable that 4,584,000 lbs. of raw cotton wool, value 153,000*l.*, are used; and 140,000 lbs. of raw silk (2-5ths China and 3-5ths Novi), value 91,000*l.*; also, 6,318,000 lbs. of English wool, value 316,000*l.* The total original value of the materials used, is, therefore, 560,000*l.*, which, it appears, becomes of the ultimate cost value of 1,991,000*l.*, in this manufacture.

There are employed in the various processes, as follows, viz. —

In cotton spinning, doubling, &c., 3,000; worsted carding, spinning, &c., 2,500; silk winding, throwing, &c., 1,000	6,500
In making stockings, 13,000 men, 10,000 women, and 10,000 youths; and women and children in seaming, winding, &c., 27,000	60,000
In embroidering, mending, bleaching, dyeing, dressing, putting-up, &c., probably about	6,500
Total persons employed	73,000

The capital employed in the various branches of the trade may be thus estimated, taking the machinery and frames at neither their original cost, nor actual selling price, but at their working value, and the stocks of hosiery on an average of years: —

	L.
The capital in mills and machinery, for preparing cotton, is	70,000
— — worsted, &c.	52,000
— — silk	18,000
Fixed capital in mills, &c.	140,000
— in frames	245,000
Total of fixed capital	*L.* 385,000

	L.
In wool and yarn in process and stock	85,000
— — —	150,000
— — —	35,000
Floating capital in spinning, &c.	*L.* 270,000

	L.
Capital in narrow cotton frames	62,000
— wide —	60,000
— narrow worsted frames	76,000
— wide —	11,000
— silk frames	36,000
Fixed capital in frames	*L.* 245,000

	L.
In goods in process and stock	350,000
— —	345,000
— —	85,000

	L.
Floating capital in making hose	780,000
— in spinning, &c.	270,000
Total of floating capital	*L.* 1,050,000

N. B. — This estimate is independent, of course of the value of the hosiery wrought by wires; but this is not very considerable. We believe it underrates the total value of the manufacture; for a sum of 1,991,000*l.* is barely equivalent, without even deducting the exports, which are very considerable, to an expenditure upon stockings of about 2*s.* 5*d.* a year to each individual in Great Britain, — a sum which we are inclined to think is decidedly under the mark.

STORAX. See BALSAM.

STORES, MILITARY AND NAVAL, include arms, ammunition, &c. It is enacted, that no arms, ammunition, or utensils of war, be imported by way of merchandise, except by licence, for furnishing his Majesty's public stores only. — (6 *Geo.* 4. c. 107.)

STORES, in commercial navigation, the supplies of different articles provided for the subsistence and accommodation of the ship's crew and passengers.

It is laid down, in general, that the surplus stores of every ship arriving from parts beyond seas are to be subject to the same duties and regulations as those which affect similar commodities when imported as merchandise; but if it shall appear to the collector and comptroller that the quantity of such stores is not excessive, nor unsuitable, under all the circumstances of the voyage, they may be entered for the private use of the master, purser, or owner of such ship, on payment of the proper duties, or be warehoused for the future use of such ship, although the same could not be legally imported by way of merchandise. — (3 & 4 *Will.* 4. c. 52. § 35.)

A List, by which to calculate the Amount of Stores, of the estimated Average Number of Days' Duration of a Voyage from the United Kingdom to the different Ports enumerated, and back.

Ports of Destination.	Days of Voyage.	Ports of Destination.	Days of Voyage.	Ports of Destination.	Days of Voyage.	Ports of Destination.	Days of Voyage.
Abo	100	Cyprus	180	Majorca	110	Rhodes Island	180
Algiers	120	Cape of Good Hope	240	Minorca	110	River Gambia	190
Almeria	100	Callao	400	Marseilles	130	St. Andero	80
Azores Isles	90	Coquimbo	400	Messina	130	St. Ubes	80
Alicant	110	Chili	360	Montreal	150	Salee	120
Altea	110	Calcutta	400	Malta	140	Stettin	100
Antigua	180	Colombo	365	Martinico	180	Stockholm	100
Augustine's Bay	150	Ceylon	365	Mariegalante	180	St. John's, Newfound.	120
Ancona	160	Cuddalore	400	Miramichi	100	St. Mary's	95
Alexandria	180	China	420	Montserrat	180	St. Michael's, Azores	80
Ascension Isle	240	Canton	420	Maranham	180	St. John, New Bruns.	120
Archipelago Isles	180	Dantzic	100	Monte Video	230	St. Andrew, do.	120
Annabona	180	Drontheim	100	Madagascar	270	Salerno	130
Archangel	120	Delaware Bay	130	Mexico. *Vide* Vera Cruz and Acapulco.		Sardinia Isle	130
Australia	420	Demerara	150			Susa	120
Alexandretta	180	Dominica	180	Mogadore	105	Savannah	150
Acapulco, Mexico	450	Davis Straits	240	Mauritius	270	Syracuse	140
Bergen	100	Embden	42	Madras	400	St. Augustine's Bay	150
Bona	120	Elbing	95	Malabar	365	St. Helena	240
Bornholm	100	Elsineur	100	Malacca	400	Sydney, N. S. Wales	400
Barcelona	110	Elba Isle	130	Manilla	420	Sumatra	400
Bay of Roses	110	Essequibo	180	Mangalore	365	Society Islands	420
Baltimore	120	Friendly Islands	420	Masulipatam	400	Swan River	365
Bahama Isles	150	Fare Islands, N. Sea	100	Mocha	365	Singapore	365
Barbadoes	180	Faro Island, Canaries	95	Nantes	80	Surat	365
Berbice	180	Ferrol	80	Newfoundland	120	Sandwich Isles	420
Bermuda	120	Fayal	80	North Bergen	100	South Sea fishery	3 years
Boston	120	Fernando Po	180	Naples	130	St. Bartholomew	180
Bahia	200	Falkland Islands	240	Narbonne	130	St. Croix	180
Brazils	200	Göttenburgh	100	Nice	130	St. Christopher's	180
Buenos Ayres	240	Gibraltar	100	Nevis	180	St. Domingo	210
Bay of Campeachy	240	Genoa	130	Nova Scotia	120	St. Eustatia	180
Barcelor	365	Grenada	180	New York	120	St. Lucia	180
Bombay	365	Guadaloupe	180	New Providence	165	St. Martin	180
Bengal	400	Greek islands, and Greece	180	New Orleans	190	St. Thomas	180
Botany Bay	420	Gallipoli	180	New Guinea	400	St. Vincent's	180
Batavia	400	Greenland fishery	180	New South Wales	400	Salonica	180
Bremen	42	Goree	190	New Zealand	400	Santa Martha	240
Bayonne	80	Guayaquil	420	Negapatam	400	St. Salvador, or Bahia	200
Bilboa	80	Gaugapatam	400	New Brunswick	120	St. Sebastian	210
Bordeaux	80	Goa	365	Newport	120	Senegal	180
Corunna	80	Hamburgh	42	Oporto	80	Sierra Leone	180
Cadiz	90	Heligoland	42	Odessa	240	Scandaroon	180
Carlscrona	100	Hayti	210	Otaheite	420	Syra	180
Carthagena	100	Halifax	120	Owhyhee	420	Smyrna	180
Cape de Verde Islands, viz.		Havannah	200	Petersburgh	100	Tangier	120
St. Antonio	100	Honduras	240	Pillau	100	Trinity Bay	120
St. Vincent		Hudson's Bay	240	Placentia Harbour	120	Tunis	120
St. Jago		Hobart Town	400	Port St. John, Newfoundland	120	Tarragona	110
Ceuta	120	Iceland	100	Port-au-Prince, Hayti	210	Tonningen	42
Canary Isles	95	Ivica	110	Palermo	130	Toulon	130
Christiania	100	Italy	130	Pensacola	190	Tripoli	120
Copenhagen	100	Isle of Sable	120	Philadelphia	120	Teneriffe	95
Cette	130	Ionian Isles	130	Porto Rico	210	Tortola	180
Civita Vecchia	130	Islands in the Archip.	180	Providence, Bahama Islands	160	Tobago	180
Corsica Isle	130	Isles of France and Bourbon	270	Pernambuco	190	Trinidad	180
Cayenne	180	Jamaica	210	Porto Bello	240	Trieste	160
Cape Hayti	210	Java	400	Para	185	Truxillo	410
Charlestown	120	Königsberg	100	Panama	420	Timor	420
Chesapeake Bay	120	Lima	400	Peru	400	Tellicherry	365
Cuba	210	Ladrones	430	Philippine Islands	420	Tranquebar	400
Curaçoa	180	Lisbon	80	Pondicherry	400	Trincomalee	380
Cronstadt	100	Lubeck	100	Pellew Islands	420	Vigo	80
Candia Isle	160	Leghorn	130	Quebec	150	Valencia	110
Cephalonia	160	Long Island	130	Queen Ann's Point	180	Venice	160
Corfu Isle	160	La Guayra	240	Rio Grande	200	Vera Cruz	260
Calabar	180	La Conception	400	Rio Janeiro	200	Venezuela	240
Cape Coast Castle	200	Maalstroom	100	Rochelle	80	Valdivia	400
Carthagena, Spanish main	240	Malaga	100	Revel	100	Valparaiso	400
Cape St. Mary	180	Madeira	90	Riga	100	Van Diemen's Land	365
Constantinople	180	Memel	100	Rugen	100	Wyburg	100
Colombia River	700	Mogadore	120	Rome	130	Zara	160
Cumana	240					Zea	160
						Zante Isle	160

For such places as are not included in the List, the same allowance should be granted as is given to the place nearest thereunto.

No stores shall be shipped for the use of any ship bound to parts beyond the seas, nor shall any goods be deemed to be such stores, except such as shall be borne upon the victualling bill. — (3 & 4 *Will.* 4. c. 52. sect. 61.)

Goods delivered into the charge of the searchers to be shipped as stores, may be so shipped without entry or payment of any duty, for any ship of the burden of 70 tons at least bound upon a voyage to foreign parts, the probable duration of which out and home will not be less than 40 days: provided such stores be duly borne upon the ship's victualling bill, and be shipped in such quantities, and subject to such directions and regulations, as the commissioners of customs shall direct and appoint. — (3 & 4 *Will.* 4. c. 57. sect. 16.)

Rum of the British plantations may be delivered to the searcher, to be shipped as stores for any ship, without entry or payment of any duty; and any surplus stores of any ship may be delivered to the searcher, to be re-shipped as stores for the same ship, or for the same master in another ship, without entry or payment of any duty,— such rum and such surplus stores being duly borne upon the victualling bills of such ships respectively; and if the ship, for the future use of which any surplus stores have been warehoused, shall have been broken up or sold, such stores may be so delivered for the use of any other ship belonging to the same owners, or may be entered for payment of duty, and delivered for the private use of such owners or any of them, or of the master or purser of the ship. — Sect. 17.

The searchers in London, on clearance of vessels coastwise to take in cargoes for foreign parts, are to apprise the collectors and comptrollers at the outports where the vessels may be bound, of the quantity and description of the goods which may have been shipped as stores on board such vessels, and that bond has been given by the masters of the vessels that no part of such stores shall be consumed by the crews, or any package opened or altered, until the vessels have actually been cleared on their foreign voyages; and the collectors and comptrollers at the out-ports are in like manner to cause a similar communication to be made to the ports where the outward cargoes are to be taken on board, and the officers at such ports are to take care to ascertain that the several goods so shipped are actually on board the vessels on their arrival, and have neither been consumed or run on shore during the coasting voyage; and if so, to report the same to the Board. — (*Min. by Com. of Customs*, 19th of Feb. 1833.)

List of Foreign Goods allowed to be shipped as Stores, from the bonded Warehouses free of Duty. — (Custom's Minute, 29th of Nov. 1832.)

Tea, ½ of an oz.; coffee or cocoa, 1 oz. per day for each person on board, with the option to ship the entire quantity required for the voyage of either species of these articles, *half* an *oz.* of tea being considered equal to one oz. of coffee or cocoa; the tea to be shipped in the original packages in which it was imported.

Wine, 1 quart per day for the master, each mate, and cabin passenger.

Wine bottled in the bonded warehouses for exportation may be shipped as stores, in packages containing not less than 3 doz. reputed quart, or 6 doz. reputed pint bottles.

Spirits, viz. brandy, geneva, rum (British plantation), ½ pint per day for each person on board.

British plantation rum to be in the proportion of ½ of the whole quantity of spirits shipped. Each description of spirits intended as stores to be shipped in *one* cask capable of containing the entire quantity of brandy, or of geneva or rum, allowed for the voyage, or in casks containing not less than 40 gallons of brandy or geneva, or 20 gallons of British plantation rum, as the case may be: provided that if spirits shall have been imported in bottles, or bottled in the bonded warehouse for exportation, the same may be shipped as stores, in packages containing not less than 3 doz. reputed quart or 6 doz. reputed pint bottles.

Raw Sugar and Molasses (*together or separate*), 2 oz. per day for each person on board.

Dried Fruits, 2 lbs. per week for each person on board.

Rice, 2 lbs. per week for each person on board.

Foreign Segars, ½ oz. per day for the master, each mate, and each cabin passenger.

The entire quantity of foreign segars, allowed as stores for each voyage to be shipped in *one* package.

A List of British manufactured Goods to be allowed to be shipped as Stores on the usual Bounty or Drawback.

British refined Sugar, 3 oz. per day for the master, each mate, and each cabin passenger.

British manufactured Tobacco, ½ oz. per day per man.

British exciseable Goods, viz. beer, ale, and porter (together or separate), 1 quart per day for the master, each mate, and each passenger.

Vinegar, ½ pint per week for each person on board.

Soap, ½ oz. per day for each person on board. The same indulgence, in respect of the shipment of stores, which has been granted to merchant vessels under the 2 & 3 Will. 4. c. 84., and by subsequent orders, is granted to transports under the following conditions, viz.: — On a certificate being produced for each vessel, from the office of a comptroller for victualling and transport services, setting forth the destination of the vessel, and the number of the crew and passengers on board, who are not to be messed by the victualling shipped by the public; and as respects soldiers embarked as guards in ships chartered for the transportation of convicts, on a certificate being produced from the proper department, specifying the number of soldiers to be embarked in each case; but no indulgence can be granted in regard to the article of soap. — (*Treas. Order*, 6th of March, 1833; see also *Ellis's British Tariff for* 1833 *and* 1834, — an accurate and useful publication.)

STRANDING, in navigation, the running of a ship on shore, or on the beach.

It is the invariable practice to subjoin the following *memorandum* to policies of insurance executed by private individuals in this country: — "*N. B.* — Corn, fish, salt, fruit, flour, and seed, are warranted free from average, unless general, *or the ship be stranded;* sugar, tobacco, hemp, flax, hides, and skins, are warranted free from average under *5l.* per cent.; and all other goods, also the ship and freight, are warranted free of average under *3l.* per cent., unless general, *or the ship be stranded.*"

It is, therefore, of the greatest importance accurately to define what shall be deemed a stranding. But this is no easy matter; and much diversity of opinion has been entertained with respect to it. It would, however, appear that merely striking against a rock, bank, or shore, is not a stranding; and that, to constitute it, the ship must be upon the rock, &c. for some time (how long?). — Mr. Justice Park has the following observations on this subject: — "It is not every touching or striking upon a fixed body in the sea or river that will constitute a stranding. Thus Lord Ellenborough held, that in order to establish a stranding, the ship must be *stationary;* for that merely striking on a rock, and *remaining there a short time* (as in the case then at the bar, about a minute and a half), and then passing on, though the vessel may have received some injury, is not a stranding. Lord Ellenborough's language is important. — *Ex vi termini* stranding means lying on the shore, or something analogous to that. To use a vulgar phrase, which has been applied to this subject, if it be *touch and go* with the ship, there is no stranding. It cannot be enough that the ship lie for a few moments on her beam ends. Every striking must necessarily produce a retardation of the ship's motion. If by the force of the elements she is run aground, and becomes stationary, it is immaterial whether this be on piles, on the muddy bank of a river, or on rocks on the sea shore; but a mere *striking* will not do, *wherever* that may happen. I cannot look to the consequences, without considering the *causa causans.* There has been a curiosity in the cases about stranding not creditable to the law. A little common sense may dispose of them more satisfactorily."

This is the clearest and most satisfactory statement we have met with on this subject; still, however, it is very vague. Lord Ellenborough and Mr. Justice Park hold, that to constitute a stranding, the ship must be *stationary;* but they also hold, that if she merely remain upon a rock, &c. for a *short time,* she is not to be considered as having been stationary. Hence every thing turns upon what shall be considered as a short time. And we cannot help thinking that it would be better, in order to put to rest all doubts upon the subject, to decide either that every striking against a rock, the shore, &c. by which damage is done to the ship, should be considered a stranding; or that no striking against a rock, &c. should be considered as such, provided the ship be

got off within a *specified time.* Perhaps a *tide* would be the most proper period that could be fixed.

The insurance companies exclude the words, "*or the ship be stranded,*" from the memorandum. — (See INSURANCE, MARINE.)

STURGEON FISHERY. The sturgeon is a large, valuable, and well known fish, of which there are several species, viz. the sturgeon, properly so called, or *Accipenser sturo;* the beluga, or *Accipenser huso;* the sevruga, or *Accipenser stellatus,* &c. The sturgeon annually ascends our rivers, but in no great number, and is taken by accident in the salmon nets. It is plentiful in the North American rivers, and on the southern shores of the Baltic; and is met with in the Mediterranean, &c. But it is found in the greatest abundance on the northern shores of the Caspian, and in the rivers Wolga and Ural; and there its fishery employs a great number of hands, and is an important object of national industry. Owing to the length and strictness of the Lents in the Greek Church, the consumption of fish in Russia is immense; and from its central position, and the facilities afforded for their conveyance by the Wolga, the products of the Caspian fishery, and those of its tributary streams, are easily distributed over a vast extent of country. Besides the pickled carcases of the fish, caviar is prepared from the roes; and isinglass, of the best quality, from the sounds. The caviar made by the Ural Cossacks is reckoned superior to any other; and both it and isinglass are exported in considerable quantities. The belugas are sometimes of a very large size, weighing from 1,000 to 1,500 lbs., and yield a good deal of oil. The seal fishery is also pretty extensively prosecuted in the Caspian. The reader will find a detailed account of the mode in which the fishery is carried on in the Caspian, and in the rivers Wolga and Ural, in *Tooke's Russia,* vol. iii. pp. 49—72. We subjoin the following official statement of the produce of the Russian fisheries of the Caspian and its tributary streams in 1828 and 1829: —

Year.	Number of Persons employed.		Number of Fish taken.					Products of Sturgeon.					
	In Fishing.	In hunting Seals.	Sturgeon.	Sevruga.	Beluga.	Sasans (Carp).	Seals.	Caviar.		Fish Cartilage.		Isinglass.	
								Pouds.	*lbs.*	*Pouds.*	*lbs.*	*Pouds.*	*lbs.*
1828	8,887	254	43,035	653,164	23,069	8,353	98,584	34,860	1	1,207	38	1,225	27
1829	8,760	257	68,325	697,716	20,391	5,940	69,872	28,420	7	1,173	26¼	1,092	22

SUCCORY, OR CHICCORY, the wild endive, or *Cichorium Intybus* of Linnæus. This plant is found growing wild on calcareous soils in England, and in most countries of Europe. In its natural state the stem rises from 1 to 3 feet high, but when cultivated it shoots to the height of 5 or 6 feet. The root runs deep into the ground, and is white, fleshy, and yields a milky juice. It is cultivated to some extent in this country as an herbage plant, its excellence in this respect having been strongly insisted upon by the late Arthur Young. But in Germany, and in some parts of the Netherlands and France, it is extensively cultivated for the sake of its root, which is used as a substitute for coffee; and it is this circumstance only that has induced us to mention it. When prepared on a large scale, the roots are partially dried, and sold to the manufacturers of the article, who wash them, cut them in pieces, kiln-dry them, and grind them between fluted rollers into a powder, which is packed up in papers containing from 2 oz. to 3 or 4 lbs. The powder has a striking resemblance to dark ground coffee, and a strong odour of liquorice. It has been extensively used in Prussia, Brunswick, and other parts of Germany, for several years; but as it wants the essential oil and the rich aromatic flavour of coffee, it has little in common with the latter except its colour, and has nothing to recommend it except its cheapness. It is only lately that succory powder began to be used in England; but, within the last 3 years, considerable quantities have been imported from Hamburgh, Antwerp, &c. We believe, too, that a small quantity has been produced in the Isle of Thanet. — (*Loudon's Encyc. of Agriculture; Rees's Cyclopædia;* and *private information.*)

[1] Succory, when first imported, being an unenumerated article, was charged with a duty of 20 per cent. *ad valorem.* But the average price of British plantation coffee may be taken at 80*s.* per cwt. in bond; and the duty, being 56*s.* per cwt., is equivalent to an *ad valorem* duty of about 70 per cent.; so that *coffee was taxed more than three times as much as succory.* Had coffee been always sold unground, this distinction in the duties would have been less objectionable; but as the lower classes, who are now the great consumers of coffee, have no facilities for roasting and grinding it at home, they uniformly buy it in the shape of powder; hence it is plain that the discriminating duty in favour of succory must have acted as a premium upon, and an incentive to the adulteration of coffee by its intermixture. We are, therefore, glad to have to state that it has been abolished, and that succory is now subjected to a duty of 6*d.* per lb. The imposition of different duties upon *convertible articles* is quite subversive of every sound principle; and, whether it be so intended or not, is calculated only to promote adulteration and fraud.

SUGAR (Fr. *Sucre;* Ger. *Zucher;* It. *Zucchero;* Russ. *Sachar;* Sp. *Azucar;* Arab. *Sukhir;* Malay, *Soola;* Sans. *Sarkarā*), a sweet granulated substance, too well known to require any particular description. It is every where in extensive use; and in

this country ranks rather among the indispensable necessaries of life, than among luxuries. In point of commercial importance, it is second to very few articles. It is chiefly prepared from the expressed juice of the *arundo saccharifera*, or sugar cane; but it is also procured from an immense variety of other plants, as maple, beet root, birch, parsnep, &c.

I. *Species of Sugar.* — The sugar met with in commerce is usually of 4 sorts; — brown, or muscovado sugar; clayed sugar; refined, or loaf sugar; and sugar candy. The difference between one sort of sugar and another depends altogether on the different modes in which they are prepared.

1. *Brown, or Muscovado Sugar.* — The plants or canes being crushed in a mill, the juice, having passed through a strainer, is collected in the clarifier, where it is first exposed to the action of a gentle fire, after being "tempered" (mixed with alkali), for the purpose of facilitating the separation of the liquor from its impurities. It is then conveyed into the large evaporating copper, and successively into two others, each of smaller size; the superintending boiler freeing it, during the process, from the scum and feculent matters which rise to the surface. The syrup then reaches the last copper vessel, called the "striking tache," where it is boiled till sufficiently concentrated to be capable of granulating in the cooler, whence it is transferred with the least possible delay, to prevent charring. Here it soon ceases to be a liquid; and when fully crystallised, is put into hogsheads (called "potting"), placed on their ends in the curing-house, with several apertures in their bottoms, through which the molasses drain into a cistern below. In this state they remain till properly cured, when the casks are filled up, and prepared for shipment.

2. *Clayed Sugar* is prepared by taking the juice, as in the case of muscovado sugar, when boiled to a proper consistency, and pouring it into conical pots with the apex downwards. These pots have a hole at the lower extremity, through which the molasses or syrup is allowed to drain. After this drain has continued for some time, a stratum of moistened clay is spread over the surface of the pots; the moisture of which percolating through the mass, is found to contribute powerfully to its purification.

3. *Refined Sugar* may be prepared from muscovado or clayed sugar, by redissolving the sugar in water, and, after boiling it with some purifying substances, pouring it, as before, into conical pots, which are again covered with moistened clay. A repetition of this process produces *double refined* sugar. But a variety of improved processes are now resorted to.

4. *Sugar Candy.* — Solutions of brown or clayed sugar, boiled till they become thick, and then removed into a hot room, form, upon sticks or strings put into the vessels for that purpose, into crystals, or candy.

II. *Historical Notice of Sugar.* — The history of sugar is involved in a good deal of obscurity. It was very imperfectly known by the Greeks and Romans. Theophrastus, who lived about 320 years before the Christian era, the first writer whose works have come down to us by whom it is mentioned, calls it a sort of "honey extracted from canes or reeds." Strabo states, on the authority of Nearchus, Alexander's admiral, that "reeds in India yield honey without bees." And Seneca, who was put to death in the 65th year of the Christian era, alludes (Epist. 84.) to the sugar cane, in a manner which shows that he knew next to nothing of sugar, and absolutely nothing of the manner in which it is prepared and obtained from the cane.

Of the ancients, Dioscorides and Pliny have given the most precise description of sugar. The former says, it is "a sort of concreted honey, found upon canes, in India and Arabia Felix; it is in consistence like salt, and is, like it, brittle between the teeth." And Pliny describes it as "honey collected from canes, like a gum, white and brittle between the teeth; the largest is of the size of a hazel nut: it is used in medicine only." — (*Saccharum et Arabia fert, sed laudatius India; est autem mel in arundinibus collectum, gummium modo candidum, dentibus fragile, amplissimum nucis avellanæ magnitudine, ad medicinæ tantum usum.* — Lib. xii. c. 8.)

It is evident, from these statements, that the knowledge of the Greeks and Romans with respect to the mode of obtaining sugar was singularly imperfect. They appear to have thought that it was found adhering to the cane, or that it issued from it in the state of juice, and then concreted like gum. Indeed, Lucan expressly alludes to Indians near the Ganges, —

Quique bibunt tenerâ dulces ab arundine succos. — (Lib. iii. l. 237.)

But these statements are evidently without foundation. Sugar cannot be obtained from the cane without the aid of art. It is never found native. Instead of flowing from the plant, it must be forcibly expressed, and then subjected to a variety of processes.

Dr. Moseley conjectures, apparently with much probability, that the sugar described by Pliny and Dioscorides, as being made use of at Rome, was sugar candy obtained from China. This, indeed, is the only sort of sugar to which their description will at

all apply. And it would seem that the mode of preparing sugar candy has been understood and practised in China from a very remote antiquity; and that large quantities of it have been in all ages exported to India, whence, it is most probable, small quantities found their way to Rome. — (*Treatise on Sugar*, 2d edit. pp. 66—71. This, as well as Dr. Moseley's *Treatise on Coffee*, is a very learned and able work.)

Europe seems to be indebted to the Saracens not only for the first considerable supplies of sugar, but for the earliest example of its manufacture. Having, in the course of the 9th century, conquered Rhodes, Cyprus, Sicily, and Crete, the Saracens introduced into them the sugar cane, with the cultivation and preparation of which they were familiar. It is mentioned by the Venetian historians, that their countrymen imported, in the 12th century, sugar from Sicily at a cheaper rate than they could import it from Egypt. — (*Essai de l'Histoire du Commerce de Venise*, p. 100.) The crusades tended to spread a taste for sugar throughout the Western world; but there can be no doubt that it was cultivated, as now stated, in modern Europe, antecedently to the era of the crusades; and that it was also previously imported by the Venetians, Amalphitans, and others, who carried on a commercial intercourse, from a very remote epoch, with Alexandria and other cities in the Levant. It was certainly imported into Venice in 996. — (See the *Essai, &c.* p. 70.)

The art of refining sugar, and making what is called loaf-sugar, is a modern European invention, the discovery of a Venetian about the end of the 15th or the beginning of the 16th century. — (*Moseley*, p. 66.)

The Saracens introduced the cultivation of the sugar cane into Spain soon after they obtained a footing in that country. The first plantations were at Valencia; but they were afterwards extended to Granada and Murcia. Mr. Thomas Willoughby, who travelled over great part of Spain in 1664, has given an interesting account of the state of the Spanish sugar plantations, and of the mode of manufacturing the sugar.

Plants of the sugar cane were carried by the Spaniards and Portuguese to the Canary Islands and Madeira, in the early part of the 15th century; and it has been asserted by many, that these islands furnished the first plants of the sugar cane that ever grew in America.

But though it is sufficiently established, that the Spaniards early conveyed plants of the sugar cane to the New World, there can be no doubt, notwithstanding Humboldt seems to incline to the opposite opinion (*Essai Politique sur la Nouvelle Espagne*, liv. iv. c. 10.), that this was a work of supererogation, and that the cane was indigenous both to the American continent and islands. It was not for the plant itself, which flourished spontaneously in many parts when it was discovered by Columbus, but for the secret of making sugar from it, that the New World is indebted to the Spaniards and Portuguese; and these to the nations of the East. — (See *Lafitau, Mœurs des Sauvages*, tome ii. p. 150.; *Edwards's West Indies*, vol. ii. p. 238.)

Barbadoes is the oldest settlement of the English in the West Indies. They took possession of it in 1627; and so early as 1646 began to export sugar. In 1676, the trade of Barbadoes is said to have attained its maximum, being then capable of employing 400 sail of vessels, averaging 150 tons burden.

Jamaica was discovered by Columbus, in his second voyage, and was first occupied by the Spaniards. It was wrested from them by an expedition sent against it by Cromwell, in 1656; and has since continued in our possession, forming by far the most valuable of our West Indian colonies. At the time when it was conquered, there were only 3 small sugar plantations upon it. But, in consequence of the influx of English settlers from Barbadoes and the mother country, fresh plantations were speedily formed, and continued rapidly to increase.

The sugar cane is said to have been first cultivated in St. Domingo, or Hayti, in 1506. It succeeded better there than in any other of the West Indian islands. Peter Martyr, in a work published in 1530, states that, in 1518, there were 28 sugar-works in St. Domingo established by the Spaniards. "It is marvellous," says he, "to consider how all things increase and prosper in the island. There are now 28 sugar-presses, wherewith great plenty of sugar is made. The canes or reeds wherein the sugar groweth are bigger and higher than in any other place; and are as big as a man's wrist, and higher than the stature of a man by the half. This is more wonderful, that whereas in Valencia, in Spain, where a great quantity of sugar is made yearly, whensoever they apply themselves to the great increase thereof, yet doth every root bring forth not past 5 or 6, or at most 7 of these reeds; whereas in St. Domingo 1 root beareth 20, and oftentimes 30." — (Eng. trans. p. 172.)

Sugar from St. Domingo formed, for a very long period, the principal part of the European supplies. Previously to its devastation, in 1790, no fewer than 65,000 tons of sugar were exported from the French portion of the island.

III. *Sources whence the Supply of Sugar is derived.* — The West Indies, Brazil, Surinam, Java, Mauritius, Bengal, Siam, the Isle de Bourbon, and the Philippines, are the principal sources whence the

supplies required for the European and American markets are derived. The average quantities exported from these countries during each of the 3 years ending with 1833 were nearly as follows : —

	Tons.
British West Indies, including Demerara and Berbice	190,000
Mauritius	30,000
Bengal, Isle de Bourbon, Java, Siam, Philippines, &c.	60,000
Cuba and Porto Rico	110,000
French, Dutch, and Danish West Indies	95,000
Brazil	75,000
	560,000 tons.

Loaf or lump sugar is unknown in the East, sugar candy being the only species of refined sugar that is made use of in India, China, &c. The manufacture of sugar candy is carried on in Hindostan, but the process is extremely rude and imperfect. In China, however, it is manufactured in a very superior manner and large quantities are exported. When of the best description, it is in large white crystals, and is a very beautiful article. Two sorts of sugar candy are met with at Canton, viz. Chinchew and Canton; the former being the produce of the province of Fokien, and the latter, as its name implies, of that of Canton. The chinchew is by far the best, and is about 50 per cent. dearer than the other. Chinese sugar candy is consumed, to the almost total exclusion of any other species of sugar, by the Europeans at the different settlements throughout the East. There were exported from Canton, in 1831-32, by British ships, 32,279 piculs (38,427 cwt.) of sugar candy, valued at 242,000 dollars; and 60,627 piculs (72,175 cwt.) of clayed sugar, valued at 318,256 dollars; and during the previous year the exports were about 50 per cent. greater. — (See *antè*, pp. 257, 258.) The exports by the Americans are also considerable. At an average, the exports of sugar from Canton may be taken at from 6,000 to 10,000 tons; but of this onl a small quantity finds its way to Europe. The exports from Siam and Cochin-China are estimated an about 12,500 tons.

Consumption of Sugar in Europe, &c. — Mr. Cook gives the following Table of the imports of sugar into France and the principal Continental ports in 1831, 1832, and 1833, and of the stocks on hand on the 31st of December of each of these years : —

	Imports.			Stocks, 31st of December.		
	1831.	1832.	1833.	1831.	1832.	1833.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
France	97,450	82,000	79,500	25,870	9,350	10,450
Trieste	17,950	22,400	13,800	6,900	11,900	6,840
Genoa	9,500	10,500	6,800	1,500	2,200	2,180
Antwerp	5,240	8,780	12,800	2,000	2,000	5,100
Rotterdam	10,700	11,600	8,650	1,800	3,900	3,350
Amsterdam	18,370	22,380	20,100	2,200	3,400	5,300
Hamburgh	38,800	37,930	30,000	9,000	13,400	9,820
Bremen	12,380	12,500	7,350	3,230	5,800	3,550
Copenhagen	5,350	5,850	5,560	800	2,370	1,830
Petersburgh	11,170	23,100	18,500	8,440	11,660	15,600
	226,910	237,040	203,060	61,740	65,980	64,020

This Table does not, however, give the imports into any of the ports of the Peninsula. But the consumption of Spain, only, has been estimated, apparently on good grounds, by M. Montveran (*Essai de Statistique sur les Colonies*, p. 92.), at 45,000,000 kilog. (41,050 tons). This may appear large for a country in the situation of Spain; but the quantity is deduced from comparing the imports with the exports; and it is explained partly by the moderation of the duties, and partly by the large consumption of cocoa, and other articles that require a corresponding consumption of sugar. Mr. Cook's Table also omits the imports into Leghorn, Naples, Palermo, and other Italian ports. Neither does it give those into Stettin, Königsberg, Riga, Stockholm, Gottenburgh, &c. It is, besides, very difficult, owing to transhipments from one place to another, accurately to estimate the real amount of the imports. On the whole, however, we believe that we shall be within the mark, if we estimate those for the whole Continent at from 285,000 to 310,000 tons, including what is sent from England.

The following Table, compiled from the best authorities, exhibits the total consumption of colonial and foreign sugars in France at different periods since 1788, with the population, and the average consumption of each individual. — (See *Montveran, Essai de Statistique*, p. 96., and the authorities there referred to.)

Years.	Consumption.	Population.	Individual Consumption.
	Kilog.		Kilog.
1788	21,300,000	23,600,000	·906
1801	25,200,000	31,000,000	·813
1812	16,000,000	43,000,000	·372*
1816 to 1819 average	36,000,000	30,000,000	1·200
1819 — 1822 —	47,000,000	30,833,000	1·566
1822 — 1824 —	47,250,000	31,103,000	1·513
1824 — 1825 —	55,750,000	31,280,000	1·782
1826 — 1827 —	62,500,000	31,625,000	1·976
1830	67,250,000	31,845,000	2·126

This, however, is independent of the consumption of indigenous sugar — (see *post*), and of the sugar introduced by the contraband trade, — both of which are very considerable. The entire consumption of all sorts of sugar in France in 1832, including from 8,000,000 to 9,000,000 kilog. of beet-root sugar, and allowing for the quantity fraudulently intro-

* Continental system and empire.

duced, may be estimated at about 88,000,000 kilog., or 193,000,000 lbs.; which, taking the population at 32,000,000, gives an average consumption of 6 lbs. to each individual, being about ¼th part of the consumption of each individual in Great Britain! This extraordinary discrepancy is no doubt ascribable to various causes;—partly to the greater poverty of the mass of the French people; partly to their smaller consumption of tea, coffee, punch, and other articles that occasion a large consumption of sugar; and partly and principally, perhaps, to the oppressive duties with which foreign sugars are loaded on their being taken into France for home consumption.

The United States consume from 70,000 to 80,000 tons; but of these, from 30,000 to 40,000 tons are produced in Louisiana.

About 170,000 tons of sugar are retained for home consumption in Great Britain, and 17,000 tons in Ireland; exclusive of about 12,000 tons of bastards, or inferior sugar obtained by the boiling of molasses, and exclusive also of the refuse sugar and treacle remaining after the process of refining.

On the whole, therefore, we believe we may estimate the aggregate consumption of the Continent and of the British islands at about 500,000 tons a year; to which if we add the consumption of the United States, Turkey, &c., the aggregate will be nearly equivalent to the supply. The demand is rapidly increasing in most countries; but as the power to produce sugar is almost illimitable, no permanent rise of prices need be looked for.

Taking the price of sugar at the low rate of 1*l.* 4*s.* a cwt., or 24*l.* a ton, the prime cost of the article to the people of Europe will be 12,000,000*l.* sterling; to which adding 75 per cent. for duty, its total cost will be 21,000,000*l.*! This is sufficient to prove the paramount importance of the trade in this article. Exclusive, however, of sugar, the other products of the cane, as rum, molasses, treacle, &c., are of very great value. The revenue derived by the British treasury from rum, only, amounts to nearly 1,600,000*l.* a year.

Progressive Consumption of Sugar in Great Britain. — We are not aware that there are any authentic accounts with respect to the precise period when sugar first began to be used in England. It was, however, imported in small quantities by the Venetians and Genoese in the 14th and 15th centuries *; but honey was then, and long after, the principal ingredient employed in sweetening liquors and dishes. Even in the early part of the 17th century, the quantity of sugar imported was very inconsiderable; and it was made use of only in the houses of the rich and great. It was not till the latter part of the century, when coffee and tea began to be introduced, that sugar came into general demand. In 1700, the quantity consumed was about 10,000 tons, or 22,000,000 lbs.; at this moment, the consumption has increased (bastards included) to above 180,000 tons, or more than 400,000,000 lbs.; so that sugar forms not only one of the principal articles of importation and sources of revenue, but an important necessary of life.

Great, however, as the increase in the use of sugar has certainly been, it may, we think, be easily shown, that the demand for it is still very far below its natural limit; and that, were the existing duties on this article reduced, and the trade placed on a proper footing, its consumption, and the revenue derived from it, would be greatly increased.

During the first half of last century, the consumption of sugar increased five-fold. It amounted, as already stated —

In 1700,	to 10,000 tons	- or 22,000,000 lbs.	
1710,	- 14,000 —	- - 31,360,000 —	
1734,	- 42,000 —	- - 94,080,000 —	
In 1754,	to 53,270 tons	or 119,320,000 lbs.	
1770—1775,	72,500 (average)	- 162,500,000 —	
1786—1790,	81,000 —	- 181,500,000 —	

In the reign of Queen Anne, the duty on sugar amounted to 3*s.* 5*d.* per cwt. Small additions were made to it in the reign of George II.; but in 1780 it was only 6*s.* 8*d.* In 1781, a considerable addition was made to the previous duty; and in 1787 it was as high as 12*s.* 4*d.* In 1791 it was raised to 15*s.*; and while its extensive and increasing consumption pointed it out as an article well fitted to augment the public revenue, the pressure on the public finances, caused by the French war, occasioned its being loaded with duties, which, though they yielded a large return, would, there is good reason to think, have been more productive had they been lower. In 1797, the duty was raised to 17*s.* 6*d.*; 2 years after, it was raised to 20*s.*; and, by successive augmentations in 1803, 1804, and 1806, it was raised to 30*s.*; but in the last-mentioned year it was enacted, that, in the event of the market price of sugar in bond, or exclusive of the

* In Marin's *Storia del Commercio de' Venezziani* (vol. v. p. 306.), there is an account of a shipment made at Venice for England in 1319, of 100,000 lbs. of sugar, and 10,000 lbs. of sugar candy. The sugar is said to have been brought from the Levant.

duty, being, for the 4 months previous to the 5th of January, the 5th of May, or the 5th of September, below 49*s.* a cwt., the Lords of the Treasury might remit 1*s.* a cwt. of the duty; that if the prices were below 48*s.*, they might remit 2*s.*; and if below 47*s.*, they might remit 3*s.*, which was the greatest reduction that could be made. In 1826, the duty was declared to be constant at 27*s.*, without regard to price; but it was reduced, in 1830, to 24*s.* on West India sugar, and to 32*s.* on East India sugar.

The duty on foreign sugars is a prohibitory one of 63*s.* a cwt. Sugar from the Mauritius is, however, by a special provision, allowed to be imported at the same duty as West India sugar.

I. Account of the Quantity of Sugar retained for Home Consumption in GREAT BRITAIN, the Nett Revenue derived from it, and the Rates of Duty with which it was charged; and the Price, exclusive of the Duty, in each Year from 1789 to 1832, both inclusive.

Years.	Quantities retained for Home Consumption.	Nett Revenue.	Rates of Duty.		Price of Jamaica Brown or Muscovado Sugar in Bond, per Gazette Average.
			British Plantation Sugar.	East India Sugar, including Mauritius.	
	Cwt.		*Per Cwt.*	*Per Cwt.* / *Per Cent. ad valorem.*	*Per Cwt.*
		£ *s.* *d.*	£ *s.* *d.*	£ *s.* *d.* / £ *s.* *d.*	£ *s.* *d.*
1789	1,547,109	862,632 11 11	0 12 4	- - / 37 16 3	
1790	1,536,232	908,954 17 4			
1791	1,403,211	1,074,903 16 5	0 15 0	0 2 8 / 37 16 3	
1792	1,361,592	1,012,538 12 1			
1793	1,677,097	1,316,502 14 3			
1794	1,489,792	1,031,492 4 2			
1795	1,336,230	949,961 16 1			
1796	1,554,082	1,225,213 7 5			
1797	1,273,722	1,299,744 0 7	0 17 6	0 5 2 / 37 16 3	
1798	1,476,552	1,794,990 15 9	0 19 0	0 5 2 / 40 16 3	
1799	2,772,438	2,321,935 16 5	1 0 0	0 2 6 / 42 16 3	
1800	1,506,921	1,835,112 11 1			
1801	2,773,795	2,782,232 18 1	- -	0 3 2 / 42 16 3	
1802	2,250,311	2,210,801 6 11			
1803	1,492,565	1,551,457 17 11	1 4 0	1 6 4¾ / 1 4 0	
1804	2,144,369	2,458,124 18 3	1 6 6	1 9 1½ / 1 6 6	
1805	2,076,103	2,439,795 1 10	1 7 0	1 9 8½ / 1 7 0	
1806	2,801,747	3,097,590 3 6			
1807	2,277,665	3,150,753 6 3			
1808	2,842,813	4,177,916 3 4	- -	1 10 0 / 1 0 0	
1809	2,504,507	3,273,995 2 3			
1810	3,489,312	3,117,330 12 9	1 9 0 / 1 8 0	1 12 0 / 1 0 0	
1811	3,226,757	3,339,218 4 3	1 7 0	1 11 0 / 1 0 0	
* 1812	2,604,019	3,939,939 17 2		1 10 0 / 1 0 0	
1813	2,209,063	3,447,560 4 5	1 10 0	1 13 0 / 1 0 0	
				Per Cwt.	
1814	1,997,999	3,276,513 6 5	- -	£1 10 0 / 1 11 0 / 1 19 0	3 13 4
1815	1,888,965	2,957,403 2 4	- -	1 10 0 / 1 17 0 / 1 19 0	3 1 10
1816	2,228,156	3,166,851 18 0	1 7 0	2 0 0 / 1 17 0	2 8 7
1817	2,960,794	3,967,154 5 0	- -	1 17 0	2 9 8
1818	1,457,707	2,331,472 3 5	1 10 0	2 0 0	2 10 0
1819	2,474,738	3,507,844 11 0	1 8 0 / 1 7 0	1 18 0 / 1 17 0	2 1 4
1820†	2,581,256	3,477,770 11 4	1 7 0	1 17 0	1 16 2
1821	2,676,274	3,660,567 6 7	- -	- -	1 13 2
1822	2,618,490	3,579,412 12 1	- -	- -	1 11 0
1823	2,842,676	4,022,782 4 1	- -	- -	1 12 11
1824	2,957,261	4,223,240 18 5	- -	- -	1 11 6
1825	2,655,959	3,756,654 0 1	- -	Duty on Mauritius sugar reduced to 27*s.*	1 18 6
1826	3,255,075	4,518,690 15 9	- -		1 10 7
1827	3,021,191	4,218,623 6 7	- -	- -	1 15 9
1828	3,285,843	4,576,287 13 4	- -	- -	1 11 8
1829	3,211,535	4,452,793 18 11	- -	- -	1 8 7
1830	3,396,056	4,354,103 0 0	1 4 0	1 12 0	1 4 11
1831	3,421,597	4,219,049 0 0	- -	- -	1 3 8
1832	3,315,836‡	3,986,519 0 0	- -	- -	

* Sugar used in the distilleries included in these years.

† Previously to 1820, the importation of East India sugar was comparatively trifling, and does not at this moment amount to above 190,000 cwt. The imports from the Mauritius have increased rapidly during the last 5 years, more especially since 1826, when the duty on sugar from that island was reduced to the same level as that on sugar from the West Indies. — (See *antè*, p. 929.)

‡ *N. B.* — These quantities include the sugar refined in Britain for exportation to Ireland.

II. Account of the Imports, Exports, and Home Consumption of Sugar in the UNITED KINGDOM, and of the Revenue derived therefrom, in each Year from 1814 to 1833 inclusive, specifying the different Species of Sugar and the Quantities of each consumed and exported, with the Gross and Nett Amount of the Duty. — (*Report of the West India Committee of* 1832, p. 288.; and *Parl. Papers*.)

Years.	Imports.				
	British Plantation.	Mauritius.	East India.	Foreign Plantation.	Total of Imports.
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
1814	3,581,516	Considered as East India sugar in these years.	49,849	581,421	4,212,786
1815	3,642,807		125,639	365,889	4,134,335
1816	3,560,317		127,052	192,780	3,880,149
1817	3,679,352		125,893	105,916	3,911,161
1818	3,775,379		162,395	138,032	4,075,806
1819	3,907,151		205,527	85,837	4,198,515
1820	3,769,458		277,228	162,990	4,209,676
1821	3,906,967		269,162	197,037	4,373,166
1822	3,435,061		226,371	112,954	3,774,386
1823	3,773,528		219,580	208,598	4,201,706
1824	3,935,052		271,848	205,750	4,412,650
1825	3,501,281	93,723	150,347	162,784	3,908,135
1826	4,002,426	186,782	164,822	65,065	4,419,095
1827	3,550,918	204,344	175,846	178,910	4,110,018
1828	4,313,430	361,325	156,266	136,999	4,968,020
1829	4,152,815	297,958	206,052	199,568	4,856,393
1830	3,913,268	485,710	293,769	223,257	4,916,004
1831	4,103,716	517,553	237,416	507,547	5,366,262
1832	3,784,243	541,771	175,252	366,482	4,867,748
1833	3,648,026	522,256	209,449	346,018	4,732,749

Years.	Exports.							Consumption.
	Raw Sugar					British Refined Sugar, reduced to its equivalent Quantity of Raw Sugar.	Total Export of Sugar, Raw and Refined.	Quantity retained for actual Consumption in the United Kingdom.
	British Plantation.	Mauritius.	East India.	Foreign Plantation.	Total of Raw Sugar.			
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*
1814	430,817	Considered as East India sugar in these years.	41,083	459,990	931,890	897,347	1,829,237	2,324,051 including sugar used in distilleries.
1815	385,761		67,665	311,378	764,804	994,025	1,758,829	2,211,299
1816	234,996		101,581	190,190	526,767	953,314	1,480,081	2,529,931
1817	142,571		95,218	132,937	370,726	1,141,724	1,512,450	3,298,941
1818	98,512		109,952	108,687	317,151	1,157,082	1,474,233	1,726,896
1819	58,913		87,587	102,710	249,210	847,798	1,097,008	2,820,900
1820	77,057		185,068	138,298	400,423	1,098,616	1,499,039	2,901,864
1821	9,851		144,332	186,314	340,497	1,022,731	1,363,228	3,056,882
1822	10,657		98,277	137,707	246,641	561,206	807,847	2,989,057
1823	11,231		104,796	176,717	292,744	677,593	970,337	3,228,991
1824	8,836		144,358	213,980	369,174	640,054	1,009,228	3,367,424
1825	11,529	21,593	36,625	173,075	242,822	549,782	792,604	3,079,848
1826	102,297	45,554	46,669	105,801	300,301	586,172	886,473	3,573,990
1827	40,931	46,480	64,079	103,965	255,455	695,402	950,857	3,340,927
1828	50,586	117,985	42,546	160,329	371,446	776,624	1,148,070	3,601,419
1829	16,467	52,321	56,174	172,950	297,912	808,435	1,106,347	3,539,821
1830	13,355	48,383	83,413	166,310	311,461	1,032,886	1,344,347	3,722,044
1831	10,800	11,174	111,102	287,644	420,720	989,120	1,409,840	3,787,391 *
1832	5,398	10,146	92,049	260,501	368,095	774,939	1,143,034	3,656,554
1833	7,851	3,294	120,156	234,375	365,676	417,069	782,745	3,658,694

Years.	Revenue derived from Sugar.						
	Gross Receipt of Duties.					Payments out of Gross Receipt.	Nett Produce of Duties.
	British Plantation.	Mauritius.	East India.	Foreign Plantation (including Sugar of Martinique and Guadaloupe admitted for Home Consumption under Act 53 Geo. 3. c. 62.)	Total of Gross Receipt.	Drawback and Bounty allowed on Exportation to Foreign Parts, and Repayments on Over-Entries, &c.	
	L.	*L.*	*L.*	*L.*	*L.*	*L.*	*L.*
1814	4,577,956	Considered as East sugar in these years.	24,299	253,229	4,955,484	1,187,960	3,767,524
1815	4,740,781		73,999	65,579	4,880,359	1,426,026	3,454,333
1816	4,921,034		64,913	79,349	5,065,296	1,453,103	3,612,193
1817	5,966,545		50,612	8,034	6,025,191	1,591,265	4,433,926
1818	4,313,581		50,114	2,118	4,365,813	1,614,706	2,751,107
1819	4,984,878		192,014	924	5,177,816	1,181,273	3,996,543
1820	5,288,926		156,968	1,011	5,446,905	1,521,518	3,925,387
1821	5,352,130		222,438	1,075	5,575,643	1,386,685	4,188,958
1822	4,611,730		254,335	1,117	4,867,182	806,738	4,060,444
1823	5,135,409		190,783	750	5,326,942	919,532	4,407,410
1824	5,207,132		282,537	210	5,489,879	847,975	4,641,904
1825	4,651,525	106,205	198,322	99	4,956,151	779,496	4,176,655
1826	5,273,648	150,356	265,037	85	5,689,126	738,128	4,950,998
1827	5,059,208	230,005	172,406	30,251	5,491,870	841,678	4,650,192
1828	5,415,715	326,448	180,055	2,658	5,924,876	922,579	5,002,297
1829	5,340,258	324,752	223,002	8,745	5,896,757	1,000,515	4,896,242
1830	5,226,966	558,207	230,185	47,964	6,063,322	1,295,980	4,767,342
1831	4,936,592	547,855	189,609	104,358	5,778,414	1,127,824	4,650,590
1832	4,595,377	631,600	127,374	90	5,354,441	960,102	4,394,339
1833	4,167,268	609,352	157,287	191	4,934,098	†	†

N. B. — The rates of duty in this Table are the same as those in Table No. I.

* These quantities are exclusive of the coarse sugar and bastards remaining from the process of refining; and they are also exclusive of the coarse sugar obtained by boiling molasses. The quantities of the latter taken for home consumption, in 1831, were 8,020 tons; in 1832, 11,450 do.; and in 1833, 13,970 do. — (*Cook's Commerce of* 1833, p. 6.)

† The drawback in 1833 was 504,797*l.*; but not having learned the amount of the repayments on over entries for that year, we are unable to specify the nett produce of the duties; but it will be very near 4,400,000*l.*

The following Tables exhibit the sugar trade of 1832 more in detail: —

III. Account of the Quantity of Unrefined Sugar imported into the United Kingdom, from the several British Colonies and Plantations, from the British Possessions in the East Indies, and from Foreign Countries, in the Year ended 5th of January, 1833; distinguishing the several Sorts of Sugar, and the Colonies and Countries from which the same was imported.

Whence imported.	Of the British Plantations.	Of Mauritius.	Of the East Indies.	Of the Foreign Plantations.	Total Quantity imported.
British colonies and plantations in America, viz. —	*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*
Antigua	143,336 0 0	- -	- -	- -	143,336 0 0
Barbadoes	266,464 2 27	- -	- -	- -	266,464 2 27
Dominica	58,270 0 25	- -	- -	- -	58,270 0 25
Granada	188,231 1 14	- -	- -	- -	188,231 1 14
Jamaica	1,431,689 1 18	- -	- -	- -	1,431,689 1 18
Montserrat	20,855 2 20	- -	- -	- -	20,855 2 20
Nevis	39,843 1 19	- -	- -	- -	39,843 1 19
St. Christopher	80,602 0 20	- -	- -	- -	80,602 0 20
St. Lucia	47,965 3 14	- -	- -	- -	47,965 3 14
St. Vincent	186,812 1 15	- -	- -	- -	186,812 1 15
Tobago	108,100 3 10	- -	- -	- -	108,100 3 10
Tortola	14,999 0 24	- -	- -	- -	14,999 0 24
Trinidad	312,265 3 10	- -	- -	- -	312,265 3 10
Bermudas	0 2 0	- -	- -	- -	0 2 0
Demerara	736,561 1 26	- -	- -	- -	736,561 1 26
Berbice	137,457 0 20	- -	- -	- -	137,457 0 20
British North American colonies	10,786 2 24	1,105 3 15	- -	225 2 24	12,118 1 7
Sierra Leone	- -	1 0 18	- -	- -	1 0 18
Cape of Good Hope	- -	8,743 0 25	18 3 10	- -	8,762 0 7
Mauritius	- -	527,904 1 10	- -	- -	527,904 1 10
British possessions in the East Indies, viz. —					
East India Company's territories, exclusive of Singapore	- -	- -	88,238 3 7	- -	88,238 3 7
Singapore	- -	- -	43,415 2 15	- -	43,415 2 15
Java	- -	- -	14,653 3 4	- -	14,653 3 4
Philippine Islands	- -	- -	28,924 3 25	- -	28,924 3 25
Foreign colonies in the West Indies, viz. —					
Cuba	- -	- -	- -	210,843 3 5	210,843 3 5
Porto Rico	- -	- -	- -	2,027 2 1	2,027 2 1
St. Eustatius	- -	- -	- -	1,559 0 25	1,559 0 25
United States of America	- -	- -	- -	518 3 11	518 3 11
Brazil	- -	- -	- -	147,315 0 5	147,315 0 5
States of the Rio de la Plata	- -	- -	- -	3 1 19	3 1 19
Europe	1 2 0	4,015 2 22	- -	3,988 0 15	8,005 1 9
Total	3,784,244 2 6	541,770 1 6	175,252 0 5	366,481 2 21	4,867,748 2 10

IV. Account of the Amount of Duties received on Sugar in the United Kingdom, in the Year ended 5th of January, 1833, distinguishing each Sort of Sugar; also, of the Amount of Drawbacks and Bounties allowed upon the Exportation thereof, and the Nett Produce of the Duties, in such Year.

Year ending 5th Jan. 1833.	Gross Receipt of Duties on Sugar.			
	Of the British Plantations.	Of Mauritius.	Of the East Indies.	Of the Foreign Plantations, and Foreign Refined Sugar.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Great Britain	4,198,207 12 4	621,420 9 2	126,755 9 5	89 10 7	4,946,473 1 6
Ireland	397,169 15 7	10,179 15 7	618 4 1	- -	407,967 15 3
United Kingdom	£4,595,377 7 11	631,600 4 9	127,373 13 6	89 10 7	5,354,440 16 9

Year ending 5th Jan. 1833.	Payments out of the Gross Receipt of Duties on Sugar.			Nett Produce of the Duties on Sugar.
	Bounties paid on British Refined Sugar exported.	Repayments on Over-Entries, Damages, &c.	Total.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Great Britain	949,128 0 1	10,826 8 9	959,954 8 10	3,986,518 12 8
Ireland	44 17 1	102 13 1	147 10 2	407,820 5 1
United Kingdom	£ 949,172 17 2	10,929 1 10	960,101 19 0	4,394,338 17 9

V. Account of the Quantity of Raw and Refined Sugar exported from the United Kingdom, in the Year ended 5th of January, 1833; reducing the Quantity of Refined into its Proportion of Raw; distinguishing the several Sorts of Sugar, and the Countries to which the same was exported.— (*N. B.* — Lbs. are omitted in the Columns, but allowed for in the Totals.)

Countries to which exported.	Raw Sugar.					Refined Sugar.		Total (stated in Cwts.) of Raw Sugar.
	Of the British Plantations.	Of Mauritius.	Of the East Indies.	Of the Foreign Plantations.	Total of Raw Sugar.	Actual Weight exported.	The same stated as Raw Sugar in the Proportion of 34 Cwt. of Raw to 20 Cwt. of Refined.	
FROM GREAT BRITAIN.	*Cwt. qrs.*	*Cwt. qrs.*	*Cwt. qrs.*	*Cwt. qrs.*	*Cwt. qrs.*	*Cwt. qrs.*	*Cwt. qrs.*	*Cwt. qrs.*
Russia	18 0	22 1	3,295 3	51,627 0	51,961 0	9,240 0	15,708 1	70,669 2
Sweden	- -	- -	319 1	16 2	335 3	28 3	48 3	384 3
Norway	- -	- -	381 0	623 3	1,005 0	363 0	617 1	1,622 1
Denmark	2 1	- -	1,035 2	6,485 1	7,523 1	332 0	564 2	8,088 0
Prussia	- -	1,446 3	16,794 1	19,327 2	37,568 3	77,420 0	131,614 0	169,182 3
Germany	31 1	1,138 2	9,945 3	39,719 2	50,835 1	177,110 0	301,087 1	351,922 3
The Netherlands	6 1	5,594 2	41,830 1	79,208 2	126,439 3	3,646 3	6,199 2	132,639 2
France	1 2	31 3	11 3	4 3	50 0	22 3	38 3	89 0
Portugal, the Azores and Madeira	14 1	24 3	104 1	551 2	695 0	413 2	703 0	1,398 1
Spain and the Canaries	1 0	9 3	20 0	- -	31 0	499 3	849 3	880 3
Gibraltar	18 1	22 3	9 2	4 2	55 1	4,829 3	8,210 3	8,266 1
Italy	54 2	593 0	11,376 1	55,437 0	67,461 1	130,900 0	222,530 1	289,991 3
Malta	3 1	1 1	510 0	- -	514 3	4,964 2	8,439 3	8,954 3
The Ionian Islands	3 3	42 0	358 1	157 1	561 3	6,136 1	10,431 2	10,993 1
Turkey and Continental Greece	9 1	11 2	2,543 1	745 3	3,310 0	15,803 1	26,865 2	30,175 2
Morea and Greek islands	- -	- -	- -	2 1	2 1	321 0	545 3	548 1
Guernsey, Jersey, Alderney & Man	4,201 3	42 0	94 3	5,387 0	9,725 3	2,177 3	3,702 1	13,428 0
	4,366 1	8,781 3	88,630 0	259,299 2	361,077 3	434,211 1	738,159 0	1,099,237 0
Cape of Good Hope	3 2	38 3	26 2	3 0	72 0	214 0	364 0	436 1
Other parts of Africa	134 3	89 0	479 3	221 0	925 0	626 0	1,064 1	1,989 1
East Indies and China	142 2	440 0	468 0	307 2	1,358 2	710 2	1,208 0	2,566 3
New South Wales, Swan River, and Van Diemen's Land	109 0	232 2	300 2	141 1	783 3	1,461 3	2,485 1	3,269 0
British North American colonies	296 2	357 3	2,000 1	153 3	2,808 3	14,021 3	23,837 0	26,645 3
British West Indies	74 1	132 0	48 3	102 2	357 3	2,943 2	5,004 0	5,362 0
Foreign West Indies	39 1	7 0	4 0	24 2	74 3	163 0	277 1	352 0
United States of America	111 0	46 0	49 3	122 0	329 1	1,404 0	2,387 0	2,716 1
Mexico	11 1	2 0	3 3	20 1	37 2	11 1	19 0	56 3
Colombia	7 1	1 1	3 0	4 2	16 2	1 0	1 3	18 2
Brazil	39 0	4 1	14 0	40 0	97 3	- -	- -	97 3
States of the Rio de la Plata	18 2	2 0	9 2	24 2	55 0	- -	- -	55 0
Chili	10 1	- -	5 3	19 0	35 1	4 0	6 3	42 1
Peru	3 3	11 0	4 1	15 3	35 0	6 1	11 0	46 0
The Whale Fisheries	- -	- -	- -	- -	- -	1 0	1 3	1 3
Total from Great Britain	5,268 3	10,146 3	92,049 3	260,501 0	368,066 2	455,780 3	774,827 2	1,142,894 0
FROM IRELAND.								
Africa	2 0	- -	- -	- -	2 0	- -	- -	2 0
British North American colonies	19 2	- -	- -	- -	19 2	- -	- -	19 2
British West Indies	- -	- -	- -	- -	- -	65 2	111 2	111 2
United States of America	7 2	- -	- -	- -	7 2	- -	- -	7 2
Total from Ireland	29 0	- -	- -	- -	29 0	65 2	111 2	140 2
Total quantity exported from the United Kingdom	5,398 0	10,146 3	92,049 3	260,501 0	368,095 3	455,846 2	774,939 0	1,143,034 3

Influence of the Duties. — The price of sugar, exclusive of the duty, may be taken, at an average of the last few years, at from 24*s.* to 35*s.* a cwt. But to lay a tax of 24*s.* on a necessary of life costing from 24*s.* to 35*s.*, including 8*s.* per cwt. freight and charges, is obviously a most oppressive proceeding. Indeed, there does not seem to be much room for doubting that the consumption, and consequently also the revenue, would be very greatly increased by reducing the duty to 16*s.* or 18*s.* This may be pretty confidently inferred from the increase of consumption that has invariably followed every fall in the price of sugar. During the 3 years ending with 1808, when the price of brown or muscovado sugar, inclusive of the duty, was about 66*s.* a cwt., there were, at an average, 2,640,741 cwt. retained for home consumption. During the 3 years ending with 1816, the price was about 93*s.*, and the average quantity retained for home consumption fell off to 2,038,373 cwt. But during the 3 years ending with 1829, the price having fallen to about 57*s.*, the average quantity retained for home consumption rose to 3,267,581 cwt.; being an increase of more than *fifty* per cent. upon the quantity consumed during the previous period!

It will be observed that the duty was either the same, or very nearly the same, in those 3 periods; but had it been imposed on an *ad valorem* principle, or made to vary directly as the price, the reduction in the last-mentioned period would have been proportionately greater, and there would, consequently, have been a still greater increase of consumption.

The reduction of 3*s.* a cwt. from the duty, in 1830, was too trifling to have much effect; and it is difficult to say what portion of the increased consumption that has since taken place is to be ascribed to it, and what to other things. But if, instead of reducing the duty from 27*s.* to 24*s.*, it had been reduced from 27*s.* to 16*s.* or 18*s.*, the reduction would have had a powerful influence; and would certainly have occasioned a great increase in the consumption of the lower priced sugars, particularly in Ireland.

The quantity of sugar consumed in Great Britain is, at present, allowing for the quantity sent to Ireland, more than double what it was in 1790. But had the duty continued at 12*s.* 4*d.*, its amount in 1790, there cannot, we think, be much doubt that the consumption would have been quadrupled. During the intervening period, the population has been little less than doubled; and the proportion which the middle classes now bear to the whole population has been decidedly augmented. The consumption of coffee — an article in the preparation of which a great deal of sugar is used in this country, by all who can afford it — is more than 22 times as great now as in 1790; that is, it has increased from under 1,000,000 lbs. to above 22,000,000 lbs.! The consumption of tea has about doubled; and there has been a vast increase in the use of home-made wines, preserved and baked fruits, &c. Instead, therefore, of having done little more than increase proportionally to the increase of the population, it may be fairly presumed that the consumption of sugar would, had there not been some powerful counteracting cause in operation, have increased in a far greater degree. Instead of amounting to little more than 3,000,000, it ought to have amounted to 6,000,000 cwt.

Taking the aggregate consumption of Great Britain at 400,000,000 lbs., and the population at 16,500,000, the average consumption of each individual will be about 24 lbs. This, though a far greater average than that of France, or any of the Continental states, is small compared with what it might be were sugar supplied under a more liberal system. In workhouses, the customary annual allowance for each individual

ns, we believe, 34 lbs.; and in private families, the smallest separate allowance for domestics is 1 lb. a week, or 52 lbs. a year. These facts strongly corroborate what we have already stated as to the extent to which the consumption of sugar may be increased; and others may be referred to, that are, if possible, still more conclusive. Mr. Huskisson stated, in his place in the House of Commons, on Mr. Grant's motion for a reduction of the sugar duties, 25th of May, 1820, that "in consequence of the present enormous duty on sugar, the poor working man with a large family, to whom pence were a serious consideration, was denied the use of that commodity; and he believed *he did not go too far when he stated, that* TWO-THIRDS *of the poorer consumers of coffee drank that beverage without sugar.* If, then, the price of sugar were reduced, it would become an article of his consumption, like many other articles — woollens, for example, which are now used from their cheapness — which he was formerly unable to purchase." — (*Speeches*, vol. iii. p. 455.) There are no grounds for thinking that this statement is in any degree exaggerated; and it strikingly shows the very great extent to which the consumption of sugar might be increased, were it brought fully under the command of the labouring classes.

It is in Ireland, however, that we should anticipate the greatest and most salutary effects from a reduction of the duties on sugar. The direct importations into Ireland do not exceed 15,000 tons; and if we add to these 6,000 tons for the second-hand importations from Great Britain, which, we believe, is quite as much or more than they amount to, the entire consumption of that country will be 21,000 tons, or 47,040,000 lbs., which, taking the population of Ireland at 8,000,000, gives about 5·8 lbs. to each individual; or about 1-4th part of the average consumption of each individual in Great Britain. So singular a result must, we believe, be ascribed, in a considerable degree, to the comparative poverty of the Irish; but there can be no doubt that it is partly, if not principally, owing to over-taxation. The direct imports of sugar into Ireland were twice as great 30 years ago as they are at this moment; and there is no reason for thinking that the increase in the second-hand imports has been equivalent to the increase in the population. Hence, in order to diffuse a taste for so necessary an article as sugar among the population of Ireland, it would be very desirable, if possible, to reduce the duties even as low as 12*s.* a cwt.; and we are well convinced that such reduction, though it might occasion an immediate loss, would, in the end, be productive of a great increase of revenue, besides being attended with other and still more beneficial consequences. The "one thing needful" in Ireland is to inspire the population with a taste for the conveniences and enjoyments of civilised life; but how is it possible to do this while these conveniences are burdened with oppressive duties, that form an insuperable obstacle to their being used by any but the richest classes? Hence, the first step towards supplying what is confessedly the grand desideratum in the case of Ireland, is to reduce the duties on articles of convenience and luxury, so that they may become attainable by the mass of the people. If this be done, we may rest assured that the desire inherent in all individuals of improving their condition, will impel them to exert themselves to obtain them. A taste for the articles in question will be gradually diffused amongst all ranks; and, ultimately, it will be thought discreditable to be without them. — (*Parl. Paper*, No. 97. Sess. 1831.)

We have already seen that the imports of sugar from the British West Indies and the Mauritius may be estimated at 216,500 tons, and the consumption of Great Britain and Ireland at above 184,000 tons, exclusive of bastards; but of this quantity, about 6,000 tons is Bengal sugar, — making the nett consumption of West India and Mauritius sugar 178,000 tons, leaving 38,000 tons of the latter for exportation, exclusive of the surplus of Bengal sugar.

The duty on East India sugar ought to be reduced to the same level as that on West India sugar. It is difficult to imagine that there can be any good reason why all the productions of the different dependencies of the empire should not be allowed to come into the home market on paying the same duty. The admission of Mauritius sugar at a duty of 24*s.* is, indeed, a full concession of the principle; for there is not a single argument that could be alleged in favour of admitting Mauritius sugar at the same duty as West India sugar, that will not equally apply to Bengal sugar. However, we do not think that this point is of so much practical importance as is generally supposed. East India sugar has not, as yet, made any way in the Continental markets, most of which are open to it on the same terms as to other sugars; and unless its quality be materially improved, or its price considerably reduced, there is but little prospect of its being able to come into competition with the sugars of Jamaica, Brazil, and Cuba.

Bounty on the Exportation of Refined Sugar. — The business of refining sugar for exportation has been carried on to a considerable extent in this country; but it may be doubted whether its prosecution has ever been productive of any material national advantage. It had long been suspected, — and the fact seems now sufficiently established, — that the drawback allowed on the exportation of refined sugar has been greater than the duty charged on the raw sugar used in its manufacture; the excess being, in fact, a bounty paid to those engaged in the trade. Previously to 1826, the drawback on double refined sugar was 46*s.* a cwt.: it was then reduced to 43*s.*; but there is reason to think that it is still considerably above the mark. The average price of sugar in bond in this country, for several years past, has been from 5*s.* to 6*s.* a cwt. above what sugar of the same quality has brought on the Continent; a difference which, as we export sugar, could not have been maintained, had it not been for the bounty. The same conclusion has been established by the trials made under the superintendence of Dr. Ure at a sugar house taken for the purpose by government. It is said to be the intention of ministers to reduce the drawback to what may be supposed to be the fair equivalent of the duties paid on the raw sugar; a measure, of the expediency of which no doubt can be entertained. It has been the practice, in making up returns to parliament, to reduce the refined sugar exported into raw sugar, by allowing 34 cwt. of the latter to 20 of the former. But the export of sugar is thus made to appear greater than it really is: for, though 34 cwt. of raw may be required to produce 20 cwt. of refined sugar, the whole of the molasses and bastards that remain (about 13 cwt.) are consumed at home. We subjoin those clauses of the act 3 & 4 Will. 4. c. 58. which refer to the allowing of a bounty on refined sugar.

Bounties upon the Exportation of Refined Sugar. — So long as the duties which are now payable upon the importation of sugar until the 5th of April, 1834, shall be continued, there shall be allowed upon the exportation of refined sugar made in the United Kingdom the several bounties set forth in the Table herein-after contained; (that is to say,)

Refined sugar, viz. —	*L.*	*s.*	*d.*
Bastard sugar, or refined loaf sugar broken in pieces, or being ground or powdered sugar, or such sugar pounded, crashed, or broken, exported in a British ship, for every cwt. -	1	4	0
exported in a ship not British, for every cwt. -	1	3	0
Other refined sugar in loaf, complete and whole, or lumps duly refined, having been perfectly clarified and thoroughly dried in the stove, and being of a uniform whiteness throughout, or such sugar pounded, crashed, or broken, and sugar candy, exported in a British ship, for every cwt. -	1	16	10
exported in a ship not British, for every cwt. -	1	15	8
Double refined sugar, and sugar equal in quality to double refined sugar, additional bounty for every cwt. - - - - -	0	6	4

— § 2.

Bond to be given for the due Exportation. — The exporter of goods in respect of which any bounty is claimed under this act, or the person in whose name the same are entered outwards, shall, at the time of entry and before cocket be granted, give security by bond in double the value of the goods, with 1 sufficient surety, that the same shall be duly exported to the place for which they are entered, or be otherwise accounted for to the satisfaction of the commissioners of customs, and shall not be relanded in the United Kingdom, or landed in the Isle of Man, unless expressly entered to be exported thereto. — § 3.

Candy in Packages of ½ Cwt. — No bounty shall be given upon the exportation of any refined sugar called candy, unless it be properly refined and manufactured, and free from dirt and scum, and packed in packages, each of which shall contain ½ a cwt. of such candy at the least. — § 4.

Sugar crashed for Exportation. — If any sugar in lumps or loaves is to be pounded, crashed, or broken before the same be exported, for the bounty payable thereon, such lumps or loaves shall, after due entry thereof, be lodged in some warehouse provided by the exporter, and approved by the commissioners of the customs for such purpose, to be then first examined by the officers of customs while in such lumps or loaves, as if for immediate shipment, and afterwards to be there pounded, crashed, or broken, and packed for exportation, in the presence of such officers and at the expense of the exporter; and such sugar shall be kept in such warehouse, and be removed thence for shipment, and be shipped under the care and in the charge of the searchers, that the shipment and exportation thereof may be duly certified by them upon the debenture, according to the quality ascertained by them of the same while in such lumps or loaves. — § 5.

Different Sorts of crashed Sugar to be kept separate. — The different sorts of such sugar shall be kept apart from each other in such manner and in such distinct rooms or divisions of such warehouse as shall be directed and appointed by the commissioners of the customs; and if any sort of such sugar shall be found in any part of such warehouse appointed for the keeping of sugar of a sort superior in quality thereto, the same shall be forfeited; and if any sort of such sugar shall be brought to such warehouse to be pounded, crashed, or broken, which shall be of a quality inferior to the sort of sugar expressed in the entry for the same, such sugar shall be forfeited. — § 6.

Sugar Refiners to provide Sample Loaves of Double Refined Sugar. — There shall be provided by and at the expense of the committee of sugar refiners in London, and by and at the expense of the committee of merchants in Dublin, as many loaves of double refined sugar, prepared in manner herein-after directed, as the commissioners of customs shall think necessary; which loaves, when approved of by the said commissioners, shall be deemed and taken to be standard samples; 1 of which loaves shall be lodged with the said committees respectively, and 1 other with such person or persons as the said commissioners shall direct, for the purpose of comparing therewith double refined sugar, or sugar equal in quality to double refined sugar, entered for exportation for the bounty; and fresh standard samples shall be again furnished by such committees, whenever it may be deemed expedient by the commissioners: provided always, that no loaf of sugar shall be deemed to be a proper sample loaf of double refined sugar, if it be of greater weight than 14 lbs., nor unless it be a loaf complete and whole, nor unless the same shall have been made by a distinct second process of refinement from a quantity of single refined sugar, every part of which had first been perfectly clarified and duly refined, and had been made into loaves or lumps which were of a uniform whiteness throughout, and had been thoroughly dried in the stove. — § 7.

Sugar entered not equal to the Standard shall be forfeited. — In case any sugar which shall be entered in order to obtain the bounty on double refined sugar, or sugar equal in quality to double refined sugar, shall, on examination by the proper officer, be found to be of a quality not equal to such standard sample, all sugar so entered shall be forfeited and may be seized. — § 8.

Refining in Bond. — If any further proof, in addition to what has been stated above, were required to show that the trade of refining in this country has been at all times mainly dependent on the bounty, it would be found in the circumstances that have occurred under the late act authorising refining in bond. In 1828, 1829, 1830, and down to July, 1831, foreign sugars were allowed to be refined on the same terms as British sugars — that is, they paid the same duty and were entitled to the same drawback. The quantity of foreign sugar so refined amounted, in 1830, to 2,105 tons, and in the first half of 1831, when the privilege ceased, to about 4,500 tons. The renewal of this system was strongly advocated in 1831 and 1832; but it was successfully opposed by the West India merchants, who considered the scheme injurious to their interests. Last year (1833), however, the refiners having pressed upon parliament the expediency of allowing them to refine foreign sugars *in bond*, which excluded, of course, the possibility of the revenue losing any thing by the drawback exceeding the duty, their request was complied with. The result, however, has shown that the trade had formerly been mainly artificial, or that it had depended principally on the drawback being above the duty. "Out of 65 houses in London, 4 only have availed themselves of the permission to refine in bond; and of these 4, 2 are now about to give up working; and the total quantity that has been used is 100 tons Siam, 100 tons Havannah, and 470 tons Brazil; in all, but 670 tons. A statement has, also, been recently put forth, which shows that, notwithstanding the aid of a bounty, the export had declined from 611,000 cwt. in 1818, to 344,000 in 1828; and although it has since fluctuated between these quantities, it has amounted during the first 3 quarters of the present year (1833) to 195,271 cwt. only, against 382,479 cwt. in the same period of the last year, and 432,222 cwt. in the previous one, notwithstanding there has been abundance of foreign sugar to be had at low prices, and that all the powers of chemical science have been at work to improve the process of refining."— (*Cook's Commerce of Great Britain for* 1833.)

This unfavourable state of things is owing, no doubt, to a concurrence of causes; but principally, we believe, to the exaggerated opinions entertained by most foreign nations as to the importance of the sugar refining business. We have no wish, certainly, to undervalue it; but every unprejudiced person must admit that, compared with most other businesses carried on in a great country, it is of very inferior consideration. Instead, however, of regarding it in this point of view, most foreign governments seem to look upon it as of the highest value; and have endeavoured to extend the business, not merely by excluding foreign refined sugars from their markets, but by granting the most lavish bounties on the exportation of sugar refined at home. In France, this sort of policy, if we may so call it, was carried so far, that out of a gross revenue of about 40,000,000 francs (1,570,000*l.*) paid into the treasury on account of the sugar duties in 1832, about 19,000,000 (760,000*l.*) were returned as drawback on the export of refined sugar! As the French government could not afford to lose the sugar duties, which would very speedily have been swallowed up by the drawback, necessity has compelled them to modify their system, by making the allowance to the exporter more nearly correspond with the duty. This will, no doubt, diminish the exportation of refined sugar from France; a change by which it is reasonable to suppose our refiners will in some degree be benefited.

Prussia, and most parts of Germany, to which we formerly exported large quantities of refined sugar, no longer admit it except at a high duty. And even in those Continental markets that are still open for its importation under moderate duties, we have formidable competitors in the Dutch and Belgian refiners, whose governments continue to allow pretty high bounties.

On the whole, therefore, we are afraid that the refining business in this country is in a rather precarious state. Improvements in the process seem to be the only source of relief to which the refiners need look with much hope of advantage. The idea of attempting to bolster up the business by the aid of bounties is not one that can be any longer entertained.

We subjoin the act 3 & 4 Will. 4. c. 61., allowing sugar to be refined in bond.

Act 3 & 4 Will. 4. c. 61., for admitting Sugar to be refined for Exportation without Payment of Duty.

Commissioners of Customs may approve Premises for Bonded Sugar Houses. — Upon application to the commissioners of customs of any person actually carrying on the business of a sugar refiner in the ports of London, Liverpool, Bristol, Hull, Greenock, or Glasgow, or any other port approved by any 3 Lords of the Treasury, it shall be lawful for the commissioners of customs to approve of such premises as bonded sugar houses for the refining of sugar for exportation only, on it being made appear to the satisfaction of said commissioners that the said premises are fit in every respect for receiving such sugars, and wherein the same may be safely deposited. — § 1.

Officers of Customs empowered to deliver Sugars Duty-free, to be there refined for Exportation only. — On the approval of any premises as bonded sugar houses, it shall be lawful for the officers of the customs

at the ports where such premises are situated to deliver, without payment of duty, to the party or parties so applying as aforesaid, on entry with the proper officer of customs, any quantity of foreign sugar, or of sugar the produce of any British possession, for the purpose of being there refined, under the locks of the Crown, for exportation only; and all sugars so delivered shall be lodged and secured in such premises, under such conditions, regulations, and restrictions as the said commissioners shall from time to time direct: provided, that it shall be lawful for the commissioners to revoke or alter any order of approval of any such premises. — § 2.

Refiner to give Bond that Sugar received be refined and exported, or delivered into Bonded Warehouse. — Upon the entry of sugar to be refined in any premises approved of under the authority of this act, the refiner on whose premises the same is to be refined shall give bond, to the satisfaction of the officers of the customs, in the penalty of double the amount of the duty payable upon a like quantity of sugar of the British plantations, with a condition that the whole of such sugar shall be actually subjected to the process of refinement upon the said premises, and that within 4 months from the date of such bond the whole of the refined sugar and treacle produced by such process shall be either duly exported from the said premises, or delivered into an approved bonded warehouse, under the locks of the Crown, for the purpose of being eventually exported to foreign parts. — § 3.

Regulations as to Importation, &c. of Sugar. — No allowance is to be made for damage or increase of weight by water, on sugar, without special permission.

Tare on British plantation sugar: —

Under 8 cwt.	-	- 14 per cent.				
8 — and under 12	-	1 cwt. each cask.				
12 —	15	-	1 cwt.	1 qr.	12 lbs.	each cask.
15 —	17	-	1	2	0	—
17 — and upwards	-	1	3	0	—	

Certificates of Growth are required before any sugar can be entered as the produce of a British possession in America, or of the Mauritius; and before it can be entered as the produce of any British possession within the limits of the East India Company's charter. —(See the clauses in the act 3 & 4 Will. 4. c. 52. *antè*, p. 660.)

Beet Root Sugar. — The manufacture of sugar from beet root is carried on a very considerable extent in several parts of the Continent, particularly in France, where the annual produce of the sugar from this source may at present be estimated at about 8,000 tons. This branch of industry began during the exclusion of colonial products from France in the reign of Napoleon. It received a severe check at the return of peace, by the admission of West India sugars at a reasonable duty; and would, it is most probable, have been entirely extinguished, but for the oppressive additions made to the duties on colonial sugars in 1820 and 1822. It is supposed by some, that at no distant period the manufacture of sugar from beet root will be so much improved, that it may be able to stand a competition with colonial sugar at the same duty; but we have no idea that this supposition will ever be realised. It is of importance, however, to bear in mind, that were the culture of beet root sugar to be extensively carried on at home, it would be quite impossible to collect a duty upon it; so that the large amount of revenue that may be advantageously derived from a moderate duty on imported sugar, would be almost entirely lost. — (For an account of the beet root cultivation in France, see the article on the *French Commercial System*, in the *Edinburgh Review*, No. 99.)

We understand that a few small parcels of beet root sugar have recently been produced in this country; and with the present enormous duty on colonial sugar, we are not sure that the manufacture may not succeed. But, as the preservation of the revenue from sugar is of infinitely more importance than the introduction of this spurious business, the foundations of which must entirely rest on the miserable machinery of Custom-house regulations, sound policy would seem to dictate that the precedent established in the case of tobacco should be followed in this instance, and that the beet root sugar manufacture should be abolished. Inasmuch, too, as it is better to check an evil at the outset, than to grapple with it afterwards, we trust that no time may be lost in taking vigorous measures, should there be any appearance of the business extending.

Maple Sugar. — A species of maple (*Acer saccharinum* Lin.) yields a considerable quantity of sugar. It grows plentifully in the United States and in Canada; and in some districts furnishes the inhabitants with most of the sugar they make use of. Though inferior both in grain and strength to that which is produced from the cane, maple sugar granulates better than that of the beet root, or any other vegetable, the cane excepted. It is produced from the sap, which is obtained by perforating the tree in the spring, to the depth of about 2 inches, and setting a vessel for its reception. The quantity afforded varies with the tree and the season. From 2 to 3 gallons may be about the daily average yield of a single tree; but some trees have yielded more than 20 gallons in a day, and others not more than a pint. The process of boiling the juice does not differ materially from what is followed with the cane juice in the West Indies. It is necessary that it should be boiled as soon after it is drawn from the tree as possible. If it be allowed to stand above 24 hours, it is apt to undergo the vinous and acetous fermentation, by which its saccharine quality is destroyed. — (*Bouchette's British America*, vol. i. p. 371.; *Timber Trees and Fruits, Library of Entertaining Knowledge.*)

Prices of Sugar. — The following statement of the prices of sugar in the London market, on the 21st of February, 1834, is taken from the *Circular* of *Messrs. Corrie and Co.* of that date.

Sugar.	Duty paid.	Duties.
Raw, *Per Cwt.*	*L. s. d.*	*L. s. d.*
W. India B. P., brown	2 11 0 to 2 13 0	1 4 0
middling	2 14 0 — 2 18 0	—
good	2 19 0 — 3 0 0	—
fine	3 0 0 — 3 3 0	—
Mauritius, brown	2 9 0 — 2 12 0	—
yellow	2 13 0 — 2 16 0	—
good and fine yellow	2 16 0 — 3 0 0	—
strong grey	2 14 0 — 3 0 0	—
	In bond.	
Bengal, yellow	1 0 0 to 1 3 0	1 12 0
white	1 3 0 — 1 8 0	—
fine white	1 10 0 — 1 12 0	—
China	1 0 0 — 1 6 0	3 3 0
Java	1 2 0 — 1 6 0	—
Manilla	1 1 6 — 1 4 0	—
Siam	1 0 0 — 1 5 6	—
Rio, brown	1 1 0 — 1 2 0	—
yellow	1 2 0 — 1 3 0	—
white	1 3 6 — 1 8 0	—
Pernambuco, brown	1 0 0 — 1 1 0	—

Sugar.	In bond.	Duties.
Raw, *Per Cwt.*	*L. s. d.*	*L. s. d.*
Pernambuco, yellow	1 2 0 to 1 3 0	3 3 0
white	1 4 0 — 1 8 0	—
Bahia, brown	1 1 6 — 1 2 6	—
yellow	1 2 6 — 1 3 6	—
white	1 4 0 — 1 8 0	—
Havannah, brown	1 3 0 — 1 4 0	—
yellow	1 4 0 — 1 6 0	—
white	1 9 0 — 1 11 0	—
fine white	1 12 0 — 1 13 0	—
Porto Rico	1 2 0 — 1 5 0	
	Free.	Bounty
Refined, double loaves	4 8 0 to 5 10 0	in B. ship
Hamburgh (patent)	3 16 0 — 4 2 0	per cwt.
do. (not patent)	3 15 0 — 0 0 0	refined
powder	3 11 0 — 3 12 0	single
single	3 11 0 — 3 12 0	36*s.* 10*d.*,
small lumps	3 7 6 — 3 9 0	double
large do.	3 3 0 — 3 8 0	43*s.* 2*d.*
crushed (on board)	1 8 0 — 1 11 6	bastards
bastards	1 18 0 — 2 12 0	24*s.*

ACCOUNTS OF SALES OF SUGAR. — Subjoined are *pro formâ* accounts of sales of sugar from Jamaica, Brazil, Bengal, Mauritius, &c. These accounts are interesting, inasmuch as they exhibit the various charges affecting this necessary article, from the time it is shipped in the colonies till it finds its way into the hands of the grocer; and our readers may rely on their authenticity. It will be observed, that *the duties are very much greater than the sums received by the planters.*

Pro Formâ Sales of 100 Hogsheads Jamaica Sugar, per "Jean," Captain Yates, by Order and for Account of Thomason & Co.

1834. Feb. 19.

100 hhds. (weighing each 14 cwt.)

Cwt. qrs. lbs.		*Cwt. qrs. lbs.*		*L. s. d.*
1,400 0 0	Average market tare	1 2 0	each	
151 3 4	tare and draft. Draft	0 0 2	—	
1,248 0 24	nett		at 2*l.* 16*s.* per cwt.	3,495 0 0

Charges.	*L. s. d.*	*L. s. d.*	*L. s. d.*
Warehousing entry		0 4 6	
Sea insurance, valuing at 20*l.* per hhd. 50*s.* per cent. on 2,000*l.*	50 0 0		
Policy 5*s.* per cent., 5*l.* Commission ½ per cent., 10*l.*	15 0 0		
		65 0 0	
Insurance from fire, 3 months, at 3*s.* 3*d.* per cent. on 2,000*l.*		3 5 0	
Customs duty on 1,250 cwt. at 24s. per cwt., and entries		1,503 0 0	
Freight on 1,250 cwt., at 4*l.* 10*s.* per ton of 20 cwt.	281 5 0		
Primage at 6*d.* each, 2*l.* 10*s.* Pierage at 4½*d.*, 1*l.* 17*s.* 6*d.*	4 7 6		
		285 12 6	
Consolidated rate on 1,250 cwt. at 8*d.* per cwt. *		41 13 4	
Laying over at 6*d.* each		2 10 0	
Interest on freight, 25 days, 15*s.* 8*d.*; on duty, 70 days, 11*l.* 10*s.* 2*d.*; on charges, 70 days, 6*s.* 4*d.*		12 12 2	
Brokerage ½ per cent.		17 9 6	
Del credere 1 per cent.		34 19 0	
Commission 2½ per cent.		87 7 6	
			2,053 13 6
Errors excepted.	Cash, 3d of May	*L.*	1,441 6 6

London, 25th of February, 1834.

* This charge includes 12 weeks' rent; but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 5*d.* per ton per week. The buyer also has the sugar delivered to him free of expense.

Pro Formâ Sales of 100 Chests Bahia Sugar, per "Mary," Captain Smith, by Order and for Account of William Henry & Co.

1834. Feb. 19.

Average weight of each chest about 16 cwt. gross.
Revenue tares 13 per cent., and draft 2 lbs. per chest, allowed to buyers.

	Cwt. qrs. lbs.	*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*		*L. s. d.*
33 chests white			528 0 0	gross.	
			0 2 4	draft.	
33 do. yellow		528 0 0			
	Cwt. qrs. lbs.	0 2 4	527 1 24		
34 do. brown	528 0 0		61 0 24	tare.	
	0 2 4	527 1 24			
100 chests		61 0 24	466 1 0	nett at 1*l.* 7*s.*	629 8 9
	527 1 24				
	61 0 24	466 1 0 nett		at 1*l.* 4*s.*	559 10 0
	466 1 0 nett			at 1*l.* 1*s.*	489 11 3
					1,678 10 0
			Discount 2½ per cent.		41 19 3
					1,636 10 9

Charges.	*L. s. d.*	*L. s. d.*	*L. s. d.*
Warehousing entry		0 4 6	
Sea insurance on 1,700*l.* at 2*l.* 7*s.* 6*d.* per cent.	40 7 6		
Policy 5*s.* per cent., 4*l.* 5*s.* Commission ½ per cent., 8*l.* 10*s.*	12 15 0		
		53 2 6	
Insurance from fire on 1,700*l.* at 3*s.* 3*d.* per cent.		2 15 6	
Freight on 1,400 cwt. 1 qr. 12 lbs. at 3*l.* 10*s.* per ton of 20 cwt.	245 0 11		
Primage 5*s.* per cent., 12*l.* 5*s.* Pierage at 3½*d.* per ton, 1*l.* 0*s.* 5*d.*	13 5 5		
		258 6 4	
Consolidated rate on 1,400 cwt. 1 qr. 12 lbs. at 7*d.* per cwt. *		40 16 10	
Laying over at 6*d.* each		2 10 0	
Interest on freight, 25 days, 14*s.* 1*d.*; on dock charges, 25 days, 2*s.* 3*d.*		0 16 4	
Advertising and showing for sale, catalogues, use of room, receipt stamps, and petty expenses		2 1 6	
Brokerage 1 per cent.		16 15 8	
Commission 2½ per cent.		41 19 3	
			419 8 5
Errors excepted.	Cash, 22d of March	*L.*	1,217 2 4

London, 25th of February, 1834.

* This charge includes 12 weeks' rent; but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 5*d.* per ton per week. The buyer also has the sugar delivered to him free of expense.

Pro Formâ Sales of 500 Bags Bengal Sugar, per "Pero," Captain Hawk, by Order and for Account of W. S. Warwick.

1834. Feb. 19.

500 bags (weighing each 1 0 21) — Cwt. qr. lbs.

Cwt. qrs. lb.		
593	3	0
31	1	0 tare and draft.
562	2	0 nett

Revenue tare 6 lbs. each. Draft 1 lb. each.

at 1*l.* 9*s.* per cwt. — L. 815 12 6

Charges.	L.	s.	d.	L.	s.	d.
Warehousing entry				0	4	6
Sea insurance on 800*l.* at 2*l.* 15*s.* per cent.	22	0	0			
Policy 5*s.* per cent., 2*l.* Commission ½ per cent., 4*l.*	6	0	0			
				28	0	0
Insurance from fire on 800*l.* at 3*s.* 3*d.* per cent.				1	6	0
Freight on 566 cwt. 3 qrs. 24 lbs. at 4*l.* per ton of 20 cwt.				113	8	0
Consolidated rate on 566 cwt. 3 qrs. 24 lbs. at 6*d.* per cwt.*	14	3	6			
Lotting at 1*d.* per cwt. gross	2	9	6			
				16	12	6
Advertising and showing for sale, catalogues, use of room, receipt stamps, and petty expenses				2	1	6
Brokerage ½ per cent.				4	1	7
Commission 2½ per cent.				20	7	11
						186 2 0

Errors excepted. Cash, 24th of May - L. 629 10 6

London, 25th of February, 1834.

* This charge includes 12 weeks' rent; but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 4*d.* per ton per week. The buyer also has the sugar delivered to him free of expense.

Pro Formâ Sales of 2,000 Bags Mauritius Sugar, per "Africa," Captain Reynolds, by Order and for Account of S. R. Waters.

1834. Feb. 19.

2,000 bags (weighing each 1 1 0) — Cwt. qr. lb.

Cwt.	qr.	lbs.	
2,500	0	0	
107	0	16	tare and draft.
2,392	3	12	nett

Revenue tare 5 lbs. each. Draft 1 lb. each.

at 2*l.* 15*s.* per cwt. — L. 6,580 7 0

Charges.	L.	s.	d.	L.	s.	d.
Warehousing entry				0	4	6
Sea insurance on 3,700*l.* at 3*l.* per cent.	111	0	0			
Policy 5*s.* per cent., 9*l.* 5*s.* Commission ½ per cent., 18*l.* 10*s.*	27	15	0			
				138	15	0
Insurance from fire on 3,700*l.* at 3*s.* 3*d.* per cent.				6	0	6
Customs duty on 2,410 cwt. 2 qrs. 24 lbs. at 1*l.* 1*s.* per cwt. and entries				2,895	16	0
Freight on 2,410 cwt. 2 qrs. 24 lbs. at 4*l.* 10*s.* per ton of 20 cwt.	542	8	4			
Primage 5*s.* per cent.	13	11	2			
				555	19	6
Consolidated rate on 2,410 cwt. 2 qrs. 24 lbs. at 6*d.* per cwt.*	60	5	4			
Lotting at 1*d.* per cwt. gross	10	8	4			
				70	13	8
Interest on duty, 70 days, 22*l.* 4*s.* 3*d.*; on freight, 25 days, 1*l.* 10*s.* 5*d.*; on charges, 70 days, 10*s.* 10*d.*				24	5	6
Advertising and showing for sale, catalogues, use of room, receipt stamps, and petty expenses				7	0	0
Brokerage and guarantee 1 per cent.				65	16	0
Commission 2½ per cent.				164	10	2
						3,929 0 10

Errors excepted. Cash, 3d of May - L. 2,651 6 2

London, 25th of February, 1834.

* This charge includes 12 weeks rent, but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 4*d.* per ton per week. The buyer also has the sugar delivered to him free of expense.

Pro Formâ Sales of 500 Chests Havannah Sugar, per "Porcia," Captain Baker, by Order and for Account of Wm. Watkins.

1834. Feb. 19.

250 chests white (weighing each 4½ cwt.) — Cwt. qrs. lbs. 1,062 2 0 — 118 1 6 t. & d. — 944 0 22 nett

250 do. yellow — Cwt. qrs. lbs. 1,062 2 0 — 118 1 6 t. & d. — 944 0 22 nett

Revenue tare 52 lbs. each. Draft 1 lb. each.

at 1*l.* 14*s.* — L. 1,605 2 0

at 1*l.* 5*s.* — 1,180 5 0

2,785 7 0

Discount 2½ per cent. — 69 12 6

2,715 14 6

Charges.	L.	s.	d.	L.	s.	d.
Warehousing entry				0	4	6
Sea insurance on 2,800*l.* at 2*l.* 5*s.* per cent	63	0	0			
Policy 5*s.* per cent., 7*l.* Commission 10*s.* per cent., 14*l.*	21	0	0			
				84	0	0
Insurance from fire on 2,800*l.* at 3*s.* 3*d.* per cent.				4	11	0
Freight on 1,892 cwt. 3 qrs. 12 lbs. at 4*l.* 10*s.* per ton of 20 cwt.	425	18	6			
Primage 5*s.* per cent., 21*l.* 5*s.* 10*d.* Pierage 5½*d.* per ton, 1*l.* 7*s.* 7*d.*	22	13	5			
				448	11	11
Consolidated rate on 1,892 cwt. 3 qrs. 12 lbs. at 6*d.* per cwt.*				47	6	6
Laying over at 6*d.* each				12	10	0
Interest on freight, 25 days, 1*l.* 4*s.* 7*d.*; on dock charges, 25 days, 2*s.* 6*d.*				1	7	1
Auction duty ½ per cent.				15	18	6
Advertising and showing for sale, catalogues, use of room, receipt stamps, and petty expenses				3	1	6
Brokerage 1 per cent.				27	17	0
Commission 2½ per cent.				69	12	6
						715 0 6

Errors excepted. Cash, 22d of March - L. 2,002 14 0

London, 25th of February, 1834.

* This charge includes 12 weeks' rent; but should the importer keep the sugar on hand beyond that period, he would be liable to rent at the rate of 4*d.* per ton per week. The buyer also has the sugar delivered to him free of expense.

N. B. — The freight is charged on the weight, exclusive of the tare, but inclusive of the draft.

SULPHUR, OR BRIMSTONE (Fr. *Soufre*; Ger. *Schwefel*; It. *Zolfo, Solfo*; Sp. *Azufre*; Arab. *Kibreet*), is a crystallised, hard, brittle substance, commonly of a greenish yellow colour, without any smell, and of a weak though perceptible taste; its specific gravity is from 1·9 to 2·1. It burns with a pale blue flame, and emits a great quantity of pungent suffocating vapours. In some parts of Italy and Sicily it is dug up in a state of comparative purity. That which is manufactured in this country is obtained by the roasting of pyrites. It is denominated *rough* or *roll sulphur*, from its being cast in cylindrical moulds, and contains 7 per cent. of orpiment. The Italian roll sulphur does not contain more than 3 per cent. of a simple earth; and is, therefore, in higher estimation than the English. When roll sulphur is purified, it receives the name of *sublimed sulphur*, and is in the form of a bright yellow powder. — (*Thomson's Chemistry, &c.*)

Sulphur is of great importance in the arts. It is used extensively in the manufacture of gunpowder, and in the formation of sulphuric acid, or oil of vitriol. It is also used extensively in medicine, and for other purposes. The entries for home consumption in 1831 and 1832 amounted, at an average, to 312,698 cwt. a year. The duty on refined brimstone varies from 6*s.* to 9*s.* 9*d.* a cwt.; so that the imports consist almost wholly of rough, or what is called roll brimstone. Of 289,421 cwt. imported in 1831, 264,944 cwt. came from Italy, or rather Sicily. Its price in bond in the London market, in March, 1834, varied from 13*l.* to 20*l.* a ton.

SYDNEY, the capital of New South Wales, and of the British settlements in New Holland, or Australia, in lat. 33° 55′ S., lon. 150° 10′ E. Population about 14,000. Sydney is situated on a cove on the south side of Port Jackson, about 7 miles from its mouth. The water is of sufficient depth to allow the largest ships to come close to the shore. The inlet or harbour, denominated Port Jackson, is one of the finest natural basins in the world. It stretches about 15 miles into the country, and has numerous creeks and bays; the anchorage is every where excellent, and ships are protected from every wind. The entrance to this noble bay is between 2 gigantic cliffs not quite 2 miles apart. On the most southerly, in lat. 33° 51′ 30″ S., lon. 151° 16′ 30″ E., there is a light-house, the lantern of which is elevated 67 feet above the ground, and about 345 above the sea. Owing to a want of attention at first, the streets of Sydney were laid out, and the houses built, according to the views of individuals, without any fixed or regular plan. But latterly this defect has been to a considerable degree remedied in the old streets; and the new ones are systematically laid out. The town covers a great extent of land; almost every house having a considerable piece of ground attached to it. There are different banks at Sydney; some of which are joint stock associations, and others private copartneries. There is also a Savings' Bank. Schools for the instruction of poor children have been established; and there are, besides two establishments, dignified with the pompous title of colleges, numerous seminaries, some of them said to be very well conducted, for the education of the middle and upper classes. There are several periodical publications.

Population, &c. — The British settlements in New South Wales were originally intended to serve as penal establishments to which convicts might be transported, and employed in public and private works; and are still used for this purpose. The first vessel with convicts arrived at Botany Bay in January, 1788; but it having been found to be quite unsuitable as a site for a colony, the establishment was removed to Port Jackson. The progress of the colony has been much more rapid than might have been anticipated, considering the character and habits of the convicts annually landed upon its shores, and the difficulties which the great distance from England interpose in the way of an emigration of voluntary settlers. Owing to the circumstance of the great majority of the convicts and other emigrants being males, a great disproportion has always existed between the sexes in the colony, which has materially retarded its progress, and been, in other respects, productive of very pernicious results. Government, however, recently agreed to pay a sum of 8*l.* each, on their arrival in the colony, to every well-behaved unmarried young woman, between the ages of 18 and 30, not exceeding 1,200 in all, who might emigrate either to New South Wales or Van Diemen's Land; and some have been sent out by private associations. In 1828, the date of the last census, the entire population of the colony, exclusive of aborigines, was 36,598, distributed as follows: —

Free emigrants	males	2,846	4,673	13,400
	females	1,827		
Born in the colony	males	4,473	8,727	
	females	4,254		
Convicts become free by servitude	males	5,302	6,644	7,530
	females	1,342		
Convicts pardoned	males	850	886	
	females	51		
Convicts	males	14,155	-	15,668
	females	1,513		
Total				36,598

But there is some uncertainty as to these returns. At present, the population of the colony may safely be taken at above 50,000.

Climate. — The climate of such parts of New South Wales as have been explored by the English is particularly mild and salubrious. The high summer heat indicated by the thermometer has not the relaxing and enfeebling effect that a similar high temperature has in India and many other countries. Fearless of damps, and unmolested by noxious insects, the traveller may throw himself under the shade of the first tree that invites him, and sleep in safety. On the other hand, however, the climate has the serious defect of being too dry. It seems to be subject to the periodical recurrence of severe droughts. These prevail sometimes for 2, 3, or even 4 years together. The last "great drought" began in 1826, and it did not terminate till 1829! Very little rain fell during the whole of this lengthened period, and for more than 6 months there was not a single shower! In consequence, the whole surface of the ground was so parched and withered, that all minor vegetation ceased; and even culinary vegetables were raised with much difficulty. It well nigh ruined many of the settlers; nor is the colony as yet quite recovered from its effects. — (*Breton's Excursions in New South Wales*, p. 296.; *Sturt's Southern Australia*, vol. i. p. 2.) This is, in fact, the great drawback upon the colony; and were it more populous, there is reason to think it would expose it to still more serious difficulties.

Soil, Products, &c. — The fertility of the soil in most parts of New Holland that have been explored with any care, is very far, indeed, from corresponding with the glowing descriptions of some of its casual visiters, whose imaginations seem to have been dazzled by the magnificence of its botanical productions, and the clearness and beauty of the climate. The truth is, that the bad land seems to bear a much greater proportion to the good in New Holland, than in almost any other country with which we are acquainted. Different theories have been framed to account for the fact; but of the fact itself there seems no manner of doubt. Of course, it is not to be supposed but that in a country of such vast extent there are many fertile districts; but along the east coast, with which we are best acquainted, these seem to be much more confined than might have been expected; and the little experience we have had on the west side, at Swan River and other places, seems to lead to still more unfavourable conclusions. Only a comparatively small part of the interior has as yet been explored. On the whole, however, the fair inference seems to be, not only that New South Wales, but that New Holland generally, is much better fitted for becoming a pastoral than an agricultural country. Sheep succeed remarkably well; and notwithstanding the colony continues to derive part of her supplies of corn from Van Diemen's Land and other places, she has already a very large export of wool; and from the great and growing attention paid to the improvement of the breed of sheep, their rapid multiplication, and the extraordinary increase in the quantity of wool exported, there seems little doubt but that, at no distant period, New South Wales will be one of the principal wool-growing countries in the world. In 1822, the exports of wool amounted to only 152,880 lbs.; in 1825, they had increased to 411,600 lbs.; in 1828, they were 834,343 lbs.; and in 1832, 1,336,000 lbs.!

The following statements show the progress of cultivation in the colony, from 1819 to 1828: —

The Stock was

In 1819.		In 1828.	
Horses	3,572	Horses	12,479
Horned cattle	42,789	Horned cattle	262,868
Sheep	75,369	Sheep	536,391

The Number of *Acres* held was

In 1819	337,114	In 1828	2,906,346
Of which were cultivated	47,973	Of which were cleared	231,573
		And cultivated	71,523

Imports and Exports. — The total value of the imports from all places into Sydney in 1832, excluding those from the Whale Fishery and New Zealand, which are almost entirely the produce of the industry of the colonists, was estimated at 510,733*l.*; of which the imports from Great Britain amounted to 424,489*l.* Of the latter, the principal articles were — cottons, 1,319,000 yards, value 48,266*l.*; apparel and slops, 32,955*l.*; casks and staves, 18,592*l.*; hardware and ironmongery, 28,375*l.*; haberdashery, 27,505*l.*; hats, caps, bonnets, &c., 14,022*l.*; spirits, about 340,000 gallons, value 38,547*l.*; stationery and books, 10,797*l.*; woollens, 19,629*l.*; wines, 10,213*l.*; &c. The principal foreign and colonial imports were sugar and wheat.

The estimated value of the exports during the same year was 371,174*l.* Of these, the principal articles of native produce were — wool, 1,336,414 lbs., value 73,944*l.*; hides, 10,309*l.*; spermaceti oil, 2,221 tuns 190 gals., value 112,027*l.*; black whale oil, 944 tuns, value 21,227*l.*; salt provisions, 18,001*l.*, &c. Exclusive of these, there were re-exported of British produce and manufactures, 53,762*l.*; and of the produce of British and foreign colonial settlements, 23,816*l.* We have thus —

Total amount of imports	£ 510,733
— of exports	371,174
Balance of imports	£ 139,559

But from this we have to deduct 115,629*l.*, being the amount of the bills drawn by the insular commissariat on the government at home for the maintenance of the military and convict establishments, leaving an apparent balance against the island of 23,940*l.* It should be observed, that in these statements no account is taken of the precious metals imported or exported. — (*New South Wales Calendar and Directory for* 1833, pp. 305—312.)

In 1832, 186 ships, of the burden of about 40,000 tons, entered Port Jackson. During the same year, 38 ships, of 12,231 tons burden, entered British ports inwards from New South Wales, Van Diemen's Land, and Swan River; and 89 ships, of 30,494 tons burden, cleared outwards for the same.

Whale Fishery. — The statements given above show the great importance of the whale fishery to New South Wales. The *Physeter macrocephalus*, or black-headed spermaceti whale, being particularly abundant in the Southern Ocean, the situation of Sydney gives its whale ships advantages for the prosecution of the fishery that are not enjoyed by those either of England or America. The latter have a long voyage to make before they reach the fishing stations; whereas those belonging to New South Wales reach them without loss of time, and return home with equal facility for fresh supplies, or to repair any damage they may happen to meet with. No wonder, therefore, that the colonists should have eagerly embarked in this field of enterprise. They have prosecuted it with much success, and have now many valuable ships engaged in it.

The trade carried on between New South Wales and New Zealand is daily becoming of more and more importance. The imports of flax from the latter into this country are now, as we have already seen, of considerable value and importance.

Income and Expenditure. — We subjoin an account of the revenue of New South Wales for the 6 years ending with 1831, and for part of 1832.

Revenue of New South Wales, from the 1st of January, 1826, to the 31st of October, 1832.

Head of Revenue.	1826.	1827.	1828.	1829.	1830.	1831.	From 1st Jan. to 31st Oct. 1832.
	L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
Customs - -	49,353 13 6½	52,822 19 7½	69,677 16 6	79,136 8 8	81,078 15 1	89,805 4 1	75,486 8 1
Duty on spirits distilled in the colony	1,890 15 4½	2,211 18 1	700 2 7	288 15 0	710 7 6	1,135 0 0	867 2 6
Post-office collections - - -	- - -	- - -	598 2 4½	1,324 15 7	1,753 14 9½	2,153 0 2	2,105 16 9
Auction duty, and licences to auctioneers - - -	576 7 1½	682 18 11½	1,363 10 7½	1,276 7 1½	1,463 18 3¾	1,399 7 4½	1,201 9 7½
Licences to retail malt and spirituous liquors - - -	3,063 4 9	4,025 0 0	4,425 0 0	3,725 0 0	5,100 0 0	6,550 0 0	7,760 0 0
Crown lands - -	2,742 8 6	3,814 13 6½	5,437 5 3½	3,309 10 0	1,985 19 11½	5,017 17 5	11,181 9 9
Rents of tolls, ferries, and markets, and government premises - - -	3,231 19 4½	2,404 0 7½	3,689 18 3½	3,221 12 9¾	4,138 0 7	4,806 18 6	3,013 14 0
Fees of public offices	2,713 9 9½	1,902 6 5	3,685 15 1½	6,525 9 9½	6,461 19 4	7,055 13 1½	5,021 9 4
Fines levied by courts of justice -	809 14 8¾	371 0 2½	685 9 1½	786 12 6	758 8 1	730 15 5½	69 19 6
Proceeds of the sale of government property - - -	6,178 0 4	10,056 6 6½	3,766 18 3	2,221 14 5	501 6 1¾	1,639 16 3½	2,835 5 11¾
Miscellaneous - -	1,661 5 1¾	1,018 9 8½	7,762 9 2¾	968 10 3	776 14 3¾	2,172 2 6	622 0 0
Totals - *L.*	72,220 18 8½	79,509 13 8½	94,862 7 4½	102,784 16 2	104,729 4 1½	121,065 14 11	110,467 15 6

According to the *Papers published by the Board of Trade* (vol. i. p. 250.), the total expenditure of the colony in 1830 amounted to 242,891*l.*, of which 80,174*l.* were civil expenses; and the remainder, being 162,717*l.*, were the charges incurred by the colony for the convict and military establishments; and which has, of course, to be defrayed by the mother country. In fact, were it not for the heavy expenses necessarily incurred on account of the conveyance and superintendence of convicts, the revenue of the colony would be adequate to meet the outgoings.

Monies, Weights, and Measures. — Accounts are kept in sterling money; but Spanish dollars are most abundant. They pass current at 5*s.* each. The weights and measures are the same as those of England.

Rates of Agency, Commission, and Warehouse Rent, agreed to at a Meeting of the New South Wales Chamber of Commerce, 1828.

Commission.

1. On all sales or purchases of ships and other vessels, houses, or lands, where no advance on them has been made, 2½ per cent.
   On all other sales, purchases, or shipments, 5 per cent.
   On goods consigned and afterwards withdrawn, or sent to public auction, if no advance on them has been made, 2½ per cent.
2. On giving orders for the provision of goods, 2½ per cent.
3. On guaranteeing sales, bills, bonds, or other engagements, 2½ per cent.
4. On the management of estates for others, 5 per cent.
5. On procuring freight or charter, and on freight collected, 5 per cent.
6. On insurances effected, ½ per cent.
7. On settling losses, partial or general, 1 per cent.
8. On effecting remittances, or purchasing, selling, or negotiating bills of exchange, 1 per cent.
9. On the recovery of money, 2½ per cent. If by law or arbitration, 5 per cent.
10. On collecting house rent, 5 per cent.
11. On attending the delivery of contract goods, 2 per cent.
12. On becoming security for contracts, 5 per cent.
13. On ships' disbursements, 5 per cent.
14. On obtaining money on respondentia, 2 per cent.
15. On letters of credit granted, 2½ per cent.
16. On purchasing, selling, receiving from any of the public offices, lodging in ditto, delivering up or exchanging government paper or other public securities, ½ per cent.
17. On all items on the debit or credit side of an account, on which a commission of 5 per cent. has not been previously charged in the same account, including government paper, 1 per cent.
18. On entering and clearing ships at the Custom-house, each, 1 guinea.
19. On the dishonour of foreign bills, exclusive of protest and other law expenses a re-exchange of 25 per cent.

Warehouse Rent.

On all measurement goods, 1*s.* per ton of 40 cubic feet, per week.
On liquids, 1*s.* 3*d.* per tun of 252 gallons (old measure) per week.
On sugar, rice, salt, and similar articles, 6*d.* per ton per week.
On grain, 4*d.* per bushel for first month, and ½*d.* per bushel per month afterwards.
On iron, lead, &c. 4*d.* per ton per week.

Duties levied at Sydney under Acts of Parliament.

Acts of Parliament under which levied.	Articles upon which levied.	Present Duties levied.	Acts of Parliament under which levied.	Articles upon which levied.	Present Duties levied.
59 Geo. 3. c. 114. s. 3.; and 4 Geo. 4. c. 96. s. 28.	Spirits made or distilled from grain the produce of the colony or its dependencies.	2*s.* 6*d.* per gallon.		jesty's plantations in the West Indies, imported directly from the United Kingdom.	
Id. - - -	Ditto ditto ditto, from sugar and molasses.	8*s.* 6*d.* per do.	3 Geo. 4. c. 96.	All other spirits -	8*s.* 6*d.* per do.
3 Geo. 4. c. 96. -	Spirits, the produce and manufacture of the United Kingdom, or his Ma-	6*s.* 6*d.* per gall.	Id. - - -	Tobacco imported unmanufactured.	1*s.* 6*d.* per lb.
			Id. - - -	Ditto ditto manufactured, and snuff.	2*s.* 0*d.* per do.
			Id. - - -	Foreign goods imported.	5 per cent. *ad val.*

Shipping Charges in Port Jackson, &c.

Pilotage Rates, payable to licensed pilots on ships and vessels from and to a distance of 2 leagues out to sea, into and out of any port or harbour in New South Wales, for which a pilot shall be appointed; vessels registered in Sydney, not exceeding 50 tons, or while employed in the coasting trade from one port of New South Wales to another, and steam vessels while so employed, excepted, unless the assistance of a pilot be required and received.

For every vessel drawing	*L.*	*s.*	*d.*
7 feet or under - -	4	0	0
8 — and under 9 feet -	4	5	0
9 — — 10 — -	4	10	0
10 — — 11 — -	5	0	0
11 — — 12 — -	5	10	0
12 — — 13 — -	6	0	0

For every vessel drawing	*L.*	*s.*	*d.*
13 feet and under 14 feet -	6	10	0
14 — — 15 — -	7	0	0
15 — — 16 — -	7	10	0
16 — — 17 — -	8	0	0
17 — — 18 — -	8	10	0
18 — — 19 — -	9	0	0

For every vessel drawing	*L.*	*s.*	*d.*
19 feet and under 20 feet -	9	10	0
20 — — 21 — -	10	0	0
21 — — 22 — -	11	0	0
22 — — 23 — -	12	0	0

And so on, 1*l.* for every additional foot.

Harbour Dues and Charges, payable to the harbour master, repairing on board and appointing the place of anchorage ships and vessels entering any port or harbour in New South Wales; or for the removal of the same from one place of anchorage or mooring to another, not being for the purpose of leaving the port; vessels registered in Sydney, under 50 tons, or while employed in the coasting trade from one port of New South Wales to another, excepted.

For every vessel under	*L.*	*s.*	*d.*
100 tons - - -	0	5	0
100 — and under 200 tons	0	10	0

For every vessel of	*L.*	*s.*	*d.*
200 tons and under 300 tons	0	15	0
300 — — 400 — -	1	0	0

For every vessel of	*L.*	*s.*	*d.*
400 tons and under 500 tons -	1	5	0
500 — and upwards - -	1	10	0

Customs Charges, payable to the collector or other officer of customs, for the entry inwards, or clearance outwards, of ships and vessels at any port or harbour of New South Wales, where an officer of customs is stationed; vessels under 50 tons, registered in Sydney, excepted; viz.

	Entry. *L.*	*s.*	*d.*	*Clearance.* *L.*	*s.*	*d.*
For every steam vessel employed in the coasting trade, from one port of New South Wales to another - - -	0	1	3	0	1	3
For every vessel registered in Sydney, and so employed, if above 50 and not exceeding 100 tons - - - -	0	4	0	0	4	0
For every vessel so employed, if above 100 tons - - - - -	0	10	0	0	10	0
For every other ship or vessel - -	0	15	0	0	15	0

Light-house Dues, payable to the collector of customs, Sydney, on ships and vessels above 50 tons, arriving at Port Jackson, towards the maintenance of the light-house at the entrance thereof; viz.

	L.	*s.*	*d.*
On every ship or vessel above 50 and not exceeding 100 tons, employed in the coasting trade from one port of New South Wales to another - - -	0	2	0
On every steam vessel, the ton register measurement	0	0	0½
On every other ship or vessel, the ton register measurement - - - - -	0	0	2

Wharfage Rates, payable to the collector of customs, on articles landed at the King's Wharf, Sydney:—

For every	*L.*	*s.*	*d.*
Tun or butt - - -	0	2	0
Pipe or puncheon - - -	0	1	0
Hogshead - - -	0	0	9
Barrel - - -	0	0	6
Cask or keg of smaller size -	0	0	3
Crate, cask, or case of hardware, earthenware, or ironmongery - - - -	0	0	9
Bale, case, or box, not exceeding ½ ton measurement -	0	0	6
Ditto, exceeding ½ ton - -	0	1	0
Chest of tea - -	0	0	3
½ chest or box of tea - -	0	0	1½
Bag of sugar - - -	0	0	1½
Bag of coffee - - -	0	0	1½
Package of rice - - -	0	0	1½
Basket of tobacco - -	0	0	3
Bag of hops - - -	0	1	0
Pocket of hops - - -	0	0	6
Bushel of grain - - -	0	0	1
Dozen of oars - - -	0	0	2
100 deals - - - - -	0	2	6
100 staves - - -	0	1	0
Dozen of spades and shovels	0	0	1
Ton of iron, steel, lead, or other metal, including shot	0	2	6
Ton of salt - - -	0	1	6
Ton of flax - - - -	0	1	0
Ton of cordage - -	0	2	6
Ton of potatoes - - -	0	1	6
Bottle of paint, oil, or turpentine - - - - -	0	0	2
Millstone - - - -	0	2	0
Four-wheeled carriage -	0	5	0
Two-wheeled carriage - -	0	3	0
Small package, not otherwise enumerated - - -	0	0	3
Ton of heavy goods, not otherwise enumerated - -	0	2	6

Postage of Single Letters from Sydney.

	d.
To Paramatta - - -	4
Emu Plains (Penrith) - - -	8
Windsor - - - -	8
Liverpool - - - - -	6
Campbell Town - - -	8
Newcastle - - - -	4
Port Macquarie - - -	4
Bathurst - - - - -	12

And at corresponding rates from other places.

Double and treble letters to be charged proportionably to the aforesaid rates. Letters the weight of an ounce to be charged 4 times the rate of postage of a single letter.

Newspapers printed in New South Wales or Van Diemen's Land, 1*d.* each.

Letters from and to New South Wales and Van Diemen's Land to pay a sea postage of 3*d.*, and all other *Ship Letters* a sea postage of 4*d.* in addition to the inland postage payable thereon.

Parcels of Newspapers, printed Prices Current, or other periodical Publications, exported or imported, to be charged a sea postage at the rate of 1*d.* for every 4 ounces of their weight.

Auction Duty.

For each and every 100*l.* arising from the sale by auction of any estate, goods, or effects whatsoever, 1*l.* 10*s.*

Licences.

	L.	*s.*
Auctioneers, annually - -	2	0
Beer and spirits, to retail, do. -	25	0
Distilling, do. - - -	25	0
Hawkers, do. - - -	20	0
Carts - - - -	0	5

Emigration to New South Wales, Rate of Wages, &c. — Were it not for the heavy expenses attending emigration to so distant a country as New South Wales, the advantages it holds out to the industrious emigrant are considerable. Labour is in great demand, the rate of wages high, provisions moderately cheap, and the climate mild and not unsuitable to European constitutions. The great drawbacks are the general inferiority of the soil, the want of water, and the immense distance from Europe. The commissioners for facilitating emigration (that is, for contracting with individuals or parishes willing to defray the expense of removing voluntary emigrants to the colonies), issued the following

Information with respect to the Australian Colonies.

Price of Passage. — The commissioners for emigration have reason to expect, from the result of the inquiries which they have made on this subject, that passages can be provided for people of the working classes, including their maintenance during the voyage, at a charge not exceeding 16*l.* for adults, and 8*l.* for children. More exact particulars, and the precise charge for which passages can be provided, will be stated at the time of entering into the agreements with such persons as may apply to the commissioners for that purpose.

Probability of Employment, and Rates of Wages. — The commissioners have examined a considerable number of letters upon these subjects from respectable inhabitants of New South Wales and Van Diemen's Land; and they find that all concur in representing the existence of a great demand for labour. These representations are further confirmed by official reports received from those colonies by the secretary of state.

The following general statements, collected from a variety of sources, will afford a view of the average rates of wages in the Australian colonies: —

Twenty-five or thirty pounds a year, besides board and lodging, seem to be the wages which are usually paid to common labourers: artisans of very ordinary qualifications are reported to find no difficulty in obtaining 50*l.* a year, besides board and lodging. The following advertisement, which appeared in the Sydney Gazette of the 12th of August, 1830, contains a list of several descriptions of workmen wanted at Sydney, as well as an account of the high wages which some of them might obtain: —

Wanted, in Sydney, New South Wales, the following Tradesmen and Mechanics: —

Bread and biscuit bakers.
Butchers.
*Boat builders.
*Brick makers.
*—— layers.
Bellows makers.
*Blacksmiths.
Bell hangers.
Brass founders.
Brewers.
Boatmen.
*Collar makers.
Confectioners.
Chair makers.
*Curriers.
*Carpenters.
*Caulkers.
*Coopers.
Cart makers.
Coach makers.
Compositors.
Candle makers.
Cabinet makers.
Cheese makers.
Coach spring makers.
Cooks.
Colliers.
*Coppersmiths.
Cutlers.
Dyers.
Dairywomen.
Distillers.
*Engineers.
Farriers.
Flax dressers.
Fencers.
Fellmongers.
Gardeners.
Glaziers.
Glass blowers.
Glue makers.
Gilders.
Gunsmiths.
Hairdressers.
Hat makers.
—— finishers.
*Harness makers.
Horse breakers.
Hoop benders.
*Joiners.
Japanners.
Ironmongers.
Iron founders.
Leather dressers.
Lime burners.
Locksmiths.
Millers.
Mealmen.
*Millwrights.
Milliners.
Maltsters.
Mustard makers.
Milkmen.
Nurserymen.
Nailers.
Painters.
Parchment makers.
Pump makers.
Plough makers.
Potters.
Paper makers.
*Plasterers.
Ploughmen.
Provision curers.
Plumbers.
Printers and pressmen.
Quarrymen.
Quill preparers.
Rope makers.
Reapers.
Saddlers.
Shoemakers.
*Sawyers.
Shipwrights.
*Stone masons.
*Stone cutters.
Stone setters.
Stone quarrymen.
Sail makers.
*Slaters and shinglers.
Shepherds.
Sheepshearers.
Soap makers.
Sign painters.
Sailors.
Sail cloth makers.
Sieve makers.
Starch makers.
Straw platters.
Straw hat makers.
Turners.
*Tanners.
Tailors.
Tin plate workers.
Tobacco pipe makers.
Tobacco growers.
Tallow melters.
Vine dressers.
Upholsterers.
Wheelwrights.
Wagon makers.
Wool sorters.
Whalers.
Weavers of blankets and coarse woollen.
Wire drawers.
Wood splitters.

Those marked thus (*) are particularly wanted, and earn 10*s.* a day and upwards, *all the year round*; and engineers and millwrights earn 20*s.* a day.

All articles of provision are very cheap: beef and mutton, 2*d.* per lb. by the joint, and 1*d.* per lb. by the quarter or carcass. Tea (green), 1*s.* 6*d.*; sugar, 3*d.* Indian corn, 1*s.* 6*d.* per bushel, &c. &c.

The agent for New South Wales and Van Diemen's Land, in a letter addressed to the Chairman of the Emigration Committee in the year 1827, since which period the price of labour is understood to have risen, stated the rates of wages as follows: —

	Per Day.		Per Day.
Common labourers - - -	3*s.*	And to mechanics of peculiar qualifications, or agricultural labourers capable of managing a farm in the capacity of bailiffs - - - - -	1*l.*
Common mechanics - - -	7*s.*		
2d rate ditto - - -	8*s.* to 12*s.*		
3d rate ditto - - - -	12*s.* to 15*s.*		

Market Prices at Sydney. — The commissioners have collected from newspapers published in New South Wales, the following accounts of the market prices at Sydney on the 1st day of each month during the year 1830: —

Articles.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	October.	Nov.	Dec.
	L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
Wheat - per bush.	0 6 6	0 8 3	0 5 9	0 8 0	0 9 6	0 7 6	0 7 0	0 6 0	0 6 0	0 5 3	0 4 9	0 5 3
Maize - —	0 5 0	0 3 9	0 3 6	0 4 6	0 3 9	0 4 3	0 2 9	0 1 10	0 1 9	0 1 8	0 1 10	0 2 0
Oats - —	- - -	0 3 6	0 3 6	0 3 6	0 3 6	0 3 6	0 3 6	0 3 6	0 2 4	0 2 8	0 2 9	0 3 6
Barley - —	0 5 0	0 3 6	0 3 6	0 3 6	0 3 6	0 3 6	0 3 6	0 3 6	0 3 0	0 3 0	0 2 6	0 3 6
Potatoes per cwt.	0 8 6	0 4 0	0 5 0	0 5 6	0 10 0	0 7 0	0 7 0	0 6 6	0 10 0	0 13 0	0 11 0	0 9 6
Butter (fresh) per lb.	0 1 9	0 1 3	0 1 0	0 1 0	0 1 0	0 0 9	0 0 9	0 1 0	0 1 6	0 1 9	0 1 2	0 0 9
Do. (salt) —	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	0 0 11	0 0 11	0 0 10	0 0 7
Cheese - —	- -	0 0 9	0 0 9	0 0 9	0 0 10	0 1 1	0 1 1	0 0 11	0 1 0	0 1 0	0 0 11	0 0 9
Eggs - per doz.	0 1 9	0 1 6	0 3 0	0 2 9	0 2 6	0 2 0	0 2 0	0 1 0	0 1 0	0 0 9	0 0 10	0 0 9
Ducks - - -	0 7 0	0 6 0	0 5 0	0 4 9	0 5 0	0 3 6	0 1 3	0 2 3	0 5 0	0 5 6	0 6 0	0 5 0
Fowls - per pair	0 5 0	0 4 0	0 3 9	0 3 6	0 3 6	0 2 0	0 2 0	0 2 0	0 3 0	0 3 0	0 3 6	0 3 3
Geese - —	0 16 0	0 11 3	0 10 0	0 9 0	0 10 0	0 10 0	0 10 0	0 10 6	0 10 6	0 10 6	0 12 0	0 10 0
Turkeys —	1 0 0	0 16 0	0 12 0	0 12 0	0 12 6	0 10 6	0 10 0	0 9 6	0 12 6	0 14 0	0 13 0	0 12 0
Hay per ton	2 10 0 per load	6 10 0	6 0 0	6 0 6	6 0 0	5 10 0	5 10 6	5 9 0	5 8 0	5 17 6	6 0 6	8 0 0
Straw - per load	1 0 0	0 17 0	1 0 0	1 0 0	1 0 0	1 3 0	1 3 0	0 12 6	0 12 6	0 13 0	0 12 6	0 13 6
Bread per 4 lb. loaf	- -	10*d.* to 11*d.*	8*d.* to 9*d.*	7*d.* to 8*d.*	10*d.* to 11*d.*	8*d.* to 9*d.*	8*d.* to 9*d.*	8*d.* to 9*d.*	8*d.* to 9*d.*	7*d.* to 8*d.*	7*d.* to 8*d.*	8*d.*
Meat, per stone.												
Beef - - -	- -	0 1 3	0 1 3	0 1 3	0 1 3	0 1 3	0 1 3	0 1 2	0 1 9	0 2 0	0 1 6	0 2 4
Mutton - -	- -	0 1 5	0 1 5	0 1 5	0 1 5	0 1 5	0 1 5	0 1 4	0 2 4	0 3 0	0 2 6	0 3 4
Pork - - -	- -	0 2 6	0 2 8	0 2 8	0 2 8	0 2 8	0 2 8	0 2 8	0 5 3	0 5 3	0 5 9	0 4 6
Veal - - -	- -	0 3 1	0 2 6	0 2 6	0 2 6	0 2 6	0 2 6	0 2 4	0 4 4	0 4 6	0 5 9	0 4 6
Flour, per 100 lbs.												
Fine - - -	1 2 0	1 6 0	0 17 6	0 17 6	1 7 0	0 6 0	1 0 0	0 18 0	0 17 0	0 15 0	0 13 0	0 13 0
Seconds - -	0 19 0	1 2 0	0 15 0	0 15 0	1 2 0	0 18 1	0 16 8	0 15 0	0 14 0	0 13 0	0 11 0	0 11 0

It is not necessary that emigration to the Australian colonies should be confined to any particular season; and the commissioners for emigration will therefore be ready immediately to afford their assistance to persons desirous of going to New South Wales and Van Diemen's Land. In consequence, however, of the state of the population in the Australian colonies, the commissioners do not propose to take charge of the conveyance of any but married men and their families, or of females belonging to the labouring classes.

The price of the principal articles of provision in the market of Sydney, in January, 1833, were as follows: —

Articles.	Prices.						Articles.	Prices.					
	L.	*s.*	*d.*	*L.*	*s.*	*d.*		*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
Beef, per lb. per quarter	0	0	1½	to 0	0	2	Goose	0	4	0	to 0	6	0
Do. joint, per lb.	0	0	2½	— 0	0	3	Fresh butter, per lb.	0	1	0	— 0	1	3
Veal do.	0	0	3	— 0	0	0	Salt do. do.	0	0	8	— 0	1	0
Mutton, do.	0	0	2½	— 0	0	3	Cheese	0	0	4	— 0	0	8
Do. carcass	0	0	1½	— 0	0	2	Wheat, per bushel	0	3	4	— 0	4	0
Pork, joint	0	0	4½	— 0	0	5	Maize	0	3	6	— 0	4	0
Do. carcass	0	0	2½	— 0	0	3	Barley	0	2	9	— 0	3	0
Couple of fowls	0	1	3	— 0	2	3	Oats	0	2	6	— 0	2	9
Do. of ducks	0	2	6	— 0	4	0	Hay, per ton, from English seed	6	0	0	— 8	0	0
Turkey	0	6	0	— 0	6	6	Do. do. colonial	4	0	0	— 5	0	0

Rations for Convicts. — The weekly rations of the convicts are 12 lbs. of wheat, or 9 lbs. of flour, or 3½ lbs. of maize, and 9 lbs. of wheat, or 7 lbs. of 2d flour; 7 lbs. of beef or mutton, or 4½ lbs. of salt pork; 2 oz. of salt; 2 oz. of soap.

The clothing to which they are entitled consists of 2 frocks or jackets; 3 pair of shoes, of stout and durable leather; 3 shirts; 2 pair of trowsers; 1 hat or cap.

We subjoin, in illustration of the sort of statements put forth to allure immigrants, the following extract from the *Sydney Gazette* of the 22d of May, 1830: —

"Here, then, is a country prepared to our very hands for all the purposes of civilised life. While England is groaning under a population for which she cannot provide bread, here is an unmeasured extent of rich soil, that has lain fallow for ages, and to which the starving thousands of the North are beckoned to repair. The great want of England is employment; the great want of New South Wales is labour. England has more mouths than food; New South Wales has more food than mouths. England would be the gainer by lopping off one of her superfluous millions; New South Wales would be the gainer by their being planted upon her ample plains. In England, the lower orders are perishing for lack of bread; in New South Wales, they are, like Jeshuron, "waxing fat and kicking" amid superabundance. In England, the master is distracted to find work for his men; in New South Wales, he is distracted to find men for his work. In England, the capitalist is glad to make his 3 per cent.; in New South Wales, he looks for 20. In England, capital is a mere drug, — the lender can scarcely find a borrower, the borrower can scarcely repay the lender; in New South Wales, capital is the one thing needful, — it would bring a goodly interest to the lender, and would make the fortune of the borrower.

"Then let the capitalist wend his way hither, and his 1 talent will soon gain 10; and his 10, 20. Let the labouring pauper come hither; and, if he can do nothing but dig, he shall soon be welcome to 23*s.* a week, and shall feast on fat beef and mutton at 1*d.* or 2*d.* a pound! Let the workhouses and jails disgorge their squalid inmates on our shores, and the heart-broken pauper and the abandoned profligate shall be converted into honest, industrious, and jolly-faced yeomen."

This is a striking, but an exceedingly exaggerated, paragraph. Those who emigrate in the expectation of finding an El Dorado in New South Wales, or in any part of Australia with which we are acquainted, will meet with nothing but disappointment. Industry and good conduct are not more necessary to the success of individuals in England than they are to the success of those who emigrate to New Holland. There, as here, man must "eat his bread in the sweat of his brow."

In order to provide a fund for defraying the expenses of emigration to Australia, government has resolved to impose a tax of 1*l.* each upon the convicts assigned to private individuals. Doubts, however, may be entertained as to the policy of any such tax. A duty upon labour is certainly a novel expedient for increasing the prosperity of a colony; though, perhaps, under the peculiar circumstances of the case, it may be justified.

Granting of Land in Australia. — We have previously given (*antè*, p. 359.) a copy of the terms on which lands are henceforth to be granted to emigrants to New South Wales and Van Diemen's Land. They are not very explicit. The colonial secretary's letters to the governor merely tell him that in future all land is to be sold by auction; that the *minimum* or upset price is to be 5*s.* an acre; and that he has a *discretionary power* of fixing a higher minimum price on superior lots, and of declining to sell them till that price be obtained. Even were there nothing to object to the *principle* of this plan, if any thing so very vague deserve that name, we have very little doubt that in its practical operation it will generate every species of abuse. The local government, having the power of limiting the quantity of land to be put up to auction, has it completely in its power to fix its price; for it may either increase the quantity of land so that it shall fetch no more than the upset price, or it may limit it so that it shall fetch any greater sum. Such auctions must in reality be a mere farce; it is not possible that they can be conducted on a fair principle. The price must, in every instance, really depend on the pleasure of the sellers, and not on the competition of the buyers. Supposing the local authorities to be uniformly actuated by the sincerest desire to deal fairly by every one, by what test are they to discover the probable number of offerers at different

periods, the amount of their funds, and the intensity of their desire to purchase? And yet, without knowing all these things, they cannot decide upon the quantity of land to be put up, so as to have any thing like a fair sale. And supposing them to be influenced by the partialities and weaknesses incident to humanity, how easy, when they wish to oblige, will it be for them to increase the number of lots put up, and conversely! To obviate, in some degree at least, the chance of such abuses, the better way would be to get a *large tract* of country divided into lots, and to fix prices on these according to the estimate formed of their various advantages, assigning them in absolute property to the *first applicant* ready to pay down the price, and to conform to the regulations as to occupancy, &c. It is to no purpose to contend that the plan of selling land by auction is adopted in America. What is there in common between the political condition of Australia and the United States? Jobbing, that would be instantly detected and put down in the latter, may attain to the rankest luxuriance in the former. The influence of a government and a public on the spot is altogether different from that of a government and a public many thousand miles distant. It is easy to set a *minimum* price upon land; the real desideratum is the establishment of some certain, fixed, and *fair* principles for fixing its *maximum* price.

We confess, however, that we entertain serious doubts as to the soundness of the principle involved in this plan, even supposing it could be fairly carried into effect; and these doubts have not been in any degree lessened by the extravagant eulogies lavished upon it. It would seem, indeed, to be supposed that all the evils incident to colonisation have resulted from the settlers getting land on too easy terms; and that all that was required for the establishment of a colony on the best possible foundation, was, to sell its land at a high price; in other words, to make it as like an old country as possible! It says little for the public discernment, that opinions of this sort should have obtained much currency. We concede, indeed, that nothing can be more injurious to a colony than the making of large grants of land to individuals who either do not intend to settle upon them, or are unable to clear and bring any considerable portion of them into cultivation. But because such inconveniences have resulted from the injudicious granting of land, it does not, therefore, follow that it should be sold at high prices, or even at any price at all. In making grants of land, regard ought to be always had to the means and the intentions of the grantee; that is, the grant should depend partly on the probable amount of his available capital, and partly on the purposes to which he means to apply it. And it might be properly enough stipulated, that if, at the end of some fixed period, certain improvements were not made, buildings erected, &c., it should revert to the Crown. But the more we reflect upon the subject, the greater are our doubts as to the policy of exacting any price for land, particularly in such a country as New South Wales. Considering the very inferior quality of most of the land in that colony, it seems to us that *5s.* an acre is quite extravagant as a minimum price; and that, instead of being made the lowest point in the scale, it should rather have been made the highest. At all events, if an upset price of *5s.* an acre be not a great deal above the mark in New Holland, it must be a great deal below it in Upper Canada. It would not really be more absurd to set about establishing a uniform rate by which to regulate the sale of land in Essex and the Hebrides, than it is to apply the same scale to all our colonial possessions. If this preposterous scheme do not discourage emigration, it will assuredly turn the tide from our own colonies to the United States. And though it had no such effect, it would still be highly objectionable; inasmuch as it cripples the resources of the colonist at the very moment when they are the most indispensable; and deprives him of funds which he would have laid out better than, it is easy to suppose, they can be laid out by government. The mode of letting land by fine, that is, by the receipt of a large sum of money on the tenant's entry to a farm,—the rent during the currency of the lease being proportionally small,—has been severely censured by all the best agricultural writers; and for the very sufficient reason, that it deprives the tenant of the greater part of his capital, and disables him from undertaking any considerable improvement. And yet we are loudly called upon to do the same thing by the settlers in a new colony,—who, for the most part, emigrate only because they have little or no capital,—that is so justly condemned at home. This precious project has actually been trumpeted forth as a signal discovery that was to be productive of the very greatest utility; and a society has been formed to promote colonisation, on the avowed principle of rendering it much more difficult than it has ever hitherto been for a colonist in the lower walks of life to acquire land and become independent! If slaves could be imported into a colony of this sort, there might be some chance of its succeeding. But while land of the *very best quality* may be had in Illinois for 2 dollars an acre, and even less, we think better of the common sense of our countrymen, than to suppose that they will resort to Australia under the auspices of any company of the sort now alluded to.

In compiling this article we have made use of the *Report of Mr. Bigge on the Agriculture and Trade of New South Wales*, being *Parl. Paper*, No. 136. Sess. 1823;

Report of Commissioners of Inquiry, Parl. Paper, No. 328. Sess. 1831; *Papers laid before the Finance Committee; New South Wales Calendar and Directory for* 1833; and the works of *Messrs. Sturt, Breton*, and others.

SYRA, the ancient Seyros, one of the islands of the Greek Archipelago, in the group called the Northern Cyclades. It is from 7 to 8 miles long, and 4 broad. Though rugged, it is tolerably well cultivated, and produces corn, wine, cotton, olives, figs, &c. The population in 1830 is set down by Mr. Urquhart at 4,500; but we have been assured that it is, at present, little if at all short of 7,000. Pherycides, one of the most celebrated of the ancient Greek philosophers, the disciple of Pittacus, and the master of Pythagoras, was a native of this island.

The port is on the east side of the island, in lat. 37° 26′ 30″ N., lon. 24° 55′ E. It affords excellent anchorage for vessels of light draught, and is capable of accommodating a few even of the largest ships. In consequence, partly of the advantages it enjoys through the possession of its port, but more of its central situation, Syra has recently become a considerable commercial *entrepôt*; and has attracted a good deal of the carrying trade that formerly centered at Smyrna, Constantinople, &c.

A few miles to the east of Syra, lies Delos. This island, regarded in antiquity with peculiar veneration, from its being the birthplace of Apollo and Diana, is no less celebrated in the commercial than in the religious history of ancient Greece. Its sacred character, by insuring its immunity from hostile attacks, and its central situation, made it a favourite mart for the products of the states of Greece, Asia Minor, Phœnicia, Egypt, &c. Religion, pleasure, and trade had all their votaries at its festivals; which were famous throughout the ancient world for the splendour of the rites and processions, and the magnitude of the business transacted. It were too much to expect that Syra should ever attain to equal importance, even as an *entrepôt*. But as she enjoys most of those advantages of position that contributed to render Delos one of the principal emporiums of antiquity, it may be hoped, now that there is a reasonable prospect of good order and freedom being again established in Greece, that she may also acquire some commercial celebrity. It may be worth while mentioning, as strikingly evincing the mutability of human affairs, that, at present, both the great and the little Delos are uninhabited. And Tournefort states, that the inhabitants of Mycone were, in the early part of last century, in the habit of holding the greater Delos for the purposes of pasturage, paying to the Grand Seignior a rent of 20 crowns a year for that famous island! — (*Tournefort, Voyage du Levant*, 4to ed. tome i. pp. 290—325. There is a good account of the religious rites celebrated at Delos, though but a very indifferent one of its commerce, in the *Travels of Anacharsis*.)

T.

TACAMAHAC, a resin obtained from the *Fagara octandra*; and likewise, it is supposed, from the *Populus balsamifera*. It is imported from America in large oblong masses wrapt in flag leaves. It is of a light brown colour, very brittle, and easily melted when heated. When pure, it has an aromatic smell, between that of lavender and musk; and dissolves completely in alcohol; water having no action upon it. — (*Thomson's Chemistry*.)

TAGANROG, a city of European Russia, on the north coast of the Sea of Azof, near the mouth of the river Don, lat. 47° 12′ 40″ N., lon. 38° 39′ E. Population from 7,000 to 8,000. It has a naval hospital, a lazaretto, &c.; and there are annual fairs in May, August, and November. Taganrog is a place of considerable commercial importance. It owes this distinction to its situation, which makes it the emporium of the extensive countries traversed by the Don (the ancient *Tanais*), one of the principal European rivers; and which, there is reason to think, will at no very distant period be connected with the Wolga, and consequently with the Caspian Sea, by the completion of the canal projected by Peter the Great. Civilisation is in a very backward state in these regions; but it is making a constant, though not a very rapid progress; and as it proceeds, Taganrog will necessarily rise in importance. The principal exports are grain, particularly wheat, of which large quantities are sometimes shipped; iron and hardware from Tula; with cordage, linen and sail-cloth, copper, tallow, leather, furs, wax, ashes, caviar, isinglass, &c. The imports are comparatively trifling, and consist principally of wine, oil, fruit, dry-salteries, cotton and woollen goods, dye stuffs, tobacco, sugar, coffee, &c. By far the largest part of the trade is carried on with Constantinople, Smyrna, and other Turkish ports; but a good deal is also carried on with the different Italian ports. We subjoin an

Official Account of the principal Articles imported into and exported from Taganrog, in 1830 and 1832.

Imports.			Exports.		
Articles.	1830.	1832.	Articles.	1830.	1832.
Cochineal - - - poods	- -	3	Copper - - - poods	1,141	3,913
Coffee - - - - —	526	7	Cordage - - - —	19,101	123,245
Cotton goods - - - val. rou.	- -	1,333	Flax - - - - —	27	
Dry-salteries - - - —	- -	66,627	Grain, wheat - - chetws.	437,566	352,041
Fish - - - - —	- -	1,197	rye - - - —	- -	1,050
Fruit - - - - —	- -	1,052,153	oats - - - - —	6,730	183
Lead - - - - poods	322		barley - - - - —	1,592	3,440
Logwood - - - - —	- -	4	Hemp - - - poods	- -	8
Olive oil - - - - —	36,230	33,820	Hides, dressed - - - —	1,456	819
Precious stones - - - val. rou.	- -	900	Iron - - - - —	176,912	205,613
Sugar - - - - poods	2,707	5,993	Leather, dressed - - val. rou.	132	950
Tobacco - - - - —	22	236	undressed - - poods	2,714	9,512
Wine - - - - - hhds.	- -	13,688	Linseed - - - chetws.	4	4,588
Champagne - - bottles	- -	1,187	Oil, hemp and linseed - - poods	164	437
			Potashes - - - - —	139	135
			Tallow - - - - —	1,092	5,165
			Timber, deals, &c. - - val. rou.	90	421
			Sail-cloth - - - pieces	1,541	2,626
			Raven-ducks - - - —	2,097	2,098
			Wax - - - - poods	605	2,295

Total estimated value of imports in 1830, 2,581,153 roubles; ditto of exports, 11,011,616 roubles; so that the exports exceed the imports by the sum of 8,430,463 roubles.

Arrivals and Departures of Ships in 1830 and 1832.

Arrived.	1830.	1832.	Sailed.	1830.	1832.
From	*Ships.*	*Ships.*	To	*Ships.*	*Ships.*
Austria - - - -	5	2	Austria - - - -	1	9
Ionian Islands - - - -	- -	1	France - - - -	2	21
Italian States - - -	7	19	Greece - - - -	3	10
Malta - - - -	- -	1	Ionian Islands - - -	6	6
Russian ports - - -	- -	1	Italian States - - -	85	103
Turkey - - -	400	294	Malta - - - -	3	5
			Russian ports - - -	1	
			Turkey - - -	307	170
Total - - -	412	318	Total - -	408	324

The Turkish vessels are generally of but small burden.

Moneys, Weights, and *Measures,* same as those of PETERSBURGH; which see.

Sea of Azof. — The navigation of this sea, the *Palus Mæotis* of antiquity, is impeded by numerous shoals, and can neither be entered nor safely navigated by vessels drawing more than 11 or 12 feet water. Its greatest depth in the middle is about 7 fathoms; but it shoals gradually to the sides, and at Taganrog there is only from 9 to 10 feet water. Its depth is, however, materially affected by the direction and strength of the winds. The only entrance to this sea is by the Straits of Yenikalé, the *Bosphorus Cimmerius* of the ancients, a narrow and difficult passage, having in some places not more than 13 feet water. Owing to the great quantity of fresh water poured into the Sea of Azof, and its limited magnitude, its water is brackish merely. It is unnavigable from November to April, during the greater part of which time it is generally frozen over. — (*Norie's Sailing Directions for the Mediterranean and Black Seas; Annuaire du Commerce Maritime* for 1833, p. 161. &c.) We avail ourselves of this opportunity to lay before our readers the following details with respect to the

TRADE, ETC. OF THE CASPIAN SEA.

Quantity and Value of the Articles imported from Foreign Ports into the Russian Ports of the Caspian, in 1831.

Articles.	Quantities.	Value.	Articles.	Quantities.	Value.
	Poods.	*Roubles.*		*Poods.*	*Roubles.*
Rice - - - -	- -	26,575	Madder - - - -	16,165	496,532
Fish and caviar - - -	- -	83,681	Dry-salteries - - -	- -	56,304
Fruit - - - -	- -	58,323	Isinglass - - - -	- -	36,711
Tobacco, spices, and sundry provisions - - -	- -	15,399	Cotton goods - - -	- -	946,581
Medicinal drugs - -	- -	6,184	Silk goods - - -	- -	191,344
Raw cotton - - -	13,245	163,368	Woollen goods, shawls, girdles, &c.	- -	27,316
Cotton twist - - -	7,387	226,482	Furs - - - -	- -	74,287
Raw silk - - -	8,903	1,471,790	Sundries - - -	- -	28,621
Twisted silk - - -	94	3,743	Total -		3,913,241

Account of the Quantity and Value of the Articles exported from Russian Ports on the Caspian to Foreign Ports on ditto, in 1831.

Articles.	Quantities.	Value.	Articles.	Quantities.	Value.
		Roubles.			*Roubles.*
Brandies, and other spirits, vedros	3,191	24,737	Hempen and flaxen goods - -	- -	40,025
Salt - - - - poods	45,400	38,900	Cotton goods - - -	- -	789,626
Sugar in loaves and candied —	2,847	70,713	Silk goods - - -	- -	37,779
Tea - - - - —	300	43,011	Woollens - - - -	- -	7,946
Spices, fruit, butter, flour, and other provisions - -	- -	132,569	Russian cloth - - arsheens	11,374	32,601
Drugs and dry-salteries - -	- -	153,664	Writing paper - - -	- -	18,870
Copper - - poods	10,112	210,650	Tallow candles - - poods	2,455	10,910
Iron - - - - —	139,594	348,652	Gold and silver articles - -	- -	33,343
Other metals - - -	- -	48,390	Hardware - - -	- -	120,389
Tanned leather (youfts) - skins	69,703	88,708	Earthenware - - -	- -	39,254
Leather manufactured goods -	- -	48,705	Trunks and canteens - -	- -	50,811
Raw hides - - skins	779	4,140	Looking glasses - - -	- -	7,149
Colouring materials - -	- -	131,432	Wooden ware - - -	- -	5,993
Cotton twist - - poods	150	5,799	Sundry manufactures - -	- -	22,125
Raw silk - - - - —	882	125,694	Furs - - - -	- -	41,825
Feathers, wax, teeth, isinglass, &c.	- -	12,121	Sundries - - - -	- -	1,768
Linens - - -		25,233	Total -		2,771,550

Shipping.—Arrivals at, and Departures from, the Russian Ports of the Caspian, in 1831.

Arrived.				Departed.			
At what Port.	Number of Ships.	Tonnage.	From what Place.	From what Port.	Number of Ships.	Tonnage.	To what Place.
Astrakhan -	15	4,192	From Russian ports	Astrakhan -	34	9,150	To Russian ports
Baku - -	22			Baku - -	34		
Astrakhan -	33	6,918	From Persian ports	Astrakhan -	15	3,544	To Persian ports
Baku - -	93			Baku - -	95		
Astrakhan -	10	1,440	From Mangishlak	Astrakhan -	13	1,756	To Mangishlak
Total -	173	12,550		Total -	191	14,450	

N. B.—Of the vessels here described, only 1 Persian arrived, and 1 ditto departed, of burden unknown.

Magnitude of the Caspian Sea. Ports, &c. — The Caspian Sea, or rather lake (the *Mare Hyrcanum* of the ancients), extends lengthwise from N. to S. about 740 miles, varying in breadth from 112 to 275 miles. In some parts, particularly on the southern shores, it is so very deep that a line of 450 fathoms will not reach the bottom; whereas, in the northern parts, and opposite to the mouths of the Wolga, it is comparatively shallow; and owing to the frequent occurrence of shoals, it is not safely navigated by vessels drawing more than 10 or 12 feet water. Its level had been variously estimated by Olivier and Lowitz, at from 64 to 53 feet below that of the Black Sea; but according to the recent observations of M. Humboldt, the difference of level between them is no less than 300 feet! We confess, however, that we are not without our doubts as to the perfect accuracy of this statement; and would not have been inclined to attach much weight to it had it proceeded from any inferior authority. The water of the Caspian is not salt, but brackish merely; it has no tides, but gales of wind raise a very heavy sea. It is extremely prolific of fish and seals. The value of the sturgeon caught in the Russian fisheries amounts to a very large sum. (See Sturgeon Fishery.) They proceed in shoals up the rivers, where they are captured without the least apparent diminution of their numbers. The salmon is remarkably fine; and herrings are in such abundance, that, after a storm, the shores of the Persian provinces of Ghilan and Mazunderan are nearly covered with them.—(*Kinneir's Memoir of the Persian Empire*, p. 6.; *Memoir on the Caspian Sea, in Malte Brun's Geography; Humboldt, Fragmens de Géologie*, &c.)

Astrakhan is situated on an island of the Wolga, more than 50 miles from the mouth of that river; and owing to the extensive command of internal navigation it possesses, it is a place of very considerable commercial importance. Baku, acquired by the Russians in 1801, is, however, the best port on the western side of the Caspian. It is situated on the southern shore of a peninsula that projects far into the sea, in lat. 40° 22′ N., lon. 51° 10′ E. The harbour is spacious and convenient; and its central and advanced position gives it superior advantages as a trading station. Prodigious quantities of naphtha are procured in the vicinity of Baku. It is drawn from wells, some of which yield from 1,000 to 1,500 lbs. a day. It is used as a substitute for lamp oil; and when ignited emits a clear light, with much smoke and a disagreeable smell. Large quantities are exported in skins to the Persian and Tartar ports on the south and east shores of the sea.

Vessels. — The largest class of vessels by which the Caspian Sea is navigated are called by the Russians *schuyts*, and belong wholly to Astrakhan and Baku; their burden varies from 90 to 150, and, in some instances, 200 tons. They are not built on any scientific principle, and are constructed of the worst materials, that is, of the timber of the barks that bring grain down the Wolga to Astrakhan. There are supposed to be, in all, about 100 sail of these vessels. There is a second class of vessels employed in the trade of the Caspian, called *razchives*. They carry from 70 to 140 tons, and sail better than the schuyts. Their number is estimated at about 50. Exclusive of the above, there are great numbers of small craft employed in the coasting trade, in the rivers, in the fisheries, and in acting as lighters to the schuyts. Steam boats have been introduced upon the Wolga; and one has been launched on the Caspian itself. The masters and crews of the vessels employed on this sea are, for the most part, as ignorant as can well be imagined. They are generally quite incapable of making an observation, or of keeping a reckoning; so that accidents frequently occur, that might be avoided by the most ordinary acquaintance with the principles of navigation. — (These statements are made, partly upon official, and partly upon private authority; the latter may, however, be safely relied on.)

The trade of this great sea is entirely in the hands of the Russians; by whom it is carried on from the ports of Astrakhan and Baku, with the Persian ports of Astrabad, Balfroosh, &c. on the south; and with the Tartar ports of Mangishlak, Balkan, &c. on the east. It is very insignificant, compared with what it ought to be. On the whole, however, a gradual improvement is taking place; and whatever objections may, on other grounds, be made to the encroachments of Russia in this quarter, there can be no manner of doubt that, by introducing comparative security and good order into the countries under her authority, she has materially improved their condition, and accelerated their progress to a more advanced state.

Account of the Value of the Foreign Trade of the Port of Baku, on the Caspian Sea, during the Eight Years ending with 1831.

Articles.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.
Imports.	*Roubles.*	*Roubles.*	*Roubles.*	*Roubles.*	*Roubles.*	*Roubles.*	*Roubles.*	*Roubles.*
Raw silk	257,690	448,057	199,833	915,056	1,019,521	776,742	933,761	776,548
cotton	36,230	10,970	2,860	12,897	118,558	93,820	103,029	48,397
Cotton twist	32,692	26,805	1,390	27,915	139,885	31,478	8,756	7,802
goods	551,677	547,816	534,613	1,299,495	1,754,864	908,673	675,693	530,937
Silk goods	34,632	32,432	36,100	191,383	148,346	123,590	99,369	88,603
Shawls, girdles, and other woollens	2,736	19,696	7,687	11,248	24,205	42,313	62,282	7,210
Drugs, tobacco, fish, fruit, indigo, &c.	104,621	75,061	59,426	297,760	460,858	208,052	117,456	248,963
Total value of imports - Rou.	1,020,278	1,160,837	841,963	2,755,754	3,666,267	2,184,668	2,000,315	1,702,460
Exports.								
Naphtha	500,740	233,707	111,899	274,820	352,865	457,242	(no particulars.)	
Salt	125,560	2,970	970	35,595	47,520	66,170	6,560	38,900
Saffron	508,875	270,960	8,350	298,670	108,037	81,379	(no particulars.)	
Drugs, gold thread, spices, writing paper, furs, &c.	88,078	138,690	108,520	639,204	276,320	442,382	(no particulars.)	
Total value of exports - Rou.	1,223,253	646,317	229,739	1,248,289	783,742	1,047,173	386,527	536,016

TALC, a species of fossil nearly allied to mica. It is soft, smooth, greasy to the feel, and may be split into fine plates or leaves, which are flexible, but not elastic. It has a greenish, whitish, or silver-like lustre. The leaves are transparent, and are used in many parts of India and China, as they were used in ancient Rome — (*Plin. Hist. Nat.* lib. xxxvi. c. 22.) — in windows instead of glass. In Bengal, a seer of talc costs about 2 rupees, and will sometimes yield a dozen panes 12 inches by 9, or 10 by 10, according to the form of the mass, transparent enough to allow ordinary subjects to be seen at 20 or 30 yards' distance. It should be chosen of a beautiful pearl colour; but it has, in general, either a yellowish or faint blue tinge. Its pure translucent flakes are frequently used by the Indians, for ornamenting the baubles employed in their ceremonies. Talc is employed in the composition of *rouge végétal*. The Romans prepared with it a beautiful blue, by combining it with the colouring fluid of particular kinds of testaceous animals. Talc is met with in Aberdeenshire, Perthshire, and Banffshire in Scotland; and in various parts of the Continent, where rocks of serpentine and porphyry occur. The talc brought from the Tyrolese mountains is called in commerce Venetian talc. Several varieties are found in India and Ceylon. — (*Thomson's Chemistry; Rees's Cyclopædia; Milburn's Orient. Com.; Ainslie's Mat. Indica.*)

TALLOW (Fr. *Suif;* Ger. *Talg;* It. *Sevo, Sego;* Rus. *Salo, toplenoe;* Sp. *Sebo*), animal fat melted and separated from the fibrous matter mixed with it. Its quality depends partly on the animal from which it has been prepared; but more, perhaps, on the care taken in its purification. It is firm, brittle, and has a peculiar heavy odour. When pure, it is white, tasteless, and nearly insipid; but the tallow of commerce has usually a yellowish tinge; and is divided, according to the degree of its purity and consistence, into candle and soap tallow.

Tallow is an article of great importance. It is manufactured into candles and soap; and is extensively used in the dressing of leather, and in various processes of the arts. Besides our extensive supplies of native tallow, we annually import a very large quantity, principally from Russia. The exports of tallow from Petersburgh amount, at an average, to between 3,500,000 and 4,000,000 poods, of which the largest portion by far is brought to England; the remainder being exported to Prussia, France, the Hanse Towns, Turkey, &c.

We borrow from the work of Mr. Borrisow, on the Commerce of Petersburgh, the following details with respect to the tallow trade of that city: —

Tallow is divided into different sorts; namely, white and yellow *candle tallow*, and common and Siberian *soap tallow;* although it is allowed that the same sort often differs in quality.

Tallow is brought to Petersburgh from the interior; and the best soap tallow from Siberia, by various rivers, to the lake Ladoga; and thence, by the canal of Schlusselburg, to the Neva.

An *ambare*, or warehouse, is appropriated to the reception of tallow, where, on its arrival, it is selected and assorted (*bracked*). The casks are then marked with three circular stamps, which state the quality of the tallow, the period of selecting, and the name of the selector (*bracker*).

The casks in which white tallow is brought have a singular appearance; their form being conical, and their diameter at one end about 2½ feet, and at the other only 1½ foot: the casks of yellow tallow are of the common shape. There are also others, denominated ½ casks.

To calculate the tare, the tallow is removed from a certain number of casks, which are weighed, and an average tare is thence deduced for the whole lot. A cask weighs 8½, 9, 10, or 11 per cent., but the average is generally about 10 per cent. of the entire weight of tallow and cask.

Yellow candle tallow, when good, should be clean, dry, hard when broken, and of a fine yellow colour throughout. The white candle tallow, when good, is white, brittle, hard, dry, and clean. The best white tallow is brought from Woronesch. As for soap tallow, the more greasy and yellow it is, the better the quality. That from Siberia is the purest, and commonly fetches a higher price than the other sorts.

Formerly the oil and tallow warehouses were the same; and this occasioned great difficulties in shipping, because all vessels or lighters taking in tallow or oil were obliged to haul down to the *ambare*, and wait in rotation for their cargoes. The consequence was, that when much business was doing, a vessel was often detained for several weeks at the *ambare* before she could get her cargo on board. Now the tallow and oil warehouses are separated, and every article has its own place. When a shipment of tallow is made, the agent is furnished by the selector (*bracker*) with a sample from each cask.

Captains, in order to obtain more freight, usually load some casks of tallow upon deck; but it is more for the interest of the owner to avoid this if possible, because the tallow loses, through the heat of the sun, considerably both in weight and quality.

One hundred and twenty poods of tallow, gross weight, make a Petersburgh last, and 63 poods an English ton.

Of 1,177,908 cwt. of tallow imported in 1829, 1,164,180 came from Russia, 6,143 from the United States, 3,799 from Turkey, 1,992 from France, and 1,626 from Sweden.

We subjoin an official account of the export of tallow from Russia in 1832.

Exports of Tallow from Russia in 1832.

From	Poods.	To	Poods.	To	Poods.
Petersburgh	3,717,426	Sweden	11,801	Austria	13,703
Riga	55,016	Prussia	300,852	Turkey	192,006
Archangel	98,990	Denmark	2,521	America	7,744
Odessa	291,172	Elsineur*	11,778	Caspian Sea	53
Taganrog	5,165	Hanse Towns	51,074	Asia	45
Radzivilloff	12,500	Holland	41,038	Georgia	23
Astrakhan	47	Great Britain	5,509,547	Sundry	5,955
Sundry	25,583	France	57,776		
		Spain, Portugal, and Italy	3		
Total	4,205,919			Total	4,205,919

The exports of tallow from Petersburgh, in 1833, amounted to above 4,100,000 poods (see *antè*, p. 898.), being the largest quantity ever shipped in 1 year. The shipments to Great Britain were about 3,600,000 poods. Supposing the tallow to have been worth, when delivered to the shipper, 35*l.* a ton, its total value will have been 2,306,150*l.*! This statement shows the great importance of this trade.

The price of tallow fluctuated very much during the war. This was occasioned, principally, by the obstacles that were at different periods thrown in the way of supplies from Russia. The price of tallow is also affected by the state of the seasons. Some very extensive speculations have at various periods been attempted in tallow; but seldom, it is believed, with much advantage to the parties.

Account of the Price of Tallow in the London Market, in the Month of January each Year, from 1813.

Years.	Yellow Soap.	Petersburgh.	Years.	Yellow Soap.	Petersburgh.
	s. d. to *s. d.*	*s. d.* to *s. d.*		*s. d.* to *s. d.*	*s. d.* to *s. d.*
1813	89 0 to 90 0	80 0 to 0 0	1824	31 0 to 32 0	34 0 to 0 0
1814	98 0 — 100 0	94 0 — 96 0	1825	None.	37 0 — 0 0
1815	89 0 — 0 0	85 0 — 0 0	1826	—	35 0 — 35 3
1816	59 0 — 0 0	55 0 — 0 0	1827	38 6 to 0 0	37 0 — 0 0
1817	54 0 — 54 6	52 0 — 0 0	1828	37 9 — 38 0	37 6 — 0 0
1818	77 0 — 78 0	74 0 — 75 0	1829	39 9 — 0 0	38 6 — 39 0
1819	78 0 — 0 0	74 0 — 0 0	1830	34 0 — 0 0	35 3 — 0 0
1820	55 0 — 56 0	51 0 — 52 0	1831	45 9 — 0 0	45 9 — 0 0
1821	51 6 — 0 0	47 0 — 0 0	1832	46 0 — 0 0	
1822	44 0 — 0 0	39 0 — 0 0	1833	47 6 — 0 0	
1823	37 0 — 37 6	35 0 — 0 0			

The following is a statement of the prices per cwt. of foreign and British tallow in the London market on the 24th of March, 1834: —

	s. d. to *s. d.*
Petersburgh, &c. duty (3*s.* 2*d.*) paid, cwt.	44 0 to 44 3
Delivery first 3 months, 1834	43 6 — 43 9
Free on board, 1833, ton	37*l.* 10*s.* — 37*l.* 15*s.*
Soap, cwt.	41 6 — 0 0
Odessa	0 0 — 0 0
Siberia	42 6 — 0 0
Petersburgh on board, ton	37*l.* 10*s.* — 0 0

	Market Letter. *s. d.* to *s. d.*	Committee. *s. d.*
Town tallow, cwt.	48 0 to 0 0	48 0
Russian candle	45 6 — 0 0	46 0
Melted stuff	31 0 — 0 0	31 2
Rough ditto	21 0 — 0 0	21 0
Whitechapel Market, stone	2 8 — 0 0	0 0
St. James's ditto	3 8 — 0 0	0 0
Average	2 8 — 0 0	2 8

TALLY TRADE, the name given to a system of dealing carried on in London and other large towns, by which shopkeepers furnish certain articles on credit to their customers, the latter agreeing to pay the stipulated price by certain weekly or monthly instalments.

In the metropolis there are about 60 or 70 tally-shops of note; and from 500 to 600 on a smaller scale. They are also spread over the country to a considerable extent, particularly in the manufacturing districts. The customers of the tally-shops are mostly women; consisting, principally, of the wives of labourers, mechanics, porters, &c., servant girls, and females of loose character. Few only of the more respectable classes have been infatuated enough to resort to them. Drapery goods, wearing apparel, coals, household furniture, hardware, &c. are furnished; and even funerals are performed; but few or no articles of food, except tea, are sold upon the tally plan.

We believe that this is the very worst mode in which credit is afforded. The facility which it gives of obtaining an article when wanted, and the notion so apt to be entertained that the weekly or monthly instalments may be paid without difficulty, makes those who resort to the tally-shops overlook the exorbitant price, and usual bad quality, of the articles they obtain from them; and generates habits of improvidence that seldom fail to involve the parties in irretrievable ruin. It is not going too far to say that nine tenths of the articles supplied by tally-shops might be dispensed with. As already observed, women are the principal customers; and it is not easy to exaggerate the mischief that has been entailed on the families of many industrious labourers by their wives having got entangled with tally-shops. They buy goods without the knowledge of their husbands; and these are not unfrequently pawned, and the proceeds spent in

* The ships receive, at Elsineur, orders for their ultimate destination, and most of them are for Great Britain.

gin. So destructive, indeed, is the operation of the system, that the establishment of a tally-shop in any district is almost certain to occasion an increase in the paupers belonging to it. Even the unmarried females who do not pay are demoralised and ruined by the system; because, if a woman who buys 3 gowns, pays for the 2 first, and runs away from the payment of the last, she gains nothing *in point of saving*, while she becomes indifferent to an act of dishonesty. As tally debts can only be collected whilst a supply of goods is kept up, as soon as that supply is stopped, the debtor either flies to another district, or awaits a summons. Where the wife has contracted the debt, she usually appears before the commissioners, who in general order the debt to be paid by weekly or monthly instalments. But it often occurs, from the wife not being able to keep up such payments, that execution issues, and the poor husband is frequently arrested and lodged in prison for a debt, of the existence of which he was entirely ignorant. In this way, numbers of the working classes are completely ruined; they lose their employment, and themselves and families are reduced to beggary. The intelligent keeper of Whitecross-street prison (Mr. Barrett) states, that from 150 to 200 persons are annually imprisoned there for tally-shop debts, in sums of from 10*s.* to 5*l.*, and that in one year 30 prisoners were at the suit of one tally-shop alone! Such imprisonments, however, are now much decreased, in consequence, as is believed, of the Court of Requests discouraging the tally system, by ordering claims of *this* kind to be paid by *extremely small* instalments, and these at *very distant* intervals; and also in consequence of no composition being allowed by the charities for the relief of poor prisoners with reference to such debts.

It is estimated that in London alone about 850,000*l.*, or nearly 1,000,000*l.* sterling, is annually returned in this trade. From his large profits (generally from 25 to 40 per cent.), it is obvious that in a few transactions the tally-shop keeper becomes independent of the existing debt; and with capital and good management, it is said that some have realised considerable sums of money in this business.

According to the custom of the trade, Mondays, Tuesdays, Wednesdays, and Thursdays, are the days set apart for collecting money from the customers. The tally-man sends round his collector through the different "walks," and the amount of a collection, which keeps the collector engaged from morning till night, even in a good tally concern, seldom exceeds 4*l.* a day. The payments are invariably made in *shillings* and *sixpences* — but the people seldom or never pay at the tally-shops; they rarely call there unless something else is wanted. The tally-shop keeper trusts one party on the recommendation of another; but guarantees are never required — certainly no *written* guarantees; and a verbal guarantee is, according to Lord Tenterden's act, not binding. It is part of the collector's business, besides getting money, to beat up for fresh customers in his walk.

The greater number of the small tally concerns are kept by Scotchmen; it is a curious fact, that when a "Tally-walk" is to be sold, which is often the case, a Scotchman's walk will bring 15 per cent. more than an Englishman's! It is believed to contain a better description of customers.

From the causes above mentioned, assisted, perhaps, by the salutary influence of Savings' Banks, this obnoxious trade is understood to be rather on the wane. It will never, however, be completely rooted out, except by adopting the plan we have previously suggested — (see CREDIT,) —for placing all small debts beyond the pale of the law; and the fact, that the adoption of this plan would have so beneficial a result, is an additional and powerful recommendation in its favour. In cases where failures take place, the creditors of a tally-shop keeper are in general *terrified* into the acceptance of a small composition. The very sight of the tally Ledgers, from 10 to 20 in number, containing debts from 5*s.* to 5*l.*, dotted over the pages, like a small pattern on a piece of printed cotton, and spread over every district in and round London, determines the creditors to accept of any offer, however small, rather than encounter the collection of such disreputable assets. In an affair of this kind recently concluded, where the business was under the management of a respectable accountant in the city, the whole debts due to the concern, good, bad, and doubtful, amounted to 8,700*l.*, while the number of debtors was 7,600! giving an average of 22*s.* 10*d.* each.

N. B. — This article has been compiled wholly from *private*, but *authentic*, *information*.

TAMARINDS (Ger. *Tamarinden;* Fr. *Tamarins;* It. and Sp. *Tamarindo;* Arab. *Umblie;* Hind. *Tintiri*), the fruit of the *Tamarindus Indica*, a tree which grows in the East and West Indies, in Arabia, and Egypt. In the West Indies the pods or fruit, being gathered when ripe, and freed from the shelly fragments, are placed in layers in a cask, and boiling syrup poured over them, till the cask be filled: the syrup pervades every part quite down to the bottom; and when cool, the cask is headed for sale. The East India tamarinds are darker coloured and drier, and are said to be preserved without sugar. When good, tamarinds are free from any degree of mustiness; the seeds are

hard, flat, and clean; the strings tough and entire; and a clean knife thrust into them does not receive any coating of copper. They should be preserved in closely covered jars. — (*Thomson's Dispensatory.*) The duty on tamarinds produced, in 1832, 788*l.* 12*s.* 10*d.*

TAPIOCA, a species of starch or powder prepared from the roots of the *Jatropha manihat*, an American plant. The roots are peeled, and subjected to pressure in a kind of bag made of rushes. The juice which is forced out is a deadly poison, and is employed by the Indians to poison their arrows; but it deposits gradually a white starch, which, when properly washed, is innocent. What remains in the bag consists chiefly of the same starch. It is dried in smoke, and afterwards passed through a kind of sieve. Of this substance the cassava bread is made. — (*Thomson's Chemistry.*)

TAR (Fr. *Goudron;* Ger. *Theer;* It. *Catrame;* Pol. *Smola gesta;* Rus. *Degot, Smola shitkaja;* Sw. *Tjära*), a thick, black, unctuous substance, chiefly obtained from the pine, and other turpentine trees, by burning them in a close smothering heat.

The tar of the north of Europe is very superior to that of the United States, and is an article of great commercial importance. The process followed in making it has been described as follows by Dr. Clarke: — "The inlets of the gulf (Bothnia) every where appeared of the grandest character; surrounded by noble forests, whose tall trees, flourishing luxuriantly, covered the soil quite down to the water's edge. From the most southern parts of Westro-Bothnia, to the northern extremity of the gulf, the inhabitants are occupied in the manufacture of tar; proofs of which are visible in the whole extent of the coast. The process by which the tar is obtained is very simple: and as we often witnessed it, we shall now describe it, from a tar-work we halted to inspect upon the spot. The situation most favourable to the process is in a forest near to a marsh or bog; because the roots of the fir, from which tar is principally extracted, are always most productive in such places. A conical cavity is then made in the ground (generally in the side of a bank or sloping hill); and the roots of the fir, together with logs and billets of the same, being neatly trussed in a stack of the same conical shape, are let into this cavity. The whole is then covered with turf, to prevent the volatile parts from being dissipated, which, by means of a heavy wooden mallet, and a wooden stamper worked separately by two men, is beaten down and rendered as firm as possible above the wood. The stack of billets is then kindled, and a slow combustion of the fir takes place, without flame, as in making charcoal. During this combustion the tar exudes; and a cast iron pan being at the bottom of the funnel, with a spout which projects through the side of the bank, barrels are placed beneath this spout to collect the fluid as it comes away. As fast as the barrels are filled, they are bunged, and ready for immediate exportation. From this description it will be evident that the mode of obtaining tar is by a kind of distillation *per descensum;* the turpentine, melted by fire, mixing with the sap and juices of the fir, while the wood itself, becoming charred, is converted into charcoal. The most curious part of the story is, that this simple method of extracting tar is precisely that which is described by Theophrastus and Dioscorides; and there is not the smallest difference between a tar-work in the forests of Westro-Bothnia, and those of ancient Greece. The Greeks made stacks of pine; and having covered them with turf, they were suffered to burn in the same smothered manner; while the tar, melting, fell to the bottom of the stack, and ran out by a small channel cut for the purpose."

Of 10,752 lasts of tar imported in 1831, 7,779 were brought from Russia, 1,086 from Sweden, and 1,243 from the United States. The last contains 12 barrels, and each barrel 31½ gallons.

Tar produced or manufactured in Europe is not to be imported for home consumption, except in British ships, or in ships of the country of which it is the produce, or from which it is imported, under penalty of forfeiting the same, and 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54.)

TARE, an abatement or deduction made from the weight of a parcel of goods, on account of the weight of the chest, cask, bag, &c. in which they are contained. Tare is distinguished into *real tare, customary tare,* and *average tare.* The first is the actual weight of the package; the second, its supposed weight according to the practice among merchants; and the third is the medium tare, deduced from weighing a few packages, and taking it as the standard for the whole. In Amsterdam, and some other commercial cities, tares are generally fixed by custom; but in this country, the prevailing practice, as to all goods that can be unpacked without injury, both at the Custom-house and among merchants, is to ascertain the real tare. Sometimes, however, the buyer and seller make a particular agreement about it. We have, for the most part, specified the different tares allowed upon particular commodities, in the descriptions given of them in this work. — (For the tares at Amsterdam, Bordeaux, &c., see these articles; see also Allowances.)

TARE, VETCH, or FITCH, a plant (*Vicia sativa*, Lin.) that has been cultivated in this country from time immemorial; principally for its stem and leaves, which are used in the feeding of sheep, horses, and cattle; but partly, also, for its seed. Horses thrive better upon tares than upon clover and rye grass; and cows that are fed upon

them give most milk. The seed is principally used in the feeding of pigeons and other poultry. In 1829, we imported 87,101 bushels of tares, principally from Denmark and Prussia.

TARIFF, a Table, alphabetically arranged, specifying the various duties, drawbacks, bounties, &c. charged and allowed on the importation and exportation of articles of foreign and domestic produce.

We intended at one time to have given the tariffs of some of the principal foreign states, and had some of them translated for that purpose; but, as the duties and regulations in them are perpetually changing, they would very soon have become obsolete, and would have tended more to mislead than to instruct. The circulars issued by foreign houses usually specify the duties on importation and exportation. But the reader will find, under the articles DANTZIC, HAVRE, NEW YORK, TRIESTE, &c., pretty full details as to the principal foreign tariffs. Subjoined is the British tariff.

TARIFF (BRITISH). — 1st of January, 1834.

DUTIES OF CUSTOMS INWARDS.

Duties Inwards. — The first column of the following Table contains an account of the existing duties payable on the importation of foreign products into Great Britain for home use, as the same were fixed by the act 3 & 4 Will. 4. c. 56. The next column exhibits the duties payable on the same articles in 1819, as fixed by the act 59 Geo. 3. c. 52.; and the third and last column exhibits the duties as they were fixed in 1787, by Mr. Pitt's Consolidation Act, the 27 Geo. 3. c. 13. The reader has, therefore, before him, and may compare together, the present customs duties with the duties as they stood at the end of the late war, and at its commencement. No Table of the sort is to be met with in any other publication. We owe it to the kindness of Mr. J. D. Hume, of the Board of Trade, under whose direction it has been prepared. The duties are rated throughout in Imperial weights and measures.

A Table of the Duties of Customs payable on Goods, Wares, and Merchandise imported into the United Kingdom from Foreign Parts.

Note. — Goods on which duties are payable by measures of capacity, are rated according to the Imperial gallon and bushel.

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.*
	L. s. d.	*L. s. d.*	*L. s. d.*
A.			
Acetous acid. *See* Vinegar.			
Acorns. *See* Seed.			
Agates, or cornelians, for every 100*l.* value	10 0 0	20 0 0	} 27 10 0
set, for every 100*l.* value	20 0 0	60 0 0	}
Alkali, not being barilla, viz.			
any article containing soda or mineral alkali, whereof mineral alkali is the most valuable part, (such alkali not being otherwise particularly charged with duty,) viz.			
if not containing a greater proportion of such alkali than 20 per cent., per cwt.	0 11 4	0 11 4	1 8 0
if containing more than 20 per cent., and not exceeding 25 per cent. of such alkali, per cwt.	0 15 0	0 15 0	1 8 0
if containing more than 25 per cent., and not exceeding 30 per cent. of such alkali, per cwt.	0 18 4	0 18 4	1 8 0
if containing more than 30 per cent., and not exceeding 40 per cent. of such alkali, per cwt.	1 3 4	1 3 4	1 8
if containing more than 40 per cent. of such alkali, per cwt.	1 10 0	1 10 0	1 8 0
natural alkali, imported from places within the limits of the East India Company's charter, per cwt.	0 2 0	As above.	28 5 0 per cent.
Alkanet root, per cwt.	0 2 0	4 13 4	1 8 0
Almond paste, for every 100*l.* of the value	60 0 0	60 0 0	27 10 0
Almonds, viz.			
bitter, per cwt.	0 4 0	1 11 8	0 14 0
Jordan, per cwt.	2 0 0	4 15 0	2 6 3
of any other sort, per cwt.	1 0 0	2 7 6	1 3 2
Aloes, per lb.	0 0 8	0 2 6	0 1 2
the produce of, and imported from any British possession, per lb.	0 0 2	0 0 9	0 0 6
Alum, per cwt.	0 17 6	0 17 6	0 7 2
roch, per cwt.	0 11 8	0 11 8	0 3 0
Amber, rough, per lb.	0 0 6	0 1 8	0 1 3
manufactures of amber, not otherwise enumerated or described, per lb.	0 12 0	60 0 0 per cent.	27 10 0 per cent.
Ambergris, per oz.	0 0 6	0 5 0	0 2 0
Anchovies, per lb.	0 0 2	0 1 0	0 0 1½
Angelica, per cwt.	0 4 0	4 13 4	0 18 8
Annotto, per cwt.	0 1 0	2 6 8	} Free.
roll, per cwt.	0 4 0	5 12 0	}
Antimony, viz.			
ore, per ton	0 1 0	20 0 0 per cent.	27 10 0 per cent.
crude, per cwt.	0 8 0	0 15 0	0 4 8
regulus, per cwt.	0 16 0	2 0 0	0 9 4
Apples, per bushel	0 4 0	0 4 0	0 2 4
dried, per bushel	0 7 0	0 7 0	0 3 0
Aquafortis, per cwt.	0 14 3	0 14 3	0 4 8
Argol, per cwt.	0 0 6	0 4 9	Free.
Aristolochia, per lb.	0 0 10	0 0 10	0 0 3
Arquebusade water. *See* Spirits.			
Arrowroot, per lb.	0 0 2	0 0 2	
the produce of, and imported from any British possession, per cwt.	0 1 0	0 18 8	} 27 10 0 per cent.
Arsenic, per cwt.	0 8 0	0 14 3	0 4 8
Asafœtida. *See* Gum.			
Ashes, viz.			
pearl and pot, per cwt.	0 6 0	0 11 2	0 2 3
imported from any British possession	Free.	0 1 8	Free.
soap, weed, and wood, per cwt.	0 1 8	0 1 8	0 0 7
not otherwise enumerated or described, for every 100*l.* value	20 0 0	20 0 0	27 10 0
Asphaltum, per cwt.	0 4 0	4 13 4	0 18 8
Asses, each	0 10 0	3 6 6	27 10 0 per cent.
B.			
Bacon, per cwt.	1 8 0	2 16 0	2 7 0
Balm of Gilead. *See* Balsam.			

* By act 27 Geo. 3. c. 13., and 28 Geo. 3. c. 27., certain goods were allowed to be imported from France and Holland, on payment of duty, until the 10th of May, 1800, although prohibited to be imported from other countries.

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Balsam, viz.			
Canada, per lb.	0 0 1	0 1 3	0 0 3
capivi, per cwt.	0 4 0	11 4 0	4 4 0
Peru, per lb.	0 1 0	0 4 6	0 1 6
Riga, per lb.	0 1 0	0 1 0	0 1 6
and further, as foreign spirits, for every gallon	1 10 0	1 10 6	
Tolu, per lb.	0 2 0	0 4 6	
balm of Gilead, and all balsams not otherwise enumerated or described, per lb.	0 4 6	0 4 6	0 1 6
Bandstring twist, the dozen knots, each knot containing 32 yards	0 5 0	0 5 0	0 1 6
Barilla, per ton	2 0 0	As Alkali.	0 2 3
Bark, viz.			5 5 0
for tanners' or dyers' use, per cwt.	0 0 8	0 0 8	
imported from any British possession, per cwt.	0 0 1	0 0 8	0 0 1
Peruvian and cascarilla, per lb.	0 0 1	0 2 0	Free.
of other sorts, per lb.	0 0 1	0 2 0	0 0 9
extract of, or of other vegetable substances to be used only for tanning leather, per cwt.	0 3 0	0 3 0	0 0 2
imported from any British possession, per cwt.	0 0 1	0 3 0	27 10 0 per cent.
Bar wood, per ton	0 5 0	0 15 0	27 10 0 per cent.
Basket rods, the bundle (not exceeding 3 feet in circumference at the band)	0 1 0	0 3 2	27 10 0 per cent.
Baskets, for every 100*l.* value	20 0 0	50 0 0	0 1 6
Bast ropes, twines, and strands, per cwt.	0 10 0	0 10 0	27 10 0
Bast or straw hats or bonnets. *See* Hats.			0 1 10
platting, or other manufacture of bast or straw, for making hats or bonnets. *See* Platting.			
Beads, viz.			
amber, per lb.	0 12 0	0 12 0	0 4 5
arango, for every 100*l.* value	20 0 0	31 5 0	31 13 4
coral, per lb.	0 15 10	0 15 10	0 4 5
crystal, per 1,000	1 8 6	1 8 6	0 13 3
jet, per lb.	0 3 2	0 3 2	0 1 5
not otherwise enumerated or described, for every 100*l.* value	30 0 0	50 0 0	27 10 0
Beans, kidney or French beans, per bushel	0 0 10	0 0 10	27 10 0 per cent.
Beef, salted (not being corned beef), per cwt.	0 12 0	Prohibited.	Prohibited.
Beef wood, unmanufactured, imported from New South Wales, per ton	0 5 0	5 16 9 per cent.	33 0 0 per cent.
Beer, viz.			
mum, per barrel, containing 32 gallons	3 1 1	1 1 2	0 5 8
spruce, per barrel, containing 32 gallons	3 6 0	1 6 0	0 11 0
or ale of all other sorts, per barrel, containing 32 gallons	2 13 0	0 13 0	0 5 8
Beer was subject also to the following duties of excise, until 5 April, 1825, viz. spruce beer, ale, mum, and all other kinds of beer, per barrel, 32 gallons Imp.	- -	1 19 0	0 16 3
Benjamin, or benzoin, per cwt.	0 4 0	11 4 0	2 16 0
Berries, viz.			
bay, juniper, yellow, and any other sort not otherwise enumerated, per cwt.	0 2 0	Bay 0 11 1 1 8 6	Bay 0 4 8 0 11 0
Birds, viz. singing birds, per dozen	0 8 0	0 8 0	0 2 6
Bitumen Judaicum, per cwt.	0 4 0	4 13 4	0 18 8
Blacking, per cwt.	3 12 0	3 12 0	0 17 8
Bladders, per dozen	0 0 6	0 0 6	0 0 1½
Blubber. *See* Train oil, in Oil.			
Bones of cattle and other animals, and of fish, except whale fins, whether burnt or not, or as animal charcoal, for every 100*l.* value	1 0 0	1 0 0	27 10 0 per cent.
Bonnets. *See* Hats.			
Books, viz.			
being of editions printed prior to the year 1801, bound or unbound, per cwt.	1 0 0	6 10 0 bound.	0 19 3 bound.
being of editions printed in or since the year 1801, bound or unbound, per cwt.	5 0 0	5 0 0 unbound.	0 8 10 unbound.
Note. — For the description of books prohibited to be imported, see the act for the regulation of the customs (c. 52. s. 58.), and acts for securing copyrights.			
Boots, shoes, and calashes, viz.			
women's boots and calashes, per dozen pairs	1 10 0		
if lined or trimmed with fur or other trimming, per dozen pairs	1 16 0		
women's shoes, with cork or double soles, quilted shoes and clogs, per dozen pair	1 6 0		
if trimmed or lined with fur or any other trimming, per dozen pair	1 9 0		
women's shoes of silk, satin, jeans, or other stuffs, kid, morocco, or other leather, per dozen pair	0 18 0	Leather 75 0 0 per cent. Of silk prohibited.	Prohibited.
if trimmed or lined with fur or other trimming, per dozen pair	1 4 0		
children's boots, shoes, and calashes, not exceeding 7 inches in length, to be charged with 2-3ds of the above duties.			
men's boots, per dozen pair	2 14 0		
men's shoes, per dozen pair	1 4 0		
children's boots and shoes, not exceeding 7 inches in length, to be charged with 2-3ds of the above duties.			
Boracic acid, per cwt.	0 4 0	50 0 0 per cent.	27 10 0 per cent.
Borax or tincal, per cwt.	0 4 0	3 14 8	1 8 0
refined, per cwt.	0 10 0	9 6 8	5 12 0
Bottles, viz.			
of earth or stone, empty, per dozen	0 3 2	0 3 2	0 1 2
and further, full or empty, per cwt.	0 5 0	0 5 0	
of glass covered with wicker, per dozen quarts content	1 2 0	1 2 0	0 12 0
and further, per cwt.	4 0 0		
of green or common glass, not of less content than 1 pint, and not being phials, empty, per dozen quarts content	0 2 0	0 8 0	0 4 5
Bottles of common glass were, by act 54 Geo. 3. c. 97., subject also to the excise duty of 8*s.* 2*d.* per cwt. until 5 April, 1825.			
of green or common glass, full, computing all bottles of not greater content than ½ pint as of the content of ½ pint, and all bottles of greater content than ½ pint, and not of greater content than 1 pint, or a reputed pint, as of the content of 1 pint or a reputed pint, viz.			
imported from any British possession, per dozen quarts content	0 1 0	0 8 0	0 4 5
imported from any foreign place, viz.			
containing wine or spirits, per dozen quarts content	0 4 0	0 8 0	0 4 5
not containing wine or spirits, per dozen quarts content	0 2 0	0 8 0	0 4 5
Excise duty on common glass bottles, see above.			

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787
	L. s. d.	*L. s. d.*	*L. s. d.*
Bottles — *continued.*			
of glass, not otherwise enumerated or described, for every 100*l.* value	25 0 0	80 0 0 per cent.	60 0 0 per cent.
and further, per cwt.	4 0 0		
Note. — Flasks in which wine or oil is imported, and glass bottles or flasks in which mineral or natural water is imported, are not subject to duty.			
Boxes of all sorts, for every 100*l.* value	20 0 0	50 0 0	27 10 0
Box wood, per ton	5 0 0	7 18 6	2 13 0
the produce of, and imported from, any British possession, per ton	1 0 0	1 13 4	2 13 0
See Note at the end of Wood.			
Brass, viz.			
manufactures of, not otherwise enumerated or described, for every 100*l.* value	30 0 0	50 0 0	Prohibited.
powder of, for japanning, per lb.	0 2 6	0 5 6	0 2 8
Brazil wood, per ton	2 0 0	20 0 0 per cent.	Free.
Brazilletto wood, per ton	0 4 6	0 16 8	Free.
imported from a British possession, per ton	0 3 0	0 16 8	Free.
Bricks or clinkers, per 1,000	1 2 6	1 2 6	0 7 2
Brimstone, per cwt.	0 0 6	0 15 0	
refined, or in rolls, per cwt.	0 6 0	1 0 0	0 6 8
in flour, per cwt.	0 9 9	1 3 9	
Bristles, viz.			
rough and in the tufts, and not in any way sorted, per lb.	0 0 2½	0 3 7 dozen lbs.	0 0 1½
in any way sorted or arranged in colours, and not entirely rough and in the tufts, per lb.	0 0 3½	0 12 0 dozen lbs.	0 0 2¾
Note. — If any part of the bristles in a package be such as to be subject to the higher duty, the whole contents of the package shall be subject to the higher duty.			
Brocade of gold or silver, for every 100*l.* value	30 0 0	Prohibited.	Prohibited.
Bronze, all works of art made of bronze, per cwt.	1 0 0	50 0 0 per cent.	27 10 0 per cent.
powder, for every 100*l.* value	25 0 0	50 0 0 per cent.	27 10 0 per cent.
Bugles, viz.			
great bugle, per lb.	0 2 0	0 3 2	0 1 7
small or seed bugle, per lb.	0 2 0	0 4 9	0 2 7
Bullion and foreign coin, of gold or silver, and ore of gold or silver, or of which the major part in value is gold or silver	Free.	Free.	Free.
Bullrushes, per load containing 63 bundles	0 12 0	0 12 0	0 4 5
Butter, per cwt.	1 0 0	1 0 0	0 2 6
Buttons, for every 100*l.* value	20 0 0	Prohibited	Prohibited.
C.			
Cables, not being iron cables, tarred or untarred, per cwt.	0 10 9	1 1 6	0 8 6
not being iron cables, in actual use of a British ship, and being fit and necessary for such ship, and not or until otherwise disposed of	Free.	1 1 6	0 8 6
if, and when otherwise disposed of, for every 100*l.* value	20 0 0	1 1 6	0 8 6
Cambrics. *See* Linen.			
Camomile flowers, per lb.	0 0 3	0 0 6	27 10 0 per cent.
Camphor, per cwt.	0 1 0	7 0 0	1 17 4
refined, per cwt.	2 0 0	14 0 0	3 14 8
Camwood, per ton	0 5 0	0 15 0	33 0 0 per cent.
Candles, viz.			
spermaceti, per lb.	0 2 6	0 2 6	0 1 4
tallow, per cwt.	3 3 4	3 3 4	1 12 8
wax, per lb.	0 2 6	0 2 6	0 1 8
Candlewick, per cwt.	4 8 8	4 8 8	1 12 8
Canella alba, per lb.	0 0 1	0 0 8	27 10 0 per cent.
Canes, viz.			
bamboo, per 1,000	0 5 0	1 14 0	2 1 3
rattans, not ground, per 1,000	0 5 0	1 0 0	0 19 3
reed canes, per 1,000	0 5 0	1 6 6	0 11 0
walking canes or sticks, mounted, painted, or otherwise ornamented, for every 100*l.* value	20 0 0	50 0 0	1 18 6 per 1000.
whangees, jumboo, ground rattans, dragon's blood, and other walking canes or sticks, per 1,000	0 5 0	4 0 0	1 18 6
Cantharides, per lb.	0 1 0	0 3 6	0 1 0
Caoutchouc, per cwt.	0 1 0	0 0 5	27 10 0 per cent.
Capers, including the pickle, per lb.	0 0 6	0 1 0	0 0 2
Capsicum. *See* Pepper.			
Cardamoms, per lb.	0 1 0	0 2 0	0 0 9
extract or preparation of. *See* Extract.			
Cards, viz. playing cards, the dozen packs	4 0 0	4 0 0	Prohibited.
Carmine, per oz.	0 0 6	0 4 0	27 10 0 per cent.
Carrebe. *See* Succinum.			
Carriages of all sorts, for every 100*l.* value	30 0 0	50 0 0	27 10 0 per cent.
Casks, empty, for every 100*l.* value	50 0 0	50 0 0	0 8 3 per tun.
Cassia, viz.			
buds, per lb.	0 1 0	0 2 6	0 0 4
fistula, per lb.	0 0 10	0 0 10	0 0 3
lignea, per lb.	0 1 0	0 2 6	0 0 4
imported from any British possession, per lb.	0 0 6	0 2 6	0 0 4
Castor, per lb.	0 0 6	0 5 0	0 2 0
Casts of busts, statues, or figures, per cwt.	0 2 6	0 2 6	27 10 0 per cent.
Catechu. *See* Terra Japonica.			
Catlings, the gross, containing 12 dozen knots	0 6 4	0 6 4	0 2 6
Caviar, per cwt.	0 12 0	0 12 0	0 4 5
Cedar wood, per ton	2 10 0	20 0 0 per cent.	33 0 0 per cent.
imported from any British possession, per ton	0 10 0		
Chalk, viz.			
prepared, or otherwise manufactured, and not otherwise enumerated or described, for every 100*l.* value	40 0 0	40 0 0	27 10 0
unmanufactured, and not otherwise enumerated or described, for every 100*l.* value	20 0 0	20 0 0	27 10 0
Cheese, per cwt.	0 10 6	0 10 6	0 1 6
Cherries, per cwt.	0 18 8	0 18 8	0 4 5
dried, per lb.	0 0 8	0 0 8	0 4 5
Chicory, and any other vegetable matter applicable to the uses of chicory or coffee, roasted or ground, per lb.	0 0 6	20 0 0 per cent.	27 10 0 per cent.
Chillies. *See* Pepper.			
China root, per lb.	0 0 3	0 1 3	0 0 5
China or porcelain ware, viz.			
plain, for every 100*l.* value	15 0 0	75 0 0	47 10 0
painted, gilt, or ornamented, for every 100*l.* value	30 0	75 0 0	
Chip, manufactures of, to make hats or bonnets. *See* Platting.			
Chocolate. *See* Cocoa paste.			
Cider, per tun	21 10 0	14 5 0	7 7 10¾
Cider and perry, by act 27 Geo. 3. c. 13., were also subject to an excise duty of 21*l.* 7*s.* 9½*d.* per tun, which was altered by			

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787
	L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
Cider — *continued.* 43 Geo. 3. c. 69. to 21*l.* 8*s.* 4¾*d.* per tun, and so continued until 5 April, 1825, when the same was added to the duty of customs.			
Cinders, per ton	2 0 0	2 0 0	27 10 0 per cent.
Cinnabaris nativa, per lb.	0 0 1	0 2 0	0 1 0
Cinnamon, per lb.	0 1 0	0 3 6	0 4 5
imported from any British possession, per lb.	0 0 6	0 2 6	0 4 5
Citrate of lime, per lb.	0 0 2	0 1 6	27 10 0 per cent.
Citric acid, per lb.	0 0 6	20 0 0 per cent.	27 10 0 per cent.
Citron preserved with salt, for every 100*l.* value	20 0 0	20 0 0	27 10 0
preserved with sugar. *See* Succades.			
Citron water. *See* Spirits.			
Civet, per oz.	0 4 9	0 4 9	0 2 0
Clinkers. *See* Bricks.			
Clocks, for every 100*l.* value	25 0 0	50 0 0	27 10 0
Cloves, per lb.	0 3 0	0 3 0	0 2 8
imported from any British possession in Asia, Africa, or America, per lb.	0 2 0	0 2 0	0 2 8
Coals, per ton	2 0 0	2 0 0	0 16 10
Cobalt, per cwt.	0 1 0	20 0 0 per cent.	27 10 0 per cent.
Cocculus indicus, per lb.	0 2 6	0 2 6	0 0 5
extract or preparation of. *See* Extract.			
Cochineal, per lb.	0 0 6	0 2 6	Free.
the produce of, and imported from, any British possession, per lb.	0 0 2	0 0 10	Free.
dust, per lb.	0 0 2	0 0 5	Free.
the produce of, and imported from, any British possession, per lb.	0 0 1	0 0 2½	Free.
Cocoa, per lb.	0 0 6	Excise.	0 0 6
the produce of, and imported from, any British possession, per lb.	0 0 2	Excise.	0 0 6
husks and shells, per lb.	0 0 1	Prohibited.	Prohibited.
paste or chocolate, per lb.	0 4 4	Prohibited.	Prohibited.
the produce of, and imported from, any British possession, per lb.	0 0 4		
Cocoa and coffee were also subject to a duty of excise, viz.			
of the produce of any British possession, per lb.	- -	0 1 0	0 0 6½
of the produce of any other place, per lb.	- -	0 2 6	0 1 8
Note. — The above excise duties were transferred to the customs duties in 1825.			
Cocus wood. *See* Ebony.			
Codilla. *See* Flax.		Excise.	
Coffee, per lb.	0 1 3	0 2 6	0 0 4
the produce of, and imported from, any British possession in America, per lb.	0 0 6	0 1 0	0 0 4
the produce of, and imported from, Sierra Leone, per lb.	0 0 9		0 0 4
imported from any British possession within the limits of the East India Company's charter, per lb.	0 0 9	0 1 6	0 0 4
imported from any other place within those limits, per lb.	0 1 0		0 0 4
Coffee was also subject to a duty of excise, see Cocoa, *suprà*.			
Coin, viz. copper. *See* Copper.			
foreign, of gold or silver. *See* Bullion.			
Coir rope, twine, and strands, per cwt.	0 5 0	1 1 6	0 8 6
old, and fit only to be made into mats, per ton	0 5 0	50 0 0 per cent.	27 10 0 per cent.
Colocynth, per lb.	0 0 2	0 1 8	0 0 6
Columba root, per lb.	0 0 2	0 2 0	0 0 6
Comfits, per lb.	0 1 0	0 2 6	0 0 6
Copper, viz.			
ore, per cwt.	0 12 0	1 1 0	0 0 9
the produce of, and imported from, any British possession in America, per cwt.	0 1 0	1 1 0	0 0 9
old, fit only to be remanufactured, per cwt.	0 15 0	1 9 2	27 10 0 per cent.
in plates and copper coin, per cwt.	1 10 0	3 0 0	0 16 0
unwrought, viz. in bricks or pigs, rose copper, and all cast copper, per cwt.	1 7 0	2 14 2	0 10 6
in part wrought, viz. bars, rods, or ingots, hammered or raised, per cwt.	1 15 0	3 15 6	2 2 0
manufactures of copper, not otherwise enumerated or described, and copper plates engraved, for every 100*l.* value	30 0 0	50 0 0	Prohibited.
the produce of, and imported from, any British possession within the limits of the East India Company's charter, viz.			
ore, per cwt.	0 1 0	0 1 0	28 5 0 per cent.
old, fit only to be remanufactured, per cwt.	0 9 2	0 9 2	37 16 3 per cent.
in plates and copper coin, per cwt.	0 15 0	0 15 0	
unwrought, viz. in bricks or pigs, rose copper, and all cast copper, per cwt.	0 9 2	0 9 2	37 16 3 per cent.
in part wrought, viz. bars, rods, or ingots, hammered or raised, per cwt.	1 11 3	1 11 3	
manufactures of copper, not otherwise enumerated or described, and copper plates engraved, for every 100*l.* value	30 0 0	50 0 0	Prohibited.
Copperas, viz.			
blue, per cwt.	0 5 0	0 5 0	0 2 4
green, per cwt.	0 5 0	0 5 0	0 1 8
white, per cwt.	0 12 0	0 12 0	0 4 8
Coral, viz.			
in fragments, per lb.	0 1 0	0 1 0	0 0 3
whole, polished, per lb.	0 12 0	0 12 0	0 3 0
unpolished, per lb.	0 5 6	0 5 6	0 1 6
of British fishing or taking, per lb.	0 0 6	0 5 6	0 1 6
Cordage, tarred or untarred (standing or running rigging in use excepted), per cwt.	0 10 9	1 1 6	0 8 6
in actual use of a British ship, and being fit and necessary for such ship, and not or until otherwise disposed of	Free.	1 1 6 per cwt.	0 8 6
if and when otherwise disposed of, for every 100*l.* value	20 0 0	1 1 6 per cwt.	0 8 6
Cordial waters. *See* Spirits.			
Cork, per cwt.	0 8 0	0 8 0	0 3 8
Corks, ready made, per lb.	0 7 0	0 7 0	0 0 6 per gross.
Corn. *See antè*, p. 418.			
Cotton, viz.			
manufactures of, for every 100*l.* value	10 0 0	50 0 0	44 0 0
articles of manufactures of cotton, wholly or in part made up, not otherwise charged with duty, for every 100*l.* value	20 0 0	50 0 0	44 0 0
manufactures imported from places within the limits of the East India Company's charter, viz.			0 5 3 per piece.
plain white calico and dimity, for every 100*l.* value	10 0 0	67 10 0	16 10 0 per cent.
muslins plain, and Nanquin cloths, for every 100*l.* value	10 0 0	37 10 0	18 0 0

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Cotton — *continued.*			
articles manufactured of cotton wool, not otherwise charged with duty, for every 100*l.* value	20 0 0	67 10 0	50 0 0
wool, or waste of cotton wool. *See* Wool.			
Cranberries, per gallon	0 0 1	0 1 3	27 10 0 per cwt.
Crayons, for every 100*l.* value	40 0 0	40 0 0	27 10 0
Cream of tartar, per cwt.	0 2 0	0 15 10	0 4 8
Crystal, viz.			
rough, for every 100*l.* value	20 0 0	20 0 0	} 27 10 0 per cent.
cut, or in any way manufactured, except beads, for every 100*l.* value	30 0 0	60 0 0	
Cubebs, per lb.	0 0 6	0 2 0	0 0 2
Cucumbers, viz.			
pickled. *See* Pickles.			
preserved in salt and water, for every 100*l.* value	20 0 0	20 0 0	27 10 0
Culm, per ton	2 0 0	2 0 0	0 12 7
Currants, per cwt.	2 4 4	2 4 4	1 3 4
D.			
Damask. *See* Linen.			
Dates, per cwt.	0 10 0	4 10 3	2 6 3
Derelict. Foreign goods derelict, jetsam, flotsam, lagan, or wreck, brought or coming into Great Britain or Ireland, are subject to the same duties, and entitled to the same drawbacks, as goods of the like kind regularly imported.			
Diagrydium. *See* Scammony.			
Diamonds	Free.	Free.	Free.
Diaper. *See* Linen.			
Dice, per pair	1 6 2	1 6 2	Prohibited.
Down, per lb.	0 1 3	0 1 3	0 0 6
Drawings. *See* Prints.			
Drugs, not particularly charged, per cwt.	0 10 0	50 0 0 per cent.	27 19 0 per cent.
E.			
Earthenware, not otherwise enumerated or described, for every 100*l.* value	15 0 0	75 0 0	41 16 0
Ebony of all sorts, per ton	5 0 0	24 14 0	0 13 3
the produce of, and imported from, any British possession, per ton	0 3 0	0 15 0	0 13 3
See note at the end of Wood.			
Eggs, per 120	0 0 10	0 0 10	0 0 5
Embroidery and needlework, for every 100*l.* value	30 0 0	Prohibited.	Prohibited.
Enamel, per lb.	0 7 2	0 7 2	0 3 4
Essence, viz.			
being oil. *See* Essential oil, in Oil.			
of spruce, for every 100*l.* value	20 0 0	20 0 0	27 10 0
not otherwise enumerated or described, per lb.	0 4 6	0 4 6	27 10 0 per cent.
Euphorbium, per cwt.	0 6 0	3 14 8	0 18 8
Extract or preparation of cardamoms, cocculus Indicus, grains, viz. Guinea grains of Paradise, liquorice, nux vomica, for every 100*l.* value	75 0 0	75 0 0	27 10 0
opium, pepper, viz. Guinea pepper, for every 100*l.* value	25 0 0	75 0 0	27 10 0
Peruvian or Jesuits' bark, per lb.	0 5 0	0 5 0	27 10 0 per cent.
quassia, for every 100*l.* value	50 0 0	75 0 0	27 10 0
radix rhataniæ, per lb.	0 5 0	0 5 0	27 10 0 per cent.
vitriol, for every 100*l.* value	25 0 0	75 0 0	27 10 0
Extract or preparation of any article not being particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	20 0 0	50 0 0	27 10 0
or, and in lieu of any of the above duties, at the option of the importer, per lb.	0 10 0	Option not existing.	
F.			
Feathers, viz.			
for beds, in beds or not, per cwt.	2 4 0	4 8 8	1 6 5
ostrich, dressed, per lb.	1 10 0	2 15 6	0 8 10
undressed, per lb.	0 10 0	1 0 0	0 4 5
not otherwise enumerated or described, viz.			
dressed, for every 100*l.* value	20 0 0	50 0 0	27 10 0
undressed, for every 100*l.* value	10 0 0	20 0 0	27 10 0
Figs, per cwt.	1 1 6	1 1 6	0 12 10
Fish, viz.			
eels, per ship's lading	13 1 3	13 1 3	4 13 6
lobsters	Free.	Free.	Free.
oysters, per bushel	0 1 6	0 1 6	0 0 6
stock fish, per 120	0 5 0	0 5 0	0 2 1
sturgeon, per keg, not containing more than 5 gallons	0 9 0	0 9 0	0 3 4
turbots	Free.	Free.	Free.
fresh fish, of British taking, and imported in British ships or vessels	Free.	Free.	Free.
cured fish, of British taking and curing, and imported in British vessels	Free.	Free.	Free.
Fishing nets, old. *See* Rags.			
Flax, and tow or codilla of hemp or flax, dressed, per cwt.	0 0 1	10 14 6	5 4 6
undressed, per cwt.	0 0 1	0 0 5	Free.
Flocks, per cwt.	0 19 0	0 19 0	0 8 10
Flotsam. *See* Derelict.			
Flower roots, for every 100*l.* value	20 0 0	20 0 0	27 10 0 per cent.
Flowers, artificial, not made of silk, for every 100*l.* value	25 0 0	50 0 0	27 10 0 per cent
Fossils, not otherwise enumerated or described, for every 100*l.* value	20 0 0	20 0 0	27 10 0 per cent.
specimens of. *See* Specimens.			
Frames for pictures, prints, or drawings, for every 100*l.* value	20 0 0	50 0 0	27 10 0 per cent.
Frankincense. *See* Olibanum.			
Fruit, raw, not otherwise enumerated, for every 100*l.* value	5 0 0	20 0 0	27 10 0 per cent.
Fustic, per ton	0 4 6	1 4 6	} Free.
imported from any British possession, per ton	0 3 0	1 4 6	
G.			
Galls, per cwt.	0 2 0	0 11 2	Free.
Gamboge, per cwt.	0 4 0	9 6 8	2 16 0
Garnets, per lb.	0 10 0	0 10 0	0 4 5
cut, per lb.	1 10 0	1 10 0	0 13 3
Gauze of thread, for every 100*l.* of the value	30 0 0	50 0 0	27 10 0
Gentian, per cwt.	0 4 0	2 16 0	0 9 4
Ginger, per cwt.	2 13 0	2 13 0	1 8 0
preserved, per lb.	0 1 3	0 3 2	27 10 0 per cent.
the produce of and imported from any British possession, per cwt.	0 11 0	1 3 0	0 11 0
preserved, per lb.	0 0 1	0 3 2	27 10 0 per cent.
Ginseng, per cwt.	0 4 0	8 8 0	3 14 8

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Glass, viz.			
crown glass, or any kind of window glass (not being plate glass or German sheet glass), per cwt.	8 6 8	4 18 0	
German sheet glass, per cwt.	10 0 0	4 18 0	
plate glass, superficial measure, viz.			
not containing more than 9 square feet, per square foot	0 6 0		
containing more than 9 square feet, and not more than 14 square feet, per square foot	0 8 0	0 6 7	60 0 0 per cent.
containing more than 14 square feet, and not more than 36 square feet, per square foot	0 9 6		
containing more than 36 square feet, per square foot	0 11 0		
glass manufactures not otherwise enumerated or described, and old broken glass fit only to be remanufactured, for every 100*l.* value	20 0 0	80 0 0	
and further, for every cwt.	4 0 0		
Glass imported was by act 27 Geo. 3. c. 13. free of excise duty, but by the following acts subject, in addition to the customs duty, to an excise duty of 6*l.* 6*s.* per cwt., viz. 45 Geo. 3. c. 69., 2*l.* 2*s.*; 45 Geo. 3. c. 30., 1*l.* 1*s.*; 52 Geo. 3. c. 94., 3*l.* 3*s.* In the year 1825, the above excise duties were added to the customs duties.			
Gloves (of leather), viz.			
habit gloves, per dozen pair	0 4 0	Prohibited.	Prohibited.
men's gloves, per dozen pair	0 5 0		
women's gloves or mitts, per dozen pair	0 7 0		
Glue or gelatine, per cwt.	0 1½ 0	0 12 0	0 4 5
clippings or waste of any kind fit only for making glue, for every 100*l.* value	1 0 0	0 4 9 per cwt.	0 1 4½ per cwt.
Grains, viz.			
Guinea grains, per lb.	0 2 0	0 2 0	0 0 2
extract or preparation of. *See* Grains, in Extract.			
of Paradise, per lb.	0 2 0	0 2 0	27 10 0 per cent.
extract or preparation of. *See* Grains, in Extract.			
Granilla, per lb.	0 0 2	0 0 10	Free.
Grapes, for every 100*l.* value	20 0 0	50 0 0	27 10 0
Grease, per cwt.	0 1 8	0 1 8	Free.
Greaves, for dogs, per cwt.	0 2 0	0 2 0	0 0 11
Guinea wood, per ton	0 5 0	0 15 0	33 0 0 per cent.
Gum, viz.			
storax, per cwt.	0 6 0	11 4 0	8 8 0
ammoniacum, per cwt.	0 6 0	7 0 0	1 17 4
anima, per cwt.	0 6 0	9 6 8	1 8 0
Arabic, per cwt.	0 6 0	0 12 0	2 16 0
cashew, per cwt.	0 6 0	0 7 6	27 10 0 per cent.
copal, per cwt.	0 6 0	9 6 8	3 14 8
elemi, per cwt.	0 6 0	3 14 8	1 3 4
guaiacum, per cwt.	0 6 0	10 5 4	4 4 0
kino, per cwt.	0 6 0	8 8 0	27 10 0 per cent.
cake lac, per cwt.	0 6 0	2 6 8	0 9 4
lac dye, per cwt.	0 6 0	2 16 0	27 10 0 per cent.
lac lake, per cwt.	0 6 0	0 9 4	27 10 0 per cent.
seed lac, per cwt.	0 6 0	2 16 0	0 18 8
shell lac, per cwt.	0 6 0	3 14 8	0 18 8
stick lac, per cwt.	0 1 0	1 0 0	Free.
opoponax, per cwt.	0 6 0	19 12 0	7 9 4
sagapenum, per cwt.	0 6 0	4 13 4	1 17 4
sandarach, per cwt.	0 6 0	0 19 0	0 7 0
sarcocolla, per cwt.	0 6 0	4 13 4	1 17 4
Senegal, per cwt.	0 6 0	0 12 0	27 10 0 per cent.
Tacamahaca, per cwt.	0 6 0	11 4 0	8 8 0
tragacanth, per cwt.	0 6 0	5 12 0	1 8 0
not particularly enumerated or described, nor otherwise charged, per cwt.	0 6 0	50 0 0 per cent.	27 10 0 per cent.
Gunpowder, per cwt.	3 0 0	3 0 0	1 15 3
Gypsum, per ton	1 11 8	1 11 8	
the produce of, and imported from, any British possession, per ton	0 1 3	0 1 3	27 10 0 per cent.
H.			
Hair, viz.			
camels' hair or wool, per lb.	0 0 1	0 1 8	0 0 8
the produce of, and imported from, any British possession	Free.	0 1 8	0 0 8
cow, ox, bull, or elk hair, per cwt.	0 0 6	0 18 4	0 8 3
goats' hair. *See* Wool.			
horse hair, per cwt.	0 0 6	20 0 0 per cent.	4 4 0
human hair, per lb.	0 1 0	0 5 0	0 2 0
not otherwise enumerated or described, for every 100*l.* value	5 0 0	20 0 0	27 10 0
articles manufactured of hair, or any mixture thereof, from any place within the limits of the East India Company's charter, for every 100*l.* value	30 0 0	67 10 0	37 16 3
manufactures of hair or goats' wool, or of hair or goats' wool and any other material, and articles of such manufacture wholly or in part made up, not particularly enumerated, or otherwise charged with duty, for every 100*l.* value	30 0 0	50 0 0	27 10 0
Hams, per cwt.	1 8 0	2 16 0	2 7 0
Harp strings or lute strings, silvered, for every 100*l.* value	20 0 0	0 6 4 per gross.	0 2 6 per gross.
Hats or bonnets, viz.			
bast, chip, cane, or horse hair hats or bonnets, each hat or bonnet not exceeding 22 inches in diameter, per dozen	1 0 0	1 0 0	0 3 6
each hat or bonnet exceeding 22 inches in diameter, per dozen	2 0 0	2 0 0	0 7 0
straw hats or bonnets, each hat or bonnet not exceeding 22 inches in diameter, per dozen	3 8 0	3 8 0	0 2 9
each hat or bonnet exceeding 22 inches in diameter, per dozen	6 16 0	6 16 0	0 5 6
made of, or mixed with felt, hair, wool, or beaver, per hat	0 10 6	0 10 6	Prohibited.
Hay, the load containing 36 trusses, each truss being 56 lbs.	1 4 0	1 4 9	0 11 0
Heath for brushes, per cwt.	0 9 2	0 9 2	0 4 5
Hellebore, per lb.	0 0 1	0 0 6	0 0 1½
Hemp, dressed, per cwt.	4 15 0	4 15 0	2 4 0
rough or undressed, or any other vegetable substance of the nature and quality of undressed hemp, and applicable to the same purposes, per cwt.	0 0 1	0 9 2	0 3 8
Hides, viz.			
horse, mare, gelding, buffalo, bull, cow, or ox hides, viz.			

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Hides, horse, &c. — *continued.*			
not tanned, tawed, curried, or in any way dressed, viz.			
dry, per cwt.	0 4 8	0 0 10 per hide.	0 0 9 per hide.
wet, per cwt.	0 2 4		
the produce of, and imported from, the west coast of Africa, each hide not exceeding 14 lbs. weight, per cwt.	0 2 4	0 0 6 per hide.	0 0 9 per hide.
the produce of, and imported from, any British possession, viz.			
dry, per cwt.	0 2 4	0 0 10 per hide.	0 0 9 per hide.
wet, per cwt.	0 1 2		
tanned and not otherwise dressed, per lb.	0 0 6	0 1 0	0 0 5
the produce of, and imported from, any British possession, per lb.	0 0 3	0 1 0	0 0 5
cut or trimmed, per lb.	0 0 9	0 1 0	0 0 5
the produce of, and imported from, any British possession, per lb.	0 0 4½	0 1 0	0 0 5
and pieces of such hides, tawed, curried, or in any way dressed, per lb.	0 0 9	75 0 0 per cent.	77 0 0 per cent.
the produce of, and imported from, any British possession, per lb.	0 0 4½	75 0 0 per cent.	
cut or trimmed, per lb.	0 1 2	75 0 0 per cent.	
the produce of, and imported from, any British possession, per lb.	0 0 7	75 0 0 per cent.	
Note. — Hides, raw or undressed (except horse hides), imported from the British colonies in America, were exempted from duty in act 27 Geo. 3. c. 13.			
tails. *See* Tails.			
losh hides, per lb.	0 1 8	0 1 8	0 0 10
Muscovy or Russia hides, tanned, coloured, shaved, or otherwise dressed, per hide	0 5 0	0 1 8 per lb.	0 0 0 per lb.
pieces tanned, coloured, shaved, or otherwise dressed, per lb.	0 2 6	0 1 8 per lb.	0 0 8
hides or pieces of hides, raw or undressed, not particularly enumerated or described, nor otherwise charged with duty, imported from any British possession in America, for every 100*l.* value	5 17 6	5 17 6	Free.
hides or pieces of hides, raw or undressed, not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	20 0 0	20 0 0	27 10 0 per cent.
hides or pieces of hides, tanned, tawed, curried, or in any way dressed, not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	30 0 0	75 0 0	77 0 0 per cent.
Hones, per 100	1 3 0	1 3 0	0 11 0
Honey, per cwt.	0 15 0	0 15 0	0 8 10 per barrel, 42 gallons.
the produce of, and imported from, any British possession, per cwt.	0 5 0	0 15 0	
Hoofs of cattle, for every 100*l.* value	1 0 0	20 0 0	27 10 0 per cent.
Hoops, viz.			
of iron, per cwt.	1 3 9	1 3 9	0 11 5
of wood, viz.			
not exceeding 6 feet in length, per 1,000	0 5 0	0 15 0	0 5 11
exceeding 6 feet and not exceeding 9 feet in length, per 1,000	0 7 6	0 15 0	0 5 11
exceeding 9 feet and not exceeding 12 feet in length, per 1,000	0 10 0	0 15 0	0 5 11
exceeding 12 feet and not exceeding 15 feet in length, per 1,000	0 12 6	0 15 0	0 5 11
exceeding 15 feet in length, per 1,000	0 15 0	0 15 0	0 5 11
Hops, per cwt.	8 11 0	8 11 0	5 18 10
Horns, horn, and pieces of horns, not otherwise charged with duty, per cwt.	0 2 4	0 5 0	0 1 10 per 100.
Horn tips, per 100	0 2 4	0 5 0	0 0 7
Horses, mares, or geldings, each	1 0 0	6 13 0	2 4 0
Hungary water. *See* Spirits.			
I and *J.*			
Jalap, per lb.	0 0 6	0 2 0	0 0 9
Japanned or lacquered ware, for every 100*l.* value	20 0 0	62 10 0	49 10 0
Jet, per lb.	0 0 2	0 2 0	0 0 9
Jetsam. *See* Derelict.			
Jewels, emeralds, rubies, and all other precious stones (except diamonds), viz.			
set, for every 100*l.* value	20 0 0	50 0 0	Free.
not set, for every 100*l.* value	10 0 0	20 0 0	Free
India rubbers. *See* Caoutchouc.			
Indigo, per lb.	0 0 4	0 0 5	Free.
the produce of, and imported from, any British possession, per lb.	0 0 3	0 0 5	
Ink for printers, per cwt.	0 10 0	1 1 0	0 8 10
Inkle, unwrought, per lb.	0 0 10	0 0 10	0 0 3½
wrought, per lb.	0 5 2	0 5 2	0 2 5½
Iron, viz.			
in bars, or unwrought, per ton	1 10 0	6 10 0	2 16 2
the produce of, and imported from, any British possession, per ton	0 2 6	1 2 2	Free.
slit or hammered into rods, and iron drawn or hammered less than ⅜ of an inch square, per cwt.	0 5 0	1 0 0	Prohibited.
cast, for every 100*l.* value	10 0 0	20 0 0	
hoops. *See* Hoops.			
old broken, and old cast iron, per ton	0 12 0	0 17 6	0 13 9
ore, per ton	0 5 0	0 8 9	0 2 9
pig iron, per ton	0 10 0	0 17 6	27 10 0 per cent.
the produce of, and imported from, any British possession, per ton	0 1 3	0 8 0	Free.
chromate of iron, per ton	0 5 0	20 0 0 per cent.	27 10 0 per cent.
wrought, not otherwise enumerated or described, for every 100*l.* value	20 0 0	50 0 0	Prohibited.
Isinglass, per cwt.	2 7 6	2 7 6	0 0 5½
the produce of, and imported from, any British possession, per cwt.	0 15 10	0 15 10	
Juice of lemons or oranges, per gallon	0 0 0½	0 1 6	0 0 4
of limes, per gallon	0 0 0½	0 1 6	0 0 3½
Junk, old. *See* Rags, old.			
K.			
Kelp. *See* Alkali.			
L.			
Lac, viz. stick lac, per cwt.	0 1 0	1 0 0	Free.
Lace, viz. thread lace, for every 100*l.* value	30 0 0	40 0 0	0 17 8 per dozen yards.
Lacquered ware. *See* Japanned ware.			

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Lagan. *See* Derelict.			
Lamp black, per cwt.	1 0 0	3 6 6	1 15 3
Lapis calaminaris, per cwt.	0 1 0	0 8 0	0 3 8
Lard, per cwt.	0 8 0	0 8 0	Free.
Latten, per cwt.	0 4 0	1 8 0	0 13 3
shaven, per cwt.	0 8 0	2 10 0	1 2 0
Lavender flowers, per lb.	0 0 10	0 0 10	0 0 4
Lead, viz.			
black, per cwt.	0 4 0	0 4 0	0 6 8
chromate of lead, per lb.	0 2 0	20 0 0 per cent.	27 10 0 per cent.
ore, per ton	1 5 0	1 16 0	0 17 8
pig, per ton	2 0 0	20 0 0 per cent.	27 10 0 per cent.
red, per cwt.	0 6 0	0 8 4	0 3 8
white, per cwt.	0 7 0	0 10 4	0 4 5
Leather, viz. pieces of leather, or leather cut into shapes, or any article made of leather, or any manufacture whereof leather is the most valuable part, not otherwise enumerated or described, for every 100*l.* value	30 0 0	75 0 0	Prohibited.
Leaves of gold, per 100 leaves	0 3 0	0 3 0	0 1 2
Leaves of roses, per lb.	0 0 2	0 0 10	0 0 3
Leeches, for every 100*l.* value	5 0 0	20 0 0	27 10 0
Lemons. *See* Oranges.			
peel of, per lb.	0 0 5	0 0 5	27 10 0 per cent.
preserved in sugar. *See* Succades.			
Lentiles, the bushel	0 0 10	0 0 10	0 0 0½ per lb.
Lignum, viz.			
quassia. *See* Quassia.			
vitæ, per ton	2 0 0	4 12 8	2 5 0
the produce of, and imported from, any British possession, per ton	0 10 0	0 11 2	
See Note at the end of Wood.			
Linen, or men and cotton, viz.			
cambrics, and lawns, commonly called French lawns, the piece not exceeding 8 yards in length, and not exceeding 7-8ths of a yard in breadth, and so in proportion for any greater or less quantity,			
plain	0 5 0	0 11 0	0 5 0
bordered handkerchiefs	0 5 0		
lawns of any other sort, not French, viz.			
not containing more than 60 threads to the inch of warp, per square yard	0 0 9		
containing more than 60 threads to the inch of warp, per square yard	0 1 0		
damasks and damask diaper, viz.			
until 6 Jan. 1834, per square yard	0 2 1½		
from 5 Jan. 1834, per square yard	0 2 0		
drillings, ticks, and twilled linens, viz.			
until 6 Jan. 1834, per square yard	0 0 8½		
from 5 Jan. 1834, per square yard	0 0 8		
sail cloth, per square yard	0 0 7½		
plain linens, and diaper, not otherwise enumerated or described, and whether chequered or striped, with dyed yarn or not, viz.			
not containing more than 20 threads to the in. of warp,			
until 6 Jan. 1834, per square yard	0 0 2½		
from 5 Jan. 1834, per square yard	0 0 2½		
containing more than 20 threads, and not more than 24 threads to the inch of warp,			
until 6 Jan. 1834, per square yard	0 0 3½		
from 5 Jan. 1834, per square yard	0 0 3		
containing more than 24 threads, and not containing more than 30 threads to the inch of warp,			
until 6 Jan. 1834, per square yard	0 0 4½		
from 5 Jan. 1834, per square yard	0 0 4		
containing more than 30 threads, and not containing more than 40 threads to the inch of warp,			
until 6 Jan. 1834, per square yard	0 0 5		
from 5 Jan. 1834, per square yard	0 0 4½		
containing more than 40 threads, and not containing more than 60 threads to the inch of warp,			
until 6Jan. 1834, per square yard	0 0 8½		
from 5 Jan. 1834, per square yard	0 0 8		
containing more than 60 threads, and not containing more than 80 threads to the inch of warp,			
until 6 Jan. 1834, per square yard	0 0 10½		
from 5 Jan. 1834, per square yard	0 0 10		
containing more than 80 threads, and not containing more than 100 threads to the inch of warp,			
until 6 Jan. 1834, per square yard	0 1 0½		
from 5 Jan. 1834, per square yard	0 1 0		
containing more than 100 threads to the inch of warp,			
until 6 Jan. 1834, per square yard	0 1 7		
from 5 Jan. 1834, per square yard	0 1 6		
Note.—The duties were levied on the goods above mentioned by act 6 Geo. 4. c. 111.; previously to which they were chargeable with duties according to their length and breadth respectively, which, consequently, do not admit of being compared with the above. It may, however, be observed, that not a single entry has been made under this scale, since 1825; and the previous duties may be considered equally prohibitory.			
Or, and instead of the duties herein-before imposed upon linens according to the number of threads in the warp, at the option of the importer, for every 100*l.* value	40 0 0		
A few linens have been occasionally entered under this *ad valorem* duty.			
Note.—No increased rate of duty to be charged on any linen or lawns for any additional number of threads not exceeding two threads for such as are not of 30 threads to the inch, nor for any additional number of threads not exceeding 5 threads for such as are of 30 threads and upwards to the inch.			
sails, for every 100*l.* value	30 0 0	104 9 2	45 0 0
in actual use of a British ship, and fit and necessary for such ship, and not otherwise disposed of	Free.		
if and when otherwise disposed of, for every 100*l.* value	20 0 0	104 9 2	45 0 0
manufactures of linen, or of linen mixed with cotton or with wool, not particularly enumerated, or otherwise charged with duty, for every 100*l.* value	25 0 0	30 0 0	44 0 0

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	L. s. d.	L. s. d.
Linen — *continued.*			
articles of manufactures of linen, or of linen mixed with cotton or with wool, wholly or in part made up, not otherwise charged with duty, for every 100*l.* value	40 0 0	50 0 0	44 0 0
Linseed cakes, per cwt.	0 0 2	0 0 2	27 10 0 per cent.
Liquorice juice, or succus liquoritiæ, per cwt.	3 15 0	3 15 0	1 8 0
powder, per cwt.	5 10 0	5 10 0	2 12 1
root, per cwt.	3 3 4	3 3 4	1 8 10
extract or preparation of. *See* Extract.			
Litharge of gold, per cwt.	0 2 0	0 2 0	0 0 10
of silver, per cwt.	0 2 0	0 2 0	0 0 8
Live creatures illustrative of natural history	Free.	20 0 0 per cent.	27 10 0 per cent.
Liverwort. *See* Lichen Islandicus, in Moss.			
Logwood, per ton	0 4 6	0 9 2	
imported from any British possession, per ton	0 3 0	0 9 2	Free.
Lupines, per cwt.	0 5 0	0 5 0	0 2 4
Lute strings. *See* Catlings.			
M.			
Macaroni, per lb.	0 0 2	0 0 8	0 0 2
Mace, per lb.	0 4 6	0 4 6	0 4 0
imported from any British possession within the limits of the East India Company's charter, per lb.	0 3 6	0 3 6	0 4 0
the produce of, and imported from, any other British possession, per lb.	0 3 6	0 3 6	0 4 0
Madder, per cwt.	0 2 0	0 15 0	
root, per cwt.	0 0 6	0 5 0	Free.
Magna Græcia ware, for every 100*l.* value	5 0 0	75 0 0 per cent.	27 10 0
Mahogany, per ton	7 10 0	11 17 6	
imported from the Bay of Honduras in a British ship cleared out from the port of Belize, per ton	1 10 0	3 16 0	2 4 0
imported from any British possession, per ton	4 0 0	11 17 6	
See Note at the end of Wood.			
Manganese ore, per ton	0 10 0	20 0 0 per cent.	27 10 0 per cent.
Mangoes. *See* Pickles.			
Manna, per lb.	0 0 3	0 1 3	0 0 6
Manuscripts, viz.			
bound, per cwt.	0 18 8	6 10 0	0 19 3
unbound, per cwt.	0 18 8	5 0 0	0 8 10
Maps or charts, plain or coloured, each map or chart, or part thereof	0 0 6	0 2 0	0 0 6
Marble. *See* Stone.			
Marbles for children. *See* Toys.			
Marmalade, per lb.	0 1 3	0 1 3	0 0 3
the produce of, and imported from, any British possession, per lb.	0 0 1	0 1 3	0 0 3
Mastic, per cwt.	0 6 0	7 9 4	1 8 0
Mats, viz.			
of bast, per 100	1 3 9	1 3 9	0 11 0
imported from any British possession, for every 100*l.* value	5 0 0	50 0 0	
not otherwise enumerated or described, for every 100*l.* value	20 0 0	50 0 0	27 10 0
Matting, for every 100*l.* value	20 0 0	50 0 0	0 0 2 per yard.
imported from any British possession, for every 100*l.* value	5 0 0	50 0 0	27 10 0
Mattresses, for every 100*l.* value	20 0 0	50 0 0	27 10 0
Mead or metheglin, per gallon	0 6 7	0 0 7	0 0 2
Note. — Mead or metheglin was, by act 43 Geo. 3. c. 69., subject to an excise duty of 6*s.* per gallon in addition to the customs duty, which continued until 5 April, 1825, when the same was added to the customs duty.			
Medals of gold or silver	Free.	Free.	
of any other sort, for every 100*l.* value	5 0 0	20 0 0	27 10 0
Medlars, per bushel	0 1 0	0 5 0	0 2 4
Melasses. *See* Sugar.			
Melting pots for goldsmiths. *See* Pots.			
Mercury, prepared, for every 100*l.* value	30 0 0	50 0 0	27 10 0
Metal, viz.			
bell metal, per cwt.	1 0 0	1 0 0	1 11 1
leaf metal (except leaf gold), the packet containing 250 leaves	0 0 3	0 0 8	0 0 2
Metheglin. *See* Mead.			
Mill boards, per cwt.	3 8 2	3 8 2	0 10 0
Minerals not otherwise enumerated or described, for every 100*l.* value	20 0 0	20 0 0	27 10 0
specimens of. *See* Specimens.			
Models of cork or wood, for every 100*l.* value	5 0 0	50 0 0	27 10 0
Moss, viz.			
lichen Islandicus, per lb.	0 0 1	0 0 8	27 10 0 per cent.
rock, for dyers' use, per ton	0 5 0	1 15 0	0 5 0
not otherwise charged, for every 100*l.* value	5 0 0	20 0 0	27 10 0
Mother-of-pearl shells, for every 100*l.* value	5 0 0	20 0 0	0 0 4 per lb.
Mules, each	0 10 0	5 0 0	27 10 0 per cent.
Mum. *See* Beer.			
Musical instruments, for every 100*l.* value	20 0 0	50 0 0	27 10 0
Musk, per oz.	0 0 6	0 5 0	0 2 0
Myrrh, per cwt.	0 6 0	9 6 8	2 16 0
N.			
Natron. *See* Alkali.			
Needle work. *See* Embroidery.			
Nets, viz. old fishing nets, fit only for making paper or pasteboard. *See* Rags.			
Nicaragua wood, per ton	0 5 0	1 6 2	Free.
Nitre, viz. cubic nitre, per cwt.	0 0 6	50 0 0 per cent.	2 6 8
Nutmegs, per lb.	0 3 6	0 3 6	0 2 0
the produce of, and imported from, any British possession, per lb.	0 2 6	0 2 6	0 2 0
imported from any British possession within the limits of the East India Company's charter, per lb.	0 2 6	0 2 6	0 2 0
Nuts, viz.			
cashew nuts and kernels, per cwt.	0 10 0	11 4 0	
castor nuts or seeds, per cwt.	0 0 6	5 12 0	27 10 0 per cent.
coker or cocoa nuts, the produce of any British possession, per 1,200 nuts	0 1 0	20 0 0 per cent.	
chesnuts, per bushel	0 2 0	0 4 0	0 1 5
pistachio nuts, per cwt.	0 10 0	3 13 4	1 8 0
small nuts, per bushel	0 2 0	0 4 0	0 0 9
walnuts, per bushel	0 2 0	0 4 0	0 0 9
nuts not otherwise enumerated or described, for every 100*l.* value	20 0 0	20 0 0	27 10 0

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Nux vomica, per lb.	0 2 6	0 2 6	0 0 1½
extract or preparation of. *See* Extract.			
O.			
Oakum, per cwt.	0 0 1	0 4 9	0 2 3
Ochre, per cwt.	0 1 0	0 6 9	0 2 0 per bushel.
Oil, viz.			
of almonds, per lb.	0 0 10	0 0 10	0 0 3
of bays, per lb.	0 0 3	0 0 3	0 8 9 per cwt.
of castor, per lb.	0 1 0	0 1 3	
imported from any British possession, per lb.	0 0 3	0 1 3	0 2 5 per gallon.
the produce of, and imported from, any British possession, per cwt.	0 2 6	7 0 0	
chemical, essential, or perfumed, viz.			
of caraway, per lb.	0 4 0	0 2 6	0 0 7½
of cloves, per lb.	0 14 0	1 12 0	0 0 7½
of lavender, per lb.	0 4 0	0 4 0	0 1 6
of mint, per lb.	0 4 0	0 4 0	0 0 7½
of peppermint, per lb.	0 4 0	0 4 0	0 0 7½
of spike, per lb.	0 4 0	0 4 0	0 0 4
cassia, bergamot, lemon, otto of roses, thyme, and of all other sorts, per lb.	0 1 4	As below.	As below.
of cocoa nut, per cwt.	0 2 6	0 2 6	27 10 0 per cent.
fish oil. *See* Train oil, in Oil.			
of hemp seed, per tun	39 18 0	39 18 0	
imported from any British possession, per tun	1 0 0	39 18 0	15 16 9½
of linseed, per tun	39 18 0	39 18 0	
imported from any British possession, per tun	1 0 0	39 18 0	29 0 9½
of olives, per tun	8 8 0	18 15 7	
imported in a ship belonging to any of the subjects of the King of the Two Sicilies, per tun	10 10 0	18 15 7	8 8 10¾
of palm, per cwt.	0 2 6	0 2 6	0 7 0
of paran, per tun	8 8 0	50 0 0 per cent.	27 10 0 per cent.
of rape seed, per tun	39 18 0	39 18 0	
imported from any British possession, per tun	1 0 0	39 18 0	29 0 9½
of cassia, per lb.	0 1 4	4 0 0	0 0 7½
of bergamot, per lb.	0 1 4	0 4 0	0 1 6
of cajaputa, per lb.	0 1 4	0 16 0	0 0 7½
of jessamine, per lb.	0 1 4	0 4 0	0 1 6
of cinnamon, per lb.	0 1 4	4 0 0	1 4 0
of aniseed, per lb.	0 1 4	0 4 0	0 1 6
of juniper, per lb.	0 1 4	0 2 0	0 0 6
of nutmegs, per lb.	0 1 4	2 0 0	0 0 7½
of neroli, per lb.	0 1 4	1 12 0	0 1 6
of pine, per lb.	0 1 4	0 0 8	0 0 7½
of rosewood, per lb.	0 1 4	4 0 0	0 5 0
of rosemary, per lb.	0 1 4	0 4 0	0 0 9
of sandal wood, per lb.	0 1 4	2 0 0	0 0 7½
of turpentine, per lb.	0 1 4	0 0 8	0 0 1½
of amber, per lb.	0 1 4	0 5 6	0 0 6
of sassafras, per lb.	0 1 4	0 2 6	0 1 0
of thyme, per lb.	0 1 4	0 4 0	0 1 3
of lemon, per lb.	0 1 4	0 4 0	0 1 6
rock oil, per lb.	0 0 10	0 0 10	0 0 3
seal oil. *See* Train oil, in Oil.			
seed oil, not otherwise enumerated or described, per tun	39 18 0	39 18 0	
imported from any British possession, per tun	1 0 0	39 18 0	15 16 9½
seed cakes, per cwt.	0 0 2	0 0 2	27 10 0 per cent.
of spermaceti. *See* Train oil, in Oil.			
train oil, blubber, spermaceti oil, and head matter, viz.			
the produce of fish or creatures living in the sea, taken and caught by the crews of British ships, and imported direct from the fishery, or from any British possession in a British ship, per tun	0 1 0	0 9 11	Free.
the produce of fish or creatures living in the sea, of foreign fishing, per tun	25 12 0	39 18 0	21 15 7
walnut oil, per lb.	0 0 6	0 0 6	27 10 0 per cent.
whale oil. *See* Train oil, in Oil.			
oil not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	50 0 0	50 0 0	27 10 0
Olibanum, per cwt.	0 6 0	2 7 6	1 1 0
Olives, per gallon	0 2 0	0 3 0	0 0 8
Olive wood, per ton	8 9 6	8 9 6	
the produce of, and imported from, any British possession, per tun	0 12 4	0 12 4	3 6 0
See Note at the end of Wood.			
Onions, per bushel	0 3 0	0 3 0	0 0 3
Opium, per lb.	0 4 0	0 9 0	0 1 6
extract or preparation of. *See* Extract.			
Orange flower water, per gallon	0 3 9	0 3 9	0 1 2½
Oranges and lemons, viz.			
the chest or box not exceeding the capacity of 5,000 cubic inches	0 2 6		
the chest or box exceeding the capacity of 5,000 cubic inches, and not exceeding 7,300 cubic inches	0 3 9	1 5 0 per 1,000 oranges and lemons.	0 4 5 per 1,000 oranges and lemons.
the chest or box exceeding the capacity of 7,300 cubic inches, and not exceeding 14,000 cubic inches	0 7 6		
for every 1,000 cubic inches exceeding the above rate of 14,000 cubic inches	0 0 7½		
loose, per 1,000	0 15 0	1 5 0	0 4 5
or, and at the option of the importer, for every 100*l.* value	75 0 0	No option.	No option.
peel of, per lb.	0 0 6	0 0 6	27 10 0 per cent.
Orchal, orchelia, or archelia, per cwt.	0 3 0	0 16 8	Free.
Ore not particularly charged, for every 100*l.* value	5 0 0	20 0 0	27 10 0
of gold or silver. *See* Bullion.			
specimens of. *See* Specimens.			
Orpiment, per cwt.	1 8 6	1 8 6	0 8 9
Orris or iris root, per cwt.	0 10 6	1 8 6	27 10 0 per cent.
Orsedew, per lb.	0 0 6	0 1 3	0 0 6
Otto or attar or oil of roses. *See* Oil.			
P.			
Paddy. *See* Rice.			
Painters' colours not particularly charged, viz.			
unmanufactured, for every 100*l.* value	5 0 0	50 0 0	0 0 2 per lb.
manufactured, for every 100*l.* value	10 0 0	50 0 0	27 10 0
Paintings on glass, for every 100*l.* value	5 0 0	80 0 0	
and further for every cwt. of glass	4 0 0		
paintings on glass. Excise duty on glass. *See* Glass.			
Paper, viz.			
brown paper made of old rope or cordage only, without separating or extracting the pitch or tar therefrom, and without any mixture of other materials therewith, per lb.	0 0 3	0 0 10	0 2 11 per bundle.

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	L. s. d.	L. s. d.
Paper — *continued.*			
printed, painted, or stained paper, or paper hangings, or flock paper, per square yard	0 1 0	0 1 7	75 0 0 per cent.
waste paper, or paper of any other sort, not particularly enumerated or described, nor otherwise charged with duty, per lb.	0 0 9	0 1 7	
The descriptions of paper, and duties thereon, in act 27 Geo. 3. c. 13., are too numerous to state; particularly as the duties were prohibitory.			
Parchment, per dozen sheets	0 10 0	0 10 0	0 4 9
Pasteboards, per cwt.	3 8 2	3 8 2	0 10 0
Pearl barley, per cwt.	0 17 6	0 17 6	0 8 10
Pearls, for every 100*l.* value	5 0 0	5 0 0	Free.
Pears, per bushel	0 7 6	0 7 6	0 1 5
dried, per bushel	0 10 0	0 10 0	0 0 9
Pencils, for every 100*l.* value	30 0 0	50 0 0	27 10 0
of slate, for every 100*l.* value	20 0 0	50 0 0	
Pens, for every 100*l.* value	30 0 0	50 0 0	
Pepper of all sorts, per lb.	0 1 6		0 0 3
the produce of, and imported from, any British possession, per lb.	0 1 0		0 0 3
imported from any British possession within the limits of the East India Company's charter, per lb.	0 1 0		0 0 6½
imported from any other place within those limits, per lb.	0 1 2		0 0 6½
Note. — Pepper of all sorts, in the year 1819, was subject to the excise duty of 2*s.* 6*d.* per lb., but transferred to the customs on the 5th of April, 1825.			
Perfumery not otherwise charged, for every 100*l.* value	20 0 0	50 0 0	27 10 0
Perry, per tun	22 13 8	20 9 2	10 1 7
Excise duty on perry. *See* Cider.			
Pewter, manufactures of, not otherwise enumerated or described, for every 100*l.* value	20 0 0	50 0 0	27 10 0
Pickles of all sorts, not otherwise enumerated or described, including the vinegar, per gallon	0 1 6	0 6 0	0 0 10¾
Pictures, each	0 1 0	As below.	As below.
and further, the square foot	0 1 0	As below.	
being 200 square feet or upwards, each	10 0 0	As below.	
under 2 feet square, each	As above.	3 8 0	1 3 10
of 2 to 4 feet square, each	As above.	6 16 0	2 7 8
of 4 feet square and upwards, each	As above.	10 4 0	3 11 6
Pimento, per lb.	0 1 3	0 1 3	0 0 6
the produce of, and imported from, any British possession, per lb.	0 0 5	0 0 10	0 0 3
Pink root, per lb.	0 0 4	0 0 10	27 10 0 per cent.
Pitch, per cwt.	0 0 10	0 0 10	0 14 10¾ per last.
the produce of any British possession, per cwt.	0 0 9	0 0 9	0 13 2½ per last.
Burgundy pitch, per cwt.	0 8 0	0 14 3	0 6 4
Jews' pitch. *See* Bitumen Judaicum.			
Plants, shrubs, and trees, alive	Free.	Free.	
Plaster of Paris, per cwt.	0 1 0	0 2 6	0 1 2½
Plate, viz.			
battered, fit only to be remanufactured. *See* Bullion.			
of gold, per oz. Troy	3 16 9	3 16 9	
of silver gilt, per oz. Troy	0 6 4	0 6 4	Prohibited.
part gilt, per oz. Troy	0 6 0	0 6 0	
ungilt, per oz. Troy	0 4 6	0 4 6	
Platina, for every 100*l.* value	1 0 0	0 1 0 per oz.	27 10 0 per cent.
ore of platina, for every 100*l.* value	1 0 0	5 0 0	27 10 0
Platting or other manufactures to be used in or proper for making hats or bonnets, viz.			
of bast, chip, cane, or horse hair, per lb.	1 0 0	0 6 0	0 1 10
of straw, per lb.	0 17 0	0 17 0	0 1 10
Plums, dried or preserved, per cwt.	1 7 6	7 0 0	1 8 0
Pomatum, for every 100*l.* value	30 0 0	50 0 0	27 10 0
Pomegranates, per 1,000	0 15 0	1 10 0	0 8 10
peels of, per cwt.	0 1 0	0 15 0	0 4 8
Pork, salted (not hams nor bacon, which see), per cwt.	0 12 0	Prohibited.	Prohibited.
Potatoes, per cwt.	0 2 0	0 2 0	0 3 8
Pots, viz.			
melting pots for goldsmiths, per cwt.	0 3 2	0 3 2	0 0 7
of stone, for every 100*l.* value	30 0 0	50 0 0	27 10 0
Powder, viz.			
hair powder, per cwt.	9 15 0	9 15 0	5 5 8
perfumed, per cwt.	13 13 0	13 13 0	
powder, not otherwise enumerated or described, that will serve for the same uses as starch, per cwt.	9 10 0	9 10 0	27 10 0 per cent.
Precious stones. *See* Jewels.			
Prints and drawings, viz.			
plain, not above 1 foot square	0 0 1	0 1 0	0 0 6
above 1 foot square, each	0 0 1	0 2 0	
coloured, not above 1 foot square	0 0 2	0 2 0	
above 1 foot square, each	0 0 2	0 4 0	
Prunelloes, per cwt.	1 7 6	7 0 0	1 8 0
Prunes, per cwt.	1 7 6	1 7 6	0 12 5
Q.			
Quassia, per cwt.	8 17 6	8 17 6	27 10 0 per cent.
extract or preparation of. *See* Extract.			
Quicksilver, per lb.	0 0 1	0 1 8	0 0 9
Quills, viz.			
goose quills, per 1,000	0 2 6	0 2 6	0 0 6
swan quills, per 1,000	0 12 0	0 12 0	0 2 0
Quinces, per 1,000	0 1 0	2 0 0	0 18 4
Quinine, sulphate of, per oz.	0 0 1	50 0 0 per cent.	27 10 0 per cent.
R.			
Radix, viz.			
contrayervæ, per lb.	0 0 2	0 1 8	0 0 6
enulæ campanæ, per cwt.	0 13 6	0 13 6	0 6 4
eringii, per lb.	0 0 6	0 0 6	0 0 1½
ipecacuanhæ, per lb.	0 1 0	0 4 0	0 1 8
rhataniæ, per lb.	0 0 1	0 2 0	27 10 0 per cent.
extract or preparation of. *See* Extract.			
senekæ, per lb.	0 0 2	0 1 9	0 0 2
serpentariæ, or snake root, per lb.	0 0 2	0 1 9	0 0 9
Rags, viz.			
old rags, old ropes or junk, or old fishing nets, fit only for making paper or pasteboard, per ton	0 5 0	1 6 0	Free.
woollen rags, fit only for manure, per ton	0 1 0	0 13 0	27 10 0 per cent.
Raisins, viz.			
of the sun, per cwt.	2 2 6	2 2 6	0 18 8
of any other sort, per cwt.	1 0 0	1 2 0	As below.

Articles.	Duty. 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
Raisins — *continued.*			
of all sorts, the produce of, and imported from, any British possession, per cwt.	0 10 0	1 2 0	As below.
Smyrna, per cwt.	As above.	As above.	0 11 5
Lexia and Faro, per cwt.	As above.	As above.	0 8 0
Belvidere, per cwt.	As above.	As above.	0 8 3
other sorts, per cwt.	As above.	As above.	0 7 1
Rape cakes, per cwt.	0 0 2	0 0 2	27 10 0 per cent.
Rape of grapes, per tun	15 6 0	13 6 0	6 10 8
Ratafia. *See* Spirits.			
Red wood, or Guinea wood, per ton	0 5 0	0 15 0	Free.
Rhatany root. *See* Radix rhataniæ.			
Rhubarb, per lb.	0 1 0	0 4	0 1 6
imported from any place within the limits of the East India Company's charter, per lb.	0 1 0	0 2 6	0 1 6
Rice, viz.			
not being rough and in the husk, per cwt.	0 15 0	0 15 0	} 0 7 4 per cwt.
rough and in the husk, or paddy, per bushel	0 2 6	0 10 0 per cwt.	
the produce of, and imported from, any British possession, viz.			
not being rough and in the husk, per cwt.	0 1 0	0 5 0	} 0 7 4 per cwt.
rough and in the husk, or paddy, per quarter	0 0 1	0 2 6 per cwt.	
Rocou. *See* Annotto.			
Ropes, new, *see* Cordage; old, *see* Rags; Coir, *see* Coir.			
Rosewood, per cwt.	0 10 0	1 0 0	33 0 0 per cent.
Rosin, or colophonia, per cwt.	0 4 9	0 4 9	0 2 3
the produce of, and imported from, any British possession, per cwt.	0 3 2	0 3 2	0 1 6
Rubies. *See* Jewels.			
S.			
Saccharum Saturni, per lb.	0 0 10	0 0 10	0 0 3
Safflower, per cwt.	0 1 0	0 8 9	Free.
Saffron, per lb.	0 1 0	0 7 6	0 2 6
Sago, per cwt.	0 1 0	3 14 8	1 8 0
Sails. *See* Linen.			
Sal, viz.			
ammoniac, per cwt.	0 1 0	2 16 0	Free.
limonum, per lb.	0 4 9	0 4 9	27 10 0 per cent.
prunelle, per cwt.	0 1 0	2 16 0	0 18 8
Salep, or salop, per cwt.	0 1 0	7 0 0	1 8 0
Salt	Free.		
Saltpetre, per cwt.	0 0 6	0 0 6	0 2 3
imported from the East Indies, per cwt.	0 0 6	0 0 6	0 7 9
Sanguis draconis, per cwt.	0 4 0	9 6 8	3 14 8
Santa Maria wood, for every 100*l.* value	20 0 0	20 0 0	} 33 0 0 per cent.
Sapan wood, per ton	0 1 0	20 0 0 per cent.	
Sarsaparilla, per lb.	0 0 6	0 1 3	0 0 8
Sassafras, per cwt.	0 2 0	0 6 4	0 2 4
Saunders, red, per ton	0 1 0	0 15 0	Free
white, or yellow, per cwt.	0 1 0	4 13 4	1 8 0
Sausages or puddings, per lb.	0 0 4	0 1 3	0 0 $3\frac{1}{3}$
Scaleboards, per cwt.	3 8 2	3 8 2	0 11 0
Scammony, per lb.	0 2 6	0 6 4	0 2 6
Seed, viz.			
acorns, per bushel	0 1 0	20 0 0 per cent.	27 10 0 per cent.
ammi or ammios seed, per lb.	0 0 6	0 0 6	0 0 2
aniseed, per cwt.	0 5 0	3 0 0	1 5 2
burnet seed, per cwt.	1 0 0	50 0 0 per cent.	27 10 0 per cent
canary seed, per cwt.	3 0 0	3 0 0	0 16 6
caraway seed, per cwt.	1 10 0	1 0 0	0 5 0
carrot seed, per lb.	0 0 9	0 0 9	0 0 $1\frac{1}{2}$
carthamus seed, per lb.	0 0 6	0 0 6	0 0 2
castor seed. *See* Nuts.			
cevadilla seed. *See* Sabadilla seed.			
clover seed, per cwt.	1 0 0	1 0 0	0 2 9
cole seed, per quarter	0 1 0	1 0 0	0 13 8
coriander seed, per cwt.	0 15 0	0 15 0	0 4 5
cummin seed, per cwt.	0 2 0	1 0 0	0 7 4
fennel seed, per cwt.	0 2 0	4 4 0	0 14 0
fenugreek seed, per cwt.	0 9 6	0 9 6	0 3 4
flax seed, per quarter	0 1 0	0 3 4	} 27 10 0 per cent.
forest seed, per lb.	0 0 6	25 0 0 per cent.	
garden seed not particularly enumerated or described, nor otherwise charged with duty, per lb.	0 0 6	0 1 0	0 0 $1\frac{1}{2}$
grass seed of all sorts, per cwt.	1 0 0	50 0 0 per cent.	27 10 0 per cent.
hemp seed, per quarter	0 1 0	0 17 6	0 9 $6\frac{3}{4}$
leek seed, per lb.	0 1 6	0 1 0	0 0 $1\frac{1}{2}$
lettuce seed, per quarter	0 1 0	0 1 0 per lb.	0 0 $1\frac{1}{2}$ per lb.
linseed, per quarter	0 1 0	0 3 4	Free.
lucerne seed, per cwt.	1 0 0	0 12 6	0 2 9
maw seed, per cwt.	3 0 0	3 0 0	0 15 5
millet seed, per cwt.	0 11 6	0 11 6	0 4 5
mustard seed, per bushel	0 8 0	0 9 4 per cwt.	0 2 3 per cwt.
onion seed, per lb.	0 1 6	0 0 $5\frac{1}{2}$	0 0 $1\frac{3}{4}$
parsley seed, per lb.	0 0 1	0 1 0	0 0 $1\frac{1}{2}$
piony or peony seed, per lb.	0 0 6	0 0 6	0 0 $1\frac{1}{2}$
quince seed, per lb.	0 3 0	0 3 0	0 0 $1\frac{1}{2}$
rape seed, per quarter	0 1 0	1 0 0	0 13 8
sabadilla or cevadilla seed, per lb.	0 1 0	0 1 0	27 10 0 per cent.
shrub or tree seed not otherwise enumerated, per lb.	0 0 6	50 0 0 per cent.	27 10 0 per cent.
trefoil seed, per cwt.	1 0 0	50 0 0 per cent.	27 10 0 per cent.
worm seed, per cwt.	0 2 6	8 8 0	2 16 0
all seeds not particularly enumerated or described, nor otherwise charged with duty, commonly made use of for extracting oil therefrom, per quarter	0 1 0	0 0 $4\frac{3}{4}$	27 10 0 per cent.
all other seed not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value.	30 0 0	50 0 0	27 10 0
Segars. *See* Tobacco, manufactured.			
Senna, per lb.	0 0 6	0 1 3	0 0 6
Shaving for hats. *See* Platting.			
Ships to be broken up, with their tackle, apparel, and furniture (except sails), viz.			
foreign ships or vessels, for every 100*l.* value	50 0 0	50 0 0	5 10 0
British ships, or vessels entitled to be registered as such, not having been built in the United Kingdom, for every 100*l.* value	15 0 0	Free.	Free.
Shrubs, *See* Plants.			
Shumac, per ton	0 1 0	1 11 8	Free.
Silk, viz.			
knubs or husks of silk, and waste silk, per cwt	0 1 0	22 8 0	1 17 4
raw silk, per lb.	0 0 1	0 5 6	0 3 0

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Silk — *continued.*			
thrown silk, not dyed, viz.			
singles, per lb.	0 1 6	0 14 8	0 7 4
tram, per lb.	0 2 0	0 14 8	0 7 4
organzine and crape silk, per lb.	0 3 6	0 14 8	0 7 4
thrown silk, dyed, viz.			
singles or tram, per lb.	0 3 0	2 5 6	1 4 9
organzine, or crape silk, per lb.	0 5 2	2 5 6	1 4 9
knubs or husks of silk, and waste or floss silk, imported from any place within the limits of the East India Company's charter, per cwt.	0 1 0	21 0 0	28 5 0 per cent.
raw silk, the produce of any British territory in the East Indies, per lb.	0 0 1	0 4 0	0 3 0
the produce of any other part of the East Indies, per lb.	0 0 1	0 5 6	0 3 0
manufactures of silk, or of silk mixed with any other material, the produce of Europe, viz.			
silk or satin, plain, per lb.	0 11 0		
or, and at the option of the officers of the customs, for every 100*l.* value	25 0 0		
silk or satin, figured or brocaded, per lb.	0 15 0		
or, and at the option of the officers of the customs, for every 100*l.* value	30 0 0		
gauze, plain, per lb.	0 17 0		
or, and at the option of the officers of the customs, for every 100*l.* value	30 0 0		
gauze, striped, figured, or brocaded, per lb.	1 7 6		
or, and at the option of the officers of the customs, for every 100*l.* value	30 0 0		
crape, plain, per lb.	0 16 0		
or, and at the option of the officers of the customs, for every 100*l.* value	30 0 0		
crape, figured, per lb.	0 18 0		
or, and at the option of the officers of the customs, for every 100*l.* value	30 0 0		
velvet, plain, per lb.	1 2 0		
or, and at the option of the officers of the customs, for every 100*l.* value	30 0 0		
velvet, figured, per lb.	1 7 6		
or, and at the option of the officers of the customs, for every 100*l.* value	30 0 0		
ribands, embossed or figured with velvet, per lb.	0 17 0	Prohibited.	Prohibited.
or, and at the option of the officers of the customs, for every 100*l.* value	30 0 0		
and further, if mixed with gold, silver, or other metal, in addition to the above rates, when the duty is not charged according to the value, per lb.	0 10 0		
fancy silk, net or tricot, per lb.	1 4 0		
plain silk lace or net, called tulle, per square yard	0 1 4		
manufactures of silk, or of silk mixed with any other material, the produce of, and imported from, British possessions within the limits of the East India Company's charter, for every 100*l.* value	20 0 0		
millinery of silk, or of which the greater part of the materials is of silk, viz.			
turbans or caps, each	0 15 0		
hats or bonnets, each	1 5 0		
dresses, each	2 10 0		
or, and at the option of the officers of the customs, for every 100*l.* value	40 0 0		
manufactures of silk, or of silk and any other material, not particularly enumerated, or otherwise charged with duty, for every 100*l.* value	30 0 0		
articles of manufacture of silk, or of silk and any other material, wholly or in part made up, not particularly enumerated, or otherwise charged with duty, for every 100*l.* value	30 0 0		
Silkworm gut, for every 100*l.* value	20 0 0	20 0 0	27 10 0
Skins, furs, pelts, and tails, viz.			
badger, undressed, per skin	0 0 6	0 1 6	0 0 7
bear, undressed, per skin	0 4 6	0 4 6	
undressed, imported from any British possession in America, per skin	0 2 6	0 2 6	0 5 6
beaver, undressed, per skin	0 0 8	0 0 8	0 0 8½
undressed, imported from any British possession in America, per skin	0 0 4	0 0 4	0 0 1
Calabar. *See* Squirrel skins.			
calf and kip, viz.			
in the hair, not tanned, tawed, curried, or in any way dressed, viz.			
dry, per cwt.	0 4 8		
wet, per cwt.	0 2 4		
the produce of, and imported from, the west coast of Africa, each skin not exceeding 7 lbs. weight, per cwt.	0 2 4	calf skins, 0 2 0 per doz.	calf skins, 0 2 9 per doz.
the produce of, and imported from, any British possession, viz.			
dry, per cwt.	0 2 4		
wet, per cwt.	0 1 2		
kip, in the hair, not tanned, tawed, curried, or in any way dressed	As above.	0 6 0 p. dz. skins.	27 10 0 per cent.
calf and kip, viz.			
tanned, and not otherwise dressed, per lb.	0 0 9	0 1 0	
the produce of, and imported from, any British possession, per lb.	0 0 4½	0 1 0	calf, 0 0 4½ per lb.
cut or trimmed, per lb.	0 1 2	0 1 0	
the produce of, and imported from, any British possession, per lb.	0 0 7	0 1 0	kip, 77 0 0 per cent.
tawed, curried, or in any way dressed (not being tanned hides), per lb.	0 1 0		
the produce of and imported from, any British possession, per lb.	0 0 6	75 0 0 per cent.	77 0 0 per cent.
cut or trimmed, per lb.	0 1 6		
the produce of, and imported from, any British possession, per lb.	0 0 9		
cat, undressed, per skin	0 0 1	0 0 6	0 0 1¼
Chinchilla, undressed, per skin	0 0 3	2 0 0 per cent.	27 10 0 per cent.
coney, undressed, per 100 skins	0 1 0	0 1 0	0 2 5
deer, undressed, per skin	0 0 1	0 0 4	
undressed, the produce of, and imported from, any British possession in America, per 100 skins	0 1 2	0 16 8	0 0 9 per skin.
Indian, half-dressed, per skin	0 0 0	0 0 8	0 0 4½ per lb

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Skins — *continued.*			
deer, undressed or shaved, per skin	0 0 1	0 0 8	0 0 9
dog, in the hair, not tanned, tawed, or in any way dressed, per dozen skins	0 0 2	0 0 10	0 2 6
dog fish, undressed, per dozen skins	0 5 2	0 5 2	0 2 0
undressed, of British taking, and imported direct from Newfoundland, per dozen skins	0 0 1	0 5 2	
elk, in the hair, not tanned, tawed, curried, or in any way dressed, per skin	0 1 0	0 1 0	0 1 8
ermine, undressed, per skin	0 0 3	0 0 8	0 0 3½
dressed, per skin	0 0 8	75 0 0 per cent.	77 0 0 per cent.
fisher, undressed, per skin	0 0 6	0 1 0	0 1 4½
undressed, imported from any British possession in America, per skin	0 0 3	0 0 6	
fitch, undressed, per dozen skins	0 2 0	0 3 2	0 1 0
fox, undressed, per skin	0 0 8	0 0 8	0 0 4½
undressed, imported from any British possession in America, per skin	0 0 4	0 0 4	0 0 4½
tails, undressed, for every 100*l.* value	5 0 0	20 0 0	27 10 0 per cent.
goat, raw or undressed, per dozen skins	0 0 6	0 2 10	0 5 6
tanned, per dozen skins	2 0 0	2 0 0	1 0 0
hare, undressed, per 100 skins	0 1 0	0 5 6	0 0 9¼
husse, undressed, per skin	0 0 6	0 0 6	0 0 2
kangaroo, raw and undressed, imported from any British possession, for every 100*l.* value	5 0 0	20 0 0	27 10 0
kid, in the hair, undressed, per 100 skins	0 0 4	0 1 7	0 19 3
dressed, per 100 skins	0 10 0	2 0 0	1 4 9
dressed, and dyed or coloured, per 100 skins	0 15 0	2 0 0	
kip. *See* Calf skins.			
Kolinski, undressed, per skin	0 0 3	20 0 0 per cent.	27 10 0 per cent.
lamb, undressed, in the wool, per 100 skins	0 0 4	20 0 0 per cent.	0 2 3½
tanned or tawed, per 100 skins	0 10 0	2 0 0	77 0 0 per cent.
tanned or tawed, and dyed or coloured, per 100 skins	0 15 0	2 0 0	77 0 0 per cent.
dressed in oil, per 100 skins	4 0 0	4 0 0	2 0 4
leopard, undressed, per skin	0 2 6	0 9 6	0 6 11
lion, undressed, per skin	0 1 0	0 6 0	0 2 9
lynx, undressed, per skin	0 0 6	20 0 0 per cent.	27 10 0 per cent.
marten, undressed, per skin	0 0 6	0 0 6	0 1 4½
undressed, imported from any British possession, per skin	0 0 3	0 0 3	
tails, undressed, per 100 tails	0 5 0	0 16 3	0 0 9½
mink, undressed, per skin	0 0 4	0 0 4	0 0 5
undressed, imported from any British possession in America, per skin	0 0 2	0 0 2	
dressed, per skin	0 2 0	0 2 0	0 0 6½
mole, undressed, per dozen skins	0 0 6	0 0 6	0 0 2
musquash, undressed, per 100 skins	0 1 0	0 12 6	0 13 9
nutria, undressed, per 100 skins	0 1 0	20 0 0 per cent.	27 10 0 per cent.
otter, undressed, per skin	0 1 6	0 1 6	0 1 5
undressed, imported from any British possession in America, per skin	0 1 0	0 1 0	0 1 5
ounce, undressed, per skin	0 7 6	0 7 6	0 3 6
panther, undressed, per skin	0 2 6	0 9 6	0 5 6
pelts of goats, undressed, per dozen pelts	0 3 0	0 3 0	0 1 4½
dressed, per dozen pelts	0 6 0	0 6 0	0 2 9
of all other sorts, undressed, per 100 pelts	0 17 0	0 17 0	0 8 3
racoon, undressed, per skin	0 0 2	0 0 2	0 13 9
undressed, imported from any British possession in America, per skin	0 0 1	0 0 1	
sable, undressed, per skin	0 2 6	0 8 4	0 4 1½
tails or tips of sable, undressed, per piece	0 0 3	0 1 3	0 0 7
seal, in the hair, not tanned, tawed, or in any way dressed, per skin	0 1 0	0 0 3	0 0 6
of British taking, per dozen skins	0 0 1	0 0 3	0 0 2
of British taking, and imported from Newfoundland, per skin	0 0 1	0 0 1	Free.
sheep, undressed, in the wool, per dozen skins	0 1 0	0 2 3	0 0 10
tanned or tawed, per 100 skins	2 0 0	2 0 0	1 0 10
dressed in oil, per 100 skins	4 0 0	4 0 0	1 19 7
squirrel or Calabar, undressed, per 100 skins	0 11 6	0 11 6	0 4 7
tawed, per 100 skins	0 17 6	0 17 6	0 5 4½
tails, undressed, for every 100*l.* value	20 0 0	20 0 0	27 10 0 per cent.
swan, undressed, per skin	0 1 0	0 2 3	0 0 11
tiger, undressed, per skin	0 2 6	0 9 6	0 2 9
weasel, undressed, per 100 skins	0 4 9	0 4 9	0 0 9½
wolf, undressed, per skin	0 0 6	0 2 0	0 6 4
undressed, imported from any British possession in America, per skin	0 0 3	0 1 0	0 6 4
tawed, per skin	0 17 6	0 17 6	0 8 3
wolverines, undressed, per skin	0 1 0	0 1 0	0 3 6
undressed, imported from any British possession in America, per skin	0 0 6	0 0 6	
skins and furs, or pieces of skins and furs, raw or undressed, not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	20 0 0	20 0 0	27 10 0
skins and furs, or pieces of skins and furs, tanned, tawed, curried, or in any way dressed, not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	30 0 0	75 0 0	77 0 0
articles manufactured of skins or furs, for every 100*l.* value	75 0 0	75 0 0	
Note. — The duty on fox, otter, seal, wolf, bear, cat, and beaver skins, imposed by act 59 Geo. 3. c. 52., suspended till 5 July, 1824, being the produce of and imported from Newfoundland.			
Slate. *See* Stone.			
Smalts, per lb.	0 0 4	0 0 9½	0 0 4
Snuff, per lb.	0 6 0	As below.	(See below.)
of any country, by act 59 Geo. 3. c. 53. 5*s.* } per lb.	- -	Excise.	Customs.
annual act 1*s.* } excise.	- -	0 6 0	
from the East Indies, per lb.	- -	- -	0 3 3
from British plantations in America, per lb.	- -	- -	0 1 6
from any other place, per lb.	- -	- -	0 2 2
Note. — Snuff was, by act 27 Geo. 3. c. 13., subject only to duties of customs, and by the 59 Geo. 3. c. 53., subject only to a duty of excise, which was, on the 5th of April, 1825, transferred to the customs.			
Soap, viz.			
hard, per cwt.	4 10 0	4 10 0	2 4 0
soft, per cwt.	3 11 3	3 11 3	1 17 5
the produce of, and imported from, any British possession in the East Indies, viz.			
hard, per cwt.	1 8 0	50 0 0 per cent.	37 16 3 per cent.
soft, per cwt.	1 3 0		

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Soda. *See* Alkali.			
Spa ware, for every 100*l.* value	30 0 0	50 0 0	27 10 0
Specimens of minerals, fossils, or ores, not particularly enumerated or described, nor otherwise charged with duty, each specimen not exceeding in weight 14 lbs.	Free.	0 0 2 per lb.	27 10 0
exceeding in weight 14 lbs. each, for every 100*l.* value	5 0 0	20 0 0	
illustrative of natural history, not otherwise enumerated or described	Free.		
Previous to 1823, subject to duty according to their respective denomination.			
Speckled wood, per ton	8 14 2	8 14 2	4 8 4
the produce of, and imported from, any British possession, per ton	9 16 3	0 16 3	
See Note at the end of Wood.			
Spelter, in cakes, per cwt.	0 2 0	50 0 0 per cent.	27 10 0 per cent.
not in cakes, per cwt.	0 10 0	1 8 6	0 13 9
Spermaceti, fine, per lb.	0 1 6	0 1 6	0 0 8

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.	Spirits were also subject to the following duties of excise at the time of the passing of the undermentioned acts, viz.	
				59 Geo. 3. c. 2.	27 Geo. 3. c. 13.
Spirits or strong waters of all sorts, viz.	*L. s. d.*	*L. s. d.*	*L. s. d.*		
for every gallon of such spirits or strong waters of any strength not exceeding the strength of proof by Sykes's hydrometer, and so in proportion for any greater strength than the strength of proof, and for any greater or less quantity than a gallon, viz.					
not being spirits or strong waters, the produce of any British possession in America, or any British possession within the limits of the East India Company's charter, and not being sweetened spirits, or spirits mixed with any article, so that the degree of strength thereof cannot be exactly ascertained by such hydrometer	1 2 6	0 2 2¼	0 0 10¾	*L. s. d.* 1 0 4¾	*L. s. d.* 0 5 1¼
or strong waters, the produce of any British possession in America, not being sweetened spirits, or spirits so mixed as aforesaid	0 9 0	0 1 6	0 0 6	0 12 5	0 4 3½
or strong waters, the produce of any British possession within the limits of the East India Company's charter, not being sweetened spirits, or spirits so mixed as aforesaid	0 15 0	0 2 6	0 3 4¾	0 18 6½	0 4 3½
cordials, or strong waters respectively (not being the produce of any British possession in America), sweetened or mixed with any article, so that the degree of strength thereof cannot be exactly ascertained by such hydrometer	1 10 0	0 6 7½	0 3 4¾	1 16 7½	0 9 8½
cordials, or strong waters respectively, being the produce of any British possession in America, sweetened or mixed with any article, so that the degree of strength thereof cannot be exactly ascertained by such hydrometer	1 0 0	0 5 7½	0 3 4¾	1 4 0	0 8 0
rum shrub, however sweetened, the produce of, and imported from, any British possession in America, per gallon	0 9 0	0 6 7½	0 3 4¾	1 4 0	0 8 0

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Sponge, per lb.	0 0 6	0 2 0	0 0 9
the produce of, and imported from, any British possession, per lb.	0 0 1	0 2 0	0 0 9
Squills, dried, per cwt.	0 8 0	1 0 0	0 2 6
not dried, per cwt.	0 1 0	0 5 0	
Starch, per cwt.	9 10 0	9 10 0	5 5 8
Stavesacre, per cwt.	0 4 0	1 8 0	0 8 9
Steel, unwrought, prepared in, and imported from, any British possession in Asia, Africa, or America, per ton	0 1 0	50 0 0 per cent.	27 10 0 per cent.
or any manufactures of steel not otherwise enumerated or described, for every 100*l.* value	20 0 0	50 0 0 per cent.	Prohibited.
Stibium. *See* Antimony.			
Sticks, viz. walking sticks. *See* Canes.			
Stone, viz.			
burrs for mill stones, per 100	0 10 0	3 16 0	0 11 0
dog stones, not exceeding 4 feet in diameter, above 6 and under 12 inches in thickness, per pair	6 3 6	6 3 6	2 17 2½
emery stones, per ton	0 1 0	0 2 0	1 16 8
filtering stones, for every 100*l.* of the value	50 0 0	50 0 0	27 10 0
flint stones for potters	Free.	0 2 6 per ton.	27 10 0 per cent.
stones, not flint, for potters	Free.	66 10 0 per cent.	
felspar for potters	Free.	20 0 0 per cent.	
gravestones of marble, viz.			
polished, each not containing more than 2 feet square, per foot square, superficial measure	0 2 6	0 2 6	0 0 2½
unpolished, the foot square, superficial measure	0 0 10	0 0 10	0 0 1½
gravestones not of marble, polished or unpolished, the foot square, superficial measure	0 0 6	0 0 6	0 0 0½
limestone	Free.	20 0 0 per cent.	27 10 0 per cent.
marble, rough, blocks or slabs	Free.	0 6 4 the solid ft.	0 2 0 the solid ft.
marble in any way manufactured (except gravestones and paving stones, each not containing more than 2 feet square), per cwt	0 3 0	0 3 2 the foot sqr.	0 1 0 the foot sqr.

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Stone — *continued.*			
marble paving stones, each not containing more than 2 feet square, viz.			
polished, the foot square, superficial measure	0 0 10	0 0 10	0 0 2½
rough, per foot square, superficial measure	0 0 6	0 0 6	0 0 1½
mill stones above 4 feet in diameter, or if 12 inches in thickness or upwards, per pair	11 8 0	11 8 0	2 4 0
paving stones, not of marble, per 100 feet square, superficial measure	0 12 0	0 12 0	0 4 2
pebble stones	Free.	0 13 6 per ton.	0 5 6 per ton.
polishing stones, for every 100*l.* value	5 0 0	20 0 0	27 10 0
pumice stones, per ton	0 5 0	1 13 4	0 3 0
quern stones, viz. under 3 feet in diameter, and not exceeding 6 inches in thickness, per pair	0 8 9	0 17 6	0 3 3½
3 feet in diameter, and not above 4 feet in diameter, and not exceeding 6 inches in thickness, per pair	0 17 6	0 17 6	0 6 7½
rag stones, for every 100*l.* value	20 0 0	20 0 0	27 10 0
slates not otherwise enumerated or described, for every 100*l.* value	66 10 0	66 10 0	0 0 6 each.
slates in frames, per dozen	0 3 9	0 3 0	0 0 11
slick stones, per 100	0 8 0	0 8 0	0 3 4
stone, sculptured, or mosaic work, per cwt.	0 2 6	0 2 6	27 10 0 per cent.
stone to be used for the purpose of lithography	Free.	1 0 0 per cwt.	27 10 0 per cent.
whet stones, per 100	0 8 9	0 8 9	0 3 8
stones not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	20 0 0	66 10 0	27 10 0 per cent
Note. — If any statue, group of figures, or other stone or marble ornament, carved out of the same block, shall exceed 1 ton weight, the duty to be charged thereon shall be estimated at the rate payable for 1 ton weight, and no more.			
Storax, or Styrax. *See* Gum.			
Straw or grass for platting, per cwt.	0 0 1	20 0 0 per cent.	27 10 0 per cent.
Succades, per lb.	0 1 3	0 3 2	0 0 8
the produce of, and imported from, any Brit. poss. per lb.	0 0 1	0 3 2	0 0 8
Sugar, viz.			
brown or muscovado or clayed, not being refined, until 5 April, 1834, per cwt.	3 3 0	4 6 8 clayed. 3 3 0 not clayed.	2 5 6 clayed. 1 7 2 not clayed.
the growth, produce, or manufacture of any British possession within the limits of the East India Company's charter, and imported from thence, per cwt.	1 12 0	2 0 0	
the growth, produce, or manufacture of any Brit. poss. in America, and imported from thence, per cwt.	1 4 0	1 15 0 clayed. 1 10 0 not clayed.	1 9 0 clayed 0 12 4 not clayed.
(Sugar was, by act 59 Geo. 3. c. 52., subject to the fluctuation of 3*s.* per cwt. less than the above duties, according to the average price of muscovado sugar, until the passing of 6 Geo. 4. c. 9.)			
melasses, per cwt.	1 3 9	1 3 9	0 11 9
the produce of, and imported from, any Brit. pos., per cwt.	0 9 0	0 10 0	0 3 0
refined, per cwt.	8 8 0	8 8 0	4 18 8
candy, brown, per cwt.	5 12 0	5 12 0	2 15 0
white, per cwt.	8 8 0	8 8 0	4 2 6
candy, imported from the East Indies, viz.			
brown, per cwt.	5 12 0	5 12 0	4 19 0
white, per cwt.	5 12 0	5 12 0	7 8 6
Sulphur impressions, for every 100*l.* value	5 0 0	50 0 0	27 10 0
vivum. *See* Brimstone.			
Sweep-washers' dirt, containing bullion. *See* Bullion.			
Sweet wood, per ton	10 13 0	10 13 0	5 10 0
the produce of, and imported from, any Brit. poss., per ton	0 16 3	0 16 3	
See Note at the end of Wood.			
T.			
Tails, viz.			
buffalo, bull, cow, or ox tails, per 100	0 6 0	0 6 0	0 2 9
fox tails, marten tails, sable tails, squirrel or Calabar tails. *See* Skins.			
Talc, per lb.	0 0 8	0 0 8	0 0 2
Tallow, per cwt.	0 3 2	0 3 2	
imported from any British possession in Asia, Africa, or America, per cwt.	0 1 0	0 3 2	Free.
Tamarinds, per lb.	0 0 8	0 0 8	
the produce of, and imported from, any Brit. poss., per lb.	0 0 1	0 0 8	0 0 2
Tapioca, per cwt.	0 1 0	2 16 0	0 18 8
Tar, the last, containing 12 barrels, each barrel not exceeding 31½ gallons	0 15 0	1 5 9½	0 14 10
the produce of, and imported from, any British possession, the last containing 12 such barrels	0 12 0	1 3 4	0 13 2¼
Barbadoes tar, per cwt.	0 2 6	2 6 8	0 9 4
Tares, per quarter	0 10 0	20 0 0 per cent.	27 10 0 per cent.
Tarras, per bushel	0 1 3	0 1 3	0 0 6
Tartaric acid, per lb.	0 0 4	50 0 0 per cent.	27 10 0 per cent.
Tea, from 22. April 1834, will be subject to the following customs duties, viz.			
bohea, per lb.	0 1 6	Excise.	Excise.
congou, twankay, hyson skin, orange pekoe, and campoi, per lb.	0 2 2		
souchong, flowery pekoe, hyson, young hyson, gunpowder, imperial, and other sorts not enumerated, per lb.	0 3 0		
(Tea was free of customs duty until 23. April, 1834; but in the year 1787 was subject to the excise duty of 7*l.* 10*s.* per cent. on the gross price; and in the year 1819 to the following excise duties, viz. sold at or under 2*s.* per lb. 96*l.* per cent.; sold above 2*s.* per lb., 100*l.* per cent.			
Teasles, per 1,000	0 1 0	0 1 8	0 1 2
Teeth, viz.			
sea cow, sea horse, or sea morse teeth, per cwt.	1 0 0	3 4 0	3 14 8
elephants' teeth, not above 21 lbs. wt. each tooth, per cwt.	1 0 0	2 0 0	1 6 5
exceeding 21 lbs. weight each tooth, per cwt.	1 0 0	4 0 0	1 6 5
Telescopes, for every 100*l.* value	30 0 0	50 0 0	27 10 0 per cent.
Terra, viz.			
Japonica or catechu, per cwt.	0 1 0	4 13 4	1 17 4
Sienna, per cwt.	0 4 0	1 11 8	27 10 0 per cent.
umbra, per cwt.	0 4 0	0 12 0	0 4 5
verde, per cwt.	0 1 0	0 16 0	27 10 0 per cent.
Thread, viz.			
Bruges thread, per dozen lbs.	0 15 0	1 10 6	0 9 11
cotton thread. *See* Cotton manufactures.			
Outnal thread, per dozen lbs.	0 15 0	1 10 6	0 17 8
packthread, per cwt.	0 15 0	1 10 6	0 14 10
sisters thread, per lb.	0 4 0	0 8 4	0 2 9

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Thread — *continued.*			
whited brown thread, per dozen lbs.	0 18 0	1 16 6	0 17 8
not otherwise enumerated or described, for every 100*l.* value	25 0 0	50 0 0	27 10 0
Tiles, for every 100*l.* value	50 0 0	50 0 0	} As below.
Dutch tiles, for every 100*l.* value	15 0 0	50 0 0	
paving tiles not above 10 inches square, per 1,000	As above.	As above.	1 9 9
exceeding 10 inches square, per 1,000	As above.	As above.	2 6 3
pan tiles, per 1,000	As above.	As above.	2 12 10
Tin, per cwt.	2 10 0	5 9 3	2 13 0
manufactures of, not otherwise enumerated or described, for every 100*l.* value	20 0 0	50 0 0	27 10 0
ore, for every 100*l.* value	20 0 0	20 0 0	27 10 0
Tincal. *See* Borax.			
Tin foil, for every 100*l.* value	25 0 0	50 0 0	27 10 0
Tobacco, viz.			
unmanufactured, per lb.	0 3 0	}	0 3 6
the produce of, and imported from, any British possession in America, per lb.	0 2 9	} Excise	0 1 3
manufactured, or segars, per lb.	0 9 0	} As below.	0 3 6
(Manufactured in the United Kingdom at or within 2 miles of any port into which tobacco may be imported, made into shag, roll, or carrot tobacco, drawback upon exportation, per lb. 2*s.* 7½*d.*)			
Tobacco was, by act 59 Geo. 3. c. 53., and annual act, subject to the following excise duties, viz.			
unmanufactured, of Turkey, and British possessions in America, the territories of Russia, and any place within the limits of the E. I Co.'s charter, per lb.	0 4 0	Excise 0 4 0	
of Spain or Portugal, per lb.	- -	0 6 0	
segars, per lb.	- -	0 6 0	
Tobacco pipes, for every 100*l.* value	50 0 0	50 0 0	27 10 0
Tongues, per dozen	0 3 0	0 3 0	0 1 0
Tornsal, or Turnsole, per cwt.	0 5 0	0 10 0	0 4 3
Tortoiseshell or turtleshell, unmanufactured, per lb.	0 2 0	0 4 0	} 0 1 3
imported from any British possession, per lb.	0 0 1	0 4 0	
Tow. *See* Flax.			
Toys, for every 100*l.* value	20 0 0	50 0 0	33 0 0
Trees. *See* Plants.			
Truffles, per lb.	0 1 0	0 5 6	0 2 3
Turmeric, per cwt.	0 10 0	3 14 8	} 0 18 8
imported from any British possession, per cwt.	0 2 4	3 14 8	
Turnery not otherwise enumerated or described, for every 100*l.* value	30 0 0	50 0 0	27 10 0
Turnsole. *See* Tornsal.			
Turpentine, viz.			
not being of greater value than 12*s.* the cwt. thereof, per cwt.	0 4 4	0 4 4	} 0 2 3
being of greater value than 12*s.* and not of greater value than 15*s.* the cwt. thereof, per cwt.	0 5 4	0 4 4	
being of greater value than 15*s.* per cwt. thereof, per cwt.	1 6 2	0 4 4	0 2 3
of Venice, Scio, or Cyprus, per lb.	0 0 10	0 0 10	0 0 4
Twine, per cwt.	1 11 0	1 11 0	0 11 0
V.			
Valonia, per cwt.	0 1 0	0 2 6	Free.
Vanelloes, per lb.	0 5 0	0 16 8	0 8 3
Varnish, not otherwise enumerated or described, for every 100*l.* value	30 0 0	50 0 0	0 8 9 per cwt.
Vases, ancient, not of stone or marble, for every 100*l.* value	5 0 0	50 0 0	27 10 0
Vellum, per skin	0 7 2	0 7 2	0 3 2
Verdigris, per lb.	0 1 0	0 3 4	0 0 3
Verjuice, per tun	73 12 9	73 12 9	27 10 0 per cent.
Vermicelli, per lb.	0 0 2	0 0 8	0 0 2
Vermilion, per lb.	0 0 6	0 2 0	0 0 7
Vinegar, or acetous acid, per tun	18 18 0	73 12 9	39 10 7
Vinegar, or acetous acid, by act 58 Geo. 3. c. 65., was subject also to the duty of excise of 1*s.* 2½*d.* per gallon until April 5. 1825, when the same was transferred to the customs.			
W.			
Wafers, per lb.	0 1 3	0 1 3	0 0 6
Washing balls, per lb.	0 1 8	0 1 8	27 10 0 per cent.
Watches of gold, silver, or other metal, for every 100*l.* value	25 0 0	50 0 0	27 10 0
Water, viz.			
arquebusade, citron, cordial, Hungary, lavender. *See* Spirits.			
Cologne water, the flask (30 of such flasks containing not more than 1 gallon)	0 1 0	0 6 7¼ per gallon.	0 3 4¾ per gallon.
Cologne water was subject also to the excise duty of 5*s.* 1¼*d.* per gallon by act 27 Geo. 3. c. 13., and to 1*l.* 0*s.* 4¾*d.* per gallon at the time of passing act 59 Geo. 3. c. 52.			
mineral or natural water, per dozen bottles or flasks (each bottle or flask not exceeding 3 pints)	0 4 0	0 4 0	0 1 10
strong water. *See* Spirits.			
Wax, viz.			
bees' wax, viz.			
unbleached, per cwt.	1 10 0	3 6 6	1 11 7
in any degree bleached, per cwt.	3 0 0	6 3 6	3 2 4
imported from any British possession in Asia, Africa, or America, viz.			
unbleached, per cwt.	0 10 0	3 6 6	1 11 7
in any degree bleached, per cwt.	1 0 0	6 3 6	3 2 4
myrtle wax, per lb.	0 1 0	0 1 0	0 0 4
sealing wax, for every 100*l.* value	30 0 0	50 0 0	27 10 0
Weld, per cwt.	0 1 0	0 2 9	0 0 10
Whale fins, per ton	95 0 0	95 0 0	97 18 0
taken and caught by the crew of a British ship, and imported direct from the fishery, or from any British possession, in a British ship, per ton	1 0 0	2 7 6	2 15 0
Whipcord, per lb.	0 1 0	0 1 0	0 0 2
Wine, viz.			
Cape, per tun	34 13 0	17 4 5	23 10 5
excise ditto	- -	21 0 0	14 5 7
Madeira, per tun	69 6 0	52 18 5	23 10 5
excise ditto	- -	63 0 0	14 5 7
Rhenish, Germany, and Hungary, per tun	69 6 0	79 7 7	40 6 5
excise ditto	- -	63 0 0	21 8 5
French, per tun	69 6 0	79 7 7	35 5 7
excise ditto	- -	93 17 5	21 8 5

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Wine — *continued.*			
other wines, per tun	69 6 0	51 13 2	23 10 5
excise ditto	- -	63 0 0	14 5 7
(The full duties on wine are drawn back upon exportation.)			
lees, subject to the same duty as wine, but no drawback is allowed on the lees of wine exported.			
Wire, viz.			
brass or copper, per cwt.	2 10 0	5 14 0	2 12 3
gilt or plated, for every 100*l.* value	25 0 0	50 0 0	Prohibited.
iron, per cwt.	1 0 0	5 18 9	2 17 9
latten, per cwt.	1 0 0	5 9 3	2 13 0
silver, for every 100*l.* value	25 0 0	50 0 0	Prohibited.
steel, per lb.	0 1 10	0 1 10	0 0 10
Woad, per cwt.	0 1 0	0 6 6	0 1 7¾
Wood, viz.			
anchor stocks, per piece	0 8 4	0 8 4	0 2 3
imported from any British possession in America, per piece	0 0 10	0 0 10	Free.
See Note at the end of Wood.			
balks, viz.			
under 5 inches square, and under 24 feet in length, per 120	18 2 7	18 2 7	1 1 3
under 5 inches square, and 24 feet in length, or upwards, per 120	27 0 0	20 0 0 per cent.	2 13 0 per 120.
5 inches square, or upwards, are subject and liable to the duties payable on fir timber.			
balks imported from any British possession in America, viz.			
under 5 inches square, and under 24 feet in length, per 120	3 5 0	0 16 3	Free.
under 5 inches square, and 24 feet in length, or upwards, per 120	4 17 6	0 16 3	Free.
5 inches square, or upwards, are subject and liable to the duties payable on fir timber.			
See Note at the end of Wood.			
battens imported into Great Britain, viz.			
6 feet in length and not exceeding 16 feet in length, not above 7 inches in width, and not above 2¾ inches in thickness, per 120	10 0 0	10 11 6 8 to 20 feet.	1 6 6 8 to 20 feet.
exceeding 16 feet in length and not exceeding 21 feet in length, not above 7 inches in width, and not exceeding 2¾ inches in thickness, per 120	11 10 0	21 3 0 above 20 ft.	2 13 0 above 20 ft.
exceeding 21 feet in length and not exceeding 45 feet in length, not above 7 inches in width, and not exceeding 2¾ inches in thickness, per 120	20 0 0	21 3 0 above 20 ft.	2 13 0 above 20 ft.
exceeding 45 feet in length, or above 2¾ inches in thickness (not being timber 8 inches square), per load, containing 50 cubic feet	2 10 0	21 3 0 above 20 ft.	2 13 0 above 20 ft.
and further, per 120	6 0 0		
battens of the growth and produce of any British possession in America, and imported directly from thence into Great Britain, viz.			
6 feet in length and not exceeding 16 feet in length, not above 7 inches in width, and not exceeding 2¾ inches in thickness, per 120	1 0 0	0 8 4	Free.
exceeding 16 feet in length and not exceeding 21 feet in length, and not above 7 inches in width, and not exceeding 2¾ inches in thickness, per 120	1 3 0	0 8 4	Free.
exceeding 21 feet in length, not above 7 inches in width, or if exceeding 2¾ inches in thickness, per 120	2 0 0	0 8 4	Free
See Note at the end of Wood.			
battens imported into Ireland, viz.			
8 feet in length and not exceeding 12 feet in length, not above 7 inches in width, and not exceeding 3½ inches in thickness, per 120	8 6 3	Ireland.	Ireland.
exceeding 12 feet in length and not exceeding 14 feet in length, not above 7 inches in width, and not exceeding 3½ inches in thickness, per 120	9 14 0	Ireland.	Ireland.
exceeding 14 feet in length and not exceeding 16 feet in length, not above 7 inches in width, and not exceeding 3½ inches in thickness, per 120	11 1 8	Ireland.	Ireland.
exceeding 16 feet in length and not exceeding 18 feet in length, not above 7 inches in width, and not exceeding 3½ inches in thickness, per 120	12 9 4	Ireland.	Ireland.
exceeding 18 feet in length and not exceeding 20 feet in length, not above 7 inches in width, and not exceeding 3½ inches in thickness, per 120	13 17 2	Ireland.	Ireland.
exceeding 20 feet in length and not exceeding 45 feet in length, and not above 7 inches in width, and not exceeding 3½ inches in thickness, per 120	34 6 1	Ireland.	Ireland.
exceeding 45 feet in length, or above 3½ inches in thickness (not being timber 8 inches square), per load, containing 50 cubic feet	2 10 0	Ireland.	Ireland.
and further, per 120	6 0 0		
batten ends, imported into Great Britain, viz.			
under 6 feet in length, not above 7 inches in width, and not exceeding 2¾ inches in thickness, per 120	3 0 0	3 11 3 under 8 feet.	0 8 10 under 8 feet.
under 6 feet in length, not above 7 inches in width, and exceeding 2¾ inches in thickness, per 120	6 0 0	7 5 0 under 8 feet.	0 17 8 under 8 feet.
batten ends of the growth and produce of any British possession in America, and imported directly from thence into Great Britain, viz.			
under 6 feet in length, not above 7 inches in width, and not exceeding 2¾ inches in thickness, per 120	0 7 6	0 8 4	Free.
under 6 feet in length, not above 7 inches in width, and exceeding 2¾ inches in thickness, per 120	0 15 0	0 8 4	Free.
See Note at the end of Wood.			
batten ends imported into Ireland, viz.			
under 8 feet in length, not above 7 inches in width, and not exceeding 3½ inches in thickness, per 120	4 14 5	Ireland.	Ireland.
under 8 feet in length, if exceeding 3½ inches in thickness, per 120	9 3 1	Ireland.	Ireland.
battens and batten ends, of all sorts, of the growth and produce of any British possession in America, and imported directly from thence into Ireland, per 120	0 8 3	Ireland.	Ireland.
beech plank, 2 inches in thickness or upwards, per load, containing 50 cubic feet	2 8 9	2 8 9	0 13 3
of all sorts, of the growth and produce of any British possession in America, and imported directly from thence, per 120	0 8 4	0 8 4	Free.
See Note at the end of Wood.			

Articles.	Duty. 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
Wood — *continued.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
beech quarters, viz.			
under 5 inches square, and under 24 feet in length, per 120	4 10 8	4 10 8	1 1 3
5 inches square, and under 8 inches square, or if 24 feet in length or upwards, per 120	12 3 6	12 3 6	2 13 0
of all sorts, under 8 inches square, of the growth and produce of any British possession in America, and imported directly from thence, per 120 *See* Note at the end of Wood.	0 16 3	0 16 3	Free.
boards, viz.			
beech boards, viz.			
under 2 inches in thickness, and under 15 feet in length, per 120	4 9 6	4 9 6	1 6 5
under 2 inches in thickness, and if 15 feet in length or upwards, per 120	8 19 0	8 19 0	2 12 0
clap-boards, viz.			
not exceeding 5 feet 3 inches in length, and under 8 inches square, per 120	6 2 0	6 2 0	1 0 0
of the growth and produce of any British possession in America, and imported directly from thence, per 120 *See* Note at the end of Wood.	0 12 4	0 12 4	Free.
linn boards or white boards for shoemakers, viz.			
under 4 feet in length, and under 6 inches in thickness, per 120	6 16 6	6 16 6	1 19 8
4 feet in length, or 6 inches in thickness, or upwards, per 120	13 13 0	13 13 0	3 19 4
oak boards, viz.			
under 2 inches in thickness, and under 15 feet in length, per 120	18 1 0	18 1 0	2 12 10
under 2 inches in thickness, and if 15 feet in length or upwards, per 120	36 2 0	36 2	5 5 8
outside slabs or paling boards, hewed on one side, not exceeding 7 feet in length, and not above 1½ inch in thickness, per 120	2 0 0	17 3	0 5 0
outside slabs or paling boards, hewed on one side, exceeding 7 feet in length, and not exceeding 12 feet in length, and not above 1½ inch in thickness, per 120	4 0 0	3 14 6	0 10 0
outside slabs or paling boards, hewed on one side, exceeding 12 feet in length, or exceeding 1½ inch in thickness, are subject and liable to the duties payable on deals.			
outside slabs or paling boards, hewed on one side, of the growth and produce of any British possession in America, and imported directly from thence, viz.			
not exceeding 7 feet in length, and not above 1½ inch in thickness, per 120	0 5 0	8 4	Free.
exceeding 7 feet in length and not exceeding 12 feet in length, and not above 1½ inch in thickness, per 120	0 10 0	0 8 4	Free
exceeding 12 feet in length, or exceeding 1½ inch in thickness, are subject and liable to the duties payable on deals. *See* Note at the end of Wood.			
pipe boards, viz.			
above 5 feet 3 inches in length and not exceeding 8 feet in length, and under 8 inches square, per 120	9 3 0	9 3 0	1 10 0
exceeding 8 feet in length, and under 8 inches square, per 120	18 6 0	18 6 0	3 0 0
of all sorts, exceeding 5 feet 3 inches in length, and under 8 inches square, of the growth and produce of any British possession in America, and imported directly from thence, per 120 *See* Note at the end of Wood.	0 19 6	0 19 6	Free.
wainscot boards, viz.			
the foot, containing 12 feet in length, and 1 inch in thickness, and so in proportion for any greater or lesser length or thickness	0 4 0	0 5 6	0 0 9
boards of all sorts, not otherwise enumerated or described, of the growth and produce of any British possession in America, and imported directly from thence, per 120 *See* Note at the end of Wood.	0 8 4	0 8 4	Free.
bowsprits. *See* Masts.			
deals to be used in mines, viz.			
above 7 inches in width, being 8 feet in length and not above 10 feet in length, and not exceeding 1½ inch in thickness, per 120	8 2 6	8 2 6	No rate.
deals imported into Great Britain, viz.			
above 7 inches in width, being 6 feet in length and not above 16 feet in length, and not exceeding 3½ inches in thickness, per 120	19 0 0	20 15 8 8 to 20 ft.	As below.
above 7 inches in width, above 16 feet in length, and not above 21 feet in length, and not exceeding 3½ inches in thickness, per 120	22 0 0	50 9 2 above 20 ft.	As below
above 7 inches in width, above 21 feet in length, and not above 45 feet in length, and not above 3½ inches in thickness, per 120	44 0 0	51 9 2	As below.
deals, above 7 inches wide, viz.			
8 feet to 20 feet long, not above 3½ inches thick, per 120	- -	- - -	2 13 0
8 feet to 20 feet long, above 3½ inches thick, per 120	- -	- - -	5 6 0
above 20 feet long, not above 4 inches thick, per 120	- -	- - -	5 19 0
above 20 feet long, above 4 inches thick, per 120	- -	- - -	11 18 0
above 45 feet in length, or above 3½ inches in thickness (not being timber 8 inches square or upwards), the load, containing 50 cubic feet	2 10 0	} 100 6 0 the 120.	No rate.
and further, per 120	6 0 0	}	
deals of the growth and produce of any British possession in America, and imported directly from thence into Great Britain, viz.			
above 7 inches in width, being 6 feet in length and not above 16 feet in length, and not exceeding 3½ inches in thickness, per 120	2 0 0	0 8 4	Free.
above 7 inches in width, above 16 feet in length and not above 21 feet in length, and not exceeding 3½ inches in thickness, per 120	2 10 0	0 8 4	Free.
above 7 inches in width, being 6 feet in length and not above 21 feet in length, and exceeding 3½ inches in thickness, per 120	4 0 0	0 8 4	Free.

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Wood — *continued.*			
deals of the growth, &c. — *continued.*			
above 7 inches in width, exceeding 21 feet in length, and not exceeding 4 inches in thickness, per 120	5 0 0	0 8 4	Free.
above 7 inches in width, exceeding 21 feet in length, and exceeding 4 inches in thickness (not being timber 8 inches square or upwards), per 120	10 0 0	0 8 4	Free.
See Note at the end of Wood.			
deals imported into Ireland, viz.			
above 7 inches in width and not exceeding 12 inches in width, and not exceeding 3½ inches in thickness, viz.			
8 feet in length and not exceeding 12 feet in length, per 120	12 9 5	Ireland.	Ireland.
exceeding 12 feet in length and not exceeding 14 feet in length, per 120	14 11 0	Ireland.	Ireland.
exceeding 14 feet in length and not exceeding 16 feet in length, per 120	16 12 6	Ireland.	Ireland.
exceeding 16 feet in length and not exceeding 18 feet in length, per 120	18 14 1	Ireland.	Ireland.
exceeding 18 feet in length and not exceeding 20 feet in length, per 120	20 15 7	Ireland.	Ireland.
above 7 inches in width and not exceeding 12 inches in width, and exceeding 3½ inches in thickness, viz.			
8 feet in length and not exceeding 20 feet in length, per 120	41 11 3	Ireland.	Ireland.
above 7 inches in width and not exceeding 12 inches in width, and not exceeding 4 inches in thickness, and exceeding 20 feet in length, per 120	51 9 2	Ireland.	Ireland.
above 7 inches in width and not exceeding 12 inches in width, and exceeding 4 inches in thickness, and exceeding 20 feet in length, per 120	100 6 1	Ireland.	Ireland.
deal ends imported into Great Britain, viz.			
above 7 inches in width, being under 6 feet in length, and not exceeding 3½ inches in thickness, per 120	6 0 0	7 1 9 under 8 ft.	0 17 8 under 8 ft.
above 7 inches in width, being under 6 feet in length, and exceeding 3½ inches in thickness, per 120	12 0 0	13 14 9 under 8 ft.	1 15 4 under 8 ft.
deal ends of the growth and produce of any British possession in America, and imported directly from thence into Great Britain, viz.			
above 7 inches in width, being under 6 feet in length, and not exceeding 3½ inches in thickness, per 120	0 15 0	0 8 4	Free.
above 7 inches in width, being under 6 feet in length, and exceeding 3½ inches in thickness, per 120	1 10 0	0 8 4	Free.
See Note at the end of Wood.			
deal ends imported into Ireland, viz.			
above 7 inches in width and not exceeding 12 inches in width, and under 8 feet in length, viz.			
not exceeding 3½ inches in thickness, per 120	7 1 8	Ireland.	Ireland.
exceeding 3½ inches in thickness, per 120	13 14 8	Ireland.	Ireland.
deals and deal ends, viz.			
of all sorts, of the growth and produce of any British possession in America, and imported directly from thence into Ireland, per 120	0 8 3	Ireland.	Ireland.
and further, on all deals and deal ends, imported into Ireland, of the aforesaid lengths and thicknesses, but of the following widths, the additional duties following, viz.			
if exceeding 12 inches in width and not exceeding 15 inches in width, 25 per cent., or ¼ of the aforesaid rates.			
if exceeding 15 inches in width and not exceeding 18 inches in width, 50 per cent., or ½ of the aforesaid rates.			
if exceeding 18 inches in width and not exceeding 21 inches in width, 75 per cent., or ¾ of the aforesaid rates.			
if exceeding 21 inches in width, 100 per cent., or an additional duty equal to the aforesaid rates respectively.			
firewood not fit or proper to be used other than as such, viz.			
the fathom, 6 feet wide and 6 feet high	0 19 0	0 19 0	0 2 8
imported from any British possession in America, the fathom, 6 feet wide and 6 feet high	0 0 10	0 0 10	Free.
See Note at the end of Wood.			
fir quarters, viz.			
under 5 inches square and under 24 feet in length, per 120	18 2 7	18 2 7	1 1 3
under 5 inches square and 24 feet in length or upwards, per 120	27 0 0	20 0 0 per cent.	2 13 0 per 120
5 inches square or upwards are subject and liable to the duties payable on fir timber.			
fir quarters of the growth and produce of any British possession in America, and imported directly from thence, viz.			
under 5 inches square, and under 24 feet in length, per 120	3 5 0	0 16 3	Free.
under 5 inches square, and 24 feet in length or upwards, per 120	4 17 6	0 16 3	Free.
5 inches square or upwards are subject and liable to the duties payable on fir timber.			
See Note at the end of Wood.			
fir timber. *See* Timber.			
handspikes, viz.			
under 7 feet in length, per 120	2 0 0	2 7 6	0 6 8
7 feet in length or upwards, per 120	4 0 0	4 15 0	0 13 4
handspikes imported from any British possession in America, viz.			
under 7 feet in length, per 120	0 2 6	0 2 3	Free.
7 feet in length or upwards, per 120	0 3 0	0 4 6	Free.
See Note at the end of Wood.			
knees of oak, viz.			
under 5 inches square, per 120	0 10 0	0 12 0	0 3 4
5 inches square and under 8 inches square, per 120	4 0 0	4 17 6	1 13 0
8 inches square or upwards, per load containing 50 cubic feet	1 6 0	1 11 0	0 9 11
knees of oak imported from any British possession in America, viz.			
under 5 inches square, per 120	0 2 0	0 8 4	Free.
5 inches square and under 8 inches square, per 120	0 15 0	0 8 4	Free.

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Wood — *continued.*			
knees of oak — *continued.*			
8 inches square or upwards, per load containing 50 cubic feet — *See* Note at the end of Wood.	0 5 0	0 5 6	Free.
lathwood, viz.			
in pieces under 5 feet in length, per fathom, 6 feet wide and 6 feet high	4 5 0	4 17 6	0 13 3
in pieces 5 feet in length and under 8 feet in length, per fathom, 6 feet wide and 6 feet high	6 16 0	7 5 0	0 19 10
8 feet in length and under 12 feet in length, per fathom, 6 feet wide and 6 feet high	10 4 0	7 5 0	0 19 10
12 feet long or upwards, per fathom, 6 feet wide and 6 feet high	13 12 0	7 5 0	0 19 10
lathwood imported from any British possession in America, viz.			
in pieces under 5 feet in length, per fathom, 6 feet wide and 6 feet high	0 15 0	0 6 0	Free.
in pieces 5 feet in length or upwards, per fathom, 6 feet wide and 6 feet high — *See* Note at the end of Wood.	1 5 0	0 6 0	Free.
masts, yards, or bowsprits, viz.			
6 inches in diameter and under 8 inches, each	0 8 0	0 9 6	0 1 1½
8 inches in diameter and under 12 inches, each	1 2 0	1 6 2	0 3 4
12 inches in diameter or upwards, per load containing 50 cubic feet	2 15 0	3 5 0	0 6 8
masts, yards, or bowsprits, imported from any British possession in America, viz.			
6 inches in diameter and under 8 inches, each	0 1 6	0 3 2	0 1 1½
8 inches in diameter and under 12 inches, each	0 4 0	0 8 4	0 3 4
12 inches in diameter or upwards, per load containing 50 cubic feet	0 10 0	1 10 6	0 6 8
oak plank, viz.			
2 inches in thickness or upwards, per load containing 50 cubic feet	4 0 0	5 16 6	0 19 10
oak plank of the growth of any British possession in America, and imported directly from thence, viz.			
2 inches in thickness or upwards, per load containing 50 cubic feet — *See* Note at the end of Wood.	0 15 0	0 8 4 per 120.	Free.
oak timber. *See* Timber.			
oars, per 120	14 19 3	14 19 3	1 19 8
of the growth of any British possession in America, and imported directly from thence, per 120 — *See* Note at the end of Wood.	0 19 6	0 19 6	Free.
spars, viz.			
under 22 feet in length, and under 4 inches in diameter, exclusive of the bark, per 120	2 8 0	2 16 3	0 6 8
22 feet in length or upwards, and under 4 inches in diameter, exclusive of the bark, per 120	4 5 0	4 17 6	0 11 0
4 inches in diameter and under 6 inches in diameter, exclusive of the bark, per 120	9 0 0	10 11 6	1 4 3
of the growth of any British possession in America, and imported directly from thence, viz.			
under 22 feet in length, and under 4 inches in diameter, exclusive of the bark, per 120	0 9 0	0 16 3	Free.
22 feet in length or upwards, and under 4 inches in diameter, exclusive of the bark, per 120	0 16 0	0 16 3	Free.
4 inches in diameter and under 6 inches in diameter, exclusive of the bark, per 120 — *See* Note at the end of Wood.	1 15 0	0 16 3	Free.
spokes for wheels, viz.			
not exceeding 2 feet in length, per 1,000	3 7 4	3 7 4	0 19 10
exceeding 2 feet in length, per 1,000	6 14 8	6 14 8	0 19 10
of all sorts, of the growth of any British possession in America, and imported directly from thence, per 1,000 — *See* Note at the end of Wood.	0 6 4	0 6 4	Free.
staves, viz.			
not exceeding 36 inches in length, not above 3 inches in thickness, and not exceeding 7 inches in breadth, per 120	1 3 0	1 6 2	0 4 0
above 36 inches in length and not exceeding 50 inches in length, not above 3 inches in thickness, and not exceeding 7 inches in breadth, per 120	2 6 0	2 9 2	0 7 6
above 50 inches in length and not exceeding 60 inches in length not above 3 inches in thickness, and not exceeding 7 inches in breadth, per 120	3 0 0	3 5 0	0 10 0
above 60 inches in length and not exceeding 72 inches in length, not above 3 inches in thickness, and not exceeding 7 inches in breadth, per 120	4 4 0	4 15 10	0 15 0
above 72 inches in length, not above 3 inches in thickness, and not exceeding 7 inches in breadth, per 120	4 16 0	5 8 6	0 17 6
above 3 inches in thickness, or above 7 inches in breadth, and not exceeding 63 inches in length, shall be deemed clap boards, and be charged with duty accordingly.			
above 3 inches in thickness, or above 7 inches in breadth, and exceeding 63 inches in length, shall be deemed pipe boards, and be charged with duty accordingly.			
staves imported from any British possession in America, and imported directly from thence, viz.			
not exceeding 36 inches in length, not above 3½ inches in thickness, and not exceeding 7 inches in breadth, per 120	0 2 0	0 1 3	Free.
above 36 inches in length and not exceeding 50 inches in length, not above 3½ inches in thickness, and not exceeding 7 inches in breadth, per 120	0 4 0	0 1 3	Free.
above 50 inches in length and not exceeding 60 inches in length, not above 3½ inches in thickness, and not exceeding 7 inches in breadth, per 120	0 6 0	0 2 6	Free.
above 60 inches in length and not exceeding 72 inches in length, not above 3½ inches in thickness, and not exceeding 7 inches in breadth, per 120	0 8 0	0 2 6	Free.
above 72 inches in length, not above 3½ inches in thickness, and not exceeding 7 inches in breadth, per 120 — *See* Note at the end of Wood.	0 10 0	0 2 6	Free.
not exceeding 1½ inch in thickness shall be charged with 1-3d part of the duty herein proposed on such staves.			

Articles.	Duty, 1 Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Wood — *continued.*			
staves imported — *continued.*			
above 3½ inches in thickness, or above 7 inches in breadth, and not exceeding 63 inches in length, shall be deemed clap boards, and be charged with duty accordingly.			
above 3½ inches in thickness, or above 7 inches in breadth, and exceeding 63 inches in length, shall be deemed pipe boards, and be charged with duty accordingly.			
teak wood, per load, containing 50 cubic feet	1 10 0	1 10 0	0 6 8
imported from any British possession in Africa, per load, containing 50 cubic feet	0 10 0	1 10 0	0 6 8
imported from any British possession within the limits of the East India Company's charter, per load, containing 50 cubic feet	0 0 1	1 10 0	0 6 8
imported from any other place within those limits, per load, containing 50 cubic feet	0 10 0	1 10 0	0 6 8
timber, viz.			
fir timber, 8 inches square or upwards, per load, containing 50 cubic feet	2 15 0	3 5 0	0 6 8
fir timber imported from any British possession in America, 8 inches square or upwards, per load, containing 50 cubic feet	0 10 0	0 2 6	Free.
See Note at the end of Wood.			
oak timber, 8 inches square or upwards, per load, containing 50 cubic feet	2 15 0	3 1 9	0 6 8
oak timber of the growth of any British possession in America, and imported directly from thence, 8 inches square or upwards, per load, containing 50 cubic feet	0 10 0	0 5 6	Free.
See Note at the end of Wood.			
timber of all sorts, not particularly enumerated or described, nor otherwise charged with duty, being 8 inches square or upwards, per load, containing 50 cubic feet	1 8 0	1 12 6	0 6 8
timber of all sorts, not particularly enumerated or described, nor otherwise charged with duty, being of the growth of any British possession in America, and imported directly from thence, being 8 inches square or upwards, per load, containing 50 cubic feet	0 5 0	0 2 6	Free.
See Note at the end of Wood.			
ufers, viz.			
under 5 inches square, and under 24 feet in length, the 120	18 2 7	18 2 7	1 1 3
under 5 inches square, and 24 feet in length or upwards, per 120	27 0 0	20 0 0 per cent.	2 13 0 per 120
5 inches square or upwards are subject and liable to the duties payable on fir timber.			
ufers imported from any British possession in America, viz.			
under 5 inches square, and under 24 feet in length, per 120	3 5 0	0 16 3	Free.
under 5 inches square, and 24 feet in length or upwards, per 120	4 17 6	0 16 3	Free.
5 inches square or upwards are subject and liable to the duties payable on fir timber.			
See Note at the end of Wood.			
wainscot logs, viz.			
8 inches square or upwards, per load, containing 50 cubic feet	2 15 0	4 9 6	0 9 11
of the growth of any British possession in America, and imported directly from thence, per load, containing 50 cubic feet	0 12 0	0 5 6	Free.
unmanufactured, of the growth of any British possession in America, not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	5 0 0	5 16 9	Free.
unmanufactured, not particularly enumerated or described, and on which the duties due on the importation are payable according to the value thereof, being of the growth of the British limits within the province of Yucatan in the Bay of Honduras, and imported directly from the said bay, for every 100*l.* of the value	5 0 0	5 16 9	Free.
See Note at the end of Wood.			
unmanufactured, not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	20 0 0	20 0 0	33 0 0
Note. — For the conditions under which any sort of wood, plank, or timber whatsoever, wrought or unwrought (except masts, yards, or bowsprits), or any of the goods called lumber (enumerated in act 8 Geo. 1. c. 12.), may be imported directly from any of his Majesty's British possessions in America free from all customs and impositions, see 8 Geo. 1. c. 12., 26 Geo. 3. c. 53., 26 Geo. 3. c. 60., and 11 Geo. 4. c. 41.			
Wool, viz.			
beaver wool, per lb.	0 1 7	0 1 7	Free.
cut and combed, per lb.	0 4 9	0 4 9	0 16 6
coney wool, per lb.	0 0 2	0 0 6	0 0 1½
cotton wool, or waste of cotton wool, per cwt.	0 2 11	0 9 7½	0 9 4
the produce of, and imported from, any British possession, per cwt.	0 0 4	0 7 0	Free.
goat's wool or hair, per lb.	0 0 1	0 0 6	Free.
the produce of, and imported from, any British possession	Free.	0 0 6	Free.
hares' wool, per lb.	0 0 2	0 0 2½	0 0 1
lambs' wool. *See* Sheep's wool.			
red or Vicunia wool, per lb.	0 0 6	0 0 6	Free.
sheep or lambs' wool, viz.			
not being of the value of 1*s.* the lb. thereof, per lb.	0 0 0½	0 0 6	Free.
being of the value of 1*s.* the lb. or upwards, per lb.	0 0 1	0 0 6	Free.
the produce of, and imported from, any British possession	Free.	0 0 1	Free.
Woollens, viz.			
manufactures of wool not being goats' wool, or of wool mixed with cotton, not particularly enumerated or described, nor otherwise charged with duty, for every 100*l.* value	15 0 0	50 0 0	Prohibited.
articles of manufactures of wool (not being goats' wool) or of wool mixed with cotton, wholly or in part made up, not otherwise charged with duty, for every 100*l.* value	20 0 0	50 0 0	
Wreck. *See* Derelict.			

Articles.	Duty, 1Jan. 1834.	Duty, 1819.	Duty, 1787.
	L. s. d.	*L. s. d.*	*L. s. d.*
Y.			
Yarn, viz.			
cable yarn, per cwt.	0 10 9	1 1 6	0 8 6
camel or mohair yarn, per lb.	0 0 1	0 1 7	0 0 7
raw linen yarn, per cwt.	0 1 0	0 1 0	Free.
worsted yarn, per lb.	0 0 6	0 1 7	0 0 10
Z.			
Zaffre, per cwt.	0 1 0	20 0 0 per cent.	27 10 0 per cent.
Zebra wood, per ton	2 0 0	20 0 0 per cent.	33 0 0 per cent.
Goods, wares, and merchandise, being either in part or wholly manufactured, and not being enumerated or described, nor otherwise charged with duty, and not prohibited to be imported into or used in Great Britain or Ireland, for every 100*l.* value	20 0 0	50 0 0	27 10 0
Goods, wares, and merchandise, not being either in part or wholly manufactured, and not being enumerated or described, nor otherwise charged with duty, and not prohibited to be imported into or used in Great Britain or Ireland, for every 100*l.* value	5 0 0	20 0 0	27 10 0
Note. — All goods, the produce or manufacture of the island of Mauritius, are subject to the same duties as are imposed in this Table on the like goods, the produce or manufacture of the British possessions in the West Indies.			
All goods, the produce or manufacture of the Cape of Good Hope or the territories or dependencies thereof, are subject to the same duties as are imposed in this Table on the like goods, the produce or manufacture of the British possessions within the limits of the East India Company's charter, except when any other duty is expressly imposed thereon.			

Duties of Customs Outwards.

A Table of Duties of Customs payable on Goods, Wares, and Merchandise exported from the United Kingdom to Foreign Parts.

	L.	*s.*	*d.*
Coals, not being small coals, exported to any place not being a British possession, viz.			
in a British ship, per ton	0	3	4
in a ship not British, per ton	0	6	8
Small coals, culm, and cinders exported to any place not being a British possession, viz.			
in a British ship, per ton	0	2	0
in a ship not British, per ton	0	4	0
Hare skins and coney skins, per 100 skins	0	1	0
Hare wool and coney wool, per cwt.	0	1	0
Sheep and lamb wool, per cwt.	0	1	0
Woolfels, mortlings, shortlings, yarn, worsted, woolflocks, crewels, coverlets, waddings, or other manufactures or pretended manufactures, slightly wrought up, so as that the same may be reduced to and made use of as wool again, mattresses or beds stuffed with combed wool or wool fit for combing or carding, per cwt.	0	1	0
Goods, wares, and merchandise of the growth, produce, or manufacture of the United Kingdom (not being subject to other export duty, nor particularly exempted from export duty), for every 100*l.* value	0	10	0
Except the following articles, viz.			
Bullion and coin.			
Corn, grain, meal, malt, flour, biscuit, bran, grits, pearl barley, and Scotch barley.			
Cotton yarn or other cotton manufactures.			
Fish.			
Linen, or linen with cotton mixed.			
Melasses or treacle.			
Military clothing, accoutrements, or appointments exported under the authority of the commissioners of his Majesty's treasury, and sent to any of his Majesty's forces serving abroad.			
Military stores exported to India by the East India Company.			
Salt.			
Sugar, refined, of all sorts, and sugar candy.			
Goods, wares, and merchandise exported to the Isle of Man by virtue of any licence which the commissioners of his Majesty's customs may be empowered to grant.			
Any sort of craft, food, victuals, clothing, or implements or materials necessary for the British fisheries established in any of the British possessions in North America, and exported direct thereto.			
Wool.			
Woollen goods, or woollen and cotton mixed, or woollen and linen mixed, exported to any place within the limits of the East India Company's charter.			

Inland Duties of Excise.

	L.	*s.*	*d.*
Bricks, not exceeding 10 inches long, 3 inches thick, and 5 inches wide, per 1,000	0	5	10
exceeding the above dimensions, per 1,000	0	10	0
smoothed or polished on 1 or more sides, not exceeding 10 inches long by 5 inches wide, per 1,000	0	12	10
not exceeding 10 inches square, per 100	0	2	5
exceeding 10 inches square, per 100	0	4	10
Glass, viz. flint, per lb.	0	0	6
broad, per cwt.	1	10	0
crown, per cwt.	3	13	6
plate, in plates or sheets of not less size than 6 in. by 4 in., and not less than 1-8th nor more than 5-8ths of an inch in thickness, per cwt.	3	0	0
other than in such plates or sheets, per cwt.	4	18	0
common bottles, per cwt.	0	7	0
Hops, per lb.	0	0	2
Malt, made from barley, per bushel	0	2	7
made from bear or bigg only, in Scotland or Ireland, per bushel	0	2	0
Mead, or metheglin, per gallon	0	0	6
Paper, first class, viz. all paper other than brown paper, made of old ropes or cordage only, per lb.	0	0	3
second class, viz. all brown paper, made of old ropes and cordage only, per lb.	0	0	1½
Paper — *continued.*			
glazed paper, millboard, & scaleboard, per cwt.	1	1	0
pasteboard, made wholly of second class paper, per cwt.	0	14	0
made wholly or in part of paper other than the second class, per cwt.	1	8	0
printed, painted, or stained, per yard	0	0	1¾
Soap, viz. hard, per lb.	0	0	1½
soft, per lb.	0	0	1
Spirits, made in England, per gallon	0	7	6
made in Scotland or Ireland, for home consumption, per gallon	0	3	4
imported from Scotland or Ireland into England, per gallon	0	7	6
Starch, or British gum, or any preparation of or from starch, per lb.	0	0	3½
Stone bottles, not exceeding 2 quarts measure, per cwt.	0	5	0
Sweets, or liquors made by infusion, fermentation, or otherwise, from fruit or sugar, or from fruit and sugar mixed with any other ingredients or materials whatsoever, commonly called sweets or made wines, per gallon	0	0	6
Vinegar, or acetous acid, or liquors prepared or preparing for vinegar, or acetous acid, per gallon	0	0	2

TARIFF.

Customs and Excise Drawbacks.

	L.	s.	d.
Beer, brewed by any entered brewer for sale in the United Kingdom, and duly exported from any part of the same to foreign parts, as merchandise, per barrel of 36 gallons Imperial measure	0	5	0
Bricks, not exceeding 10 inches long, 3 inches thick, and 5 inches wide, per 1,000	0	5	10
exceeding the above dimensions, per 1,000	0	10	0
smoothed or polished on 1 or more sides, not exceeding 10 inches long by 5 inches wide, per 1,000	0	12	10
not exceeding 10 inches square, per 100	0	2	5
exceeding 10 inches square, per 100	0	4	10
Glass, viz. flint, per lb.	0	0	6
broad, per cwt.	1	10	0
crown, per cwt.	3	13	6
plate, in plates or sheets of not less size than 6 in. by 4 in., and not less than 1-8th nor more than 5-8ths of an inch in thickness, per cwt.	3	0	0
other than in such plates or sheets, per cwt.	4	18	0
common bottles, per cwt.	0	7	0
Hops, per lb.	0	0	2
Paper, first class, viz. all paper other than brown paper, made of old ropes or cordage only, per lb.	0	0	3
second class, viz. all brown paper, made of old ropes and cordage only, per lb.	0	0	1½
glazed paper, millboard, & scaleboard, per cwt.	1	1	0
pasteboard, made wholly of second class paper, per cwt.	0	14	0
made wholly or in part of paper other than the second class, per cwt.	1	8	0
printed, painted, or stained, per yard	0	0	2
Plate, of wrought gold, manufactured in Great Britain, and which shall or ought to be assayed and marked in Great Britain, viz.			
made since the 1st Dec. 1784, per oz.	0	8	0
made since the 5th July, 1797, per oz.	0	16	0
made since the 31st August, 1815, per oz.	0	17	0
No drawback allowed on gold watch cases of any weight, nor shall any drawback be allowed on any articles of gold, not exceeding the weight of 2 ounces; and if any person shall export any manufacture of gold not duly marked, to denote the standard of 22 or 18 carats of fine gold in every lb. Troy, he shall forfeit 50*l*. Gold of the fineness of 18 carats to be marked with a "crown and the figures 18."—(38 *Geo.* 3. c. 69., 55 *Geo.* 3. c. 185., and 1 *Geo.* 4. c. 14.)			
of wrought silver, manufactured in Great Britain, and which shall or ought to be assayed and marked in Great Britain, viz.			
made since the 1st Dec. 1784, per oz.	0	0	6
made since the 5th July, 1797, per oz.	0	1	0
made since the 10th Oct. 1804, per oz.	0	1	3
made since the 31st Aug. 1815, per oz.	0	1	6
No drawback allowed on silver watch cases, chains, necklaces, beads, lockets, filigree work, shirt buckles or brooches, stamped medals, and spouts to china, stone, or earthenware teapots, whatever the weight; nor on tippings, swages, or mounts, not weighing 10 dwts. of silver each, and not being necks or collars for castors, or cruets, or glasses, appertaining to any sorts of stands or frames; wares of silver not weighing 5 dwts. of silver each; but this exemption not to include necks, tops, and collars for castors, cruets, or glasses appertaining to any sort of stands or frames; buttons to be affixed to or set on any wearing apparel, solid silver buttons and solid silver studs, not having a bevelled edge soldered on; wrought seals, blank seals, bottle tickets, shoe clasps, patch boxes, salt spoons, salt ladles, tea spoons, tea strainers, caddy ladles, buckles, and pieces to garnish cabinets, or knife cases, tea chests, bridles, stands, or frames.—(55 *Geo.* 3. c. 185.)			
Rice.—Upon the exportation from the United Kingdom of any foreign rice or paddy, cleaned therein, and which have paid the duties on importation, a drawback shall be allowed and paid for every hundred weight thereof, equal in amount to the duty paid on every 4 bushels of the rough rice, or paddy, from which the same shall have been cleaned, viz. per cwt.	0	10	0
Silk goods manufactured in the United Kingdom, viz. for every pound of stuffs or ribands of silk, composed of silk only, and being of the value of 14*s.* at least	0	3	6
for every pound of stuffs or ribands of silk and cotton mixed, whereof ½ at least shall be silk, and being of the value of 4*s.* 8*d.* at least	0	1	2
for every pound of stuffs or ribands of silk and worsted mixed, whereof ½ at least shall be silk, and being of the value of 2*s.* 4*d.* at least	0	0	7
Soap, viz. hard, per lb.	0	0	1½
soft, per lb.	0	0	1
Starch, or British gum, or any preparation of or from starch, per lb.	0	0	3½
Stone bottles, not exceeding 2 qts. meas., per cwt.	0	5	0
Sugar (refined), viz.			
bastard sugar, or refined loaf sugar broken in pieces, or being ground or powdered sugar, or such sugar pounded, crashed, or broken, exported in a British ship, per cwt.	1	4	0
exported in a ship not British, per cwt.	1	3	0
other refined sugar in loaf, complete and whole, or lumps duly refined, having been perfectly clarified and thoroughly dried in the stove, and being of a uniform whiteness throughout; or such sugar pounded, crashed, or broken, and sugar candy,			
exported in a British ship, per cwt.	1	16	10
exported in a ship not British, per cwt.	1	15	10
double refined sugar, and sugar equal in quality to double refined sugar, additional bounty, per cwt.	0	6	4
Tobacco, manufactured in the United Kingdom, at or within 2 miles of any port into which tobacco may be imported, made into shag, roll, cut, or carrot tobacco, per lb.	0	2	7½
Wine, the produce of the Cape of Good Hope, or of the territories or dependencies thereof, and imported direct, per gallon	0	2	9
French, Portuguese, Canary, Fayal, Madeira, Spanish, and other wines not enumerated, per gallon	0	5	6

Countervailing Duties.

Schedule of countervailing duties payable on the importation of certain articles, the growth, produce, or manufacture of Great Britain and Ireland respectively; and of the drawbacks allowed on exportation from either country to the other. The following duties are payable on Irish articles brought for consumption into Great Britain, and the like amount is drawn back on the exportation of similar British articles to Ireland, except in the case of British hops sent to Ireland, on which no drawback is allowed.

	L.	s.	d.
Bottles, of stone, not exceeding 2 quarts in measure, or the mouth or neck of which shall not exceed in diameter, in the narrowest part of the inside, 3 inches; or if made for blacking, and shall not exceed 1 pint in measure, and the mouth or neck of which shall not be less than 1¼ inch in diameter in the narrowest part of the inside, and which shall be permanently stamped with the words "blacking bottles," per cwt.	0	5	0
Bricks, not exceeding 10 inches long, 3 inches thick, and 5 inches wide, per 1,000	0	5	10
exceeding the above dimensions, per 1,000	0	10	0
smoothed or polished on 1 or more sides, not exceeding 10 inches long by 5 inches wide, per 1,000	0	12	10
not exceeding 10 inches square, per 100	0	2	5
exceeding 10 inches square, per 100	0	4	10
Hops, per lb.	0	0	2
Plate, of wrought gold, per oz. Troy	0	16	0
Plate, of wrought silver, per oz. Troy	0	0	6
Soap, viz. hard soap, per lb.	0	0	1½
soft, per lb.	0	0	1
Spirits, made and extracted in Ireland, and warehoused there without payment of duty and imported into England, for every 100 gallons Imperial measure, of spirits of the strength of proof, as denoted by Sykes's hydrometer, and so in proportion for any greater or less degree of strength, or any greater or less quantity.—(6 *Geo.* 4. c. 80. & *Will.* 4. c. 49.)	37	10	0
duty paid in Ireland, and imported into England, per gallon	0	4	2
Starch, or British gum, or any preparation of or from starch, per lb.	0	0	3½
All other articles, the growth, produce, or manufacture of Great Britain or Ireland, to pass from either country to the other without duty or drawback.			

Remarks on Duties Inwards. — The Table of duties inwards previously laid before the reader, affords copious materials for reflection and comparison. Excepting a very few articles, such as silk, linens, gloves, &c., that were prohibited, the highest duties in 1787 seldom exceeded 27*l.* 10*s.* per cent. *ad valorem.* In the interval between 1787 and 1819 a good many changes were made in the mode of assessing the duties; several of those that were charged on the *ad valorem* principle at the former epoch, being changed into rated duties at the latter. The extraordinary rise of duties in the interval referred to is, however, the most striking circumstance. The fact, that in the arithmetic of the customs, 2 and 2, instead of always making 4, sometimes make only 1, was then totally forgotten.

During the war, it does not seem to have once occurred to any of our finance ministers, that every increase of price necessarily lessens consumption; and that, were twice the quantity of a commodity made use of, under a duty of 1*s.* or 5*s.* per lb., cwt. &c., that would be made use of under a duty of 2*s.* or 10*s.*, the revenue would gain nothing by the increase, while the comforts of the consumers would be materially lessened. They proceeded on a more compendious plan; and concluded that, because an article subjected to a duty yielded a certain revenue, it would yield twice, three, or four times as much were the duty doubled, trebled, or quadrupled! Consistently with this principle, if we may so term it, the duties on tea were raised from 12½ to 100 per cent.; those on sugar from 12*s.* 4*d.* to 30*s.* a cwt.; on pepper from 3*d.* to 2*s.* 6*d.* per lb.; on brandy and geneva from 6*s.* to 22*s.* 6*d.* a gallon; on port wine from 37*l.* 16*s.* to 114*l.* 13*s.* a tun, &c.; while the *ad valorem* duties were mostly all either doubled or trebled! Mr. Vansittart carried this system to an extreme; so much so, that the enormous additions made during his administration to the duties, by checking consumption, or diverting it into illegitimate channels, or both, in most cases added nothing whatever to the revenue, and frequently even occasioned its reduction! Since 1825, however, a very great improvement has been made in the system of duties. Many of those that were most oppressive have been materially reduced, while not a few have been wholly repealed; and we are glad to have to add, that in every instance in which oppressive duties have been adequately reduced, a greater amount of revenue has been derived from the lower rate of duty than from the higher. — (See Coffee, Malt, Spirits, Wine, &c.) The existing tariff is, in fact, in many respects, preferable to that of 1787. The most objectionable of the present duties are those on timber, corn, brandy, geneva, sugar, tobacco, currants, and a few others; and of these, the first-mentioned 4 are not really imposed for the sake of revenue, but to bolster up peculiar interests. We have elsewhere pointed out the practical operation of the duties in question, and their mischievous influence on the public interests. — (See Timber, Corn Laws and Corn Trade, Brandy, &c.) It is not surely possible that these duties can be allowed to continue much longer on their present footing. Experience has shown that, instead of increasing, excessive duties powerfully contribute to diminish revenue; at the same time that they give rise to a vast amount of smuggling and demoralisation, which it is impossible to get rid of otherwise than by their reduction. It is, besides, the bounden duty of government to make the interests of the few submit to those of the many; and there is plainly neither sense nor justice in inflicting an injury on the public by imposing duties, not for the sake of revenue — the only legitimate purpose for which they can be imposed — but to enable a limited number of individuals to linger on in disadvantageous businesses. The change from a bad to a better system ought, no doubt, to be cautiously and gradually brought about. But the longer the period required for the transition, the less ought to be the delay in entering upon it.

Drawbacks. — The fewness of the drawbacks at present, compared with their number a few years ago, is a consequence of the extension of the warehousing and bonding system. When goods of all sorts may be freely imported and lodged in warehouses without paying any duty, the necessity of granting drawbacks is obviated; and, while all commercial operations are facilitated, frauds are prevented.

TARTAR. See Argal.

TATTA, a town in the territory of Sinde, situated about 60 miles in a direct line from the sea, at a short distance from the western bank of the river Indus, in lat. 24° 44′ N., lon. 68° 17′ E. Population uncertain, probably about 10,000. The streets are narrow and dirty; but the houses, though built of mud, chopped straw, and timber, are superior to the low huts seen in the adjoining towns and villages.

Trade. — Being situated a little above the part where the Indus divides into the two great branches by which its waters are poured into the Indian Ocean, it might be supposed that Tatta would be a place of great trade. But, owing to the unwholesomeness of the climate, the barbarism of the tribes on its banks, and other causes, its commerce has never corresponded with what might have been anticipated, looking at its position on the map. It had probably attained the acmé of its prosperity in the beginning of the 16th century. In 1555, the Portuguese, by way, as they stated, of avenging the treachery of the king of Sinde, inhumanly massacred 8,000 of the inhabitants, and burned the town. — (*Conquêtes des Portugais*, tome iv. p. 183.) It is probable that Tatta never fully recovered from this dreadful blow; but Mr. Hamilton mentions, that in the 17th century it was extensive and populous, possessing much commerce, with manufactures of silk, wool, and cabinet ware. The decayed state in which we now find it, has been a consequence of the misgovernment and rapacity of its present rulers, the Ameers of Sinde, under whose sway it fell more than 40 years ago.

In 1635, the English established a factory at Tatta, in the view of facilitating the disposal of woollens and other goods in the countries traversed by the Indus; and the building occupied by the factory, though far from magnificent, was recently, if it be not still, the best, not in Tatta only, but in the whole country of Sinde.

The chief exports are rice, shawls from Cashmere, opium from Malwah, hides, ghee, cotton, goats' wool, carpets, drugs, &c. Putchock, an article largely consumed in China, is a peculiar export of Sinde. The imports comprise a variety of articles, but the quantities are trifling; they consist principally of spices, dye stuffs, hardware, tin, iron, &c., broad cloths, English cottons, silks, &c. But at present the trade is quite inconsiderable; and no one could believe, *à priori*, that the natural emporium of so noble a river as the Indus, traversing many rich and extensive countries, would cut so insignificant a figure in the trading world.

Indus. — Its navigation by Alexander the Great has conferred on the Indus a classical celebrity not to be matched by any other river of the East. Its magnitude, too, is worthy of its fame. It may be navigated by flat-bottomed boats as far as Attock; and its tributary stream, the Ravee, one of the Punjab rivers, is navigable as far as Lahore; both places being fully 1,000 miles from the sea. Unluckily, its mouths are much encumbered by sand banks; and, owing to the violence of the *bore* or tide, their navigation is attended with considerable difficulty and danger. This is no doubt the reason that at present the navigation through the delta of the Indus is quite deserted: all the products brought down the river destined for exportation by sea, being conveyed from Tatta over-land to Curachee, a sea-port a little to the north of the most northerly mouth of the river, about 60 miles in a direct line from Tatta. Above this city the current of the river is not rapid. The boats by which it is navigated are called *doondies*, seldom exceeding 50 tons burden; and drawing, when laden, about 4 feet water. They have two masts, and, with a good wind, make their way against the stream at the rate of about 3 miles an hour. They are a sort of floating houses; resembling in this respect the Chinese junks.

There would seem to be no river in the world where steam navigation might be applied more advantageously than the Indus. But until the country near its embouchure fall under the sway of some more enlightened and less rapacious rulers than those by whom it is now possessed, little improvement need, we are afraid, be expected. But should Sinde be conquered by some civilised people, or should its present rulers learn to respect the right of property, and to encourage industry, it would not be easy to exaggerate the importance of the Indus as a commercial highway. The navigable rivers of the Punjab that fall into it, lay open a vast extent of rich and fruitful country, with great commercial resources. It is not, indeed, possible to estimate the extent of the trade that would be carried on by the channel of the Indus, did security and good order prevail on its banks; and there is reason to think that some progress is making towards their establishment.

The delta of the Indus has little in common with the delta of the Nile, except its shape. Not a fourth part of it is cultivated, and its few inhabitants principally lead a pastoral life. It is overgrown with tamarisks and other wild shrubs; and, though intersected by the numerous mouths of the river, its surface is dry and arid, and it is in a great degree destitute of fresh water. The unfavourable appearance of this tract of country does not, however, generally speaking, depend on any infertility of soil, but on the neglect of cultivation arising out of the oppression under which the people live. Mr. Burnes says, that in most places it requires little or no labour on the part of the husbandman to prepare the land; and the seed, scattered without care or attention, yields a plentiful harvest. But where property is insecure, even this little labour is not expended. — (See a *Memoir on the Indus, by Lieut. Burnes*, in the 3d vol. of the *Journal of the London Geographical Society*; *Hamilton's East India Gazetteer*, articles *Indus*, *Tatta*, &c.)

Money, Weights, and Measures. — Accounts are kept in rupees, carivals, and pice: 12 pice = 1 carival; 50 carivals = 1 rupee. Cowries are current in Sinde, 48 cowries = 1 pice.

Small Weights. — 24 Moons = 1 Ruttee.
6 Ruttees = 1 Massa.
12 Massas = 1 Tolah.

Gross Weights. — 4 Pice = 1 Anna.
16 Annas = 1 Pucca seer.
40 Seers = 1 Maund, or 74 lbs. 5 oz. 7 dwts. avoirdupois.

Long Measure. — 1 Garce = 2 inches.
16 Garces = 1 Guz; but 1 guz cloth = 34 inches at Tatta.

Grain Measure. — 4 Puttoes = 1 Twier.
4 Twiers = 1 Cossa.
60 Cossas = 1 Carval of wheat; or 22 Pucca maunds, or 21 Bombay parahs.

Diamonds and pearls are sold by hubbas and ruttees — 8 hubbas = 1 ruttee, about 2 grs. Troy. — *Milburn's Orient. Commerce.*

TEA (in one dialect of Chin. *Cha*; in another *Te*; Du. *Te*; Fr. *Thé*; It. *Te*; Rus. *Tchai*; Hind. *Cha*; Malay, *Teh*), the leaves of the tea tree or shrub (*Thea viridis* Lin.).

I. Description of the Tea Plant. — Tea Trade of China.
II. Rise and Progress of the British Tea Trade. — Consumption of Tea.
III. East India Company's Monopoly — Influence of, on the Price of Tea — Conditions under which it was held — Abolition of.
IV. Duties on Tea. — Consumption of, on the Continent and in the United States, etc.

I. Description of the Tea Plant. — Tea Trade of China.

Description of the Plant. — Places where it is cultivated. — The tea plant ordinarily grows to the height of from 3 to 6 feet, and has a general resemblance to the myrtle, as the latter is seen in congenial situations in the southern countries of Europe. It is a polyandrous plant, of the natural order *Columniferæ*, and has a white blossom, with yellow style and anthers, not unlike those of a small dog-rose. The stem is bushy, with numerous branches, and very leafy. The leaves are alternate, on short, thick, channelled footstalks, evergreen, of a longish elliptic form, with a blunt, notched point, and serrated except at the base. These leaves are the valuable part of the plant. The *Camellias*, particularly the *Camellia Sasanqua*, of the same natural family as the tea tree, and very closely resembling it, are the only plants liable to be confounded with it by a careful observer. The leaves of the particular camellia just named are, indeed, often used in some parts of China, as a substitute for those of the tea tree.

The effects of tea on the human frame are those of a very mild narcotic; and, like those of many other narcotics taken in small quantities, — even of opium itself, — they are exhilarating. The green varieties of the plant possess this quality in a much higher degree than the black; and a strong infusion of the former will, in most constitutions, produce considerable excitement and wakefulness. Of all narcotics, however, tea is the least pernicious; if, indeed, it be so at all in any degree, which we very much doubt.

The tea shrub may be described as a very hardy evergreen, growing readily in the open air, from the equator to the 45th degree of latitude. For the last 60 years, it has been reared in this country, without difficulty, in greenhouses; and thriving plants of it are to be seen in the gardens of Java, Singapore, Malacca, and Penang; all within 6

degrees of the equator. The climate most congenial to it, however, seems to be that between the 25th and 33d degrees of latitude, judging from the success of its cultivation in China. For the general purposes of commerce, the growth of good tea is confined to China; and is there restricted to 5 provinces, or rather parts of provinces, viz. Fokien and Canton, but more particularly the first, for black tea; and Kiang-nan, Kiang-si, and Che-kiang, but chiefly the first of these, for green. The tea districts all lie between the latitudes just mentioned, and the 115th and 122d degrees of East longitude. However, almost every province of China produces more or less tea, but generally of an inferior quality, and for local consumption only; or when of a superior quality, like some of the fine wines of France, losing its flavour when exported. The plant is also extensively cultivated in Japan, Tonquin, and Cochin-China; and in some of the mountainous parts of Ava; the people of which country use it largely as a kind of *pickle preserved in oil!*

Botanically considered, the tea tree is a single species; the green and black, with all the diversities of each, being mere varieties, like the varieties of the grape, produced by difference of climate, soil, locality, age of the crop when taken, and modes of preparation for the market. Considered as an object of agricultural produce, the tea plant bears a close resemblance to the vine. In the husbandry of China, it may be said to take the same place which the vine occupies in the southern countries of Europe. Like the latter, its growth is chiefly confined to hilly tracts, not suited to the growth of corn. The soils capable of producing the finest kinds are within given districts, limited, and partial. Skill and care, both in husbandry and preparation, are quite as necessary to the production of good tea, as to that of good wine.

The best wine is produced only in particular latitudes, as is the best tea; although, perhaps, the latter is not restricted to an equal degree. Only the most civilised nations of Europe have as yet succeeded in producing good wines; which is also the case in the East with tea; for the agricultural and manufacturing skill and industry of the Chinese are there unquestionably pre-eminent. These circumstances deserve to be attended to, in estimating the difficulties which must be encountered in any attempt to propagate the tea plant in colonial or other possessions. These difficulties are obviously very great; and, perhaps, all but insuperable. Most of the attempts hitherto made to raise it in foreign countries were not, indeed, of a sort from which much was to be expected. Within the last few years, however, considerable efforts have been made by the Dutch government of Java, to produce tea on the hills of that island; and having the assistance of Chinese cultivators from Fokien, who form a considerable part of the emigrants to Java, a degree of success has attended them, beyond what might have been expected in so warm a climate. The Brazilians have made similar efforts; having also, with the assistance of Chinese labourers, attempted to propagate the tea shrub near Rio de Janeiro: and a small quantity of tolerably good tea has been produced. But owing to the high price of labour in America, and the quantity required in the cultivation and manipulation of tea, there is no probability, even were the soil suitable to the plant, that its culture can be profitably carried on in that country.

It might probably be successfully attempted in Hindostan, where labour is comparatively cheap, and where the hilly and table lands bear a close resemblance to those of the tea districts of China; but we are not sanguine in our expectations as to the result.

Species of Tea. — Manner in which they are manufactured. — The *black* teas usually exported by Europeans from Canton are as follows, beginning with the lowest qualities: — Bohea, Congou, Souchong, and Pekoe. The *green* teas are Twankay, Hyson skin, young Hyson, Hyson, Imperial, and Gunpowder. All the black teas exported (with the exception of a part of the bohea, grown in Woping, a district of Canton) are grown in Fokien — a hilly, maritime, populous, and industrious province, bordering to the north-east on Canton. Owing to the peculiar nature of the Chinese laws as to inheritance, and probably, also, in some degree, to the despotic genius of the government, landed property is much subdivided throughout the empire; so that tea is generally grown in gardens or plantations of no great extent. The plant comes to maturity and yields a crop in from 2 to 3 years. The leaves are picked by the cultivator's family, and immediately conveyed to market; where a class of persons, who make it their particular business, purchase and collect them in quantities, and manufacture them in part; that is, expose them to be dried under a shed. A second class of persons, commonly known in the Canton market as "the tea merchants," repair to the districts where the tea is produced, and purchase it in its half-prepared state from the first class, and complete the manufacture by garbling the different qualities; in which operation, women and children are chiefly employed. A final drying is then given, and the tea packed in chests, and divided, according to quality, into parcels of from 100 to 600 chests each. These parcels are stamped with the name of the district, grower, or manufacturer, exactly as is practised with the wines of Bordeaux and Burgundy, the indigo of Bengal, and many other [illegible] get the name of *chops*, the Chinese

term for a seal or signet. Some of the leaf-buds of the finest black tea plants are picked early in the spring, before they expand. These constitute pekoe, or black tea of the highest quality; sometimes called "white-blossom" tea, from there being intermixed with it, to give it a higher perfume, a few blossoms of a species of olive (*Olea fragrans*), a native of China. A second crop is taken from the same plants in the beginning of May, a third about the middle of June, and a fourth in August; which last, consisting of large and old leaves, is of very inferior flavour and value. The younger the leaf, the more high flavoured, and consequently the more valuable, is the tea. With some of the congous and souchongs are occasionally mixed a little pekoe, to enhance their flavour; and hence the distinction, among the London tea dealers, of these sorts of tea, into the ordinary kinds and those of "Pekoe flavour." Bohea, or the lowest black tea, is partly composed of the lower grades; that is, of the fourth crop of the teas of Fokien, left unsold in the market of Canton after the season of exportation has passed; and partly of the teas of the district of Woping in Canton. The green teas are grown and selected in the same manner as the black, to which the description now given more particularly refers; and the different qualities arise from the same causes. The gunpowder here stands in the place of the pekoe; being composed of the unopened buds of the spring crop. Imperial, hyson, and young hyson, consist of the second and third crops. The light and inferior leaves, separated from the hyson by a winnowing machine, constitute hyson skin,—an article in considerable demand amongst the Americans. The process of drying the green teas differs from that of the black; the first being dried in iron pots or vases over a fire, the operator continually stirring the leaves with his naked hand. The operation is one of considerable nicety, particularly with the finer teas; and is performed by persons who make it their exclusive business.

Tea Trade in China. — The tea merchants commonly receive advances from the Hong merchants and other capitalists of Canton; but, with this exception, are altogether independent of them; nor have the latter any exclusive privilege or claim of pre-emption. They are very numerous; those connected with the green tea districts alone being about 400 in number. The black tea merchants are less numerous, but more wealthy. The greater part of the tea is brought to Canton by land carriage or inland navigation, but chiefly by the first: it is conveyed by porters; the roads of China, in the southern provinces, not generally admitting of wheel carriages, and beasts of burden being very rare. A small quantity of black tea is brought by sea, but probably smuggled; for this cheaper mode of transportation is discouraged by government, which it deprives of the transit duties levied on inland carriage. The length of land carriage from the principal districts where the green teas are grown, to Canton, is probably not less than 700 miles; nor that of the black tea, over a more mountainous country, less than 200 miles. The tea merchants begin to arrive in Canton about the middle of October, and the busy season continues until the beginning of March; being briskest in November, December, and January. Tea, for the most part, can only be bought from the Hong or licensed merchants; but some of these, the least prosperous in their circumstances, are supported by wealthy *outside* merchants, as they are called; and thus the trade is considerably extended. The prices in the Canton market vary from year to year with the crop, the stock on hand, and the external demand, as in any other article, and in any other market. After the season is over, or when the westerly monsoon sets in, in the month of March, and impedes the regular intercourse of foreigners with China, there is a fall in the price of tea, not only arising from this circumstance, but from a certain depreciation in quality, from the age of the tea; which, like most other vegetable productions, is injured by keeping, particularly in a hot and damp climate.

Foreign Trade in Tea. — There seems to be little mystery in the selection and purchase of teas; for the business is both safely and effectively accomplished, not only by the supercargoes of the American ships, but frequently by the masters; and it is ascertained from the sales at the East India House, that there is no difference between the qualities of the teas purchased by the commanders and officers of the Company's ships, without any assistance from the officers of the factory, and those purchased for the Company by the latter. An unusual degree of good faith, indeed, appears to be observed, on the part of the Chinese merchants, with respect to this commodity; for it was proved before the select committee of the House of Commons, in 1830, that it is the regular practice of the Hong merchants to receive back, and return good tea for, any chest or parcel upon which any fraud may have been practised, which sometimes happens in the conveyance of the teas from Canton on board ship. Such restitution has occasionally been made even at the distance of 1 or 2 years. The Company seem to enjoy no advantage over other purchasers in the Canton market, except that which the largest purchaser has in every market, viz. a selection of the teas, on the payment of the same prices as others; and this advantage they enjoy only as respects the black teas; for the Americans are the largest purchasers of green teas.

We subjoin a Table for calculating the cost of tea: —

Comparison of the Cost of Tea per Picul (133⅓ lbs. Avoirdupois), with the Rate per Pound and Ton, at 9 Cwt. or 1,008 Pounds per Ton.

Per Picul.	Exchange 4*s.* per Dol.			Exch. 4*s.* 3*d.* per Dol.			Exch. 4*s.* 4*d.* per Dol.			Exch. 4*s.* 5*d.* per Dol.			Exch. 4*s.* 6*d.* per Dol.		
	Per Lb.	Per Ton.		Per Lb.	Per Ton.		Per Lb.	Per Ton.		Per Lb.	Per Ton.		Per Lb.	Per Ton.	
Taels.	*d.*	*L.*	*s.* *d.*	*d.*	*L.*	*s.* *d.*	*d.*	*L.*	*s.* *d.*	*d.*	*L.*	*s.* *d.*	*d.*	*L.*	*s.* *d.*
20 equal	10	42	0 0	10·625	44	12 6	10·833	45	10 0	11·042	46	7 6	11·250	47	5 0
21 —	10½	44	2 0	11·156	46	17 1½	11·375	47	15 6	11·594	48	13 10½	11·813	49	12 3
22 —	11	46	4 0	11·687	49	1 9	12·916	50	1 0	12·146	51	0 3	12·375	51	19 6
23 —	11½	48	6 0	12·219	51	6 4½	12·458	52	6 6	12·698	53	6 7½	12·936	54	6 9
24 —	12	50	8 0	12·750	53	11 0	13·000	54	12 0	13·250	55	13 0	13·500	56	14 0
25 —	12½	52	10 0	13·281	55	15 7½	13·541	56	17 6	13·802	57	19 4½	14·063	59	1 3
26 —	13	54	12 0	13·812	58	0 3	14·083	59	3 0	14·354	60	5 9	14·625	61	8 6
27 —	13½	56	14 0	14·344	60	4 10½	14·625	61	8 6	14·906	62	12 1½	15·188	63	15 9
28 —	14	58	16 0	14·875	62	9 6	15·166	63	14 0	15·458	64	18 6	15·750	66	3 0
29 —	14½	60	18 0	15·406	64	14 1½	15·708	65	19 6	16·010	67	4 10½	16·313	68	10 3
30 —	15	63	0 0	15·937	66	18 9	16·250	68	5 0	16·562	69	11 3	16·875	70	17 6
31 —	15½	65	2 0	16·469	69	3 4½	16·791	70	10 6	17·114	71	17 7½	17·438	73	4 9
32 —	16	67	4 0	17·000	71	8 0	17·333	72	16 0	17·666	74	4 0	18·000	75	12 0
33 —	16½	69	6 0	17·531	73	12 7½	17·875	75	1 6	18·218	76	10 4½	18·563	77	19 3
34 —	17	71	8 0	18·062	75	17 3	18·416	77	7 0	18·770	78	16 9	19·125	80	6 6
35 —	17½	73	10 0	18·594	78	1 10½	18·958	79	12 6	19·323	81	3 1½	19·688	82	13 9
36 —	18	75	12 0	19·125	80	6 6	19·500	81	18 0	19·875	83	9 6½	20·250	85	1 0
37 —	18½	77	14 0	19·656	82	11 1½	20·041	84	3 6	20·427	85	15 10½	20·813	87	8 3
38 —	19	79	16 0	20·187	84	15 9	20·583	86	9 0	20·979	88	2 3	21·375	89	15 6
39 —	19½	81	18 0	20·719	87	0 4½	21·125	88	14 6	21·531	90	8 7½	21·938	92	2 9
40 —	20	84	0 0	21·250	89	5 0	21·666	91	0 0	22·083	92	15 0	22·500	94	10 0

Thus, at 4*s.* 3*d.* per dollar, one tael per picul is equal to ½*d.* per pound.

Usual Nett Weight and Measurement of a Chest of different Descriptions of Tea.

	Weight.	*Sol. Meas.*		*Weight.*	*Sol. Meas.*
Bohea, whole chests	catties 138	feet 8·956	Hyson	catties 48 to 50	feet 4
½ do.	— 84	— 5·416	Hyson skin	— 48 - 50	— 4·125
¼ do.	— 46	— 3·374	Twankay, long chests	— 62 - 65	— 4·864
Congou chests	— 63 to 64	— 4·085	Gunpowder	— 80 - 84	— 4·100
Souchong	— 60 - 62	— 4·025	Imperial	— 70 - 74	— 4·074
Pekoe	— 49 - 50	— 4.333	Young Hyson	— 70 - 72	— 4·220

II. Rise and Progress of the British Tea Trade. — Consumption of Tea.

The late rise and present magnitude of the British tea trade are among the most extraordinary phenomena in the history of commerce. Tea was wholly unknown to the Greeks and Romans, and even to our ancestors previously to the end of the 16th or the beginning of the 17th century. It seems to have been originally imported in small quantities by the Dutch; but was hardly known in this country till after 1650. In 1660, however, it began to be used in coffee houses; for, in an act passed in that year, a duty of 8*d.* is laid on every gallon of "coffee, chocolate, sherbet, and tea," made and sold. But it is abundantly evident that it was then only beginning to be introduced. The following entry appears in the Diary of Mr. Pepys, secretary to the Admiralty: — "September 25. 1661. I sent for a cup of tea (a China drink), of which I had never drunk before." In 1664, the East India Company bought 2 lbs. 2 oz. of tea as a present for his Majesty. In 1667, they issued the first order to import tea, directed to their agent at Bantam, to the effect that he should send home 100 lbs. of the best tea he could get! — (See the references in *Milburn's Orient. Com.* vol. ii. p. 530.; *Macpherson's Hist. of Com. with India*, pp. 130—132.) Since then, the consumption seems to have gone on regularly though slowly increasing. In 1689, instead of charging a duty on the decoction made from the leaves, an excise duty of 5*s.* per lb. was laid on the tea itself. The importation of tea from 1710 downwards is exhibited in the following Tables.

The great increase that took place in the consumption of duty paid tea in 1784 and 1785, over its consumption in the preceding years, is to be ascribed to the reduction that was then effected in the duties. In the *nine* years preceding 1780, above 180,000,000 lbs. of tea were exported from China to Europe, in ships belonging to the Continent, and about 50,000,000 lbs. in ships belonging to England. But from the best information attainable, it appears that the real consumption was almost exactly the reverse of the quantities imported; and that, while the consumption of the British dominions amounted to above 13,000,000 lbs., the consumption of the Continent did not exceed 5,500,000 lbs. If this statement be nearly correct, it follows that an annual supply of above 8,000,000 lbs. was clandestinely imported. It was well known, indeed, that smuggling was carried on to an enormous extent; and after every other means of checking it had been tried to no purpose, Mr. Pitt proposed, in 1784, to reduce the duties from 119 to 12½ per cent. This measure was signally successful. Smuggling and the practice of adulteration were immediately put an end to, and the legal imports of tea were about trebled. In 1795, however, the duty was raised to 25 per cent.; and after successive augmentations in 1797, 1800, and 1803, it was raised, in 1806, to 96 per cent. *ad valorem*, at which it continued till 1819, when it was raised to 100 per cent. on all teas that brought above 2*s.* per lb. at the Company's sales.

The following statements show the progress of the consumption of tea in this country from a very remote epoch down to the present time: —

I. Account of the Quantity of Tea retained for Home Consumption in Great Britain from 1789 to 1833, and of the Quantity that paid Duty for Home Consumption in Ireland from 1789 to 1827; specifying the Nett Produce of the Duties in each Country, and the Rates of Duty.

Great Britain.						Ireland.						
Years.	Quantities retained for Home Consumption.	Nett Amount of Duty.			Rates of Duty.	Quantity charged with Duty for Home Consumption.	Nett Amount of Duty. (*British Currency.*)			Rates of Duty.		
	Lbs.	*L.*	*s.*	*d.*		*Lbs.*	*L.*	*s.*	*d.*	*Black:*	*Green:*	
1789	14,534,601	562,038	14	5	12*l.* 10*s.* per cent.	1,970,898	38,038	14	3	4*d.* per lb.	6*d.* per lb.	Irish Currency.
1790	14,693,299	547,230	4	8	—	1,736,796	33,132	12	2	ditto	ditto	
1791	15,096,840	607,430	8	4	—	1,994,787	43,295	12	4	4¼*d.* per lb.	6½*d.* per lb.	
1792	15,822,045	616,775	6	9	—	1,844,598	35,110	0	8	ditto	ditto	
1793	15,244,931	609,846	5	6	—	2,148,755	39,274	9	6	ditto	ditto	
1794	16,647,963	628,081	6	5	—	2,141,290	43,892	6	2	ditto	ditto	
1795	18,394,232	695,108	5	9	20*l.* per cent.	2,970,701	64,093	16	10	ditto	ditto	
1796	18,009,992	877,042	13	0	—	2,320,306	48,633	14	9	ditto	ditto	
1797	16,368,041	1,028,060	9	7	At or above 2*s.* 6*d.* per lb. 30*l.* per ct. Under 2*s.* 6*d.* per lb. 20*l.* per ditto.	2,492,254	60,817	6	5	ditto	ditto	
1798	19,566,934	1,111,898	9	1	At or above 2*s.* 6*d.* per lb. 35*l.* per ct. Under 2*s.* 6*d.* per lb. 20*l.* per ditto.	2,953,240	103,016	5	5	ditto	ditto	
1799	19,906,510	1,176,861	9	9	—	2,873,717	101,727	11	0	5½*d.* per lb.	7*d.* per lb.	
1800	20,358,702	1,152,262	0	0	At or above 2*s.* 6*d.* per lb. 40*l.* per ct. Under 2*s.* 6*d.* per lb. 20*l.* per ditto.	2,926,166	69,824	17	7	ditto	ditto	
										All Sorts:		
1801	20,237,753	1,287,808	2	6	At or above 2*s.* 6*d.* per lb. 50*l.* per ct. Under 2*s.* 6*d.* per lb. 20*l.* per ditto.	3,499,801	135,852	3	4	Sold at or above 2*s*6*d* per lb. 35*l.* per ct. ad val.	Sold under 2*s.* 6*d.* per lb. 20*l.* per ct. ad val.	
1802	21,148,245	1,450,252	7	9	—	3,576,775	182,214	17	7	38*l.* 10*s.* —	23*l.* 10*s.* —	
1803	21,647,922	1,757,257	18	4	At or above 2*s.* 6*d.* per lb. 95*l.* per ct. Under 2*s.* 6*d.* per lb. 65*l.* per ditto.	3,239,937	172,355	15	6	ditto	ditto	
1804	18,501,904	2,348,004	4	8	—	3,337,122	251,734	8	9	84*l.* 14*s.* —	51*l.* 14*s.* —	
1805	21,025,380	2,925,298	17	9	At or above 2*s.* 6*d.* per lb. 95*l.* 2*s.* 6*d.* per cent. Under 2*s.* 6*d.* per lb. 65*l.* 2*s.* 6*d.* per do.	3,267,712	411,225	1	4	ditto	ditto	British Currency.
1806	20,355,038	3,098,428	13	2	On all teas 96*l.* per cent.	2,611,458	348,242	7	2	ditto	71*l.* 14*s.* —	
1807	19,239,312	3,043,224	11	3	—	3,555,129	476,949	4	3	ditto	ditto	
1808	20,859,929	3,370,610	0	10	—	3,706,771	534,685	1	7	ditto	ditto	
1809	19,869,134	3,130,616	14	9	—	3,391,663	462,088	12	3	ditto.	ditto	
										On all Teas:		
1810	19,093,244	3,212,430	1	1	—	2,922,568	435,307	10	2	93*l.* per cent. ad val.		
1811	20,702,809	3,249,294	0	9	—	3,517,384	502,816	16	11	ditto		
1812	20,018,251	3,258,793	2	9	—	3,758,499	567,186	11	6	ditto		
1813	20,443,226	Customs' records destroyed.			—	2,352,294	521,299	12	3	ditto		
1814	19,224,154	3,428,236	8	4	—	3,387,012	529,818	7	11	96*l.* per cent. ad valorem, and henceforth the same as in Great Britain.		
1815	22,378,345	3,526,590	18	3	—	3,462,776	531,500	15	2			
1816	20,246,144	3,956,719	0	5	—	2,990,580	405,777	16	3			
1817	20,822,936	3,003,650	18	7	—	3,141,035	427,713	7	3			
1818	22,660,177	3,362,588	10	1	—	3,569,431	510,105	6	6			
1819	22,631,467	3,256,433	12	10	At or under 2*s.* per lb. 96*l.* per cent. Above 2*s.* per lb. 100*l.* per ditto.	3,238,498	433,371	11	6			
1820	22,452,050	3,128,449	17	0	—	3,150,344	398,742	5	4			
1821	22,892,913	3,275,642	17	6	—	3,493,960	462,819	16	3			
1822	23,911,884	3,434,292	19	10	—	3,816,966	511,299	5	2			
1823	23,762,470	3,407,983	1	8	—	3,567,710	440,139	4	11			
1824	23,784,838	3,420,205	11	11	—	3,387,510	445,271	15	11			
1825	24,830,015	3,527,944	4	11	—	3,889,658	503,074	13	4			
1826	25,238,067	3,291,813	19	5	—	3,877,785	446,229	5	1			
1827	26,043,223	3,263,206	19	3	—	3,887,955	442,382	14	10			
1828	*26,790,481	3,177,179	8	0	—							
1829	29,495,199	3,321,722	2	6	—							
1830	30,047,079	3,387,097	18	9	—							
1831	29,997,100	3,344,918	12	9	—							
1832	31,548,409	3,509,834	13	7	—							
1833	31,829,620	3,444,101	18	1	—							

* This amount includes all tea shipped to Ireland for consumption in that country subsequently to the passing of the act 9 Geo. 4. c. 44.

II. Account of the Quantity of Tea remaining for Home Consumption in Great Britain from 1711 to 1786, obtained by deducting the Quantity exported from the Quantity sold at the Company's Sales.

	Lbs.		Lbs.		Lbs.		Lbs.
1711	141,995	1740	1,302,549	1765	4,906,546	1782	4,166,854
1715	120,659	1745	2,209,183	1770	7,723,538	1783	3,087,616
1720	237,904	1750	2,114,922	1775	5,475,498	1784	8,608,473
1725	286,494	1755	2,738,136	1780	5,588,315	1785	13,165,715
1730	537,016	1760	2,293,613	1781	3,578,499	1786	13,985,506
1735	1,380,199						

N.B. — We have extracted this account from that given from the Company's records in *Milburn's Oriental Commerce* (vol. ii. p. 534.). There is an account, furnished by the Excise, of the quantities of tea retained for home consumption from 1725 to 1832, in the *Appendix to the First Report of the Commissioners of Excise Inquiry*. It appears, however, to involve some very material errors. Thus, it represents the consumption from 1768 to 1772, both inclusive, as under 200,000 lbs. a year, at the same time that it makes the consumption, in the immediately preceding and subsequent years, above 4,000,000 lbs.! A statement of this sort is obviously inaccurate; and yet it is not accompanied by a single remark or explanation of any sort.

III. A Return of the Quantities and Prices of the several Sorts of Tea sold by the East India Company, in each Year during the present Charter (1st of May to 1st of May).

Years.	Bohea.		Congou.		Campoi.		Souchong.		Pekoe.	
	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.
	Lbs.	s. d.	Lbs.	s. d.	Lbs.	s. d.	Lbs.	s. d.	Lbs.	s. d.
1814-15	397,909	2 10·20	21,283,549	3 2·55	1,002,000	3 4·67	1,520,035	3 7·51	22,625	6 10·62
1815-16	839,198	2 1·37	17,908,827	2 11·02	823,507	3 4·94	982,816	3 6·55	30,700	5 8·95
1816-17	1,597,276	2 5·56	14,895,681	2 10·39	925,550	3 1·73	1,862,135	3 0·47	98,562	4 2·53
1817-18	1,972,736	2 5·73	15,736,003	2 11·82	866,304	3 3·12	2,018,058	3 2·88	76,302	4 4·36
1818-19	1,441,686	2 4·78	18,441,066	2 11·22	533,821	3 4·49	1,183,051	3 5·11	69,760	4 4·37
1819-20	1,497,592	1 9·25	17,664,453	2 7·94	479,081	3 4·64	1,168,605	3 2·01	27,802	4 2·41
1820-21	2,522,927	2 1·88	15,939,795	2 7·31	319,775	3 6·04	1,285,496	3 2·96	133,964	4 2·53
1821-22	3,583,486	2 5·28	17,249,982	2 8·59	121,293	3 7·00	1,397,931	3 1·25	92,957	3 10·69
1822-23	1,873,881	2 5·43	18,822,848	2 7·82	323,063	3 6·30	1,391,668	2 10·62	44,757	4 4·73
1823-24	1,853,394	2 4·92	19,006,594	2 8·06	242,562	3 6·36	1,322,326	2 11·82	46,005	5 0·74
1824-25	2,093,276	2 4·59	20,598,958	2 7·90	227,722	3 0·88	473,476	3 4·74	86,051	4 3·26
1825-26	2,713,011	2 0·50	21,034,635	2 6·75	207,971	3 1·77	547,128	3 1·28	148,038	4 0·84
1826-27	2,588,124	1 7·02	20,472,625	2 4·73	166,701	2 9·04	475,796	3 2·17	165,842	3 6·01
1827-28	3,759,199	1 7·44	19,389,392	2 3·95	297,346	2 9·31	448,163	3 0·53	280,308	3 6·61
1828-29	3,778,012	1 6·65	20,142,073	2 3·88	284,187	2 9·14	601,739	2 10·38	131,281	3 9·23
1829-30	4,845,826	1 6·32	18,402,118	2 3·26	474,735	2 2·24	298,819	3 3·60	129,554	3 9·23
1830-31	6,096,153	1 10·03	17,857,208	2 3·15	431,455	2 3·17	277,067	3 0·76	253,101	3 9·92
1831-32	6,474,833	1 10·65	17,734,257	2 2·77	273,289	2 1·92	447,799	2 10·68	545,775	2 10·23

Years.	Twankay.		Hyson Skin.		Young Hyson.		Hyson.		Gunpowder.	
	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.	Quantity.	Average Sale Price per Pound.
	Lbs.	s. d.	Lbs.	s. d.	Lbs.	s. d.	Lbs.	s. d.	Lbs.	s. d.
1814-15	3,646,048	3 6·11	795,907	3 9·57	-	- -	1,008,948	5 9·15	9,189	7 6·50
1815-16	3,784,868	3 3·06	708,280	3 5·26	-	- -	1,059,225	5 5·75		
1816-17	3,239,210	2 11·92	554,270	3 0·76	-	- -	882,820	4 11·61	15,425	5 0·93
1817-18	3,763,123	3 0·69	451,904	3 1·97	-	- -	992,439	4 10·34		
1818-19	4,730,297	2 11·87	193,852	3 2·78	-	- -	909,637	4 11·83		
1819-20	4,288,345	2 10·83	161,919	3 4·38	-	- -	700,312	5 3·66		
1820-21	4,900,764	3 0·33	343,995	3 0·84	-	- -	782,482	5 6·04		
1821-22	4,401,778	3 1·48	225,626	3 1·89	-	- -	1,044,256	4 8·53		
1822-23	4,165,896	3 4·77	205,658	3 3·99	-	- -	816,872	4 3·24		
1823-24	3,967,206	3 5·71	259,209	3 4·72	-	- -	980,753	4 3·23		
1824-25	3,754,120	3 5·17	324,987	3 3·29	9,055	4 3·68	985,566	4 2·71		
1825-26	3,768,406	3 4·88	229,961	3 4·57	-	- -	932,099	4 5·38		
1826-27	4,424,262	3 1·94	298,960	3 2·26	51,421	4 0·75	801,724	4 8·72		
1827-28	4,537,672	2 7·04	242,313	2 7·19	-	- -	1,013,771	4 5·58		
1828-29	4,101,845	2 5·72	213,993	2 3·84	-	- -	1,014,923	4 1·75	645	6 6·51
1829-30	3,852,443	2 4·04	228,016	2 4·60	-	- -	1,071,278	4 1·40		
1830-31	4,560,562	2 3·72	196,791	2 6·39	-	- -	1,047,748	4 1·56		
1831-32	4,463,352	2 3·02	169,909	2 6·78	1,065	2 6·87	1,223,758	3 10·31		

IV. Account of the Quantity of Tea entered for Home Consumption, the Rate of Duty, and the Nett Produce of the Duty, in the Year ended 5th of January, 1834.

Year ended 5th of January.	Lbs. Weight of Tea.			Rate of Duty on the Sale Price.	Total Lbs. Weight.	Nett Produce.		
	Sold at or under 2s. per Lb.	Rate of Duty on the Sale Price.	Sold above 2s. per Lb.					
	Lbs.	L.	Lbs.	L.	Lbs.	L.	s.	d.
1834	7,663,333	96 per cent.	24,166,287	100 per cent.	31,829,620	3,444,101	18	1

It appears from the first of the foregoing Tables, making allowance for the increase of population, that the consumption of tea in Great Britain has been about stationary, or has rather diminished, from 1800 to the present period. This has been occasioned partly, perhaps, by the increased use of coffee; but more, we think, by the enhanced price arising out of the increase of the duty, and the operation of the monopoly. In Ireland, the consumption has been about stationary since 1801, notwithstanding the population has more than doubled in the interval.

III. East India Company's Monopoly — Influence of, on the Price of Tea — Conditions under which it was held — Abolition of.

From its origin down to the present year (1834), the tea trade has been monopolised by the East India Company. Considerable quantities of tea have, indeed, been at different times smuggled into the country; but no British subject, not authorised by the Company, was ever allowed openly to import tea. Being thus the *only sellers*, they had it in their power, by limiting the quantity brought to market, to raise its price above its natural elevation, and to realise immense profits at the expense of the public. They might, no doubt, have declined availing themselves of this power; but no such forbearance could be rationally expected from the Company, or from any other body of men. All individuals and associations exert themselves to obtain the highest price for whatever they have to sell: and it is found that those who are protected from the competition of others, or who have obtained a monopoly of any market, invariably raise the price of their commodities to a very high pitch. The East India Company have done this, probably, to a less extent than most other bodies that have enjoyed such exclusive privileges. Still, however, it is an undoubted fact that *the teas sold by them of late years cost the people of Britain upwards of* 1,500,000*l. a year more than they would have cost had they been sold at the price at which teas of equal quality were sold, under a system of free competition, in New-York, Hamburgh, Amsterdam, &c.!* — (For proofs of this statement, see former edition of this *Dictionary*, p. 1031.)

The legislature endeavoured, at different periods, to prevent the Company from abusing their monopoly, by enacting regulations as to the sale of tea; and though no longer of any practical importance, it may still be worth while briefly to notice some of the more important, and the means by which they were defeated. In 1745, for example, a very great deduction was made from the amount of the tea duties; and by a statute passed in that year (18 Geo. 2. c. 26.), it was enacted, in order to prevent the Company from depriving the public of the benefit of this reduction, that in case the tea imported by the East India Company shall not always be sufficient to answer the consumption thereof in Great Britain, and to *keep the price of tea in this country upon an equality with the price thereof in the neighbouring Continent of Europe*, it shall be lawful for the said Company, and their successors, to import into Great Britain such quantities of tea as they shall think necessary from any part of Europe: and by another section of the same statute, it is enacted, that if the East India Company shall, at any time, neglect to keep the British market supplied with a *sufficient quantity of tea at reasonable prices*, it shall be lawful for the Lords of the Treasury to *grant licences to any other person or persons*, body politic or corporate, to import tea into Great Britain from any part of Europe.

Had this statute been enforced, it would certainly have restrained the demands of the Company within reasonable limits; but it was very soon forgotten, and the Company continued, as before, to sell their teas at an enormous advance as compared with their prices in Hamburgh and Amsterdam.

The same well-founded jealousy, which dictated the act of 1745, was again displayed in the proceedings at the reduction of the duties in 1784. It was then enacted (24 Geo. 3. c. 38.), that the East India Company should make 4 sales of tea every year, as near as conveniently may be at equal distances of time from each other, and should put up at such sales such quantities of tea as may be judged sufficient to supply the demand; and at each sale, the tea to be put up shall be sold without reserve to the highest bidder, provided an advance of 1*d.* per lb. be bid upon the price at which the same is put up. By another clause it was enacted, that it should not be lawful for the East India Company "to put up their teas for sale at any price which shall, upon the whole of the teas so put up at any sale, exceed the prime cost thereof, with the freight and charges of importation, together with lawful interest from the time of arrival of such teas in Great Britain, and the common premium of insurance as a compensation for the sea risk incurred thereon." The Company were further ordered to keep a stock, equal to at least 1 year's consumption, according to the sales of the preceding year, always beforehand. And they were bound to lay before the Lords of the Treasury, copies of the accounts and estimates upon which their orders for importation, prices for sale, and quantities put up to sale, should be grounded.

The object of these conditions is obvious. They were intended to secure a plentiful supply of tea to the public, and to prevent its being sold at an oppressive increase of price. But monopoly and low prices are altogether incompatible. The conditions now referred to were, as to all practical purposes at least, quite inoperative.

1. In the first place, the Company made various additions to the prime cost, and consequently to the putting up price of their tea, which they ought not to have made, but which the Lords of the Treasury, had they been so disposed, could hardly disallow.

They always, for example, charged the cost of the factory at Canton to the price of tea. This establishment consisted of about 20 persons, and cost at an average about 100,000*l.* a year! We do not presume to say that it was altogether useless. Undoubtedly, however, it might have been conducted at half the expense. It is a fact, that the whole American business at Canton has been transacted by the captains of the ships; and every one knows that they have had fewer disturbances with the natives than the English.

2. In the second place, it was established by the evidence taken before the select committee of 1830, that the Company had for many years thrown the whole losses arising from their outward investment upon tea, by estimating the value of the tael, or Chinese money in which the accounts are kept, at the price which it cost for the purpose of being vested in tea. This was a complete evasion of the provisions of the statute; but it was one which it was very difficult, if not impossible, to defeat.

3. In the third place, the obligation imposed on the Company, of keeping a year's supply of tea in their warehouses, contributed both to raise its price, and deteriorate its quality. From a return made to an order of the select committee of the House of Commons in 1830 (*First Report*, App. p. 23.), it appears that the shortest time any tea sold by the Company had been in store was 14 months; and that, at an average, all the teas sold during the 3 years ending with 1829 had been 17 months in store. But, according to the evidence of the most respectable American witnesses, the black and coarser kinds of tea are depreciated at least 5 per cent. by being kept a twelvemonth, and are, indeed, hardly saleable after the arrival of fresh teas from China. Adding, therefore, warehouse rent, interest of capital, and insurance for 17 months, to the deterioration in point of quality, we may estimate the loss to the public, by this well-meant but most injudicious interference of the legislature, at 15 per cent. upon the price of all the teas sold.

4. In the fourth place, it is obvious, even supposing the prime cost of the Company's teas had not been improperly enhanced, that the regulation obliging them to be sold at an advance of 1*d.* per lb. if offered, on the putting-up price, could not be otherwise than nugatory. Had the trade been open, private merchants would have undersold each other, until the price of tea, like that of sugar or coffee, had been reduced to the very lowest point that would yield the sellers the customary rate of profit. But the Company was in an entirely different situation. Being the *only sellers*, they invariably *understocked* the market. Instead of bringing forward such quantities of tea as might have occasioned its sale at a small advance upon the upset price, they adjusted the supply so that the price was raised to a much higher elevation. Now, it will be observed, that all that this system of management put into the Company's coffers consisted of *extra profit*; for the putting up price embraced every item that could fairly enter into the cost of the tea, including both *interest* on capital and insurance, and including also, as we have seen, several items that had but little to do with it. To show the extent to which this source of profit was cultivated, we may mention, that at the June sale in 1830, the Company put up congou at 1*s.* 8*d.* and 2*s.* 1*d.* per lb.; the lowest sort, or that put up at 1*s.* 8*d.*, being sold partly at 2*s.* 1½*d.*, being an advance of *twenty-two and a half* per cent., and partly at 2*s.* 5*d.*, being an advance of FORTY-FIVE per cent.; while the highest sort, or that put up at 2*s.* 1*d.*, was sold partly at 2*s.* 2*d.*, being an advance of *four* per cent., and partly at 3*s.* 7*d.*, being an advance of no less than SEVENTY-TWO per cent. above the upset price; that is, above a price calculated to yield *ordinary profits*. Mr. Mills, an intelligent and extensive wholesale tea merchant, in a paper laid before the recent committee of the House of Lords on East India affairs, showed, that the advance on the teas sold at the Company's June sale in 1830, above the putting-up price, amounted to 122,177*l.* 18*s.* 1*d.*; and as there are 4 such sales in the year, the total advance must have been about 500,000*l.*; and this was considerably under what it had been a few years previously!

These statements show generally how the Company defeated the provisions of the act of 1784, and, indeed, turned them to its own advantage. But, as already observed, nothing else could be expected. It is nugatory to attempt to combine monopoly with low prices and good qualities. They never have existed, and it is not possible they ever should exist, together. Monopoly is the parent of dearness and scarcity; freedom, of cheapness and plenty.

Great, however, as was the sacrifice entailed on the people of Britain by the Company's monopoly, it is doubtful whether it yielded any considerable amount of revenue to the Company. Every one, indeed, must be satisfied, on general grounds, that it was impossible for the Company to make any thing like the same profits by the privileges conceded to them, that would have been made by private individuals enjoying similar advantages. "The spirit of monopolists," to borrow the just and expressive language of Gibbon, "is narrow, lazy, and oppressive. Their work is more costly and less productive than that of independent artists; and the new improvements so eagerly grasped by the competition of freedom, are admitted with slow and sullen reluctance, in those

proud corporations above the fear of a rival, and below the confession of an error" We have no doubt that the directors of the East India Company were disposed to extend its commerce, and to manage it according to the most approved principles, but they were wholly without the means of giving effect to their wishes. They had to operate through servants; and is it to be imagined that the *employés* of such bodies will ever display that watchful attention to their interests, or conduct the business intrusted to their care with the unsparing economy practised by private merchants trading on their own account, superintending their own concerns, and responsible in their own private fortunes for every error they may commit? The affairs of the Company, notwithstanding the efforts of the directors to introduce activity and economy, have always been managed according to a system of routine. Their captains and mercantile agents were, we doubt not, "all honourable men;" but it were an insult to common sense to suppose that they may be compared for a moment with individuals trading on their own account, in the great requisites of zeal, conduct, and skill.

Several gentlemen of great knowledge and experience, who have carefully inquired into the state of the Company's affairs, have expressed their decided conviction, that they made nothing by the tea trade! — the increased price at which they sold the article not being more than sufficient to balance the immense expenses incident to the monopoly! Perhaps this statement may be somewhat exaggerated, though we incline to think it is not far from the mark.—(See *antè*, p. 535.) Taking, however, the accounts laid by the Company before the late committee on Indian affairs, as they stand, it would appear that the profits realised by them during the 3 years ending with 1827-28 amounted to 2,542,569*l.*, being at the rate of 847,523*l.* a year. — (*Appen. to Second Report of Select Committee of* 1830, p. 95.) But we have already seen that the excess of price received by the Company for their teas, over the price of similar teas sold at New York and Hamburgh, has been above 1,500,000*l.* a year; so that, according to the Company's own showing, their monopoly occasioned an *absolute loss* of 652,477*l.* exclusive of its mischievous influence in lessening the consumption of tea, and in confining our trade with China to less than a third of what it will probably amount to under a system giving free scope to the energies of individual enterprise.

The renewal of a monopoly productive of such results was, therefore, wholly out of the question. There was hardly, indeed, in 1833, an individual in the empire out of the pale of the Company who was not anxious for the opening of the trade to China; and the act 3 & 4 Will. 4. c. 93.—(see *antè*, p. 241.) — abolishing the Company's monopoly, and making it lawful for all individuals to import tea, was passed with almost no opposition.

IV. Duties on Tea. — Consumption of, on the Continent and in the United States, etc.

Down to the 22d of April, 1834, the duty on tea was an *ad valorem* one, being 96 per cent. on all teas sold under 2*s.* a pound, and 100 per cent. on all that were sold at or above 2*s.* Seeing that tea may now be considered almost as a necessary of life, this was, certainly, a high duty; though, as a large amount of revenue must be raised, we do not know that it could be fairly objected to on that ground. But under the monopoly system, the duty was, in fact, about 200 per cent. *ad valorem!* For, the price of the tea sold by the Company being forced up to nearly double what it would have been had the trade been free, it followed, inasmuch as the duty varied directly as the price, that it also was doubled when the latter was doubled. The price of congou at Hamburgh, for example, varies from 1*s.* 2*d.* to 1*s.* 4*d.* per lb.; and had the Company supplied our markets with congou at the same rate, it would have cost us, duty included, from 2*s.* 2*d.* to 2*s.* 8*d.* per lb. But instead of this, the congou sold by the Company has been, at an average, a good deal above 2*s.* per lb.; and, the duty being as much, it has invariably cost us from 4*s.* to 5*s.* per lb. Hence, though the duty was only 100 per cent. on the Company's price, it was really above 200 per cent. on the price of tea in an open market! The mischief of the monopoly was thus aggravated almost beyond endurance; inasmuch as every addition made by it to the cost of the article, made an equal addition to the duty on it.

But this system is now happily at an end. The *ad valorem* duties ceased on the 22d of April, 1834; and all tea imported into the United Kingdom for home consumption is now charged with a customs duty as follows: —

Bohea - - - - -	1*s.* 6*d.* per lb.
Congou, twankay, hyson skin, orange pekoe, and campoi - -	2*s.* 2*d.* —
Souchong, flowery pekoe, hyson, young hyson, gunpowder, imperial, and other teas not enumerated - - - - -	3*s.* 0*d.* —

If we compare these duties with the prices of tea at New York and Hamburgh, they will be found to be exceedingly heavy, particularly on bohea and congou. It is pretty certain, that, at no distant period, bohea will be sold, exclusive of the duty, at or under

1*s.* per lb. * ; and supposing this to be the case, the present fixed duty will be equivalent to an *ad valorem* duty of 150 per cent. ! But to impose such a duty on an article fitted to enter largely into the consumption of the lower classes, seems to be in the last degree oppressive and absurd. It will go far to neutralise the beneficial effects that would otherwise result from the abolition of the monopoly ; and cannot fail, by confining the consumption of the article within comparatively narrow bounds, to render the duty less productive than it would be were it lower. Nothing can be more injurious, both in a commercial and financial point of view, than the imposition of oppressive duties on articles, the consumption of which would be materially extended by a fall of price ; and that such is the case with bohea is beyond all question. The Company, by reducing its price from about 2*s.* 6*d.* to 1*s.* 10½*d.* per lb. (which was, of course, accompanied by a corresponding reduction of duty), increased the consumption from 1,873,881 lbs. in 1822-23, to 6,474,838 lbs. in 1831-32. Here we have the consumption more than trebled by a fall of about 1*s.* 3*d.* per lb. And we have not the slightest doubt that a further fall of 1*s.* 3*d.* would, by bringing the article fairly within the command of a vastly greater number of consumers, extend the demand for it in a much greater degree. But it is hardly possible that such a reduction should take place, unless 6*d.* be taken from the duty. We trust, however, that this may be done. At 1*s.* per lb., the duty would undoubtedly yield more than it will ever do at 1*s.* 6*d.* We may also add that nothing would do so much to weaken the pernicious habit of gin-drinking, as a fall in the price of tea, coffee, &c. And it is not to be endured that the price of such desirable articles should be raised to an exorbitant height by duties, that would be more productive of revenue were they effectually reduced.

It has been wholly owing to their exorbitant prices, that notwithstanding the English are the richest people in the world, and that the taste for tea is so very generally diffused amongst us, we consume very little of the superior qualities ! Indeed, some of the finest are not to be met with in our markets ; and while about a dozen kinds of tea are regularly quoted in the Hamburgh, Amsterdam, and New York Price Currents, there are never more than 7, and sometimes only 6, species to be met with here. Imperial, a very fine green tea, regularly imported into America, and all parts of the Continent, is unknown in the English market. Singlo, once imported by the Company, has disappeared for about 50 years. Pekoe and gunpowder, the finest qualities of black and green, are little known in the English market ; and have been only imported in small quantities by the officers of the Company's ships.

The abolition of the monopoly will, no doubt, introduce a greater variety of teas ; and, by lowering their price, will materially extend the demand for those of a superior quality. The fixed duty on the finer teas is, when compared to their prices, a good deal less than that laid on bohea and congou. But a preference of this sort ought not to exist, or to exist only in favour of the coarser teas, or of those consumed by the mass of the people. A duty even of 1*s.* on bohea would be very decidedly higher than a duty of 3*s.* on imperial and gunpowder.

We subjoin an abstract of the act 3 & 4 Will. 4. c. 101. regulating the tea duties.

Tea importable into the U. K. from the Cape of Good Hope, &c. — From and after the 22d of April, 1834, it shall be lawful to import any tea into the United Kingdom from the Cape of Good Hope, and from places eastward of the same to the Straits of Magellan, and not from any other place. — § 1.

Tea importable into British Possessions, &c. — It shall be lawful to import any tea into any of the islands of Guernsey, Jersey, Alderney, or Sark, or into the British possessions of America, from the Cape of Good Hope and places eastward of the same to the Straits of Magellan, or from the United Kingdom, and not from any other place. — § 2.

Duties. — From and after the 22d of April, 1834, the duties of excise payable upon tea shall cease and determine, except as hereafter provided, and in lieu of such duties, there shall be paid the duties of customs set forth in the Table following ; and such duties shall be raised, levied, collected, and paid unto his Majesty, and shall be appropriated and applied in like manner as if the same had been imposed by an act passed in the present session of parliament for granting duties of customs ; viz.

Table of Duties on Tea in Warehouse, or imported into the United Kingdom :

Tea, viz.	*L.*	*s.*	*d.*		*L.*	*s.*	*d.*
Bohea, per lb. - - - -	0	1	6	Souchong, flowery pekoe, hyson, young hyson, gunpowder, imperial, and other sorts not enumerated, per lb. - -	0	3	0
Congou, twankay, hyson skin, orange pekoe, and campoi, per lb. - - -	0	2	2				

Provided, that nothing herein contained shall alter or affect the duties payable upon tea sold by the East India Company at their public sales, prior to the said 22d of April, 1834 : provided also, that the allowance commonly called draft, made by the commissioners of excise in the weighing of tea, shall be made by the commissioners of customs under the authority of this act. — § 3.

Abatement for Sea Damage not allowed. — No abatement of duty shall be made on account of damage received by tea during the voyage ; but it shall be lawful for the importer to separate the damaged parts, and to abandon the same to the commissioners of the customs for the duty. — § 4.

Mixed Tea liable to highest Duty. — If different sorts of tea mixed together be imported in the same package, the whole shall be liable to the highest rate of duty to which any of such sorts would be separately liable ; and if 2 or more sorts of tea not perfectly mixed together be imported in 1

* The price of bohea in the New York market, in January, 1834, was from 13 to 16 cents per lb. ; that is, about 7·2*d.* Should the price of bohea sink to this level in London, the duty would be nearly 300 per cent. on its value ! — (See *post.*)

package, the same shall be forfeited, and may be seized, sued for, recovered, and dealt with in the same manner as any forfeiture incurred under any law relating to the customs. — § 5.

Importation of Tea to be under the Customs. — From and after the passing of this act, it shall be lawful for the Lords of the Treasury, by warrant under the hands of 3 or more of them, to order and direct that the importation of tea, and the duties thereon, shall be under the management of the commissioners of customs, instead of the commissioners of excise, and from and after the time specified in such warrant, the same shall be transferred accordingly: provided, that until the transfer of such management, and of the custody of tea in warehouse, shall be fully made under the directions of the Lords of the Treasury, any act, &c. done or performed by, to, or with the commissioners of excise, or their officers, shall have the same effect in law as if it had been done or performed by, to, or with the commissioners of customs, or their officers, under the authority of this act; but nothing herein-before contained shall alter or affect any law of excise relating to licences for the sale of tea, or to permits for its removal, or to the internal management of tea by the excise, after the import duties have been paid, and after it has been delivered out of the charge of the officers of the customs. — § 6.

Treasury may discontinue Permits for Tea and other Goods. — It shall be lawful for the Lords of the Treasury, by warrant or order under the hands of 2 or more of them, to discontinue the practice of issuing permits for the removal of tea, and to make and establish any other rules, regulations, and restrictions in lieu of such practice, as shall appear to them necessary for the security of the revenue; and all rules, regulations, and restrictions so made and established, shall have the force of law, as fully as if they were embodied in this act, and shall be obeyed and enforced in like manner as any rules, regulations, &c. are or can be obeyed or enforced under the provisions of any act or acts of parliament relating to the customs, or to the excise; and copies of such rules, regulations, &c. shall be laid before parliament. — § 7.

Assessment of the Duties. — A good deal of discussion has recently taken place with respect to these duties. It has been contended, that it will be impossible to assess them fairly; and that it would be better to establish a uniform duty of 2*s.* a pound. We understand, however, that the *ad valorem* duties formerly charged on teas imported into the United States, were collected with considerable fairness; and we do not see why the same may not be done here. But whatever device may be fallen upon to obviate frauds upon the revenue, or to facilitate the collection of the duties, we protest against its being attempted by an equalisation of the duties. The real objection to the present scale is, not that the duties differ too much, but that they differ too little — that the duty on bohea is much too high, as compared with that on the finer teas. The equalisation of the duties would, indeed, be a proceeding too glaringly opposed to every fair principle, to be tolerated. Should it, however, be found necessary to make any alteration in the duties, on account of the difficulty in the way of their assessment, the better way would probably be, to admit congou at the duty of 1*s.* 6*d.* It is only in the substitution of congou for bohea, that any considerable frauds can take place; and this would, of course, effectually obviate them. This plan is objectionable, no doubt, from its leaving the duty on bohea too high; but, as we have only to choose among difficulties, it is, perhaps, as good a one as could be made.

Port Charges in China. — We expressed, in a previous article, (see *antè*, p. 241.) our doubts as to the policy of the clause in the act opening the China trade, which authorised the imposition of peculiar duties on the ships and goods engaged in the trade, for the purpose of defraying the cost of the establishment to be kept up at Canton. Soon after that paragraph was printed, an order in council, was issued, fixing the duties in question at 2*s.* per ton of tonnage duty, and 7*s.* per cent. on the value of the imports into and exports from China. These were heavy charges; and as the American and other foreign ships resorting to Canton are not liable to any claims of the sort, their imposition on British ships would have been most injurious to them. The order in council, being, in consequence, loudly and justly objected to, was very properly withdrawn. An arrangement has since been made, by which the expense of the factory is to be defrayed, ½ by the British government, and ½ by the East India Company; so that British ships will not be liable to any charges, except such as are imposed by the Chinese, and which fall on all foreigners alike. — (For an account of these charges, see *antè*, p. 234.)

Capacity of China to furnish additional Supplies of Tea. — It has been sometimes contended, that the tea trade being thrown open, were the duties materially reduced, the increased demand of this country could not be supplied, and that the reduction of the duty would not really benefit the British consumer, but the Chinese government. Our readers will hardly expect that we should enter at any length into the refutation of so absurd a notion. At the commencement of last century, the entire annual consumption of tea in this country, the Continent, and America, did not certainly amount to 500,000 lbs.; whereas the consumption of Great Britain, the Continent, and United States, amounts at present to about 50,000,000 lbs.; and yet every one acquainted with the history of the trade is aware, that though the consumption has increased *a hundred fold*, the prices in all open markets have been regularly declining, and even at the Company's sales they have lately been a good deal less than they were 50 or 60 years since. We may, therefore, rest quite easy upon this point. The production of tea is rapidly extending in China; and the vast extent of that empire, its capacities for raising unlimited quantities of tea, and the extent to which it is there used, negative the idea that any conceivable increase of the consumption of this country should have any perceptible or permanent influence on its cost price.

Retail Dealers in Tea. — Retailers of tea are obliged to take out a licence, which costs 11*s.* a year. In 1832, their numbers were, in England 76,713, in Scotland 13,701, in Ireland 11,273; making, for the United Kingdom, a grand total of 101,687!

Adulteration of Tea. — It might have been fairly enough anticipated, from the high price of, and the high duty on, tea, and the facility with which it may be mixed up with foreign substances, that it would not escape adulteration; and the records of the courts of justice show that such is the case; several dealers having been convicted of this pernicious practice. The adulteration is usually effected either by the intermixture of sloe or ash leaves with fresh teas; or by mixing the latter with tea that has been already used. The penalties on such offences are stated below; but the best, or rather the only, security on which any reliance can be placed, is to be found in the character and respectability of the parties dealing in tea. Even were he influenced by nothing else, it would be extreme folly in any person carrying on an extensive business to engage in such dishonest practices; for they can hardly fail of being detected; and the ruin of his business, that would follow such exposure, would far more than balance whatever gains he could hope to make by his fraudulent schemes.

Penalties on Adulteration. — If any dealer in or seller of tea dye or fabricate any sloe or other leaves in imitation of tea, or mix or colour leaves of tea with terra Japonica or other ingredient, or vend or expose to sale, or have in possession the same, he shall forfeit for every pound of such adulteration, 10*l.* — (4 *Geo.* 2. c. 14. s. 11.)

Every person, whether a dealer in or seller of tea, or not, who shall dye or fabricate any sloe leaves, liquorice leaves, or the leaves of tea that have been used, or the leaves of the ash, elder, or other tree, shrub, or plant, in imitation of tea, or who shall mix or colour such leaves with terra Japonica, copperas, sugar, molasses, clay, logwood, or other ingredient, or who shall sell or expose to sale, or have in custody, any such adulterations in imitation of tea, shall for every pound forfeit, on conviction, by the oath of 1 witness, before 1 justice, 5*l.*; or, on nonpayment, be committed to the house of correction for not more than 12 nor less than 6 months. — (17 *Geo.* 3. c. 29. s. 1.)

Any person having in possession any quantity exceeding 6 pounds of sloe, ash, or elder leaves, or the leaves of any other tree, plant, or shrub, green or manufactured, and shall not prove to the satisfaction of the justice hearing the matter that the same were gathered with the consent of the owner of the trees, &c., and that they were gathered for some other purpose than that of being fabricated in imitation of tea, shall forfeit 5*l.* for every pound in his possession, or, on nonpayment, be committed to prison. — Sect. 2.

If an officer of excise, or other person, make oath that he suspects herbs dyed, or otherwise prepared in imitation of tea, are hid or lodged in any place, a justice may issue a warrant for seizing the same by day or night, (in the night, in presence of a constable,) together with all wagons, tubs, and packages in which they may be contained; the herbs may be directed to be burnt, and the wagons, &c. sold, and, after deducting expenses, the proceeds to be shared, ½ to informer, and ½ to poor of the parish. Obstructing such seizure subjects the offender to a penalty of 50*l.*, or not less than 6 nor more than 12 months' imprisonment. — Sect. 3.

Herbs not to be burnt, if owner can prove, within 24 hours, that they were gathered with consent of proprietor of trees, plants, or shrubs, and that they were not intended to be fabricated in imitation of tea. — Sect. 4.

Occupier of premises where herbs are found, liable to the penalties, unless he can prove they were lodged without his consent. — Sect. 5.

Consumption of Tea on the Continent and in the United States. — Of the Continental states, Russia and Holland are the only ones in which the consumption of tea is considerable. In 1832, the imports of tea into Russia amounted to 179,474 poods, or 6,461,064 lbs. The imports consist almost entirely of black tea. The consumption of tea in Holland amounts to about 2,800,000 lbs. a year; the duty on which varies from 1⅓*d.* to 4½*d.* per lb. The consumption of France is not supposed to exceed 230,000 lbs. The importations into Hamburgh vary between 1,500,000 and 2,000,000 lbs., the greater part of which is forwarded to the interior of Germany. The imports into Venice and Trieste do not exceed a few cwt. a year.

The consumption of the United States exceeds 8,000,000 lbs. a year. Duties on tea used to form one of the largest items of American revenue, having in some years produced 650,000*l.* Their magnitude, however, was justly complained of; and it is probably owing to this circumstance that, while the consumption of tea was for several years pretty stationary in the United States, that of coffee increased with even greater rapidity than in England. — (See *antè*, p. 310.) The secretary of the treasury of the United States, in his Report for 1827, observed, — "The use of tea has become so general throughout the United States, as to rank almost as a necessary of life. When to this we add that there is no rival production at home to be fostered by lessening the amount of its importation, the duty upon it may safely be regarded as too high. Upon some of the varieties of the article it considerably exceeds 100 per cent., and is believed to be generally above the level which a true policy points out. A moderate reduction of the duty would lead to an increased consumption of the article, to an extent that, in all probability, would, in the end, rather benefit than injure the revenue. Its tendency would be to enlarge our trade and exports to China; a trade of progressive value, as our cottons and other articles of home production (aside from specie) are more and more entering into it. It would cause more of the trade in teas to centre in our ports; the present rate of duty driving our tea ships, not unfrequently, to seek their markets in Europe, not in the form of re-exportation, but in the direct voyage from China. It would also serve to diminish the risk of the United States losing any portion of a trade so valuable, through the policy and regulations of other nations." These judicious suggestions could not fail to command attention; and the flourishing state of the revenue having admitted of a very great reduction of duties, those on tea have been wholly repealed. As was to be expected, the consumption has since begun rapidly to increase. We subjoin an account of the

Quantity and Value of the different Sorts of Tea imported into and exported from the United States during the Year ended 30th of September, 1832. — (*Papers laid before Congress*, 15th of February, 1833.)

Different Sorts of Tea.	Imports.	Exports.
	Lbs.	*Lbs.*
Bohea	637,341	93,890
Souchong, and other black	2,960,764	521,501
Hyson skin, and other green	1,345,600	13,004
Hyson and young hyson	4,142,919	340,474
Imperial, gunpowder, and gomee	819,982	310,593
Total	9,906,606	1,279,462
	Dollars.	*Dollars.*
Value of teas imported and exported	2,788,353	702,014

The following is a statement of the wholesale prices of tea in New York on the 15th of January, 1834.

	Cents.	*Doll.*	*Cts.*					
Imperial	65	to	1	0	per lb.	Hysonskin	25	to 0 50 per lb.
Gunpowder	65	—	1	0	—	Souchong	25	— 0 40 —
Hyson	56	—	0	88	—	Bohea	13	— 0 16 —
Young hyson	53	—	0	80	—			

TEAK WOOD, or INDIAN OAK, the produce of the *Tectona grandis*, a large forest tree, that grows in dry and elevated districts in the south of India, the Burman

empire, Pegu, Ava, Siam, Java, &c. Teak timber is by far the best in the East; it works easily, and, though porous, is strong and durable; it is easily seasoned, and shrinks very little; it is of an oily nature, and, therefore, does not injure iron. Mr. Crawfurd says, that in comparing teak and oak together, the useful qualities of the former will be found to preponderate. "It is equally strong, and somewhat more buoyant. Its durability is more uniform and decided; and to insure that durability, it demands less care and preparation; for it may be put in use almost green from the forest, without danger of dry or wet rot. It is fit to endure all climates and alternations of climate."—(See *Tredgold's Principles of Carpentry*, p. 206.; *Crawfurd's East. Archip.*, vol. i. p. 451.; *Rees's Cyclopædia*, &c.)

The teak of Malabar, produced on the high table land of the south of India, is deemed the best of any. It is the closest in its fibre, and contains the largest quantity of oil, being at once the heaviest and the most durable. This species of teak is used for the keel, timbers, and such parts of a ship as are under water; owing to its great weight, it is less suitable for the upper works, and is not at all fit for spars. The teak of Java ranks next to that of Malabar, and is especially suitable for planking. The Rangoon or Burman teak, and that of Siam, is not so close grained or durable as the others. It is, however, the most buoyant, and is therefore, best fitted for masts and spars. Malabar teak is extensively used in the building-yards of Bombay. Ships built wholly of it are almost indestructible by ordinary wear and tear; and instances are not rare of their having lasted from 80 to 100 years; they are said to sail indifferently; but this is probably owing as much to some defect in their construction, as to the weight of the timber. Calcutta ships are never wholly built of teak; the timbers and framework are always of native wood, and the planking and deck only of teak. The teak of Burma, being conveyed with comparatively little difficulty to the ports of Rangoon and Martaban, is the cheapest and most abundant of any. It is largely exported to Calcutta and Madras.—(See RANGOON.)—(*Private information.*)

A species of timber called African teak is pretty largely imported into England, from the west coast of Africa. But, in point of fact, it is not teak, and it is destitute of several of its most valuable properties. It is, however, for some purposes, a useful species of timber.

TEASEL, OR FULLERS' THISTLE (Ger. *Weberdistel, Kratzdistel*; Fr. *Chardon à carder*; It. *Cardo da cardare*; Sp. *Cardencha, Cardo peinador*). This plant, which is cultivated in the north and west of England, is an article of considerable importance to clothiers, who employ the crooked awns of the heads for raising the nap on woollen cloths; for this purpose they are fixed round the periphery of a large broad wheel, against which the cloth is held while the machine is turned. In choosing teasels, the preference should be given to those with the largest bur, and most pointed, which are generally called *male teasels*. They are mostly used in preparing and dressing stockings and coverlets; the smaller kind, commonly called the fullers' or drapers', and sometimes the *female teasels*, are used in the preparation of the finer stuffs, as cloths, rateens, &c.

THREAD (Ger. *Zwirn*; Du. *Garen*; Fr. *Fil*; It. *Refe*; Sp. *Hilo, Torzal*; Rus. *Nitki*), a small line made up of a number of fibres of some vegetable or animal substance, such as flax, cotton, or silk; whence its names of linen, cotton, or silk, thread.

TILES (Ger. *Dachziegel*; Fr. *Tuiles*; It. *Tegole, Embrici*; Sp. *Tejas*; Rus. *Tscherepiza*), a sort of thin bricks, dried in kilns, and used in covering and paving different kinds of buildings. The best brick earth only should be made into tiles.—(See BRICKS AND TILES.)

TIMBER (Ger. *Bauholz, Zimmer*; Du. *Timmerhout*; Fr. *Bois de charpente, Bois à bâtir*; It. *Legname da fabbricare*; Sp. *Madera de construccion*; Rus. *Strövewoi Gess*; Pol. *Cembrowina*), the term used to express every large tree squared, or capable of being squared, and fit for being employed in house or ship building. In the language of the customs, when a tree is sawn into thin pieces, not above 7 inches broad, it is called batten; when above that breadth, such thin pieces are called deal. Wood is the general term, comprehending under it timber, dye woods, fire wood, &c.

Timber is generally sold by the load.

The following are the contents of the loads of different species of timber, hewn and unhewn:—

A load of timber unhewn	40	cubic feet.	
squared timber	50	—	
1 inch plank	600	square feet.	
1¼ inch plank	400	—	
2 inch plank	300	—	

A load of 2½ inch plank	240	square feet.
3 inch plank	200	—
3½ inch plank	170	—
4 inch plank	150	—

36⅓	Russian stand. deals	12	ft. long,	1½	inch thick,	11	inch. broad,	make	1	load timber.
58$\frac{10}{63}$	Christiania ditto	11	—	1¼	—	9	—		1	—
53⅓	Dram ditto	10	—	1½	—	9	—		1	—
3	Riga logs	-	-	-	-	-	-		1	—

Price of Memel Timber per Load, in the Month of January each Year, from 1813 to 1831.

Years.	Price per Load.			Years.	Price per Load.			Years.	Price per Load.		
	L.	*s.*	*d.*		*L.*	*s.*	*d.*		*L.*	*s.*	*d.*
1813	10 10 0	to	11 0 0	1820	6 0 0	to	6 5 0	1826	5 10 0	to	5 15 0
1814	10 10 0	—	11 0 0	1821	6 0 0	—	6 2 6	1827	4 15 0	—	5 7 6
1815	8 0 0	—	8 15 0	1822	5 0 0	—	5 5 0	1828	4 15 0	—	5 0 0
1816	6 0 0	—	7 0 0	1823	5 15 0	—	5 17 0	1829	5 0 0	—	5 10 0
1817	6 0 0	—	6 10 0	1824	5 10 0	—	5 12 6	1830	4 17 6	—	5 2 6
1818	6 10 0	—	6 12 6	1825	5 15 0	—	6 0 0	1831	4 15 0	—	5 2 6
1819	6 15 0	—	6 17 6								

The following were the prices of the principal species of timber in the London markets, March, 1834, duty paid. — (For the duties, see TARIFF.)

		L.	s.	d.	L.	s.	d.
Teak, African	per load	6	10	0 to 7	10	0	
Oak plank, European	—	8	0	0 - 10	0	0	
Quebec	—	6	0	0 - 6	10	0	
Fir, Riga	—	5	10	0 - 0	0	0	
Dantzic and Memel	—	5	7	6 - 0	0	0	
Norway balks	per 120	36	0	0 - 35	0	0	
Pine, Quebec red	per load	4	0	0 - 4	5	0	
yellow	—	3	10	0 - 3	15	6	
New Brunswick, yellow	—	3	5	0 - 0	0	0	
red	—	3	7	6 - 3	12	6	
Miramichi yellow	—	3	5	0 - 4	0	0	
Black birch, American	—	3	5	0 - 3	10	0	
Maple, American	—	3	5	0 - 0	0	0	
Ash, American	—	3	10	0 - 4	0	0	
Wainscot logs, 14 feet	each	3	15	0 - 4	0	0	
Rose-wood	per ton	12	0	0 - 30	0	0	
Masts, Quebec red, 10 to 18 in.	per load	6	0	0 - 7	0	0	
yellow, 20 in. and upwards	—	7	0	0 - 8	0	0	
Riga	—	5	10	0 - 0	0	0	
Norway and Swedish	—	0	0	0 - 0	0	0	
Plank, Dantzic oak	—	9	0	0 - 0	0	0	
Memel	—	16	0	0 - 19	0	0	
Deals, Gefle, 14 ft. 3 in. by 10,	per 120	38	0	0 - 0	0	0	
Stockholm	—	37	0	0 - 38	0	0	
Gottenburgh, 12 ft. 3 in. by 9	—	26	0	0 - 28	0	0	
Christiania, 1st and 2d	—	32	0	0 - 0	0	0	
Frederickshal	—	29	0	0 - 0	0	0	
Onega, Archangel	—	16	0	0 - 17	0	0	
Petersburg, Dantzic, or Memel, per standard hundred		16	0	0 - 19	0	0	

If white wood, from 2*l.* to 3*l.* less.

		L.	s.	d.	L.	s.	d.
Quebec red pines, per stand. hun.		12	0	0 - 16	0	0	
yellow	—	12	0	0 - 16	10	0	
white spruce	per 120	21	0	0 - 23	0	0	
Dantzic deck	each	26	0	0 - 30	0	0	
Deal ends, &c. generally 2-3ds the price of deals.							
Spars	—						
Lathwood, Memel, &c.	per fathom	8	10	0 - 9	0	0	
British America	—	4	10	0 - 5	0	0	
Staves, per 1,200, viz.							
Quebec pipe		95	0	0 - 0	0	0	
Hhd. 2-3d, and barrel ½ price of pipe.							
Virginia pipe		16	0	0 - 0	0	0	
Hhd.		9	0	0 - 12	0	0	
Barrel		7	0	0 - 12	0	0	
Boston pipe		16	0	0 - 0	0	0	
Hhd.		1	0	0 - 0	0	0	
Quebec pipe, of 1½ inch		45	0	0 - 47	10	0	
Hhd. and barrel, in proportion.							
New York pipe, in bond		15	0	0 - 16	0	0	
Hhd		9	0	0 - 12	0	0	
Barrel		7	0	0 - 10	0	0	
Dantzic crown pipe		150	0	0 - 0	0	0	
Stettin crown pipe		150	0	0 - 0	0	0	
Hhds. 2-3ds, barrel ½ price							
Long headling, 1-3d, short headling, ½ price.							
Memel crown pipe		150	0	0 - 0	0	0	
Timber, Riga, per load of 50 cubic feet		5	10	0 - 0	0	0	
Memel, &c.		4	17	6 - 5	5	0	

TIMBER TRADE. Having, in separate articles, described those species of timber most in demand in this country, we mean to confine ourselves in this article to a few remarks on the policy of the regulations under which the trade in timber is conducted.

1. *Importance of a cheap Supply of Timber.* — It is surely unnecessary to enter into any lengthened statements on this head. If there be one article more than another with which it is of primary importance that a great commercial nation like England should be abundantly supplied on the lowest possible terms, that article is timber. Owing to the deficiency of our home supplies, most of the timber, with the exception of oak, required for building ships and houses; and most part, also, of that employed in the construction of machinery; is imported from abroad. Any individual acquainted with the purposes to which timber is applied, but ignorant of our peculiar policy with respect to it, would never, certainly, imagine that such an article could be made the subject of oppressive duties, and of still more oppressive preferences. Timber is not to be looked at in the same light as most other commodities. It is against all principle to impose duties on materials intended to be subsequently manufactured; but timber is the raw material of the most important of all manufactures — that of the instruments of production! Suppose it were proposed to lay a heavy tax on ships, wagons, looms, or workshops when completed, would not such a monstrous proposal be universally scouted? And yet this is what is really done. The finished articles are not, indeed, directly taxed; but the principal material of which they are made, and without which they could not be constructed, is burdened with an exorbitant duty! To dwell on the absurdity of such a tax would be worse than useless. Of all things essential to the prosperity of manufacturing industry, improved and cheap machinery is the most indispensable. Most individuals amongst us are ready enough to ridicule the contradictory conduct of the French government, who, at the very moment that they are endeavouring to bolster up a manufacturing interest, lay enormous duties on foreign iron, and thus double or treble the price of some of the most important manufacturing implements. Timber is, however, of quite as much importance in this respect as iron; and our conduct in burdening it with exorbitant duties partakes as largely of the *felo-de-se* character as that of our neighbours! Indeed, as will be immediately seen, it is decidedly less defensible. Some plausible, though inconclusive, reasonings might be urged in defence of duties on iron and timber, were they imposed for the sake of revenue: but even this poor apology for financial ignorance and rapacity cannot be set up in defence of the iron duties of France or the timber duties of England. The former, however, are the least objectionable; they were imposed, and are still kept up, to encourage the production of iron in France: whereas the duties on timber in England have been imposed for the sake, principally, of promoting the lumber trade of Canada, and of forcing the employment of a few thousand additional tons of shipping! We do not sacrifice the goose for the sake of the golden eggs, but for the sake of the offal she has picked up.

2. *Origin and Operation of the discriminating Duty in favour of American Timber.* — The practice of encouraging the importation of the timber of Canada and our other possessions in North America, in preference to that of foreign countries, is but of recent growth. It took its rise during the administration of Mr. Vansittart, and bears in every part the impress of his favourite policy. The events that took place in 1808 having seriously affected our previous relations with the Baltic powers, a deficiency in the accustomed supply of timber began to be apprehended; and the ship owners and

Canada merchants naturally enough availed themselves of this circumstance, to excite the fears of the ministry, and to induce them to change the fair and liberal system on which the trade in timber had been conducted down to that time, by granting extraordinary encouragement to its importation from Canada. Even as a temporary expedient, applicable to a peculiar emergency, the policy of giving any such encouragement is extremely doubtful. Supposing timber not to have been any longer obtainable from the north of Europe, its price would have risen, and it would, of course, have been imported from Canada, the United States, or wherever it could be had, without any interference on the part of government. But, in 1809, a large addition was made to the duties previously charged on timber from the north of Europe, at the same time that those previously charged on timber from Canada and our other possessions in America were almost entirely repealed; and in the very next year (1810), the duties thus imposed on Baltic timber were *doubled!* Nor did the increase of duties on such timber stop even here. In 1813, after Napoleon's disastrous campaign in Russia, and when the free navigation of the Baltic had been restored, 25 per cent. was added to the duties on European timber! The increase of the revenue was pleaded as a pretext for this measure; but we believe it was really intended to augment the preference in favour of Canada timber; for how could it be supposed that an increase of the duties on an article imported from a particular quarter of the world, that was already taxed up to the very highest point, could add any thing considerable to the revenue, when a convertible article might be imported from another quarter duty free? The various duties laid on European timber amounted, when consolidated by the act 59 Geo. 3. c. 52., to 3*l.* 5*s.* per load.

Admitting, for the moment, that the peculiar and unprecedented aspect of things in 1808 and 1809 warranted the giving of some preference to the importation of timber from Canada, such preference should plainly have ceased in 1813. So long as the communication with the bridge is interrupted, we may be forced to use a boat to cross the river; but when the communication is again opened, and when there is not the remotest chance of its future interruption, it would be a singular absurdity to refuse to resume the use of the bridge, and to continue the costly and inconvenient practice of being ferried over! This, however, is exactly what we have done in the case of the Canada trade. Because a fortuitous combination of circumstances obliged us, upon one occasion, to import inferior timber at a comparatively high price, we resolve to continue the practice in all time to come! The history of commerce affords no parallel display of gratuitous folly.

The absurdity of this conduct will appear still more striking, if we reflect for a moment on the peculiar situation of the countries in the north of Europe. The nations round the Baltic have made little progress in manufacturing industry. They abound in valuable raw products; but they are wholly destitute of the finer species of manufactured commodities, and of colonies. Nor have they any real inducement to attempt supplying themselves directly with the former, or to establish the latter. Their iron and copper mines, their vast forests, and their immense tracts of fertile and hitherto unoccupied land, afford far more ready and advantageous investments for their deficient capital, than could be found in manufactures or foreign trade. Russia and Prussia have, indeed, been tempted, by our corn and timber laws, to exclude some species of manufactured goods; but it is not possible that they should succeed in materially limiting our exports to them, provided we do not second their efforts by refusing to admit their products.

Of all the countries in the world, there is obviously none which has so many facilities for carrying on an advantageous trade with the North as Great Britain. We have a surplus of all those products of which Russia, Prussia, Sweden, Denmark, and Norway stand most in need; and, on the other hand, they have a surplus of many of those of which we are comparatively destitute. The immense traffic we carry on with the Baltic does not, therefore, depend in any considerable degree on artificial or accidental circumstances. It does not rest on the wretched foundation of Custom-house regulations or discriminating duties, but on the gratification of mutual wants and desires. It has been justly remarked by the Marquis Garnier, the excellent translator of the "Wealth of Nations," that no inconsiderable portion of the increased power and wealth of England may be traced to the growing opulence of Russia. But the Russian empire is yet only in the infancy of civilisation; she must continue for a very long period to advance in the career of improvement, and it will be our own fault if we do not reap still greater advantages from her progress.

Such is the nature of that commerce against which the discriminating duties on timber from the north of Europe aimed a severe blow! In 1809, when this system began, 428,000 tons of British shipping entered inwards from the Baltic. In 1814, the year after the 25 per cent. of additional duty had been imposed on Baltic timber, and when all the ports of that sea were open to our ships, only 242,000 tons of British

shipping entered inwards, — being little more than the half of what it amounted to when the system began. In 1816, the British shipping entered inwards from the Baltic amounted to 181,000 tons. It was materially augmented in 1818 and 1819, in consequence of the failure of the crops in this country in 1817 and 1818; but even in 1819 the entries inwards were 55,000 tons under what they had been 10 years before!

By diminishing our imports from the northern nations, the high discriminating duty on timber necessarily diminished our exports to them in the same proportion.

The following extract from the evidence of Mr. Edward Patzcker, a merchant of Memel, given before the committee of the House of Commons on the foreign trade of the country, in 1821, shows the effect that the increased duties on timber had on the commerce with Prussia: —

"Has there been a great alteration in the timber trade between Memel and this country of late years?" — "Since the war, a great alteration; before the war we used to have 950 to 1,000 English ships in 1 year, and since the war we have had from 200 to 300 only."

"When you talk of 900 ships, do you mean 900 ships trading between Great Britain and Memel?" — "Yes."

"Do you mean that number of cargoes were loaded in the year for England?" — "Yes."

"How many cargoes were loaded for Great Britain during the last year (1820)?" — "About 270 or 280 cargoes; there have not been more."

"To what cause do you attribute that diminution in the trade?" — "*To the high duties in England:* for formerly the duties were only 16*s.* and some pence; now they are 3*l.* 5*s.* in a British, and 3*l.* 8*s.* in a foreign ship."

"Has that diminished trade in timber produced a great alteration in the circumstances of the people of Prussia?" — "Yes: for it is the only trade which we can carry on; wheat and all the rest of our articles cannot be brought here; *timber* is the only one that can be brought, and the trade from Poland has very much ceased in consequence of the diminished demand for it; the people cannot sell their goods and we cannot take such quantities of timber as we used to do; and, therefore, they cannot take English goods from us."

"If such an alteration was to take place in the duties on timber in this country, as to give the Prussians a larger share of the trade than they at present enjoy, do you think that would produce increased friendly feelings on the part of the people of your country to the people of this country?" — "It would. *They would certainly take far more goods from hence*, as they could get better rid of them. The Poles, also, would take more of them." — (*Report*, 9th of March, 1821, p. 107.)

The effect that the increased duties had on the trade with Norway and Sweden, aggravated as they in some degree were by an absurd method of charging the duty on deals, was still more striking and extraordinary. These countries had few products, except timber and iron, to exchange for our commodities; and as neither of these could be advantageously imported into England under the new system, the trade with them almost entirely ceased; and they were reluctantly compelled to resort to the markets of France and Holland for the articles they had formerly imported from us. In proof of this, we may mention, that the exports to Sweden, which had amounted in 1814 to 511,818*l.*, declined in 1819 to 46,656*l.*; and the exports to Norway, which had in 1815 amounted to 199,902*l.*, amounted in 1819 to only 64,741*l.** — (*Lords' Report on the Foreign Trade of the Country*, 3d of July, 1820, p. 34.)

This extraordinary falling off in so very important a branch of our commerce having been established beyond all question by the evidence taken before the committees now referred to, an approach to a better system was made in 1821, when the duty on timber from the north of Europe was reduced from 3*l.* 5*s.* to 2*l.* 15*s.* per load, at the same time that a duty of 10*s.* per load was laid on timber from British America. This, however, was a comparatively inefficient measure. It was stated, to be sure, at the time, that the 2*l.* 5*s.* per load of excess of duty that was thus continued on Baltic timber over that laid on timber imported from Canada, was not more than enough to balance the higher prime cost, the greater freight, and other charges consequent upon the importation of the latter; and that it would, therefore, be in future indifferent to a merchant whether he imported timber from Memel or Miramichi! In point of fact, however, the discriminating duty continued in favour of Canada timber has been far too high to allow of this equalisation being effected. So much so is this the case, that there have been instances of ships loading with timber in the north of Europe, carrying that timber to Canada, and then bringing it to England as Canada timber; the difference of duty having been about sufficient to indemnify the enormous expense of this round-about voyage! We do not mean to say that this has been a common practice; but what are we to think of a commercial regulation that admits of such an adventure being undertaken with any prospect of success? Admitting, however, that the duty had been adjusted so as to have had the anticipated effect, could any thing be more preposterous and absurd than to impose it on such a principle? There are mines of coal in New Holland; but

* Even at present, the official value of the total exports, including colonial produce, from the United Kingdom to Sweden, does not exceed 160,000*l.* a year. Our exports of all sorts to Norway amount to about 150,000*l.* a year, while our imports hardly amount to 85,000*l.* In fact, were it not that Norway finds means of paying us by drafts on Holland, into which her produce is admitted, she could import almost nothing from England. The injury done to our commerce with these two nations, by our heavy discriminating duties on the principal equivalent they have to give in exchange for commodities brought from abroad, was placed in a [illegible] by Lord [illegible], in the debate on the timber duties, the 18th of March, 1821.

what should we think, were an attempt made to impose such duties on coals from Newcastle as should render it indifferent to a London merchant whether he imported a cargo of coal from the Tyne or Botany Bay? Now, the case of the timber duties is, in point of principle, precisely the same. We may obtain timber from countries so near at hand that our ships may make 3, 4, 5, and even 6 voyages a year to them *; and we refuse to admit it unless loaded with a duty that raises its price to a level with what is brought from the other side of the Atlantic — a voyage which our ships cannot, at most, perform above twice a year!

The following official account shows the extent to which the system of preference has been carried: —

An Account of the Rates of Duty payable in Great Britain on the Principal Articles of Wood.

Timber.	Of Foreign Countries.	Of the British Plantations in America.
	L. s. d.	*L. s. d.*
Battens, 6, and not exceeding 16 feet long, and not exceeding 2¾ inches thick - - per 120	10 0 0	1 0 0
16, and not exceeding 21 feet long, and not exceeding 2¾ inches thick, per 120	11 10 0	1 3 0
exceeding 21 feet long, or if exceeding 2¾ inches thick - per 120	20 0 0	2 0 0
Deals, 8, and not above 10 feet long, and not exceeding 1½ inch thick, per 120	8 2 6	
6, and not above 16 feet long, and not exceeding 3½ inches thick, per 120	19 0 0	2 0 0
16, and not exceeding 21 feet long, and not exceeding 3½ inches thick, per 120	22 0 0	2 10 0
21, and not above 45 feet long, and not exceeding 3½ inches thick, per 120	44 0 0	
exceeding 45 feet long, or above 3½ inches thick (not being timber 8 inches square or upwards) the load containing 50 cubic feet - -	2 10 0	
and further, the 120 - -	6 0 0	
N.B. — There is no class of deals brought from the colonies of the same dimensions as the 2 previous classes; but the preference on those that do come corresponds to its amount on other articles. — (See TARIFF.)		
Deal ends, under 6 feet long, and not exceeding 3½ inches thick, per 120	6 0 0	0 15 0
and exceeding 3¼ inches thick, per 120	12 0 0	1 10 0

Timber.	Of Foreign Countries.	Of the British Plantations in America.
	L. s. d.	*L. s. d.*
Lathwood, in pieces under 5 feet long, per fathom	4 5 0	0 15 0
5, and under 8 feet long —	6 16 0	1 5 0
8, and under 12 feet long —	10 4 0	
12 feet long and upwards —	13 12 0	
Masts, 6, and under 8 inches in diameter - - - each	0 8 0	0 1 6
8, and under 12 inches in diameter, each	1 2 0	0 4 0
12 inches in diameter or upwards per load	2 15 0	0 10 0
Oak plank, 2 inches thick or upwards —	4 0 0	0 15 0
Spars, under 4 inches in diameter, and under 22 feet long - per 120	2 8 0	0 9 0
and 22 feet long or upwards, per 120	4 5 0	0 16 0
4, and under 6 inches in diameter —	9 0 0	1 15 0
Staves, not exceeding 36 inches long —	1 3 0	0 2 0
above 36, and not exceeding 50 inches long - - per 120	2 6 0	0 4 0
above 50, and not exceeding 60 inches long - - per 120	3 0 0	0 6 0
above 60, and not exceeding 72 inches long - - per 120	4 4 0	0 8 0
above 72 inches long - —	4 16 0	0 10 0
N.B. — Staves of the United States of America, of Florida, of the Ionian Islands, or of the British colonies, and not exceeding 1½ inch in thickness, are chargeable with 1-3d part only of the above rates.		
Fir, 8 inches square or upwards, per load	2 15 0	0 10 0
Oak do. - - —	2 15 0	0 10 0
Unenumerated do. - —	1 8 0	0 5 0
Wainscot logs, 8 inches square or upwards - - - per load	3 15 0	0 12 0

So long as the foreigner can lay his finger on such a Table as this, it will not be easy to convince him that our commercial system has lost so much of its exclusive character as it really has done during the last few years. Having set such an example to the Russians and Prussians, need we wonder at their having attempted to shut several of our peculiar productions out of their markets? Could we expect that they were to follow our precepts rather than our practice?

3. *Comparative Quality of Baltic and Canada Timber.* — Had the timber of Canada been decidedly superior to that of the north of Europe, something might have been found to say in favour of the discriminating duty: for it might have been contended, with some show of reason, that it was of the utmost consequence, considering the application of timber to ship and house building, and other important purposes, to prevent the importation of an inferior species, even though it might be cheaper. But the system we have adopted is of a totally different character. We have not attempted to shut out an article which, though cheap, is inferior; but have committed the twofold absurdity of shutting out one that is at once *cheap and superior!*

The committee of the House of Lords observe, in their *First Report on the Foreign Trade of the Country*, that "the North American timber is more soft, less durable, and every description of it more liable, though in different degrees, to the dry rot, than timber of the north of Europe. The red pine, however, which bears a small proportion to the other descriptions of timber, and the greater part of which, though imported from Canada, *is the produce of the United States*, is distinguished from the white pine by its greater durability. On the whole, it is stated by one of the commissioners of his Majesty's navy, most distinguished for practical knowledge, experience, and skill, that the timber of Canada, both oak and fir, *does not possess, for the purpose of ship building, more than half the durability of wood of the same description, the produce of the north of*

* According to the evidence of Mr. J. D. Powles, an extensive ship and insurance broker, ships can make *six* voyages from Norway, 3 or 4 from Prussia, and 2 from Russia, in a season. — (*Commons' Report*, p. 89.)

Europe. The result of its application to other purposes of building is described by timber merchants and carpenters to be nearly similar."—(p. 4.)

We subjoin the following extracts from the evidence of Sir Robert Seppings, the commissioner alluded to by the committee, whose great intelligence and experience render his opinion of the highest authority: —

"Can you state to the committee the result of any observations that you or others in his Majesty's service have made, on the durability of timber, the produce of the North American colonies, or timber imported from the north of Europe, applied to the same purposes?"—"About the year 1796, there were a certain number of frigates built of the fir of the Baltic, and *their average durability was about* EIGHT *years.* About the year 1812, there were a considerable number of frigates built also, of fir of the growth of North America, and their *average durability was not* HALF *that time.*"

"You have stated that Canada timber is peculiarly subject to the dry rot, and the dry rot is known to have prevailed lately to a great degree in the navy; has that prevailed principally since the application of Canada timber to the uses of the navy?"—"I believe *the navy has suffered very considerably from the introduction of Canada timber*, or timber of the growth of North America; and in consequence, from experience, we have *entirely discontinued the use of it*, except for deals and masts."—(p. 56.)

Mr. Copland, an extensive builder and timber merchant, being asked by the committee what was his opinion with respect to the comparative qualities of American and Baltic timber, answered,—"The timber of the Baltic in general, speaking of Norway, Russian, Prussian, and Swedish timber, is of very superior quality to that imported from America; the bulk of the latter *is very inferior in quality, much softer in its nature, not so durable, and very liable to dry rot;* indeed, it is not allowed by any professional man under government to be used, nor is it ever used in the *best* buildings in London; it is only speculators that are induced to use it, from the price of it being much lower (in consequence of its exemption from duty) than the Baltic timber; if you were to lay two planks of American timber upon each other, in the course of a twelvemonth they would have the dry rot, almost invariably, to a certain extent."—(p. 56.) And many passages to the same effect might be produced, from the evidence of persons of the greatest experience in building.

Now, we would beg leave to ask whether any thing can be more absolutely monstrous, than to force, by means of a system of discriminating duties, a large proportion of the public to use that very timber in the construction of their ships and houses, which government will not use for either of these purposes, and which the most experienced engineers and builders pronounce to be utterly unfit for them? This is not to impose duties on a fair and equal principle for the sake of revenue, but for the sake of securing a preference to a worthless article: it is not imposing them in the way in which they may be least, but in that in which they are certain to be *most injurious* to those who have to pay them.

It appears from the official account subjoined to this article, that, at an average of the years 1828 and 1829, the revenue would have gained considerably more than 1,500,000*l.* a year, had the same duty been laid on Canada timber that is laid on timber from the north of Europe; and this, therefore, may be considered as the amount of the pecuniary sacrifice we consent to make, in order that our ships and houses may be inoculated with dry rot!

4. *Apologies for the discriminating Duty.* — If any thing ought, more than another, to make legislators pause before enacting a restrictive regulation, it is the difficulty of receding from it. After it has been enforced for a while, a variety of interests usually grow up under its protection, which may be materially injured by its repeal. *All*, however, that the persons so interested can justly claim, is, that sufficient time, and every possible facility, should be afforded them to prepare for a change of system. Because the interests of a comparatively small portion of the community may be injuriously affected by the abolition of a regulation ascertained to be in the last degree inimical to the public, is it, therefore, to be contended that we ought, at all hazards, to continue to enforce the regulation we have so unwisely enacted? To maintain the affirmative, would be to give perpetuity to the worst errors and absurdities; and would be an effectual bar to every sort of improvement. No change, even from a bad to a good system, ought to be rashly set about: but when once the expediency of an alteration has been clearly established, it ought to be resolutely carried into effect.

It is objected to the abolition of the discriminating duties on timber, that it would be injurious to Canada and the shipping interest. We believe, however, that the injury would not be nearly so great as has been represented; that it would, in fact, be quite inconsiderable. So far from the *lumber trade* — or the trade of felling wood, squaring it, and floating it down the rivers to the shipping ports — being advantageous to a colony, it is distinctly and completely the reverse. The habits which it generates are quite subversive of that sober, steady spirit of industry, so essential to a settler in a rude country; to such a degree, indeed, is this the case, that lumberers have been described as the pests of a colony, "made and kept vicious by the very trade by which they live."— But abstracting altogether from the circumstances now alluded to, Mr. Poulett Thomson showed, in his unanswerable speech on the timber question (March 18. 1831), that the

abolition of the lumber trade would materially benefit the real interests of the colonies. It is ludicrous, indeed, seeing that not one tree in a hundred is fit for the purposes of being squared for timber, to suppose that the discontinuance of the trade could be any serious loss. But the fact is, that when trees are cut down by lumberers, for export as timber, instead of being burnt down, so great a growth of brushwood takes place, that it actually costs more to clear the ground where the lumberers have been, than where they have not been. Mr. Richards, who was sent out by government to report on the influence of the lumber trade, represents it as most unfavourable; and observes, that, "when time or chance shall induce or compel the inhabitants to desist from this employment, agriculture will begin to raise its head." The statements of Captain Moorsom, in his *Letters from Nova Scotia*, are exactly similar. He considers the depression of the timber market, although a severe loss to many individuals, a "decided gain to the colony," from the check it has given to the "lumbering mania." — (p. 53.)

The statements that have been made as to the amount of capital expended on saw mills, and other fixed works for carrying on the lumber trade, have been singularly exaggerated. Mr. Thomson, who had the best means of acquiring accurate information on this point, made the following statement with respect to it in his speech already referred to: — "From the means I have had of calculating the amount of capital embarked in these saw mills, I believe it is about 300,000*l.*: I am sure I may say that if 500,000*l.* were taken as the amount, it would be a great deal above rather than under the real value; but, after all, this description of property is not to be sacrificed by the arrangements proposed, even if they were carried to the fullest extent. I am ready at once to admit, that the consequence of the proposed alteration may be, that it will diminish the exports of timber from Canada to England, and affect the productiveness of the capital vested in the mills to which I have referred; but the committee ought not to lose sight of the fact, that though in this one branch of industry there will be a great falling off, yet the same amount of labour might be applied to much greater advantage on land in the colonies; and the mills, which will be rendered useless for their original purposes, may be converted into useful auxiliaries to the agricultural and other pursuits of the colonists; so that the enormous losses that have been placed in so frightful a point of view, will, as I have shown, be absolutely next to nothing."

So far, therefore, as the interests of the colonies are concerned, it is plain they would not really lose, but gain, by a repeal of the discriminating duties on foreign timber. They would still continue to possess a respectable share of the trade; for their timber, though unfit for more important purposes, is well suited, by its softness and freedom from knots, for the finishing of rooms and cabins, the manufacture of boxes, &c.; and in the mast trade, it is believed, that they would be able to maintain a successful competition with Riga. It might also be expedient to assist in turning the industry of the colonies into the profitable channel of agriculture, by giving their corn and flour a still more decided preference than they now enjoy in our markets. In our opinion, it would be good policy to admit them, at all times, duty free.

The ship owners would undoubtedly have more cause to complain of injury from the equalisation of the duties; but even as respects them, it would not be nearly so great as is commonly supposed. The statement usually put forward by those who represent the timber trade to North America as of vital importance to the shipping interest, is, that it employs 1,800 ships, of 470,000 tons, navigated by 20,000 sailors. But Mr. Poulett Thomson showed, in his previously quoted speech, that this statement is utterly erroneous. The entries inwards of British ships from our possessions in North America correspond with the sums now stated; but, at an average, every ship employed in the trade makes 1¾ voyage a year; so that, in point of fact, only 1,028 ships, of 270,000 tons and 11,427 men, are employed in the trade.* From this latter number must, however, be struck off ships employed in other branches of trade; for no one pretends that the only trade we carry on with British North America is the importation of timber. We believe that the number to be so struck off may be safely estimated at 200 ships, of 54,000 tons and 2,200 men, leaving about 800 ships, of 216,000 tons and 9,200 men, to be affected by the change. Inasmuch, however, as about a third part of the timber now brought from Canada would most probably continue to be brought for the purposes already referred to, were the duties equalised, only 534 ships, of 144,000 tons and 6,134 men, would be forced to change their employments. Now of these, a half, at least, would be immediately employed in bringing from the Baltic the same quantity of timber that is brought from America; and as the price of timber would be materially lowered by the reduction of the duty, the demand for it would no doubt materially increase; so that it is abundantly plain that very few, if any, ships would be thrown out of employment by the abolition of the discriminating duties. It

* It is singular that Mr. Bouchette shows [illegible] — (See the Preface to his valuable work on British America.)

is material, too, to observe, that whatever temporary inconvenience the shipping interest might sustain from the change, its future consequences would be singularly advantageous to it. The high price of timber employed in the building of ships is at present the heaviest drawback on the British ship owners; but the equalisation of the duties would materially reduce this price; and we have the authority of the best practical judges for affirming, that were the duty (as it ought to be) entirely repealed, ships might be built decidedly cheaper in England than in any part of the world.

It would be desirable, however, to secure the interests of so important a class as that of the ship owners from any chance even of temporary loss or inconvenience from an equalisation of the duties. And it is fortunate that this object may be attained, not only without any loss, but with certain benefit to the public. The expediency of encouraging emigration to the colonies, as a means of relieving parts of England and Ireland from that mass of paupers by which they are burdened, is no longer questioned; and we incline to think that no more effectual means of promoting emigration could be devised, than the giving a bounty to the owners of ships landing emigrants in Canada, the Cape of Good Hope, or New South Wales. We have already seen that the number of emigrants to British North America, in 1832, amounted to about 66,000 (*antè*, p. 881.); and supposing that a bounty of 30*s.* or 40*s.* a head were in future to be paid on the arrival of emigrants at Quebec, it would more than indemnify the ship owners for any inconvenience resulting from a new arrangement of the timber duties; at the same time that the stimulus it would give to emigration would be of the utmost importance to Great Britain and to the colonies.

5. Alteration proposed in the Timber Duties in 1831. — To suppose that the timber trade should be allowed to continue on its present footing, seems to be quite out of the question. We have already seen that the discriminating duties impose a pecuniary sacrifice of 1,500,000*l.* a year on the British public, besides forcing the use of a comparatively worthless article where none but the very best ought to be employed. We have also seen that this sacrifice produces no real benefit to the colonies; and that the benefit it does produce to the ship owners is but trifling, and may be more than made up to them without loss to the public. The existing government seems to have been early satisfied of the propriety of attempting to introduce a less objectionable system; and on the 18th of March, 1831, Lord Althorp moved that the duties on Baltic timber should be reduced 6*s.* a load on the 1st of January, 1832; 6*s.* more on the 1st of January, 1833; and 3*s.* on the 1st of January, 1834; making the total reduction 15*s.* a load, and leaving a protection in favour of Canada timber of 30*s.* a load. The only real objection to this scheme was, that it did not go far enough; that "it scotched the snake, without killing it." There is not the shadow of a ground on which to justify the granting of a bounty (for such is the real operation of the duty) to force the use of an inferior and more costly article; and even if a reasonable bounty could be justified, one of 30*s.* a load is quite excessive. But singular as it may seem, this proposal, moderate as it certainly was, encountered a very keen opposition. Some of those who had previously expressed their concurrence in the expediency of some measure of the sort, thought proper to vote against it; and, upon a division, it was lost by a majority of 46. Lord Althorp seems to have been much discouraged by the result of this motion; for, during the lengthened period that has since elapsed, he has made no attempt to effect any modification of the duties. But notwithstanding these unfavourable appearances, we do not believe that a system so destructive of the public interests will be upheld much longer. It were much to be wished that the duties could be wholly dispensed with. Timber is about the very worst subject for taxation; but, at all events, an end must be put to the discriminating duties. It is not to be endured, that so essential an article — that *the prime necessary of manufacturing industry* — should be loaded with exorbitant duties, imposed, not for the sake of revenue, but for the sake of those who either reap no advantage from them, or none that is material.

I. Account of the Amount of Duties paid in the United Kingdom on Timber and other Articles of Wood, imported from the British Provinces of North America, in each of the Years ending the 5th of January, 1828, the 5th of January, 1829, and the 5th of January, 1830; and of the Amount of Duties which would have been paid on such Timber and other Articles of Wood, if they had been charged with the Rates of Duty payable on similar Articles imported from the Baltic.

	Amount of Duty paid in the United Kingdom on Timber, Deals, and other Articles of Wood, imported from the British Provinces in North America.			Amount of Duty which would have been paid upon such Timber, Deals, and other Articles of Wood, if they had been imported from the Baltic.		
	£	*s.*	*d.*	£	*s.*	*d.*
Year ending 5th of January, 1828 -	213,749	15	4	1,251,922	13	4
— 1829 -	224,108	12	9	1,494,867	4	1
— 1830 -	232,799	17	0	1,580,795	9	4

II. Account of the Quantities of the different Species of Timber imported into the United Kingdom in 1831; specifying the Countries whence they were brought, and the Quantities brought from each.

Countries from which imported.	Battens and Batten Ends.	Deals and Deal Ends.	Lathwood.	Masts, Yards, & Bowsprits under 12 Inches in Diameter.	Masts, Yards, & Bowsprits 12 Inches in Diameter and upwards.	Oak Plank 2 Inches thick or upwards.	Staves.	Teak.	Timber, Fir, Oak, & unenumerated, 8 Inches square, or upwards.	Wainscot Logs, 8 Inches square or upwards.
	Gt.hds.qrs.No.	*Gt.hds.qrs.No.*	*Fath.*	*No.*	*Loads. ft.*	*Loads. ft.*	*Gt.hds.qrs.No.*	*Loads. t.*	*Loads. ft.*	*Lds. ft.*
Russia	2,766 1 28	14,075 3 0	2,170	2,020	731 22	72 20	- -	-	6,486 17	1,846 33
Sweden	1,999 2 29	5,723 1 12	8	2,839	5 11	0 7	70 2 20	-	3,820 11	
Norway	8,439 1 26	10,457 2 13	50	4,826	8 37	-	- -	-	23,537 44	
Denmark	- -	0 0 14	-	-	-	-	- -	-	576 2	
Prussia	306 2 25	4,550 0 4	2,254	510	282 4	2,058 4	20,807 3 8	-	100,964 14	708 13
Germany	0 0 8	3 2 8	-	-	40 13	210 12	396 1 27	-	4,454 22	
The Netherlands	- -	10 1 7	2	2	-	-	7 1 19	-	387 26	12 45
Other pt. of Europe	0 1 18	11 3 20	-	11	253 40	3 35	20 0 4	24 26	243 27	
West. est. of Africa	- -	- -	-	-	-	-	- -	23,677 6		
E. I. C.'s territories and Ceylon	- -	- -	-	-	3 33					
Mauritius	- -	- -	-	1	-	-	1 1 6	137 18		
New S. Wales and V.Diemen's Land	- -	- -	-	2	1 0	-	- -	0 38	735 26	
New Zealand and South Sea Islands	- -	- -	-	-	350 8					
Brit. Northern col.	1,080 1 6	22,056 2 2	6,889	3,146	3,126 33	180 46	54,147 2 27	-	418,879 39	3 40
West Indies	- -	0 1 6	-	9	-	-	358 3 17	-	27 18	
Hayti	- -	- -	-	-	-	-	- -	-	6 8	
U. S. of America	3 2 8	15 1 7	-	12	-	-	621 0 21	-	2,079 49	
Isle Guernsey, Jersey, Alderney, & Man, for goods	0 0 2	0 0 4	-	55	-	-	- -	-	0 5	
Total import	14,596 0 3	54,915 0 7	11,373	13,438	4,703 1	2,525 24	76,431 1 29	23,839 38	562,199 8	2,571 31

III. Account of the Quantities of Timber and Hard Woods imported, exported, and retained for Home Consumption, with the Nett Revenue thereon, in 1831 and 1832.—(*Papers published by Board of Trade*, vol. ii. p. 22. and p. 27.)

	Quantities imported.		Quantities exported.		Quantities retained for Consumption.		Nett Revenue.	
Timber.	1831.	1832.	1831.	1832.	1831.	1832.	1831.	1832.
							L.	*L.*
Battens and batten ends - great 100	14,596	11,118	61	51	11,637	11,782	109,898	110,727
Deal and deal ends - —	54,915	51,264	487	1,005	49,489	53,154	530,641	517,835
Masts, 6 and under 8 inches in diameter - - - No.	9,000	6,784	128	583	8,047	6,776		
8 inches and under 12 - —	4,138	3,104	58	200	3,980	3,025	10,258	11,173
12 and upwards - - loads	4,703	6,246	20	100	4,125	6,077		
Oak plank - - - —	2,525	1,789	- -	6	2,280	1,829	8,470	7,286
Staves - - - great 100	76,431	63,[illegible]8	2,907	1,831	70,507	63,676	50,295	49,037
Fir, 8 inches square and upwards, lds.	512,155	493,830	403	600	497,057	503,582	465,607	434,326
Oak, ditto - - —	23,382	30,176	4	13	22,673	29,581	30,867	38,865
Unenumerated, ditto - - —	26,463	33,403	8	84	26,348	32,329	6,526	8,151
Wainscot logs, ditto - - —	- -	2,719	- -	3	- -	2,870	- -	7,836
							*L.*1,212,560	1,185,236
Hard Woods.								
Box wood - - - tons	484	327	48	22	447	398	2,034	1,868
Cedar - - - - —	1,029	1,137	- -	21	1,017	1,352	1,424	2,717
Mahogany - - - —	11,542	15,864	463	791	12,175	19,293	47,932	47,524
Rosewood - - - —	1,253	852	57	183	848	838	8,484	8,392
							L. 59,874	60,501

TIN (Ger. *Blech, Weissblech;* Fr. *Fer blanc;* It. *Latta, Banda stagnata;* Sp. *Hoja de lata;* Rus. *Blächa, Shest;* Arab. *Resas;* Sans. *Trapu* and *Ranga*), a metal which has a fine white colour like silver; and when fresh, its brilliancy is very great. It has a slightly disagreeable taste, and emits a peculiar smell when rubbed. Its hardness is between that of gold and lead. Its specific gravity is 7·29. It is very malleable; *tin-foil*, or tin leaf, is about $\frac{1}{1000}$th part of an inch thick; and it might be beat out into leaves as thin again, if such were required for the purposes of art. In ductility and tenacity it is very inferior. A tin wire 0·078 inch in diameter is capable of supporting a weight of 34·7 pounds only without breaking. Tin is very flexible, and produces a crackling noise when bent. It may be readily alloyed with copper, zinc, &c., forming very valuable compounds.—(*Thomson's Chemistry.*)

The ores of this metal are found in comparatively few places; the principal, and perhaps the only, ones are Cornwall, Galicia, Erzgebirge in Saxony, Bohemia, the Malay countries, China, and Banca in Asia. They are peculiar to primitive rocks, generally in granite, either in veins or beds, and are often associated with copper and iron pyrites.

Tin is much used as a covering to several other metals: iron is tinned, to prevent its rapid oxidation when exposed to air and moisture; and the same process is applied to copper, to avoid the injurious effects to which those who are in the habit of employing cooking utensils made of this metal are always liable. The solutions of tin in the nitric, muriatic, nitro-sulphuric, and tartaric acids, are much used in dyeing, as giving a degree of permanency and brilliance to several colours, to be obtained by the use of no other mordants with which we are at present acquainted: tin forms the basis of pewter, in the composition of which it is alloyed with lead; when rolled into thin sheets, it is called tin-foil, and is applied, with the addition of mercury, to cover the surface of glass, thus forming looking-glasses, mirrors, &c.; and in combination with sulphur; it constitutes what is called mosaic gold.—(*Joyce's Chem. Min.*)

Tin Plates, known in Scotland by the name of *white iron*, are applicable to a great variety of purposes, and are in very extensive demand. They are formed of thin plates of iron dipped into molten tin. The tin not only covers the surface of the iron, but penetrates it completely, and gives the whole a white colour. It is usual to add about 1-10th of copper to the tin, to prevent it from forming too thick a coat upon the iron.—(*Thomson's Chemistry.*)

Historical Notice of the British Tin Trade. — The tin mines of Cornwall have been worked from a very remote era. The voyages of the Phœnicians to the Cassiterides, or tin islands, are mentioned by Herodotus (lib. iii. c. 115.), Diodorus Siculus (lib. iv. p. 301. ed. 1604), and Strabo (*Geog.* lib. iii.). Some difference of opinion has, indeed, been entertained as to the particular islands to which the Phœnicians applied the term Cassiterides; but Borlase (*Account of the Scilly Islands*, p. 72.), Larcher (*Herodote*, tome iii. p. 384. ed. 1802.), and the ablest critics, agree that they are the Scilly Islands, and the western extremity of Cornwall. After the destruction of Carthage, the British tin trade, which was always reckoned of peculiar importance, was carried on by the merchants of Marseilles, and subsequently by the Romans. Besides Britain, Spain furnished the ancients with considerable quantities of tin. We have no very precise information as to the purposes to which they applied this metal. It has been supposed that the Phœnicians, so famous for their purple dyes, were acquainted with the use of the solution of tin in nitro-muriatic acid in fixing that colour. The best of the ancient mirrors, or *specula*, were also made of a mixture of copper and tin; and tin was used in the coating of copper vessels. — (*Watson's Chemical Essays*, vol. iv.)

In modern times, the tin mines of Cornwall and Devon have been wrought with various degrees of energy and success. Queen Elizabeth brought over some German miners, by whom some of the processes were improved. During the civil wars, the mines were much neglected. At the commencement of last century, however, the business of mining was carried on with renewed vigour; and from 1720 to 1740, the annual produce was about 2,100 tons. The produce went on gradually increasing, till it amounted, in the 10 years from 1790 to 1800, to 3,254 tons a year. During the next 15 years, the produce fell off; and for the 5 years ending with 1815, it was always considerably under 3,000 tons a year. But in the last-mentioned year, a considerable increase took place; and since 1816, the produce has been, with the exception of 1820, always above 3,000 tons a year; and in 1827 and 1828, it was very near 5,000 tons. The present average produce of the mines may be estimated at 4,500 tons a year. We subjoin from the papers published by the Board of Trade and other authorities, an

Account of the Quantities of British Tin coined and exported, and of the average Price of the same, in each Year from 1820 to 1832, both inclusive; exhibiting, also, the Imports and Exports of Foreign Tin during the same Period.

Years.	British Tin.							Foreign Tin.	
	Coined in Cornwall.		Coined in Devon.		Exported.	Average Price per Cwt.		Imported.	Exported.
	Blocks.	*Cwt. qrs. lbs.*	*Blocks.*	*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*	*L. s. d.*		*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*
1820	16,800	50,639 2 18	- -	- -	25,852 1 15	3 13	6	1,309 0 5	3,047 1 24
1821	18,135	54,851 3 1	- -	- -	29,229 1 15	3 17	6	1,106 0 25	652 3 23
1822	18,720	56,678 3 13	61	201 2 20	35,843 2 3	4 8	0	1,536 2 14	1,909 0 5
1823	22,326	67,602 1 0	80	252 1 4	26,364 1 27	5 5	6	6,461 1 24	5,502 1 21
1824	28,465	87,125 2 15	279	836 2 3	36,890 0 13	4 2	6	6,420 1 14	4,709 2 20
1825	25,063	77,699 2 14	389	1,180 0 14	34,237 3 19	4 9	6	4,213 3 20	4,709 3 11
1826	24,555	76,674 1 1	400	1,200 2 20	43,645 0 0	3 19	0	3,394 2 8	5,647 1 3
1827	30,544	95,882 1 14	602	1,869 3 7	49,474 0 21	3 17	6	2,217 2 4	2,938 0 24
1828	28,983	91,387 3 19	547	1,739 3 23	41,426 2 13	3 13	0	3,386 0 12	3,258 1 10
1829	25,761	83,469 2 11	543	1,827 1 22	33,215 0 8	3 14	6	2,674 3 21	2,580 2 21
1830	24,306	80,979 3 26	589	2,064 0 24	30,425 1 8	3 10	0	15,539 2 5	10,426 0 5
1831	24,016	79,971 1 9	462	1,651 0 12	21,762 2 0			8,099 2 9	12,225 3 10
1832					31,837 2 3	3 13	0	29,203 1 8	21,719 3 13

Account showing the Quantity of British and of Foreign (Banca and Malay) Tin exported to different Countries in 1833, specifying the Quantities shipped for each. — (*Parl. Paper*, No. 233. Sess. 1834.)

Countries to which exported.	British Tin.	Foreign Tin.	Countries to which exported.	British Tin.	Foreign Tin.
	Cwt. qrs. lbs.	*Cwt. qrs. lbs.*		*Cwt. qrs. lbs.*	*Cwt. qrs. lbs.*
Russia	3,753 2 24	5,014 1 16	Arabia	25 3 0	4 2 6
Sweden	506 2 3		Africa	220 1 26	
Norway	18 0 21		British N. American colonies	148 3 0	
Denmark	118 3 1	504 0 23	British West Indies	114 2 14	
Prussia	332 2 6	659 2 25	Foreign West Indies	97 0 0	
Germany	162 3 7	1,468 3 13	United States of America	1,177 0 0	3,569 2 17
Holland	687 2 0	4,285 2 10	Mexico	4 0 0	
Belgium	42 2 0	15,745 2 10	Colombia	4 0 0	
France	8,986 2 0	1,554 3 17	Brazil	322 0 0	
Portugal, Azores and Madeira	175 0 0		States of the Rio de la Plata	8 0 0	
Spain and the Canaries	937 0 0	39 3 23	Peru	6 0 0	
Gibraltar	48 0 0	20 0 2	Guernsey, Jersey, Alderney, and Man	14 2 20	
Italy	3,087 3 18	5,388 0 24			
Malta	180 0 0	95 3 27			
Turkey	3,790 0 0	1,498 1 10	Total	24,989 1 0	39,849 3 27
Morea and Greek islands	20 0 0				

Prices, &c. — The prices of tin and tin plates in the London market in March, 1834, were as follows: —

		L. s. d.			*L. s. d.*
Tin, British, in blocks	per cwt.	3 15 6	Tin plates, per box of 225 shts.		per cwt.
ingots	—	3 15 0	No. 1. C. 13⅜ by 10 inches		112 lbs. 1 18 0
in bars	—	3 17 6	1. X.		140 2 3 0
grain blocks	—	4 13 0	1. XX. 161		161 2 9 0
broken	—	4 18 0	IXXX		182 2 15 0
Foreign, Banca, in bond	—	3 2 0	IXXXX.		208 3 1 0
Streights		3 0 0	No. II. C. 13⅜ by 9¾ inches		105 1 15 0

			L.	s.	d.
Tin plates, per box of 225 slats.					
No. II. X. 13¼ by 9¾ inches		133 lbs.	2	1	0
III. C. 12¾ by 9½ inches		98	1	13	0
III. X.		126	1	19	0
Small Double	SDC 15 by 11	167	2	19	0
	SDX 200 sheets	188	3	5	0
	SDXX	209	3	15	0
	SDXXX	230	3	17	0
	SDXXXX	251	4	3	0

			L.	s.	d.
Double	C. 16⅜ by 12½ inches	98 lbs.	1	15	0
	X. 100 sheets	126	1	19	0
	XX.	147	2	5	0
	XXX.	168	2	11	0
	XXXX.	189	2	17	0

Taggers, 14 by 10 inches, 2*l.* 5*s.*
14½ by 10½ inches.

Wasters of No. I. C., No. I. X., and No. XX. 3*s.* per box less than perfect plates; all other sorts of wasters 6*s.* per box less. Duty and shipping charges 6*d.* per box.

The price of British tin, at an average, from 1811 to 1815, inclusive, was about 7*l.* a cwt. Its fall from 1815 to 1820, and its comparatively low price since, have been owing to a variety of causes; partly to improvements in the art of working the mines, partly to the increased supply of metal obtained from them, and partly and principally to the competition of the tin of Banca and of the Malay countries. Previously to 1814, we had in some measure a monopoly of the market of the world. But since then the Banca mines have been wrought with unusual spirit; and their produce has been so much increased, as not only fully to supply the market of China, to which we formerly exported from 600 to 1,000 tons, but to meet us in every European market. It appears, from the foregoing Tables, that Malay tin is now very extensively imported, for warehousing, into England, at the same time that large quantities are carried direct to Holland, where there are refining houses. Hence, notwithstanding the fall of price, and the increased produce of the Cornish mines, our exports of tin have continued nearly stationary, or have rather fallen off; having been less in 1831 and 1832, when the produce of the mines exceeded 4,000 tons a year, than in 1820 and 1821, when it was only about 2,000 tons a year.

Duty on British Tin. — All tin produced in Cornwall has been subject, from a very remote period, to a coinage duty of 4*l.* a ton, payable to the Duke of Cornwall: the tin raised in Devonshire is subject to a similar duty of 1*l.* 13*s.* 4*d.* a ton. This duty produces from 16,000*l.* to 20,000*l.* a year; and is felt to be a serious grievance, not only from its amount, but from the vexatious regulations under which it is collected. Though the orders sent the miner were for tin of a peculiar description, he is not allowed to smelt it at once into the required form, but is obliged to cast it, in the first instance, into *blocks*. This regulation being complied with, it might be expected that the tin would be surveyed by officers at the smelting-house, and the duty charged accordingly; but instead of this the miner is obliged to convey it sometimes as far as 8 or 10 miles, to one of the *coinage towns*, where it is, (and where only it can be) coined; that is, a small piece is struck off one of the corners, and the block is impressed with the arms of the duchy, and the duty paid. This useless ceremony being gone through, the tin has frequently to be carried back, before it can be shipped, to the very place whence it was taken to be coined! Another grievance is, that the coinage is only performed quarterly; so that, however pressing the demand for tin may be in the interim, the miner cannot supply it. There are also certain fees payable on the coinage, particularly if it take place during the Christmas and Ladyday quarters; so that if we add to the duty of 4*l.* a ton, those charges, and make a reasonable allowance for the expense of carriage, and for the trouble and inconvenience to which the miner is put, the whole may be moderately estimated at 5*l.* a ton.

It is surely high time that this tax, and the proposterous regulations connected with it, were abolished. So long as we enjoyed a sort of monopoly of the tin trade, the duchy duty was comparatively little felt; but now that we have to sustain a competition that has already sunk the price of tin about 50 per cent., and that is every day becoming more severe, it is found to be quite oppressive. And it is not to be endured that the existence of an ancient and important branch of industry, supposed to afford employment for about 20,000 persons, should be endangered, that the Crown may gain a paltry revenue of from 16,000*l.* to 20,000*l.* a year. This is a subject which calls loudly for the interference of the legislature; and should another edition of this work be called for, we trust we shall then have to announce the abolition or commutation of the tin duty. — (For further particulars, see an excellent little tract entitled the *Tin Duties*, (ascribed to Sir Charles Lemon) published in 1833. There is a useful and instructive paper on the tin trade in the *Spectator*, No. 217.)

Tin, Oriental (Malay, *Timah*; Hind. *Kalai*; Siamese, *Dibuk*; Burmese, *Kye-p'kyu*, white copper), in commercial language usually called Banca tin. It is found in several provinces of China; but the most extensive and, probably, richest tin district in the world, exists in the Malay countries. This comprehends the whole of the peninsula, from the extreme cape to the latitude of 14° on its western side, and to 11° on its eastern, and comprehends several of the small islands lying in the route between the peninsula and Java, as far as the latitude of 3° south; so that the whole of this tin district has an extreme length of near 1,200 miles. By far the greater number of the mines within these limits are as yet unwrought and unexplored. It was only in the beginning of last century that the mines of Banca, the most productive at present worked, were accidentally discovered. The whole tin of the Malay countries is the produce of alluvial ores, or what is called, in Cornwall, "Stream-work;" and from the abundance in which the mineral has been found by the mere washing of the soil, no attempt has hitherto been made at regular mining, or obtaining the ore from its rocky matrix. Malay tin, consequently, is grain tin, or tin in a very pure state; that being the species which alluvial ore uniformly produces. The mines, or rather excavations, are perpendicular pits of from 15 to 25 feet deep; and when the soil and a superstratum of common clay are removed, the bed containing the ore, consisting of quartz and granitic gravel, is reached. The sand and gravel are separated from the ore by passing a stream of water through the whole materials. The ore so obtained is preserved in heaps, and smelted periodically with charcoal in a blast furnace. The mine or pit is kept clear of water by the Chinese wheel. No cattle are used in any part of the process; human labour being had recourse to throughout the whole of its stages. The most imperfect part of the process is the smelting. The stream ores of Cornwall, which are generally poor, afford from 65 to 75 per cent. of grain tin; whereas, owing to the imperfection of the process, from those of Banca not more than 55 or 60 are usually obtained. The difference in the produce suggested, a few years ago, the practicability of sending the ore to England for the purpose of being smelted; and the experiment was tried; but our customs regulations not allowing the produce to be bonded and re-exported without duty, rendered the scheme abortive.

With very trifling exceptions, the whole tin of the Malay islands is mined and smelted by Chinese settlers; and before their skill and enterprise were applied to its production, the metal seems to have been obtained by the inhabitants of the countries which produced it, by processes hardly more skilful than those by which the precious metals were procured by the native inhabitants of America, prior to the introduction of European skill and machinery. The following estimate has been given of the annual produce of the principal states and places producing tin: —

East coast of the Malay peninsula —	Piculs.
Junk Ceylon	5,000
Queda	2,000
Pera	3,000
Salangore	3,000
Malacca	4,000
Total	Piculs 17,000

West coast of the Malay peninsula and islands —	Piculs.
Sungora and Patani	3,000
Tringanu	7,000
Pahang	3,000
Singkep	5,000
Banca	35,000
Total	Piculs 53,000

This can be considered only as a rough estimate; but we believe it is not far wide of the truth. At an average of the 2 years, 1826–27 and 1827–28 the exports of Singapore amounted to 16,542 piculs, or about

970 tons. The most considerable port of exportation is Batavia; from which there is sent annually, either directly, or through orders from the Dutch government or the authorities at Banca, 2,000 tons. From Prince of Wales Island there is also a considerable quantity exported; and a smaller one direct to China in junks, from several of the native ports on the eastern shore of the Malay peninsula. The great marts for the consumption of tin are China, Hindostan, and the continent of Europe. The quality of the different descriptions of Malay tin, although there may be some inconsiderable difference in the quality of the original ores, seems to be derived chiefly from the greater or less skill with which the process of smelting is conducted; and this, again, necessarily depends upon the extent of capital, and goodness of the machinery employed. The mining operations of Banca have long been conducted upon a larger scale, and with more skill, than in any other of the Malay countries; and consequently, the metal produced in this island is superior by from 10 to 12 per cent.: in the market of Canton it is called "old tin," in contradistinction to "new tin," the produce of the other Malay countries. Next, in point of quality, to the produce of Banca, are those of Tringanu and Singkep, which are not more than 5 per cent. inferior to it. The tin of the state of Pera, a considerable part of which is produced by the natives themselves, without Chinese assistance, is the worst, and usually about 15 per cent. below that of Banca. The native tin of China is 10 per cent. inferior to that of Banca, and is probably block tin, like the greater part of that of Cornwall; and, like it, the produce of regular mining operations, and not alluvial. The produce of the Chinese mines is said of late years to have greatly decreased; probably owing to the great increase which has recently taken place in the produce of the Malay countries, and the cheapness and abundance with which it finds its way to China. It should be added, that of late years, and chiefly owing to the very low price and abundance of German spelter (zinc) in the Indian market, this commodity has occasionally been fraudulently mixed with tin. The Chinese brokers of Canton, however, are sufficiently expert to detect the adulteration; and it is believed that this discreditable practice has lately ceased.

The price of tin, taking the market of Singapore as the standard, has fluctuated of late years from 14 to 20 Spanish dollars per picul; equal, at the exchange of 4*s.* per dollar, to 47*s.* and 67*s.* per cwt. At an average of these prices, the annual value of the whole Malay tin will be about 240,000*l.* per annum.—(*Crawfurd's History of the Indian Archipelago; Dr. Horsfield's MS. Statistical View of the Island of Banca; Singapore Chronicle; Canton Register, &c.*)

TOBACCO (Da. *Tobak;* Du. *Tabak*; Fr. *Tabac;* Ger. *Taback;* It. *Tabacco;* Pol. *Tobaka;* Rus. *Tabak;* Sp. *Tabaco;* Arab. *Bujjerbhang;* Hind. *Tumbākū;* Malay, *Tambrācoo*), the dried leaves of the *Nicotiana Tabacum*, a plant indigenous to America, but which succeeds very well, and is extensively cultivated, in most parts of the Old World. The recent leaves possess very little odour or taste; but when dried, their odour is strong, narcotic, and somewhat fœtid; their taste bitter and extremely acrid. When well cured, they are of a yellowish green colour. When distilled, they yield an essential oil, on which their virtue depends, and which is said to be a virulent poison. The leaves are used in various ways; being chewed, smoked, and ground and manufactured into snuff. It is in the last mentioned form that tobacco is principally used in Great Britain; and, though the contrary has been often asserted, its use does not seem to have been productive of any perceptible bad consequence.

1. *Historical Sketch of Tobacco.* — The taste for tobacco, though apparently administering only to a frivolous gratification, has given birth to a most extensive commerce, and been a powerful spur to industry. Being a native of the New World, its introduction into Europe dates only from the early part of the 16th century. Seeds of the plant were sent, in 1560, from Portugal, to Catharine de' Medici, by Jean Nicot, the French ambassador in that country, from whom it has received its botanical name. The notion, at one time so general, that the specific appellation tobacco was derived from its having been imported from Tobago, is now universally admitted to be without foundation. Humboldt has shown, that tobacco was the term used in the Haytian language to designate the pipe, or instrument made use of by the natives in smoking the herb; and the term, having been transferred by the Spaniards from the pipe to the herb itself, has been adopted by the other nations of the ancient world. — (*Essai Politique sur la Nouvelle Espagne*, vol. iii. p. 50. 2d edit.) Tobacco is believed to have been first introduced into England by the settlers who returned, in 1586, from the colony which it had been attempted to found in Virginia, under the auspices of Sir Walter Raleigh, in the preceding year. Harriott, who accompanied this expedition, gives, in his description of Virginia, an account of the tobacco plant, and of the manner in which it was used by the natives; adding, that the English, during the time they were in Virginia, and since their return home, were accustomed to smoke it after the fashion of the Indians, "and found many rare and wonderful experiments of the virtue thereof." — (*Hakluyt*, vol. i. p. 75.)

Raleigh, and other young men of fashion, having adopted the practice of smoking, it spread amongst the English; as it had previously spread amongst the Spaniards, Portuguese, French, and other Continental nations. But it made its greatest progress in this country after the foundation of the colony at James Town in Virginia, in 1607. The soil of the colony being found particularly well fitted for the culture of tobacco, considerable quantities were raised and sent home; and the numerous individuals interested in the colony contributed to introduce that taste for it which was diffused amongst all classes with astonishing rapidity.

James I. attempted, by repeated proclamations and publications, some of them couched in very strong terms, to restrain the use of tobacco. But his efforts had very little effect; and the settlers in Virginia continued to experience a more rapidly increasing and better demand for tobacco than for any other product of the colony.

During the earlier part of the reign of Charles I., the trade in tobacco was mono-

polised by the Crown. This monopoly was not, however, of long continuance, and totally ceased at the breaking out of the civil war.

Tobacco plants had been early introduced into England, and were found to answer remarkably well. Their cultivation was, indeed, prohibited by James, and afterwards by Charles, but apparently without effect. At length, however, the growing consumption of tobacco having excited the attention of the government financiers, it was seen that, by imposing a duty on its importation, a considerable revenue might be raised; but that, were it allowed to be freely cultivated at home, it would be very difficult to collect a duty upon it. In 1643, the Lords and Commons imposed a moderate duty, for the sake of revenue, on plantation tobacco; but instead of directly prohibiting the use of native tobacco, they burdened it with such a duty as, it was supposed, would occasion its culture to be abandoned. The facility, however, with which the duty was evaded, soon satisfied the republican leaders that more vigorous measures were required to stop its cultivation, and consequently to render its importation a source of revenue. Hence, in 1652, an act was passed, prohibiting the growth of tobacco in England, and appointing commissioners to see its provisions carried into effect. This act was confirmed at the Restoration, by the act Charles 2. c. 34., which ordered that all tobacco plantations should be destroyed. These measures were believed, at the time, to have been principally brought about by the solicitations of the planters; but their real intention was not so much to conciliate or benefit the latter, as to facilitate the collection of a revenue from tobacco; and, considered in this point of view, their policy seems quite unexceptionable.

This act did not, however, extend to Ireland; and, of late years, the cultivation of tobacco made considerable progress in that country. Had this been allowed to continue, there can be no question, that in a few years the revenue from tobacco, amounting to about 3,000,000*l.* a year, would have been materially diminished; for it would be quite visionary to suppose that any plan could have been devised for collecting a duty even of 100 per cent. upon tobacco — (see *post.*) — supposing it to have been generally cultivated in Ireland. No one, therefore, can question the wisdom of the late act prohibiting its growth in that country, and of rigorously enforcing its provisions. Any advantage Ireland might have gained by its cultivation, would have been but a poor compensation for the sacrifice of revenue it must have occasioned.

In some countries, as England, tobacco is principally used in the form of snuff; in others it is principally chewed; but in one form or other it is every where made use of. So early as 1624, Pope Urban VIII. issued a bull, excommunicating those who smoked in churches! The practice of smoking was at one time exceedingly prevalent in this country; but during the reign of George III. it was well nigh superseded, at least amongst the higher and middle classes, by the practice of snuff taking. Latterly, however, smoking has been in some measure revived, though it is still very far from being so extensively practised as formerly.

We quote the following statement as to the universality of the use of tobacco from a learned and able paper on its "Introduction and Use," in the 22d volume (p. 142.) of the *Asiatic Journal:* — "In Spain, France, and Germany, in Holland, Sweden, Denmark, and Russia, the practice of smoking tobacco prevails amongst the rich and poor, the learned and the gay. In the United States of America, smoking is often carried to an excess. It is not uncommon for boys to have a pipe or cigar in the mouth during the greatest part of the day. The death of a child is not unfrequently recorded in American newspapers, with the following remark subjoined: — 'supposed to be occasioned by excessive smoking.' If we pass to the East, we shall find the practice almost universal. In Turkey, the pipe is perpetually in the mouth; and the most solemn conferences are generally concluded with a friendly pipe, employed like the *calumet of peace* amongst the Indians. In the East Indies, not merely all classes, but both sexes, inhale the fragrant steam; the only distinction among them consisting in the shape of the instrument employed, and the species of the herb smoked. In China, the habit equally prevails; and a modern traveller in that country (Barrow) states, that every Chinese female, from the age of 8 or 9 years, wears, as an appendage to her dress, a small silken purse or pocket to hold tobacco, and a pipe, with the use of which many of them are not unacquainted at this tender age. This prevalence of the practice, at an early period, amongst the Chinese, is appealed to by M. Pallas as an evidence that 'in Asia, and especially in China, the use of tobacco for smoking is more ancient than the discovery of the New World.' He adds — 'Among the Chinese, and amongst the Mongol tribes who had the most intercourse with them, the custom of smoking is so general, so frequent, and has become so indispensable a luxury; the tobacco purse affixed to their belt so necessary an article of dress; the form of the pipes, from which the Dutch seem to have taken the model of theirs, so original; and, lastly, the preparation of the yellow leaves, which are merely rubbed to pieces and then put into the pipe, so peculiar; that they could not pos-

sibly derive all this from America by way of Europe; especially as India, where the practice of smoking is not so general, intervenes between Persia and China.'"

This, however, is a very doubtful proposition. It seems sufficiently established that the tobacco plant was first brought from Brazil to India about the year 1617; and it is most probable that it was thence carried to Siam, China, and other Eastern countries. The names given to it in all the languages of the East, are obviously of European, or rather American, origin; a fact which seems completely to negative the idea of its being indigenous to the East.

Sources of Supply. Importation into Great Britain. — Tobacco is now very extensively cultivated in France and other European countries, in the Levant, and in India; but the tobacco of the United States is still very generally admitted to be decidedly superior to most others. It is much higher flavoured than the tobacco of Europe; a superiority attributable in some degree, perhaps, to a different mode of treatment; but far more, it is believed, to differences of soil and climate.

Previously to the American war, our supplies of tobacco were almost entirely derived from Virginia and Maryland; and they are still principally imported from these states; so much so, that of 33,107,679 lbs. of unmanufactured tobacco imported in 1831, 32,712,108 lbs. came from the United States. Mr. Jefferson, in his *Notes on Virginia*, has given a very unfavourable view of the effects of the tobacco culture. It was, indeed, well known to be a crop that speedily exhausted all but the very best lands; and in addition to this, Mr. J. says that "it is a culture productive of infinite wretchedness. Those employed in it are in a continued state of exertion, beyond the powers of nature to support. Little food of any kind is raised by them; so that the men and animals on these farms are badly fed, and the earth is rapidly impoverished."— (English ed. p. 278.)

Tobacco is extensively cultivated in Mexico, but only for home consumption. It might probably, however, were it not for the restrictions under which it is placed, form a considerable article of export from that country. Under the Spanish government, the tobacco monopoly was one of the principal sources of revenue; yielding from 4,000,000 to 4,500,000 dollars, exclusive of the expenses of administration, amounting to about 800,000 dollars. No tobacco was allowed to be cultivated, except in a few specified places. Commissioners, or *guardas de tabaco*, were appointed, whose duty it was to take care that all tobacco plantations without the privileged districts should be destroyed. The government fixed the price at which the cultivators of tobacco were obliged to sell it to its agents. The sale of the manufactured tobacco was farmed out; and *cigars* were not allowed to be sold, except at the royal *estancos*. No one was allowed to use cigars of his own manufacture. This most oppressive monopoly was established in 1764. It has been continued, from the difficulty of supplying the revenue which it produces, by the present government. — (*Humboldt, Nouvelle Espagne*, vol. iii. p. 49.; *Poinsett's Notes on Mexico*, note 116. Lond. ed.)

Cuba is celebrated for its tobacco, particularly its cigars. These consist of the leaves, formed into small rolls, for the purpose of smoking. Formerly their importation into this country was prohibited; but they may now be imported on paying the exorbitant duty of 9*s.* per lb. Havannah cigars are usually reckoned the best. Previously to 1820, the cultivation and sale of tobacco were subjected to the same sort of monopoly in Cuba as in Mexico; but, at the period referred to, the trade was thrown open. In consequence of the freedom thus given to the business, the production and exportation of tobacco are both rapidly increasing, though hardly, perhaps, so much as might have been expected; the culture of sugar and coffee being reckoned more profitable. In 1828, the declared value of the tobacco exported from Cuba amounted to 868,000 dollars; but there is good reason to think that its real value considerably exceeded this sum. At present, the total real value of the exports of tobacco from the Havannah and other ports is probably not much under 2,000,000 dollars. The tobacco used in Cuba by the lower classes is chiefly imported from the United States.

Consumption of Duty-paid Tobacco in the United Kingdom. — It appears from the following official account, that the consumption of duty-paid tobacco in Great Britain has increased from about 8,000,000 lbs. in 1789, to 16,214,000 lbs. in 1833; the duty having fluctuated during the same period from 1*s.* 3*d.* to 4*s.* and 3*s.* per lb. There are, however, sufficient grounds for thinking that the consumption would have been at least *one fourth part* greater, had the duty been less. But, whatever difference of opinion may exist as to the influence of the duty in Great Britain, there can be none as to its influence in Ireland. The subjoined Table shows that during the 5 years ending with 1798, when the duty was 8*d.* a pound, the annual average consumption of duty-paid tobacco was 7,337,217 lbs. Since 1798, the population of Ireland has been more than *doubled*; and yet, during the 5 years ending with 1833, when the duty was 3*s.* per lb., the annual average consumption has been only about 4,266,000 lbs.; which, making allowance for the increase of population, shows that the consumption has sunk to little

more than a *fourth part* of what it amounted to at the former period! This statement warrants the conclusion, that were the duty on tobacco in Ireland reduced to 1*s.* per lb., the consumption would be so much increased, that the revenue would gain, and not lose, by the reduction.

Smuggling. — The price of tobacco in bond varies from 3*d.* to 6*d.* per lb.; so that the duty of 3*s.* amounts to 1,200 per cent. on the inferior, and to 600 per cent. on the superior qualities. Now, though the use of tobacco be a frivolous, it is, at the same time, an innocent gratification; and we do not really see any reason whatever for loading it with such oppressive duties, even supposing it were possible to collect them. The more the wants and desires of men are multiplied, the more inventive and industrious they become; and so far from preventing luxurious indulgences, a wise government should exert itself to increase their number, and to diffuse a taste for them as widely as possible. But supposing it to be otherwise, still the magnitude of the tobacco duty is altogether indefensible: it is neither calculated to produce the largest amount of revenue, nor to eradicate the taste for the article. Its exorbitancy is advantageous to the smuggler, and to him only. With the exception of brandy and geneva, tobacco is the principal article clandestinely imported. If, as one might be half inclined to suspect, the duty were intended to give life and activity to the nefarious practices of the illicit traders, it has completely answered its object; but in every other point of view, its failure has been signal and complete. "According," said Mr. Poulett Thomson, in his admirable speech on the taxation of the empire, on the 26th of March, 1830, "according to all accounts laid before the house on this subject, smuggling in this article in England, Ireland, and Scotland, is carried on to the greatest possible extent. I have heard it stated, and I have the fact upon the best authority, that numbers of vessels are constantly leaving the ports of Flushing, Ostend, &c., carrying contraband tobacco to this country. It is a fact which was established in evidence before a committee of this house, that *seventy* cargoes of tobacco, containing 3,644,000 lbs., were smuggled in 1 year, on the coast of Ireland, from the port of Waterford to the Giant's Causeway alone! In Scotland, smuggling in this article is also carried on to a great extent. There is no doubt," added the Right Honourable gentleman, "that the only mode of meeting this system of smuggling consists *in fairly reducing the duty upon the article.* I believe, that were the duty upon it reduced to 1*s.* or 1*s.* 6*d.* per lb., the public would be greatly served, and smuggling put down."

We question, indeed, whether, allowing for the clandestine importation, the consumption be relatively less at this moment, in Ireland, than at any former period. Under the present system, government collects an exorbitant duty upon about a *fourth part* of the tobacco consumed in Ireland, the other *three fourths* being supplied by the smuggler; the duty being at once an incentive to his energies, and a premium to indemnify him for his risks! A *fourth part* of the demand of Great Britain is, probably, supplied in the same way.

Account of the Number of Pounds' Weight of Leaf Tobacco, manufactured Cigars, and Snuff, that paid Duty in the United Kingdom, for the Year ending the 5th of January, 1834; with the Rates of Duty and Total Amount of the same. — (*Parl. Paper*, No. 212. Sess. 1834.)

	Quantities entered for Home Consumption in the United Kingdom.				Gross Amount of Duty received thereon.			
	Leaf Tobacco.	Manufactured Tobacco and Cigars.	Snuff.	Total.	Leaf Tobacco.	Manufactured Tobacco and Cigars.	Snuff.	Total.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
Year ended 5th Jan. 1834.	20,626,800	143,868	138	20,770,806	3,090,782 12 2	64,726 8 5	41 7 8	3,155,550 8 3

Prices of Tobacco, in Bond, in the London Market, March 1834.

		s.	*d.*		*s.*	*d.*
Kentucky and Carolina, per lb.	-	0	3¼ to	0	5½	
Virginia, ordinary	-	0	3 —	0	3½	
part blacks	-	0	3½ —	0	3¾	
middling and leafy	-	0	4¼ —	0	4½	
fine	-	0	4¾ —	0	5½	
Fine Irish and spinners	-	0	5½ —	0	7	
middling	-	0	4¾ —	0	5	
fine long leafy	-	0	4½ —	0	5	
ordinary and middling	-	0	3½ —	0	4¾	
Lux, or stript leaf	-	0	3½ —	0	7	
Cargoes	100 lbs. -	0	0 —	0	0	

		s.	*d.*		*s.*	*d.*
Maryland scrubs, per lb.	-	0	0 to	0	0	
brown and leafy	-	0	3¾ —	0	5	
coloury and yellow	-	0	5½ —	1	0	
fine yellow	-	1	2 —	1	4	
Cuba, in rolls	-	0	11 —	1	2	
East India	-	0	0 —	0	0	
Turkey	-	0	6 —	0	8	
St. Domingo	-	0	6 —	0	8	
Amersfoot or German	-	0	4½ —	0	10	
Havannah and Cumana	-	1	8 —	3	6	
Cigars	-	5	6 —	13	0	

Rates of Duty charged in the Year ended the 5th of January, 1834.

	s.	*d.*	
Unmanufactured tobacco, the produce of, and imported from, any British possession in America	2	9	per lb.
Unmanufactured tobacco, otherwise imported	3	0	—
Manufactured tobacco and cigars	9	0	—
Snuff	6	0	—

Account of the Quantities of Tobacco retained for Home Consumption, the Rates of Duty thereon; and the Total Nett Produce of the Duties, in Great Britain and Ireland; from 1789 to 1833, both inclusive. —(*Parl. Papers*, No. 340. Sess. 1829, No. 747. Sess. 1833, and No. 212. Sess. 1834.)

Years.	Great Britain. Quantities retained for Home Consumption.	Great Britain. Nett Revenue of Customs and Excise.	Great Britain. Total Rates of Duty per Lb. on unmanufactured Tobacco. American.	Great Britain. Total Rates of Duty per Lb. on unmanufactured Tobacco. Of the Dominions of Spain and Portugal.	Ireland. Quantities entered for Home Consumption.	Ireland. Nett Revenue of Customs and Excise.	Ireland. Total Rates of Duty per Lb. on unmanufactured Tobacco.
	Lbs.	*L. s. d.*			*Lbs.*	*L. s. d.*	
1789	8,152,185	408,037 4 1	1*s.* 3*d.*	3*s.*	2,765,441	128,704 8 4	1*s.* Irish currency.
1790	8,960,224	512,583 7 1	- -	3*s.* 6*d.*	2,900,437	133,195 18 10	
1791	9,340,875	585,966 9 1	- -	- -	2,549,043	117,420 0 2	
1792	8,979,221	582,096 7 7	- -	- -	1,767,581	80,693 4 5	
1793	8,617,967	547,217 14 4	- -	- -	5,568,857	125,844 17 1	6*d.* ditto.
1794	9,725,536	606,262 12 10	- -	- -	9,426,211	193,158 10 7	
1795	10,972,368	659,989 3 4	- -	- -	7,874,409	215,719 9 0	8*d.* ditto.
1796	10,047,843	755,451 15 1	1*s.* 7*d.*	4*s.* 6*d.*	6,045,790	186,759 19 0	
1797	9,822,439	813,027 16 2	1*s.* 7*d.* 6-20ths.	4*s.* 6*d.* 13-20ths.	8,445,555	267,721 16 4	
1798	10,286,741	867,302 14 0	1*s.* 7*d.* 12-20ths.	4*s.* 7*d.* 4-20ths.	4,894,121	215,317 12 7	1*s.* ditto.
1799	10,993,113	799,369 14 2	- -	- -	5,876,172	288,028 4 9	1*s.* 7-10ths ditto.
1800	11,796,415	987,110 8 8	- -	- -	6,737,275	327,916 9 0	
1801	10,514,998	923,855 3 5	1*s.* 7*d.* 6-20ths.	4*s.* 6*d.* 18-20ths.	6,389,754	285,482 6 4	
1802	12,121,278	928,678 9 1	1*s.* 7*d.* 33-60ths.	4*s.* 7*d.* 13-60ths.	6,327,542	309,738 9 2	1*s.* 7-10ths per lb. and 3*s.* per 100 lbs.
1803	125,89,570	1,028,563 16 1	1*s.* 7¾*d.*	4*s.* 8¼*d.*	5,278,511	265,944 3 4	
1804	12,254,494	1,060,319 18 0	1*s.* 8½*d.*	4*s.* 10½*d.*	5,783,487	314,007 5 8	1*s.* 5*d.* Brit. currency
1805	12,656,471	1,088,821 4 5	1*s.* 8*d.* 15-20ths.	4*s.* 10*d.* 19-20ths.	4,158,794	302,316 8 1	
1806	12,435,035	1,185,850 14 1	2*s.* 2*d.* 15-20ths.	5*s.* 4*d.* 19-20ths.	5,082,186	359,867 6 4	
1807	12,432,994	1,336,542 17 9	- -	- -	4,531,049	315,417 4 3	1*s.* 5*d.* ditto.
1808	12,876,119	1,448,296 3 7	- -	- -	5,847,416	403,973 3 8	
1809	13,054,870	1,325,154 5 7	- -	4*s.* 1*d.* 13-20ths.	6,497,662	451,278 19 11	
1810	14,108,193	1,599,376 18 9	- -	- -	6,221,646	444,198 5 0	
1811	14,923,243	1,701,848 8 2	- -	- -	6,453,024	552,082 9 9	2*s.* 2*d.* 13-20ths ditto.
1812	15,043,533	1,679,912 2 2	2*s.* 4*d.* 13-20ths.	4*s.* 5*d.* 18-20ths.	5,896,702	697,897 9 11	
1813	13,648,245	Customs records destroyed.	2*s.* 8*d.* 3-16ths.	4*s.* 11*d.* 11-16ths.	5,944,817	746,006 5 2	2*s.* 8*d.* 3-16ths ditto.
1814	10,503,917	1,581,684 12 9	- -	- -	4,869,304	653,708 12 11	
1815	13,207,192	1,764,487 7 10	3*s.* 2*d.*	5*s.* 5½*d.*	4,748,205	740,279 13 1	3*s.* 2*d.* ditto.
1816	12,815,808	2,035,109 2 8	- -	- -	4,732,085	750,510 7 6	
1817	13,593,089	2,158,500 3 11	- -	- -	4,778,469	757,316 8 3	
1818	13,688,437	2,173,866 19 2	- -	- -	4,194,041	664,183 9 1	
1819	12,911,285	2,285,045 2 10	4*s.*	6*s.*	3,466,852	614,989 5 7	4*s.* ditto.
1820	13,016,562	2,610,972 7 9	- -	- -	2,582,498	516,446 2 6	
1821	12,983,198	2,600,415 7 8	- -	- -	2,614,954	522,168 6 9	
1822	12,970,566	2,599,155 15 1	- -	- -	3,309,072	664,016 7 4	
1823	13,418,554	2,695,009 15 0	- -	- -	3,546,126	730,507 12 8	
1824	13,083,094	2,627,955 12 6	- -	- -	3,749,732	750,589 5 4	
1825	14,510,555	2,930,617 6 3	3*s.*	5*s.*	4,160,049	728,288 13 11	3*s.* ditto.
1826	13,783,370	2,077,875 14 7	- -	3*s.*	3,898,647	580,893 11 0	
1827	14,704,655	2,225,340 18 4	- -	- -	4,041,172	603,037 18 9	
1828	14,540,368	2,198,142 18 2	- -	- -	4,013,915	595,683 4 3	
1829	14,760,468	2,236,366 0 0	- -	- -	4,125,297	613,341 0 0	
1830	15,170,719	2,309,287 0 0	- -	- -	4,122,782	614,978 0 0	
1831	15,350,018	2,338,107 0 0	- -	- -	4,183,823	626,485 0 0	
1832	15,892,792	2,428,532 0 0	- -	- -	4,342,676	652,566 0 0	
1833	16,214,159	- -	- -	- -	4,556,647		

Regulations as to Importation. — Tobacco is not to be imported in a vessel of less than 120 tons burden; nor unless in hogsheads, casks, chests, or cases, containing at least 100 lbs. nett weight, if from the East Indies; or 450 lbs. weight, if from any other place; or 100 lbs. weight, if cigars; except tobacco from Turkey, which may be packed in separate bags or packages, provided the outward package be a hogshead, cask, chest, or case, containing 450 lbs. nett at least; and except Guatemala and Colombian tobacco, which may be imported in packages of not less than 90 lbs. Tobacco is not allowed to be imported, unless into the following ports; viz. London, Liverpool, Bristol, Lancaster, Cowes, Falmouth, Whitehaven, Hull, Glasgow, Port Glasgow, Greenock, Leith, Newcastle, Plymouth, Belfast, Cork, Drogheda, Dublin, Galway, Limerick, Londonderry, Newry, Sligo, Waterford, and Wexford. A rent of *four* shillings is charged upon every hogshead, cask, chest, or case of tobacco, warehoused in every warehouse provided by the Crown; 2*s.* being paid immediately upon depositing the tobacco in the warehouse, and 2*s.* more before the tobacco is taken out for home consumption, or exportation: it may remain for *five* years in the warehouse without any additional charge for rent. No abatement is made from the tobacco duties on account of damage; but the merchant may, if he choóse, abandon the tobacco, which is to be destroyed. The allowance of duty-free tobacco for each sailor on board his Majesty's navy, and for each soldier on foreign service, is fixed at 2 lbs. per lunar month. Tobacco that has been exported, cannot be reimported, without being subject to the same duty as if it were imported for the first time. Tobacco cannot be entered for exportation in any vessel of less than 70 tons burden. — (See a full statement of the regulations in *Ellis's British Tariff for* 1833-34.) When tobacco is reshipped for exportation, an allowance is made for shrinkage, from the seller to the buyer, of 30 lbs. per hhd. on Virginia and Kentucky, and 15 lbs. per hhd. on Maryland, on the landing weights; the draft of the former 8 lbs. and of the latter 4 lbs., with a tret on all sorts of 4 lbs. per 104 lbs.

TON, an English weight containing 20 cwt.

TONNAGE, in commercial navigation, the number of tons burden that a ship will carry.

The mode in which the tonnage of British ships is at present, and has hitherto been, ascertained, is specified in the Registry Act, 3 & 4 Will. 4. c. 55. § § 16. & 17. (see *antè*, p. 977). This mode has, however, led to very inaccurate conclusions; and as most shipping charges depend on the tonnage, it has occasioned the building of ships of an improper form for the purposes of navigation, in order that, by measuring less than their real burden, they might evade a part of the duties. It, therefore, has long been felt to be desirable that some change should be made in the plan of measuring ships. But the practical obstacles in the way of any change are much greater than is commonly supposed. The accurate estimation of the tonnage of a ship is a very difficult problem indeed; and it is indispensable that any system to be adopted in practice be not very complex; for if so, it will either be wholly inapplicable, or it will be sure to be incor-

rectly applied. At best, therefore, only an approximative measurement can be obtained. A committee of scientific and practical gentlemen were appointed some time since to consider the subject; and at their recommendation a bill has been introduced into parliament, embodying a plan for the more correct measurement of ships. As it is probable it will be passed into a law, we subjoin its more important clauses. As much, we believe, has been done to simplify it, as was, perhaps, practicable; but it still appears to us to be abundantly complex.

New Mode by which Tonnage of Vessels is to be ascertained. — The tonnage of every ship or vessel required to be registered, shall be measured and ascertained while her hold is clear, according to the following rule; viz. divide the length of the upper deck between the after part of the stem and the fore part of the sternpost into 6 equal parts. Depths: at the foremost, the middle, and the aftermost of those points of division, measure in feet and decimal parts of a foot the depths from the under side of the upper deck to the ceiling at the limber strake. In the case of a break in the upper deck, the depths are to be measured from a line stretched in a continuation of the deck. Breadths: divide each of those 3 depths into 5 equal parts, and measure the inside breadths at the following points; viz. at 1-5th and at 4-5ths from the upper deck, of the foremost and aftermost depths; and at 2-5ths and 4-5ths from the upper deck, of the midship depth. Length: at ½ the midship depth, measure the length of the vessel from the after part of the stem to the fore part of the sternpost; then to twice the midship depth add the foremost and aftermost depths for the sum of the depths; add together the upper and lower breadths at the foremost division, 3 times the upper breadth, and the lower breadth at the midship division, and the upper and twice the lower breadth at the after division, for the sum of the breadths; then multiply the sum of the depths by the sum of the breadths, and this product by the length, and divide the final product by 3,500, which will give the number of tons for register. If the vessel have a poop or ¼ deck, or a break in the upper deck, measure the inside mean length, breadth, and height of such part thereof as may be included within the bulkhead; multiply these 3 measurements together, and, dividing the product by 92·4, the quotient will be the number of tons, to be added to the result as above found. In order to ascertain the tonnage of open vessels, the depths are to be measured from the upper edge of the upper strake. — § 2.

Mode of ascertaining Tonnage of Steam Vessels. — In ascertaining the tonnage of vessels propelled by steam, instead of deducting the length of the engine-room from the length of the vessel, as is at present by law established, an allowance for the same shall be made by an abatement of *one-fourth* of the whole tonnage of the vessel, to be ascertained in manner aforesaid; but inasmuch as the tendency of every improvement in the construction of such vessels is to diminish the space occupied by the engine, it shall be lawful, by royal proclamation, published in the *London Gazette*, to alter the proportion of allowance to be made in respect of the engine-room, as shall be found just and expedient, according to such diminution of space occupied by the engine as shall from time to time take place in such vessels. — § 4.

For ascertaining Tonnage of Vessels when laden. — For the purpose of ascertaining the tonnage of all such ships, whether belonging to the United Kingdom or otherwise, as there shall be occasion to measure while their cargoes are on board, the following rule shall be observed; viz. measure, 1st, the length on the upper deck between the after part of the stem and the fore part of the sternpost; 2dly, the inside breadth on the under side of the upper deck at the middle point of the length; and, 3dly, the depth from the under side of the upper deck down the pump-well to the skin: multiply these 3 dimensions together, and divide the product by 130, and the quotient will be the amount of the register tonnage of such ships. — § 5.

Amount of Register Tonnage to be carved on main Beam. — The true amount of the register tonnage of every merchant ship or vessel belonging to the United Kingdom, to be ascertained according to the rule by this act established in respect of such ships, shall be deeply carved or cut in figures of at least 3 inches in length, on the main beam of every such ship or vessel, prior to her being registered. — § 6.

The tonnage of goods and stores is taken sometimes by weight, and sometimes by measurement; that method being allowed to the vessel which yields the most tonnage. In tonnage by weight, 20 cwt. make a ton. In tonnage by measurement, 40 cubic feet are equal to a ton. All carriages, or other stores measured by the tonnage, are taken to pieces and packed so as to occupy the least room. Ordnance, whether brass or iron, is taken in tonnage at its actual weight; as are musket cartridges in barrels or boxes, ammunition in boxes, &c.

TOOLS AND MACHINES. Under this designation are comprised all sorts of instruments employed to assist in the performance of any undertaking, from the rudest and simplest to the most improved and complex. But we only mention them here for the purpose of making one or two remarks on the restrictions to which the trade in them is subjected.

Importation and Exportation of Tools and Machines. — Tools and machines being instruments of production, it is obviously of the utmost importance that they should be as much improved as possible, and hence the expediency of allowing their free importation. Their exclusion, or the exclusion of the articles of which they are made, would obviously lay every branch of industry carried on in a nation less advanced than others in their manufacture, under the most serious disadvantages. And supposing the implements it employed to be superior to those of other countries when the exclusion took place, the absence of foreign competition, and of the emulation which it inspires, would most probably, in a very short time, occasion the loss of this superiority. The injury arising from the prohibition of most other articles is comparatively limited, affecting only the producers and consumers of those that are prohibited. But a prohibition of machines strikes at the root of every species of industry: it is not injurious to one, or a few branches, but to all.

The question, whether the exportation of machinery ought to be free, is not so easy of solution. It is the duty of a nation to avail itself of every fair means for its own aggrandisement; and supposing the machinery belonging to any particular people were decidedly superior to that employed by their neighbours, and that they had it in their power to preserve this advantage, their generosity would certainly outrun their sense, were they to communicate their improved machinery to others. We do not, however, believe that it is possible, whatever measures may be adopted in that

view, for one country to monopolise, for any considerable period, any material improvement in machinery or the arts: and on this ground we think that the existing restraints on the exportation of machinery had better be abolished. Drawings and models of all sorts of machines used in Manchester, Glasgow, and Birmingham, are to be found in most parts of the Continent; and at Rouen, Paris, &c., numbers of the best English workmen are employed in the manufacture of prohibited machines. Now, it does certainly appear not a little preposterous to prevent the exportation of a machine, at the same time that we allow (it could not, indeed, be prevented) the free egress of the workmen by whom it is made! The effect of this absurd policy is, not to secure a monopoly of improved machines for the manufacturers of England, but to occasion the emigration of English artisans to the Continent, and the establishment there of machine manufactories under their superintendence. The prejudice that must arise from this state of things to the interests of England, is too obvious to require being pointed out. It is plain, therefore, that the exportation of all sorts of machinery, on payment of a moderate duty, ought to be allowed. A policy of this sort would afford a much more efficient protection to our manufacturers than they enjoy at present; at the same time that it would tend to keep our artisans at home, and make England the grand seat of the tool as well as of the cotton manufacture.

For an account of the restrictions on the exportation of machinery from Great Britain, see *antè*, p. 668.

Account of the Value of the Machinery exported from Great Britain, during the Six Years ending with 1829. — (*Parl. Paper*, No. 373. Sess. 1830.)

Years.	Steam Engines and Parts of Steam Engines.	Mill Work of all Sorts allowed by Law to be exported.	Machinery of all other Kinds allowed by Law to be exported.	Machinery exported under Licence from the Treasury or Privy Council.	Total.
	L.	*L.*	*L.*	*L.*	*L.*
1824	28,123	22,996	33,575	44,958	129,652
1825	78,027	25,654	104,263	4,472	212,416
1826	128,826	25,724	66,247	13,158	233,955
1827	111,930	24,538	60,507	17,154	214,129
1828	123,969	65,372	56,113	19,614	265,368
1829	153,573	47,543	52,019	23,404	256,539

TOPAZ (Ger. *Topas;* Fr. *Topase;* It. *Topazio;* Sp. *Topacio;* Rus. *Topas*). The name topaz has been restricted by M. Haüy to the stones called by mineralogists Occidental ruby, topaz, and sapphire; which, agreeing in their crystallisation and most of their properties, were arranged under one species by M. Romé de Lisle. The word topaz, derived from an island in the Red Sea, where the ancients used to find topazes, was applied by them to a mineral very different from ours. One variety of our topaz they denominated Chrysolite. Colour, wine yellow. From pale wine yellow it passes into yellowish white, greenish white, mountain green, sky blue: from deep wine yellow into flesh red and crimson red. Specific gravity from 3·464 to 3·641. — (*Thomson's Chemistry.*)

" *Yellow Topaz.* — In speaking of the topaz, a gem of a beautiful yellow colour is always understood: it is wine yellow of different degrees of intensity; and the fuller and deeper the tinge, the more the stone is esteemed. In hardness it yields to the spinelle.

" There are few gems more universal favourites than the yellow topaz, when perfect: the rich warm tone of its colour, the vivacity of its lustre (which it retains even by the side of the diamond), and its large size, compared with many others, are characters which deservedly entitle it to distinction; it bears accordingly a high price when of good quality.

" It is chiefly employed for necklaces, ear-drops, bracelets, &c. in suit. No little skill and taste are required in cutting and duly proportioning this gem; the table should be perfectly symmetrical, and not too large, the bizel of sufficient depth, and the collet side should be formed in delicate steps. It works easily on the mill, and the lapidaries are in general tolerably well acquainted with it; yet it is uncommon to meet with one well cut.

" The yellow topaz varies in price according to its beauty and perfection. A superlatively fine stone, perfect in colour and workmanship, sufficiently large for an armlet, or any other ornament, and weighing nearly 80 carats, was sold for 100*l.*

" Topazes have become more common since our intercourse with Brazil; consequently they are less in demand, and lower in price. A fine stone of 60 carats may be purchased at from 20*l.* to 35*l.*; and smaller, calculated for ring stones, at from 2*l.* to 5*l.*: but it is not usual to sell them by weight.

" *Pink Topaz.* — This is made from the yellow, which, when of intense colour, is put into the bowl of a tobacco pipe or small crucible, covered with ashes or sand: on the application of a low degree of heat, it changes its colour from a yellow to a beautiful pink. This is performed with little hazard; and if the colour produced happens to be fine, the price is much augmented.

" *Red Topaz.* — This beautiful gem, which very seldom occurs naturally, is of a fine crimson colour, tinged with a rich brown; it is extremely rare, and generally taken to be a variety of ruby, for which I have seen it offered for sale. Its price, from its scarcity, is quite capricious; it has an exquisite pleasing colour, very different from the glare of the artificial pink topaz.

" *Blue Topaz* — is also a beautiful gem, of a fine celestial blue colour. It has occurred of considerable magnitude; the finest specimen known, I brought in the rough from Brazil; when cut and polished, it weighed about 1¼ oz. Smaller specimens are not uncommon, and, when light-coloured, are often taken for aqua-marinas, from which they may always be distinguished by their greater weight and hardness, &c.

" *White Topaz* — is familiarly called *Minas Nova.* It is a beautiful pellucid gem, and is used for bracelets, necklaces, &c. It possesses greater brilliancy than crystal; and, from its hardness, has been used to cover paste, &c., and to form doublets. — (*Mawe on Diamonds, &c.* 2d ed. p. 108—112.)

TORTOISESHELL (Fr. *Ecaille de Tortue;* It. *Scaglia de Tartaruga;* Ger. *Schilpad;* Malay, *Sisik kurakura*), the brown and yellow scales of the *Testudo imbricata*, or tortoise, a native of the tropical seas. It is extensively used in the manufacture of combs, snuff-boxes, &c., and in inlaying and other ornamental work. The best tortoiseshell is that of the Indian Archipelago; and the finest of this quarter is obtained on the shores of the Spice Islands and New Guinea. When the finest West Indian tortoiseshell is worth, in the London market, 46*s.*, the finest East Indian is worth 60*s.* per lb. Under the latter name, however, a great deal of inferior shell is imported, brought from various parts of the East Indies. The goodness of tortoiseshell depends mainly on the thickness and size of the scales, and in a smaller degree on the clearness and brilliancy of the colours. Before the opening of the British intercourse with India, the greater part of the tortoiseshell which eventually found its way to Europe, was first carried to Canton, which then formed the principal mart for the commodity. It is still an article of trade from that city; the value of the tortoiseshell exported by British ships, in 1831 and 1832, having amounted to 19,017 dollars. At present, however, Singapore is the chief mart, the exports from it in 1831 and 1832 having amounted at an average to 208 piculs. The price at Singapore varies from 750 and 900 to from 1,000 to 1,600 dollars per picul, according to quality. — (*Crawfurd's Indian Archipelago; Singapore Chronicle; Canton Register.*)

The imports of tortoiseshell into Great Britain from all places eastward of the Cape of Good Hope, except China, were, in 1830, 32,189 lbs.; in 1831, 30,282; and in 1832, 39,004. — (*Parl. Paper*, No. 425 Sess. 1833.) The duty, which is 2*s.* per lb. on the shells imported from foreign countries, and 1*s.* per lb. on those imported from a British possession, produced, in 1832, 458*l.* 1*s.* 7*d.* nett.

TOYS (Ger. *Spielzeug, Speilsachen;* Du. *Speelgoed;* Fr. *Jouets, Bimbelots;* It. *Trastulli;* Sp. *Dijes, Juguetes de ninnos;* Rus. *Igrushki*), include every trifling article made expressly for the amusement of children. How frivolous soever these articles may appear in the estimation of superficial observers, their manufacture employs hundreds of hands, and gives bread to many families in London, Birmingham, &c. The greatness of the demand for them may be inferred, from the fact, that a manufacturer of glass beads, and articles of that description, has received a single order for 500*l.* worth of dolls' eyes! — (*Fourth Report, Artisans and Machinery*, p. 314.) Considerable quantities are also imported from Holland; which supplies us with several sorts of wooden toys on more reasonable terms than we can afford to produce them. But of late years, these have been made in greater abundance in England than formerly. The duty on toys, which is an *ad valorem* one of 20 per cent., produced, in 1832, 3,469*l.* 1*s.* 7*d.*, showing that the value of the toys imported for home use amounted to 17,345*l.*

TRAGACANTH, a species of gum, the produce of the *Astragalus Tragacantha*, a thorny shrub growing in Persia, Crete, and the islands of the Levant. It exudes about the end of June from the stem and larger branches, and soon dries in the sun. It is inodorous; impressing a very slightly bitter taste as it softens in the mouth. It has a whitish colour; is semitransparent; and in very thin, wrinkled, vermiform pieces; it is brittle, but not easily pulverised, except in frosty weather, or in a warmed mortar. It should be chosen in long twisted pieces, white, very clear, and free from all other colours; the brown, and particularly the black pieces, should be wholly rejected. — (*Thomson's Chemistry; Dr. A. T. Thomson's Dispensatory; Milburn's Orient. Com.*)

The entries of tragacanth for home consumption in 1831 and 1832, were at the rate of 45,836 lbs. a year. In March, 1834, tragacanth sold in the London market at from 11*l.* 10*s.* to 16*l.* per cwt., duty (6*s.*) included.

TREATIES (COMMERCIAL). By a commercial treaty is meant a treaty between two independent nations, for facilitating, and most commonly, also, regulating, the commerce carried on between them.

Origin, Objects, and Policy of modern Commercial Treaties. — During the middle ages, and down, indeed, to a comparatively recent period, foreigners resident in a country, whether for commercial or other purposes, were, for the most part, subject to very harsh treatment. At one time, it was usual in England to make aliens liable for the debts and crimes of each other; and the practice, formerly so common, of laying heavier duties on the goods imported and exported by aliens than by British subjects, is not even yet, we grieve to say, altogether abandoned. In France, and some other countries, during the 14th and 15th centuries, a stranger was incapable of bequeathing property by will; and the whole of his personal as well as real estate fell, at his death, to the king or the lord of the barony. This barbarous law was known by the name of *Droit d'Aubaine*, and was not completely abolished in France till a very late period. — (*Robertson's Charles V.* vol. i. note 29.) Previously to last century, the laws with respect to shipwreck, though infinitely more humane than they had been at a more remote period, were calculated rather to promote the interests of the sovereign of the country, or the feudal lords on whose territories shipwrecked vessels might be thrown, than those of the unfortunate

owners or survivors. — (See WRECK.*) The most serious obstacles were then, also, opposed, by the prevalent insecurity, and the arbitrary nature of the tolls which the lords were in the habit of exacting, to the transit of commodities through the territories of one state to those of another.

Under such circumstances, it became of much importance for commercial states to endeavour to obtain, by means of treaties, that protection and security for the persons and properties of their subjects, when abroad, against unjust treatment and vexatious exactions, which they could not have obtained from the laws of the countries in which they might happen to reside. Thus, it was stipulated by Edward II., in 1325, that the merchants and mariners of Venice should have power to come to England for 10 years, with liberty to sell their merchandise and to return home in safety, "*without having either their persons or goods stopped on account of other people's crimes or debts.*" — (*Anderson, anno* 1325.) The commercial treaties negotiated during the 15th, 16th, and 17th centuries, are full of similar conditions; and there can be no doubt that, by providing for the security of merchants and seamen when abroad, and suspending, with respect to them, the barbarous laws and practices then in force, they contributed materially to accelerate the progress of commerce and civilisation.

Commercial treaties were also negotiated at a very early period for the regulation of neutral commerce during war; and for defining the articles that should be deemed contraband, or which it should not be lawful for neutral ships to convey or carry to either belligerent. These are obviously points that can only be decided by express stipulations. †

Instead, however, of confining commercial treaties to their legitimate and proper purposes — the security of merchants and navigators, and the facility of commercial transactions — they very soon began to be employed as engines for promoting the commerce of one country at the expense of another. For more than 2 centuries, those engaged in framing commercial treaties have principally applied themselves to secure, either by force or address, some exclusive advantage in favour of the ships and products of their particular countries. Hence these compacts are full of regulations as to the duties to be charged on certain articles, and the privileges to be enjoyed by certain ships, according as they were either produced by or belonged to particular countries. It was in the adjustment of these duties and regulations that the skill of the negotiator was chiefly put to the test. It was expected that he should be thoroughly acquainted with the state of every branch of industry, both in his own country, and in the country with which he was negotiating; and he was to endeavour so to adjust the tariff of duties, that those branches in which his own country was deficient might be benefited, and those in which the other was superior might be depressed! The idea of conducting a negotiation of this sort on a fair principle of reciprocity is of very late origin; success in circumventing, in over-reaching, or in extorting from fear or ignorance some oppressive, but at the same time worthless privilege, was long esteemed the only proof of superior talent in negotiators.

In an able tract, attributed to Mr. Eden, afterwards Lord Auckland, published in 1787 (*Historical and Political Remarks on the Tariff of the French Treaty*), there is the following outline of the qualifications necessary to the negotiator of a commercial treaty: — "Besides a general knowledge of the trade and reciprocal interests of the contracting parties, he ought to be precisely acquainted with their several kinds of industry and skill; to discover their wants, to calculate their resources, and to weigh with nicety the state of their finances, and the proportionate interest of their money: nay, further, he should be able to ascertain the comparative population and strength of each country, together with the price and quality both of first materials, and also of the labour bestowed upon them: for this purpose he should inquire into the operations of every class of merchants and manufacturers concerned in the trade; should consult their expectations on each of its several branches; and collect their hopes and fears on the effect of such a commercial revolution, on the competition of rival nations. A good treaty of commerce, independent of the art of negotiation, is pronounced, by one who well knew the extent and difficulty of the subject, to be a '*masterpiece of skill.*'" — (p. 10.)

Had Mr. Eden concluded by stating, that no individual, or number of individuals, ever possessed, or ever would possess, the various qualifications which in his estimation were required in negotiating a "good commercial treaty," he would only have affirmed what is most certainly true. We believe, however, that he had formed a totally false

* The practice of confiscating shipwrecked property continued in France till 1681, when it was abolished by an edict of Louis XIV. It was at one time common in Germany, to use the words of M. Bouchaud, "pour les prédicateurs de prier Dieu en chaire, *qu'il se fasse bien des naufrages sur leurs côtes!*" — (*Théorie des Traités de Commerce*, p. 118.) And the fact, that the celebrated jurist Thomasius wrote a dissertation in defence of such prayers, affords, if possible, a still more striking proof of the spirit of the period.

† There is a good collection of treaties as to this point, in the Appendix to the excellent work of Lampredi, *Del Commercio de' Popoli Neutrali*. — (See CONTRABAND.)

estimate, not only of the qualifications of a negotiator, but of the objects he ought to have in view. It was the opinion of the Abbé Mably — (*Droit Publique de l'Europe*, tome ii. p. 561.), — an opinion in which we are disposed, with very little modification, to concur, — that when a few general rules are agreed upon for the effectual security of trade and navigation, including the importation and exportation of all commodities not prohibited by law; the speedy adjustment of disputes; the regulations of pilotage, harbour, and light-house duties; the protection of the property and effects of merchants in the event of a rupture, &c.; all is done that ought to be attempted in a commercial treaty. It may, indeed, be properly stipulated that the goods of the contracting powers shall be admitted into each other's ports on the same terms as "those of the most favoured nations," — that is, that no higher duties shall be charged upon them than on those of others. But here stipulations ought to cease. It is an abuse and a perversion of commercial treaties, to make them instruments for regulating duties or prescribing Custom-house regulations.

We admit, indeed, that occasions may occur, in which it may be expedient to stipulate for a reduction of duties or an abolition of prohibitions on the one side, in return for similar concessions on the other. But all arrangements of this sort ought to be determined by a convention limited to that particular object; and a fixed and not very distant term should be specified, when the obligation in the convention should expire, and both parties be at liberty to continue or abandon the regulations agreed upon. Generally speaking, all treaties which determine what the duties on importation or exportation shall be, or which stipulate for preferences, are radically objectionable. Nations ought to regulate their tariffs in whatever mode they judge best for the promotion of their own interests, without being shackled by engagements with others.* If foreign powers be all treated alike, none of them has just grounds of complaint; and it can never be for the interest of any people to show preferences to one over another. Those, for example, by whom *we* may be most advantageously supplied with foreign products, require no preferences; and if we exclude them, or give a preference to others, we incontestably injure ourselves: and yet 19 out of 20 of the regulations as to duties in commercial treaties have been founded on this preposterous principle. They have been employed to divert trade into channels, where it would not naturally flow; that is, to render it less secure and less profitable than it would otherwise have been.

A great deal of stress has usually been laid upon the advantages supposed to be derived from the privileges sometimes conceded in commercial treaties. But we believe that those who inquire into the subject will find that such concessions have, in every case, been not only injurious to the party making them, but also to the party in whose favour they have been made. The famous commercial treaty with Portugal, negotiated by Mr. Methuen in 1703, was almost universally regarded, for a very long period, as admirably calculated to promote the interests of this country; but it is now generally admitted, by every one who has reflected upon such subjects, that few transactions have taken place by which these interests have been more deeply injured. It stipulated for the free admission of British woollens into Portugal, from which they happened, at the time, to be excluded; but in return for this concession — a concession far more advantageous to the Portuguese than to us — we bound ourselves "for ever hereafter" to admit wines of growth of Portugal into Great Britain at ⅔ds of the duty payable on the wines of France! Thus, in order to open an access for our woollens to the limited market of Portugal, we consented, in all time to come, to drink inferior wine, bought at a comparatively high price! — (See WINE.) This, however, was not all: by excluding one of the principal equivalents the French had to offer for our commodities, we necessarily lessened their ability to deal with us; at the same time that we provoked them to adopt retaliatory measures against our trade. It is owing more to the stipulations in the Methuen treaty than to any thing else, that the trade between England and France — a trade that would naturally be of vast extent and importance — is confined within the narrowest limits; and is hardly, indeed, of as much consequence as the trade with Sweden and Norway. — (See *antè*, p. 644.)

It is visionary to imagine that any nation will ever continue to grant to another any exclusive advantage in her markets, unless she obtain what she reckons an equivalent advantage in the markets of the other. And if a commercial treaty stipulating for an exclusive privilege be really and *bonâ fide* observed by the country granting the privilege, we may be sure that the concessions made by the country in whose favour it is granted are sufficient fully to countervail it. Those who grasp at exclusive privileges in matters of this sort, or who attempt to extort valuable concessions from the weakness or ignorance of their neighbours, are uniformly defeated in their object. All really beneficial commercial transactions are bottomed on a fair principle of reciprocity; and that nation

* This principle is laid down as fundamental by a very high authority, Sir Henry Parnell, in his tract *Sur les Avantages des Rélations Commerciales entre la France et l'Angleterre.*

will always flourish most, and have the foundations of her prosperity best secured, who is a universal merchant, and deals with all the world on the same fair and liberal principles.

The justness of these principles, we are glad to observe, is now beginning to be very generally admitted. Stipulations as to duties and Custom-house regulations are disappearing from commercial treaties; and it is to be hoped that, at no distant period, every trace of them may have vanished.

A good work on the principles, style, and history of commercial treaties is a desideratum. The best we have seen are Mascovius *De Fœderibus Commerciorum*, 4to. Leipsic, 1735.; and Bouchaud, *Théorie des Traités de Commerce*, 12mo. Paris, 1777. But these are principally works of erudition, and were written before the sound principles of commercial policy had been unfolded. There is no good collection of treaties in the English language; but Mr. Hertslet's work is valuable, as containing the recent treaties in an accessible form. A work containing new treaties and state papers is annually compiled at the Foreign Office; it used to be distributed to a few official personages only, but it is now sold to the public.

We subjoin copies of some of the commercial treaties and conventions existing at this moment between Great Britain and other powers.

Austria.

Convention of Commerce and Navigation between His Britannic Majesty and the Emperor of Austria, signed at London, December 21. 1829.

Article 1. From the 1st day of February, 1830, Austrian vessels entering or departing from the ports or the United Kingdom of Great Britain and Ireland, and British vessels entering or departing from the ports of his Imperial and Royal Apostolic Majesty's dominions, shall not be subject to any other or higher duties or charges whatever than are or shall be levied on national vessels entering or departing from such ports respectively.

2. All articles of the growth, produce, or manufacture of any of the dominions of either of the high contracting parties, which are or shall be permitted to be imported into or exported from the ports of the United Kingdom and of Austria, respectively, in vessels of the one country, shall, in like manner, be permitted to be imported into and exported from those ports in vessels of the other.

3. All articles not of the growth, produce, or manufacture of the dominions of his Britannic Majesty, which can legally be imported from the United Kingdom of Great Britain and Ireland into the ports of Austria, in British ships, shall be subject only to the same duties as are payable upon the like articles if imported in Austrian ships: and the same reciprocity shall be observed in the ports of the United Kingdom, in respect to all articles not the growth, produce, or manufacture of the dominions of his Imperial and Royal Apostolic Majesty, which can legally be imported into the ports of the United Kingdom in Austrian ships.

4. All goods which can legally be imported into the ports of either country shall be admitted at the same rate of duty, whether imported in vessels of the other country or in national vessels; and all goods which can be legally exported from the ports of either country shall be entitled to the same bounties, drawbacks, and allowances, whether exported in vessels of the other country or in national vessels.

5. No priority or preference shall be given, directly or indirectly, by the government of either country, or by any company, corporation, or agent, acting in its behalf, or under its authority, in the purchase of any article the growth, produce, or manufacture of either country, imported into the other, on account of or in reference to the national character of the vessel in which such article may be imported; it being the true intent and meaning of the high contracting parties, that no distinction or difference whatever shall be made in this respect.

6. In respect to the commerce to be carried on in Austrian vessels with the British dominions in the East Indies, or now held by the East India Company in virtue of their charter, his Britannic Majesty consents to grant the same facilities and privileges, in all respects, to the subjects of his Imperial and Royal Apostolic Majesty, as are or may be enjoyed under any treaty or act of parliament by the subjects or citizens of the most favoured nation; subject to the laws and regulations which are, or may be, applicable to the ships and subjects of any other foreign country enjoying the like facilities and privileges of trading with the said dominions.

7. All the possessions of his Britannic Majesty in Europe, except the British possessions in the Mediterranean Sea, shall, for all the purposes of this convention, be considered as forming part of the United Kingdom of Great Britain and Ireland.

8. That clause of article 7. of the convention concluded at Paris on the 5th of November, 1815, between the courts of Great Britain, Austria, Prussia, and Russia, which relates to the commerce between the dominions of his Imperial and Royal Apostolic Majesty and the United States of the Ionian Islands, is hereby confirmed.

9. The present convention shall be in force until the 18th day of March, 1836; and further, until the end of twelve months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same; each of the high contracting parties reserving to itself the right of giving such notice to the other, on or at any time after the said 18th day of March, 1836; and it is hereby agreed between them, that, at the expiration of 12 months after such notice shall have been received by either party from the other, this convention, and all the provisions thereof, shall altogether cease and determine.

10. The present convention shall be ratified, and the ratifications shall be exchanged at London, within 1 month from the date hereof, or sooner if possible.

In witness whereof the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the 21st day of December, in the year of our Lord 1829.

Aberdeen.
W. F. Vesey Fitzgerald.
Esterhazy.

Austrian ships may import from the dominions of his Majesty the Emperor of Austria into any of the British possessions abroad, goods the produce of such dominions, and export goods from such British possessions abroad, to be carried to any foreign country whatever. — (*Order in Council*, April 7. 1830.)

Denmark.

Convention of Commerce between Great Britain and Denmark, signed at London, the 16*th of June*, 1824.

Article 1. From and after the 1st day of July next, Danish vessels entering or departing from the ports of the United Kingdom of Great Britain and Ireland, and British vessels entering or departing from the ports of his Danish Majesty's dominions, shall not be subject to any other or higher duties or charges whatever, than are or shall be levied on national vessels entering or departing from such ports respectively.

2. All articles of the growth, produce, or manufacture of any of the dominions of either of the high contracting parties, which are or shall be permitted to be imported into or exported from the ports of the

United Kingdom and of Denmark respectively, in vessels of the one country, shall, in like manner, be imported into and exported from those ports in vessels of the other.

3. All articles not of the growth, produce, or manufacture of the dominions of his Britannic Majesty, which can legally be imported from the United Kingdom of Great Britain and Ireland into the ports and dominions of the King of Denmark, in British ships, shall be subject only to the same duties as are payable upon the like articles if imported in Danish ships; and the same reciprocity shall be observed with regard to Danish vessels in the ports of the said United Kingdom of Great Britain and Ireland, in respect to all articles not the growth, produce, or manufacture of the dominions of his Danish Majesty, which can legally be imported into the ports of the United Kingdom in Danish ships.

4. All goods which can legally be imported into the ports of either country, shall be admitted at the same rate of duty, whether imported in vessels of the other country, or in national vessels; and all goods which can be legally exported from the ports of either country, shall be entitled to the same bounties, drawbacks, and allowances, whether exported in vessels of the other country, or in national vessels.

5. No priority or preference shall be given, directly or indirectly, by the government of either country, or by any company, corporation, or agent, acting on its behalf, or under its authority, in the purchase of any article the growth, produce, or manufacture of either country imported into the other, on account of or in reference to the character of the vessel in which such article was imported: it being the true intent and meaning of the high contracting parties, that no distinction or difference whatever shall be made in this respect.

6. The high contracting parties having mutually determined not to include, in the present convention, their respective colonies, in which are comprehended, on the part of Denmark, Greenland, Iceland, and the islands of Ferroe; it is expressly agreed that the intercourse which may at present legally be carried on by the subjects or ships of either of the said high contracting parties with the colonies of the other, shall remain upon the same footing as if this convention had never been concluded.

7. The present convention shall be in force for the term of 10 years from the date hereof; and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same; each of the high contracting parties reserving to itself the right of giving such notice to the other, at the end of the said term of 10 years; and it is hereby agreed between them, that, at the expiration of 12 months after such notice shall have been received by either party from the other, this convention, and all the provisions thereof, shall altogether cease and determine.

8. The present convention shall be ratified, and the ratifications shall be exchanged at London, within 1 month from the date hereof, or sooner if possible.

In witness whereof, the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the 16th of June, 1824.

GEORGE CANNING.
W. HUSKISSON.
C. E. MOLTKE.

Separate Article.

The high contracting parties reserve to themselves to enter upon additional stipulations for the purpose of facilitating and extending, even beyond what is comprehended in the convention of this date, the commercial regulations of their respective subjects and dominions, upon the principles either of reciprocal or equivalent advantages, as the case may be. And in the event of any articles or article being concluded between the said high contracting parties, for giving effect to such stipulations, it is hereby agreed, that the article or articles which may hereafter be so concluded shall be considered as forming part of the aforesaid convention.

Additional Article.

Their Britannic and Danish Majesties mutually agree, that no higher or other duties shall be levied in either of their dominions (their respective colonies being excepted from the convention of this date), upon any personal property of their respective subjects, on the removal of same from the dominions of their said Majesties reciprocally, either upon the inheritance of such property, or otherwise, than are or shall be payable in each state, upon the like property, when removed by a subject of such state, respectively.

FRANCE.

Convention of Commerce between His Britannic Majesty and the Most Christian King, together with two additional Articles thereunto annexed, signed at London, January 26. 1826.

Article 1. French vessels coming from or departing for the ports of France, or, if in ballast, coming from or departing for any place, shall not be subject, in the ports of the United Kingdom, either on entering into or departing from the same, to any higher duties of tonnage, harbour, light-house, pilotage, quarantine, or other similar or corresponding duties, of whatever nature, or under whatever denomination, than those to which British vessels, in respect of the same voyages, are or may be subject, on entering into or departing from such ports; and, reciprocally, from and after the same period, British vessels coming from or departing for the ports of the United Kingdom, or, if in ballast, coming from or departing for any place, shall not be subject, in the ports of France, either in entering into or departing from the same, to any higher duties of tonnage, harbour, light-house, pilotage, quarantine, or other similar or corresponding duties, of whatever nature, or under whatever denomination, than those to which French vessels, in respect of the same voyages, are or may be subject, on entering into or departing from such ports; whether such duties are collected separately, or are consolidated in one and the same duty;—his Most Christian Majesty reserving to himself to regulate the amount of such duty or duties in France, according to the rate at which they are or may be established in the United Kingdom: at the same time, with a view of diminishing the burdens imposed upon the navigation of the two countries, his Most Christian Majesty will always be disposed to reduce the amount of the said burdens in France, in proportion to any reduction which may hereafter be made of those now levied in the ports of the United Kingdom.

2. Goods which can or may be legally imported into the ports of the United Kingdom, from the ports of France, if so imported in French vessels, shall be subject to no higher duties than if imported in British vessels; and, reciprocally, goods which can or may be legally imported into the ports of France, from the ports of the United Kingdom, if so imported in British vessels, shall be subject to no higher duties than if imported in French vessels. The produce of Asia, Africa, and America, not being allowed to be imported from the said countries, nor from any other, in French vessels, nor from France in French, British, or any other vessels, into the ports of the United Kingdom, for home consumption, but only for warehousing and re-exportation, his Most Christian Majesty reserves to himself to direct that, in like manner, the produce of Asia, Africa, and America, shall not be imported from the said countries, nor from any other, in British vessels, nor from the United Kingdom in British, French, or any other vessels, into the ports of France, for the consumption of that kingdom, but only for warehousing and re-exportation.

With regard to the productions of the countries of Europe, it is understood between the high contracting parties, that such productions shall not be imported, in British ships, into France, for the consumption of that kingdom, unless such ships shall have been laden therewith in some port of the United Kingdom; and that his Britannic Majesty may adopt, if he shall think fit, some corresponding restrictive measure,

with regard to the productions of the countries of Europe imported into the ports of the United Kingdom in French vessels: the high contracting parties reserving, however, to themselves the power of making, by mutual consent, such relaxations in the strict execution of the present article, as they may think useful to the respective interests of the 2 countries, upon the principle of mutual concessions, affording each to the other reciprocal or equivalent advantages.

3. All goods which can or may be legally exported from the ports of either of the 2 countries, shall, on their export, pay the same duties of exportation, whether the exportation of such goods be made in British or in French vessels, provided the said vessels proceed, respectively, direct from the ports of the one country to those of the other. And all the said goods so exported in British or French vessels, shall be reciprocally entitled to the same bounties, drawbacks, and other allowances of the same nature, which are granted by the regulations of each country, respectively.

4. It is mutually agreed between the high contracting parties, that in the intercourse of navigation between their 2 countries, the vessels of any third power shall, in no case, obtain more favourable conditions than those stipulated, in the present convention, in favour of British and French vessels.

5. The fishing-boats of either of the 2 countries, which may be forced by stress of weather to seek shelter in the ports, or on the coast of the other country, shall not be subject to any duties or port charges of any description whatsoever; provided the said boats, when so driven in by stress of weather, shall not discharge or receive on board any cargo, or portion of cargo, in the ports, or on the parts of the coast where they shall have sought shelter.

6. It is agreed that the provisions of the present convention between the high contracting parties shall be reciprocally extended and in force, in all the possessions subject to their respective dominions in Europe.

7. The present convention shall be in force for the term of 10 years, from the 5th of April of the present year; and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate its operation; each of the high contracting parties reserving to itself the right of giving such notice to the other, at the end of the said term of 10 years: and it is agreed between them, that, at the end of the 12 months' extension agreed to on both sides, this convention, and all the stipulations thereof, shall altogether cease and determine.

8. The present convention shall be ratified, and the ratifications shall be exchanged in London, within the space of 1 month, or sooner if possible.

In witness whereof the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the 26th day of January, in the year of our Lord 1826.

GEORGE CANNING. LE PRINCE DE POLIGNAC.
WILLIAM HUSKISSON.

Additional Articles.

Article 1. French vessels shall be allowed to sail from any port whatever of the countries under the dominion of his Most Christian Majesty, to all the colonies of the United Kingdom (except those possessed by the East India Company), and to import into the said colonies all kinds of merchandise (being productions the growth or manufacture of France, or of any country under the dominion of France), with the exception of such as are prohibited to be imported into the said colonies, or are permitted to be imported only from countries under the British dominion; and the said French vessels, as well as the merchandise imported in the same, shall not be subject, in the colonies of the United Kingdom, to other or higher duties than those to which British vessels may be subject, on importing the same merchandise from any foreign country, or which are imposed upon the merchandise itself.

The same facilities shall be granted, reciprocally, in the colonies of France, with regard to the importation, in British vessels, of all kinds of merchandise, (being productions the growth and manufacture of the United Kingdom, or any country under the British dominion,) with the exception of such as are prohibited to be imported into the said colonies, or are permitted to be imported only from countries under the dominion of France. And whereas all goods, the produce of any foreign country, may now be imported into the colonies of the United Kingdom, in the ships of that country, with the exception of a limited list of specified articles, which can only be imported into the said colonies in British ships, his Majesty the King of the United Kingdom reserves to himself the power of adding to the said list of excepted articles any other, the produce of the French dominions, the addition whereof may appear to his Majesty to be necessary for placing the commerce and navigation to be permitted to the subjects of each of the high contracting parties with the colonies of the other, upon a footing of fair reciprocity.

2. French vessels shall be allowed to export from all the colonies of the United Kingdom (except those possessed by the East India Company), all kinds of merchandise which are not prohibited to be exported from such colonies in vessels other than those of Great Britain; and the said vessels, as well as the merchandise exported in the same, shall not be subject to other or higher duties than those to which British vessels may be subject, on exporting the said merchandise, or which are imposed upon the merchandise itself; and they shall be entitled to the same bounties, drawbacks, and other allowances of the same nature, to which British vessels would be entitled, on such exportation.

The same facilities and privileges shall be granted, reciprocally, in all the colonies of France, for the exportation, in British vessels, of all kinds of merchandise, which are not prohibited to be exported from such colonies in vessels other than those of France.

These 2 additional articles shall have the same force and validity as if they were inserted, word for word, in the convention signed this day. They shall be ratified, and the ratifications shall be exchanged at the same time.

In witness whereof the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, Jan. 26. 1826.

GEORGE CANNING. LE PRINCE DE POLIGNAC.
WILLIAM HUSKISSON.

A Treasury letter, dated 28th of March, 1826, directs that French vessels, and their cargoes legally imported or exported on board the same, according to the terms of the convention in the preceding pages, are, from the 5th of April, 1826, to be charged with such and the like duties only, of whatever kind they may be, that are charged on British vessels, and similar cargoes laden on board thereof; and in like manner the same bounties, drawbacks, and allowances are to be paid on articles exported in French vessels, that are paid, granted, or allowed on similar articles exported in British vessels. And the necessary instructions are to be transmitted to the officers in the colonies for carrying into effect the stipulations contained in the 2 additional articles of the said convention, respecting French vessels and their cargoes, from the 1st of October, 1826.

HANSE TOWNS.

Convention of Commerce between His Britannic Majesty and the Free Hanseatic Republics of Lubeck, Bremen, and Hamburgh, signed at London, Sept. 29. 1825.

Article 1. From and after the date hereof, British vessels entering or departing from the ports of the free Hanseatic republics of Lubeck, Bremen, or Hamburgh; and Lubeck, Bremen, or Hamburgh vessels entering or departing from the ports of the United Kingdom of Great Britain and Ireland; shall not be subject to any other or higher ship duties or charges than are or shall be levied on national vessels entering or departing from such ports respectively.

2. All goods, whether the production of the territories of the free Hanseatic republics of Lubeck, Bremen, or Hamburgh, or of any other country, which may be legally imported from any of the ports of the said republics into the United Kingdom of Great Britain and Ireland in British vessels, shall, in like manner, be permitted to be imported in Lubeck, Bremen, or Hamburgh vessels; and all goods, whether the production of any of the dominions of his Britannic Majesty, or of any other country, which may be legally exported from the ports of the United Kingdom in British vessels, shall, in like manner, be permitted to be exported from the said ports, in Lubeck, Bremen, or Hamburgh vessels. And all goods, which may be legally imported into or exported from the ports of Lubeck, Bremen, or Hamburgh, in national vessels, shall, in like manner, be permitted to be imported into or exported from the ports of Lubeck, Bremen, or Hamburgh, in British vessels.

3. All goods which can be legally imported into the ports of the United Kingdom directly from the ports of Lubeck, Bremen, or Hamburgh, or either of them, shall be admitted at the same rate of duty, whether imported in British vessels, or in vessels belonging to either of the said republics; and all goods which can be legally exported from the United Kingdom, shall be entitled to the same bounties, drawbacks, and allowances, whether exported in British or Hanseatic vessels. And the like reciprocity shall be observed, in the ports of the said republics, in respect to all goods which can be legally imported into or exported from any or either of the said ports in vessels belonging to the United Kingdom.

4. No priority or preference shall be given, directly or indirectly, by any or either of the contracting parties, nor by any company, corporation, or agent, acting on their behalf or under their authority, in the purchase of any article, the growth, produce, or manufacture of their states respectively, imported into the other, on account of or in reference to the character of the vessel in which such article was imported; it being the true intent and meaning of the high contracting parties that no distinction or difference whatever shall be made in this respect.

5. In consideration of the limited extent of the territories belonging to the republics of Lubeck, Bremen, and Hamburgh, and the intimate connection of trade and navigation subsisting between these republics, it is hereby stipulated and agreed, that any vessel which shall have been built in any or either of the ports of the said republics, and which shall be owned exclusively by a citizen or citizens of any or either of them, and of which the master shall also be a citizen of either of them, and provided 3-4ths of the crew shall be subjects or citizens of any or either of the said republics, or of any or either of the states comprised in the Germanic Confederation, such vessel, so built, owned, and navigated, shall, for all the purposes of this convention, be taken to be and be considered as a vessel belonging to Lubeck, Bremen, or Hamburgh.

6. Any vessel, together with her cargo, belonging to either of the three free Hanseatic republics of Lubeck, Bremen, or Hamburgh, and coming from either of the said ports to the United Kingdom, shall, for all the purposes of this convention, be deemed to come from the country to which such vessel belongs; and any British vessel and her cargo trading to the ports of Lubeck, Bremen, or Hamburgh, directly or in succession, shall, for the like purposes, be on the footing of a Hanseatic vessel and her cargo making the same voyage.

7. It is further mutually agreed, that no higher or other duties shall be levied, in any or either of the states of the high contracting parties, upon any personal property of the subjects and citizens of each respectively, on the removal of the same from the dominions or territory of such states, either upon inheritance of such property, or otherwise, than are or shall be payable, in each state, upon the like property when removed by a subject or citizen of such state respectively.

8. The high contracting parties reserve to themselves to enter upon additional stipulations for the purpose of facilitating and extending, even beyond what is comprehended in the convention of this date, the commercial relations of their respective subjects and dominions, citizens and territories, upon the principle either of reciprocal or equivalent advantages, as the case may be; and, in the event of any article or articles being concluded between the said high contracting parties, for giving effect to such stipulations, it is hereby agreed that the article or articles which may hereafter be so concluded shall be considered as forming part of the present convention.

9. The present convention shall be in force for the term of 10 years from the date hereof; and further, until the end of 12 months after the King of the United Kingdom of Great Britain and Ireland, on the one part, or the governments of the free Hanseatic republics of Lubeck, Bremen, or Hamburgh, or either of them, on the other part, shall have given notice of their intention to terminate the same; each of the said high contracting parties reserving to itself the right of giving such notice to the other at the end of the said term of 10 years: and it is hereby agreed between them, that, at the expiration of 12 months after such notice shall have been received by either of the parties from the other, this convention, and all the provisions thereof, shall altogether cease and determine, as far as regards the states giving and receiving such notice; it being always understood and agreed, that, if one or more of the Hanseatic republics aforesaid shall, at the expiration of 10 years from the date hereof, give or receive notice of the proposed termination of this convention, such convention shall, nevertheless, remain in full force and operation as far as regards the remaining Hanseatic republics or republic which may not have given or received such notice.

10. The present convention shall be ratified, and the ratification shall be exchanged at London, within 1 month from the date hereof, or sooner if possible.

In witness whereof the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, Sept. 29. 1825.

GEORGE CANNING.
W. HUSKISSON.
JAMES COLQUHOUN.

MEXICO.

Treaty of Amity, Commerce, and Navigation, between Great Britain and Mexico, signed at London, December 26. 1826.

Article 1. There shall be perpetual amity between the dominions and subjects of his Majesty the King of the United Kingdom of Great Britain and Ireland, and the United States of Mexico, and their citizens.

2. There shall be, between all the territories of his Britannic Majesty in Europe and the territories of Mexico, a reciprocal freedom of commerce. The inhabitants of the two countries, respectively, shall have liberty freely and securely to come, with their ships and cargoes, to all places and rivers in the territories aforesaid, saving only such particular ports to which other foreigners shall not be permitted to come, to enter into the same, and to remain and reside in any part of the said territories respectively; also to hire and occupy houses and warehouses for the purposes of their commerce; and, generally, the merchants and traders of each nation, respectively, shall enjoy the most complete protection and security for their commerce.

In like manner, the respective ships of war, and post-office packets of the 2 countries, shall have liberty freely and securely to come to all harbours, rivers, and places, saving only such particular ports (if any) to which other foreign ships of war and packets shall not be permitted to come, to enter into the same, to anchor, and to remain there and refit; subject always to the laws and statutes of the two countries respectively.

By the right of entering the places, ports, and rivers, mentioned in this article, the privilege of carrying on the coasting trade is not understood, in which national vessels only are permitted to engage.

3. His Majesty the King of the United Kingdom of Great Britain and Ireland engages further, that the inhabitants of Mexico shall have the like liberty of commerce and navigation stipulated for in the pre-

ceding article, in all his dominions situated out of Europe, to the full extent in which the same is permitted at present, or shall be permitted hereafter, to any other nation.

4. No higher or other duties shall be imposed on the importation into the dominions of his Britannic Majesty, of any article of the growth, produce, or manufacture of Mexico, and no higher or other duties shall be imposed on the importation into the territories of Mexico, of any articles of the growth, produce, or manufacture of his Britannic Majesty's dominions, than are or shall be payable on the like articles, being the growth, produce, or manufacture of any other foreign country; nor shall any other or higher duties or charges be imposed in the territories or dominions of either of the contracting parties, on the exportation of any articles to the territories of the other, than such as are or may be payable on the exportation of the like articles to any other foreign country; nor shall any prohibition be imposed upon the exportation of any articles the growth, produce, or manufacture of his Britannic Majesty's dominions, or of the said territories of Mexico, to or from the said dominions of his Britannic Majesty, or to or from the said territories of Mexico, which shall not equally extend to all other nations.

5. No higher or other duties or charges on account of tonnage, light or harbour dues, pilotage, salvage in case of damage or shipwreck, or any other local charges, shall be imposed, in any of the ports of Mexico, on British vessels, than those payable in the same ports by Mexican vessels*; nor, in the ports of his Britannic Majesty's territories, on Mexican vessels, than shall be payable, in the same ports, on British vessels.

6. The same duties shall be paid on the importation into the territories of Mexico, of any article the growth, produce, or manufacture of his Britannic Majesty's dominions, whether such importation shall be in Mexican* or in British vessels; and the same duties shall be paid on the importation into the dominions of his Britannic Majesty, of any article the growth, produce, or manufacture of Mexico, whether such importation shall be in British or in Mexican vessels. The same duties shall be paid, and the same bounties and drawbacks allowed, on the exportation to Mexico of any articles of the growth, produce, or manufacture of his Britannic Majesty's dominions, whether such exportation shall be in Mexican or in British vessels; and the same duties shall be paid, and the same bounties and drawbacks allowed, on the exportation of any articles the growth, produce, or manufacture of Mexico, to his Britannic Majesty's dominions, whether such exportation shall be in British or in Mexican vessels.

7. In order to avoid any misunderstanding with respect to the regulations which may respectively constitute a British or Mexican* vessel, it is hereby agreed that all vessels built in the dominions of his Britannic Majesty, or vessels which shall have been captured from an enemy by his Britannic Majesty's ships of war, or by subjects of his said Majesty furnished with letters of marque by the Lords Commissioners of the Admiralty, and regularly condemned in one of his said Majesty's prize courts as a lawful prize, or which shall have been condemned in any competent court for the breach of the laws made for the prevention of the slave trade, and owned, navigated, and registered according to the laws of Great Britain, shall be considered as British vessels; and that all vessels built in the territories of Mexico, or captured from the enemy by the ships of Mexico, and condemned under similar circumstances, and which shall be owned by any citizen or citizens thereof, and whereof the master and 3-4ths of the mariners are citizens of Mexico, excepting where the laws provide for any extreme cases, shall be considered as Mexican vessels.

And it is further agreed, that every vessel, qualified to trade as above described, under the provisions of this treaty, shall be furnished with a register, passport, or sea letter, under the signature of the proper person authorised to grant the same, according to the laws of the respective countries (the form of which shall be communicated), certifying the name, occupation, and residence of the owner or owners, in the dominions of his Britannic Majesty, or in the territories of Mexico, as the case may be; and that he, or they, is, or are, the sole owner or owners, in the proportion to be specified; together with the name, burden, and description of the vessel as to built and measurement, and the several particulars constituting the national character of the vessel, as the case may be.

8. All merchants, commanders of ships, and others, the subjects of his Britannic Majesty, shall have full liberty, in all the territories of Mexico, to manage their own affairs themselves, or to commit them to the management of whomsoever they please, as broker, factor, agent, or interpreter; nor shall they be obliged to employ any other persons for those purposes than those employed by Mexicans, nor to pay them any other salary or remuneration than such as is paid, in like cases, by Mexican citizens; and absolute freedom shall be allowed, in all cases, to the buyer and seller, to bargain and fix the price of any goods, imported into or exported from Mexico, as they shall see good, observing the laws and established customs of the country. The same privileges shall be enjoyed in the dominions of his Britannic Majesty, by the citizens of Mexico, under the same conditions.

The citizens and subjects of the contracting parties, in the territories of each other, shall receive and enjoy full and perfect protection for their persons and property, and shall have free and open access to the courts of justice in the said countries, respectively, for the prosecution and defence of their just rights; and they shall be at liberty to employ, in all causes, the advocates, attorneys, or agents of whatever description, whom they may think proper; and they shall enjoy, in this respect, the same rights and privileges therein as native citizens.

9. In whatever relates to the succession to personal estates, by will or otherwise, and the disposal of personal property of every sort and denomination, by sale, donation, exchange, or testament, or in any other manner whatsoever, as also the administration of justice, the subjects and citizens of the 2 contracting parties shall enjoy, in their respective dominions and territories, the same privileges, liberties, and rights, as native subjects; and shall not be charged, in any of these respects, with any higher imposts or duties than those which are paid, or may be paid, by the native subjects or citizens of the power in whose dominions or territories they may be resident.

10. In all that relates to the police of the ports, the lading and unlading of ships, the safety of merchandise, goods, and effects, the subjects of his Britannic Majesty, and the citizens of Mexico, respectively, shall be subject to the local laws and regulations of the dominions and territories in which they may reside. They shall be exempted from all compulsory military service, whether by sea or land. No forced loans shall be levied upon them; nor shall their property be subject to any other charges, requisitions, or taxes, than such as are paid by the native subjects or citizens of the contracting parties in their respective dominions.

11. It shall be free for each of the 2 contracting parties to appoint consuls for the protection of trade, to reside in the dominions and territories of the other party; but, before any consul shall act as such, he shall, in the usual form, be approved and admitted by the government to which he is sent; and either of the contracting parties may except from the residence of consuls such particular places as either of them may judge fit to be excepted. The Mexican diplomatic agents and consuls shall enjoy, in the dominions of his Britannic Majesty, whatever privileges, exceptions, and immunities are or shall be granted to agents of the same rank belonging to the most favoured nation; and, in like manner, the diplomatic agents and consuls of his Britannic Majesty in the Mexican territories shall enjoy, according to the strictest reciprocity, whatever privileges, exceptions, and immunities are or may be granted to the Mexican diplomatic agents and consuls in the dominions of his Britannic Majesty.

12. For the better security of commerce between the subjects of his Britannic Majesty and the citizens of the Mexican States, it is agreed that if, at any time, any interruption of friendly intercourse, or any

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* See additional articles at the end of this treaty.

rupture, should unfortunately take place between the 2 contracting parties, the merchants residing upon the coasts shall be allowed 6 months, and those of the interior a whole year, to wind up their accounts, and dispose of their property; and a safe-conduct shall be given them to embark at the port which they shall themselves select. All those who are established in the respective dominions and territories of the 2 contracting parties, in the exercise of any trade or special employment, shall have the privilege of remaining and continuing such trade and employment therein, without any manner of interruption, in full enjoyment of their liberty and property, as long as they behave peaceably, and commit no offence against the laws: and their goods and effects, of whatever description they may be, shall not be liable to seizure or sequestration, or to any other charges or demands than those which may be made upon the like effects or property belonging to the native subjects or citizens of the respective dominions or territories in which such subjects or citizens may reside. In the same case, debts, between individuals, public funds, and the shares of companies, shall never be confiscated, sequestered, or detained.

13. The subjects of his Britannic Majesty, residing in the Mexican territories, shall enjoy, in their houses, persons, and properties, the protection of the government; and, continuing in possession of what they now enjoy, they shall not be disturbed, molested, or annoyed, in any manner, on account of their religion, provided they respect that of the nation in which they reside, as well as the constitution, laws, and customs of the country. They shall continue to enjoy, to the full, the privilege already granted to them of burying, in the places already assigned for that purpose, such subjects of his Britannic Majesty as may die within the Mexican territories; nor shall the funerals and sepulchres of the dead be disturbed in any way, or upon any account. The citizens of Mexico shall enjoy, in all the dominions of his Britannic Majesty, the same protection, and shall be allowed the free exercise of their religion, in public or private, either within their own houses, or in the chapels and places of worship set apart for that purpose.

14. The subjects of his Britannic Majesty shall, on no account or pretext whatsoever, be disturbed or molested in the peaceable possession and exercise of whatever rights, privileges, and immunities they have at any time enjoyed within the limits described and laid down in a convention signed between his said Majesty and the King of Spain, on the 14th of July, 1786: whether such rights, privileges, and immunities shall be derived from the stipulations of the said convention, or from any other concession which may, at any time, have been made by the King of Spain, or his predecessors, to British subjects and settlers residing and following their lawful occupations within the limits aforesaid: the 2 contracting parties reserving, however, for some more fitting opportunity, the further arrangements on this article.

15. The government of Mexico engages to co-operate with his Britannic Majesty for the total abolition of the slave trade, and to prohibit all persons inhabiting within the territories of Mexico, in the most effectual manner, from taking any share in such trade.

16. The 2 contracting parties reserve to themselves the right of treating and agreeing hereafter, from time to time, upon such other articles as may appear to them to contribute still further to the improvement of their mutual intercourse, and the advancement of the general interests of their respective subjects and citizens; and such articles as may be so agreed upon, shall, when duly ratified, be regarded as forming a part of the present treaty, and shall have the same force as those now contained in it.

17. The present treaty shall be ratified, and the ratifications shall be exchanged at London, within the space of 6 months, or sooner if possible.

In witness whereof the respective plenipotentiaries have signed the same, and have affixed thereto their respective seals.

Done at London, the 26th day of December, in the year of our Lord 1826.

WILLIAM HUSKISSON, SEBASTIAN CAMACHO.
JAMES J. MORIER.

Additional Articles.

1. Whereas in the present state of Mexican shipping, it would not be possible for Mexico to receive the full advantage of the reciprocity established by the articles 5, 6, 7. of the treaty signed this day, if that part of the 7th article which stipulates that, in order to be considered as a Mexican ship, a ship shall actually have been *built* in Mexico, should be strictly and literally observed, and immediately brought into operation; it is agreed that, for the space of 10 years, to be reckoned from the date of the exchange of the ratifications of this treaty, any ships, *wheresoever built*, being *bonâ fide* the property of and wholly owned by one or more citizens of Mexico, and whereof the master and 3-4ths of the mariners, at least, are also natural-born citizens of Mexico, or persons domiciliated in Mexico, by act of the government, as lawful subjects of Mexico, to be certified according to the laws of that country, shall be considered as Mexican ships: his Majesty the King of the United Kingdom of Great Britain and Ireland reserving to himself the right, at the end of the said term of 10 years, to claim the principle of reciprocal restriction stipulated for in the article 7. above referred to, if the interests of British navigation shall be found to be prejudiced by the present exception to that reciprocity, in favour of Mexican shipping.

2. It is further agreed that, for the like term of 10 years, the stipulations contained in articles 5. and 6. of the present treaty shall be suspended; and in lieu thereof, it is hereby agreed that, until the expiration of the said term of 10 years, British ships entering into the ports of Mexico, from the United Kingdom of Great Britain and Ireland, or any other of his Britannic Majesty's dominions, and all articles the growth, produce, or manufacture of the United Kingdom, or of any of the said dominions, imported in such ships, shall pay no other or higher duties than are or may hereafter be payable, in the said ports, by the ships, and the like goods, the growth, produce, or manufacture of the most favoured nation; and, reciprocally, it is agreed, that Mexican ships entering into the ports of the United Kingdom of Great Britain and Ireland, or any other of his Britannic Majesty's dominions, from any port of the States of Mexico, and all articles the growth, produce, or manufacture of the said States, imported in such ships, shall pay no other or higher duties than are or may hereafter be payable, in the said ports, by the ships, and the like goods, the growth, produce, or manufacture of the most favoured nation; and that no higher duties shall be paid, or bounties or drawbacks allowed, on the exportation of any article the growth, produce, or manufacture of the dominions of either country, in the ships of the other, than upon the exportation of the like articles in the ships of any other foreign country.

It being understood that, at the end of the said term of 10 years, the stipulations of the said 5th and 6th articles shall, from thenceforward, be in full force between the two countries.

The present additional articles shall have the same force and validity as if they were inserted, word for word, in the treaty signed this day. They shall be ratified, and the ratifications shall be exchanged at the same time.

In witness whereof the respective plenipotentiaries have signed the same, and have affixed thereto their respective seals.

Done at London, the 26th day of December, in the year of our Lord 1826.

WILLIAM HUSKISSON, SEBASTIAN CAMACHO.
JAMES J. MORIER.

An order in council, dated September 3. 1827, orders, that vessels of the United States of Mexico, entering the ports of the United Kingdom of Great Britain and Ireland in ballast, or laden direct from any of the ports of Mexico, or departing from the ports of the said United Kingdom, together with the cargoes on board the same, such cargoes consisting of articles which may be legally imported or exported,

shall not be subject to any other or higher duties or charges whatever than are or shall be levied on British vessels entering or departing from such ports, or on similar articles when imported into, or exported from, such ports in British vessels: and also such articles, when exported from the said ports in vessels of the United States of Mexico respectively, shall be entitled to the same bounties, drawbacks, and allowances that are granted on similar articles when exported in British vessels.

N. B. — Treaties similar to the above have been negotiated with Colombia, Buenos Ayres, &c.

Netherlands.

Treaty between His Britannic Majesty and the King of the Netherlands, respecting Territories and Commerce in the East Indies, signed at London, March 17. 1824.

Article 1. The high contracting parties engage to admit the subjects of each other to trade with their respective possessions in the Eastern Archipelago, and on the continent of India, and in Ceylon, upon the footing of the most favoured nation; their respective subjects conforming themselves to the local regulations of each settlement.

2. The subjects and vessels of one nation shall not pay, upon importation or exportation, at the ports of the other in the Eastern seas, any duty at a rate beyond the double of that at which the subjects and vessels of the nation to which the port belongs, are charged.

The duties paid on exports or imports at a British port, on the continent of India, or in Ceylon, on Dutch bottoms, shall be arranged so as, in no case, to be charged at more than double the amount of the duties paid by British subjects, and on British bottoms.

In regard to any article upon which no duty is imposed, when imported or exported by the subjects, or on the vessels, of the nation to which the port belongs, the duty charged upon the subjects or vessels of the other shall, in no case, exceed 6 per cent.

3. The high contracting parties engage, that no treaty hereafter made by either, with any native power in the Eastern seas, shall contain any article tending, either expressly, or by the imposition of unequal duties, to exclude the trade of the other party from the ports of such native power; and that if, in any treaty now existing on either part, any article to that effect has been admitted, such article shall be abrogated upon the conclusion of the present treaty.

It is understood that, before the conclusion of the present treaty, communication has been made by each of the contracting parties to the other, of all treaties or engagements subsisting between each of them, respectively, and any native powers in the Eastern seas; and that the like communication shall be made of all such treaties concluded by them, respectively, hereafter.

4. Their Britannic and Netherland Majesties engage to give strict orders, as well to their civil and military authorities, as to their ships of war, to respect the freedom of trade, established by articles 1, 2, and 3.; and, in no case, to impede a free communication of the natives in the Eastern Archipelago, with the ports of the 2 governments, respectively, or of the subjects of the 2 governments with the ports belonging to native powers.

5. Their Britannic and Netherland Majesties, in like manner, engage to concur effectually in repressing piracy in those seas: they will not grant either asylum or protection to vessels engaged in piracy, and they will, in no case, permit the ships or merchandise captured by such vessels, to be introduced, deposited, or sold, in any of their possessions.

6. It is agreed that orders shall be given by the 2 governments, to their officers and agents in the East, not to form any new settlement on any of the islands in the Eastern seas, without previous authority from their respective governments in Europe.

7. The Molucca Islands, and especially Amboyna, Banda, Ternate, and their immediate dependencies, are excepted from the operation of the 1st, 2d, 3d, and 4th articles, until the Netherland government shall think fit to abandon the monopoly of spices; but if the said government shall, at any time previous to such abandonment of the monopoly, allow the subjects of any power, other than an Asiatic native power, to carry on any commercial intercourse with the said islands, the subjects of his Britannic Majesty shall be admitted to such intercourse, upon a footing precisely similar.

8. His Netherland Majesty cedes to his Britannic Majesty all his establishment on the continent of India; and renounces all privileges and exemptions enjoyed or claimed in virtue of those establishments.

9. The factory of Fort Marlborough, and all the English possessions on the island of Sumatra, are hereby ceded to his Netherland Majesty: and his Britannic Majesty further engages that no British settlement shall be formed on that island, nor any treaty concluded by British authority, with any native prince, chief, or state therein.

10. The town and fort of Malacca, and its dependencies, are hereby ceded to his Britannic Majesty; and his Netherland Majesty engages, for himself and his subjects, never to form any establishment on any part of the peninsula of Malacca, or to conclude any treaty with any native prince, chief, or state therein.

13. All the colonies, possessions, and establishments which are ceded by the preceding articles, shall be delivered up to the officers of the respective sovereigns on the 1st of March, 1825. The fortifications shall remain in the state in which they shall be at the period of the notification of this treaty in India; but no claim shall be made, on either side, for ordnance, or stores of any description, either left or removed by the ceding power, nor for any arrears of revenue, or any charge of administration whatever.

16. It is agreed that all accounts and reclamations, arising out of the restoration of Java, and other possessions, to the officers of his Netherland Majesty in the East Indies, — as well those which were the subject of a convention made at Java on the 24th of June, 1817, between the commissioners of the 2 nations, as all others, — shall be finally and completely closed and satisfied, on the payment of the sum of 100,000*l.*, sterling money, to be made in London on the part of the Netherlands, before the expiration of the year 1825.

17. The present treaty shall be ratified, and the ratifications exchanged at London, within 3 months from the date hereof, or sooner if possible.

In witness whereof the respective plenipotentiaries have signed the same, and affixed thereunto the seal of their arms.

Done at London, the 17th day of March, in the year of our Lord 1824.

George Canning. Charles Watkins Williams Wynn. H. Fagel. A. R. Falck.

Portugal.

Treaty of Commerce between Great Britain and Portugal, signed at Lisbon, December 27. 1703.

Article 1. His Sacred Royal Majesty of Portugal promises, both in his own name and that of his successors, to admit, for ever hereafter, into Portugal, the woollen cloths, and the rest of the woollen manufactures of the Britons, as was accustomed till they were prohibited by the laws; nevertheless, upon this condition;

2. That is to say, that her Sacred Royal Majesty of Great Britain shall, in her own name and that of her successors, be obliged for ever hereafter to admit the wines of the growth of Portugal into Britain; so that at no time, whether there shall be peace or war between the kingdoms of Britain and France, any thing more shall be demanded for these wines, by the name of custom or duty, or by whatsoever other title, directly or indirectly, whether they shall be imported into Great Britain in pipes or hogsheads, or other casks, than what shall be demanded from the like quantity or measure of French wine, deducting or abating a third part of the custom or duty: but if at any time this deduction or abatement of customs, which is to be made as aforesaid, shall in any manner be attempted and remitted, it shall be

just and lawful for his Sacred Royal Majesty of Portugal again to prohibit the woollen cloths, and the rest of the British woollen manufactures.

3. The most excellent Lords the plenipotentiaries promise, and take upon themselves, that their above named masters shall ratify this treaty, and that within the space of 2 months the ratifications shall be exchanged.

Given at Lisbon, the 27th of December, 1703.

JOHN METHUEN. MARCHIS ALEGRETENSIS.

Treaty of Commerce and Navigation between Great Britain and Portugal, signed at Rio de Janeiro, the 19th of February, 1810.

1. Peace established.

2. There shall be reciprocal liberty of commerce and navigation between the respective subjects of the 2 high contracting parties, in all the territories and dominions of either. They may trade, travel, sojourn, or establish themselves, in all the ports, cities, towns, countries, provinces, or places whatsoever, belonging to each of the 2 high contracting parties, except in those from which all foreigners whatsoever are generally and positively excluded, the names of which places may be hereafter specified in a separate article of this treaty. Provided, however, that it be thoroughly understood that any place belonging to either of the two high contracting parties, which may hereafter be opened to the commerce of the subjects of any other country, shall thereby be considered as equally opened, and upon correspondent terms, to the subjects of the other high contracting party, in the same manner as if it had been expressly stipulated by the present treaty. And his Britannic Majesty, and his Royal Highness the Prince Regent of Portugal, do hereby bind themselves not to grant any favour, privilege, or immunity in matters of commerce and navigation, to the subjects of any other state, which shall not be also at the same time respectively extended to the subjects of the high contracting parties, gratuitously, if the concession in favour of that other state should have been gratuitous, and on giving, *quam proximè*, the same compensation or equivalent, in case the concession should have been conditional.

3. The subjects of the 2 sovereigns respectively shall not pay, in the ports, harbours, roads, cities, towns, or places whatsoever, belonging to either of them, any greater duties, taxes, or imposts (under whatsoever names they may be designated or included), than those that are paid by the subjects of the most favoured nation; and the subjects of each of the high contracting parties shall enjoy, within the dominions of the other, the same rights, privileges, or exemptions, in matters of commerce and navigation, that are granted, or may hereafter be granted, to the subjects of the most favoured nation.

4. His Britannic Majesty and his Royal Highness the Prince Regent of Portugal do agree, that there shall be a perfect reciprocity on the subject of the duties and imposts to be paid by the vessels of the high contracting parties, within the several ports and anchoring places belonging to each of them; to wit, that the vessels or the subjects of his Britannic Majesty shall not pay any higher duties or imposts (under whatsoever name they be designated or implied), within the dominions of his Royal Highness the Prince Regent of Portugal, than the vessels belonging to the subjects of his Royal Highness the Prince Regent of Portugal shall be bound to pay within the dominions of his Britannic Majesty, and *vice versâ*. And this agreement shall particularly extend to the payment of the duties known by the name of *Port Charges*, *Tonnage* and *Anchorage Duties*, which shall not, in any case, or under any pretext, be greater for British vessels within the dominions of Portugal, than for Portuguese vessels within the dominions of his Britannic Majesty, and *vice versâ*.

5. The 2 high contracting parties do also agree, that the same rates of bounties and drawbacks shall be established in their respective ports upon the exportation of goods, whether those goods be exported in British or Portuguese vessels; that is, that British vessels shall enjoy the same favour in this respect, within the dominions of Portugal, that may be shown to Portuguese vessels within the dominions of his Britannic Majesty, and *vice versâ*. The 2 high contracting parties do also agree, that goods coming respectively from the ports of either of them, shall pay the same duties, whether imported in British or Portuguese vessels; or otherwise, that an increase of duties may be imposed upon goods coming into the ports of the dominions of Portugal from those of his Britannic Majesty in British ships, equivalent, and in exact proportion, to any increase of duties that may hereafter be imposed upon goods coming into the ports of his Britannic Majesty from those of his Royal Highness the Prince Regent of Portugal, imported in Portuguese ships. And in order that this matter may be settled with due exactness, and that nothing may be left undetermined concerning it, it is agreed, that Tables shall be drawn up by each government, respectively, specifying the difference of duties to be paid on goods so imported; and the Tables (which shall be made applicable to all the ports within the respective dominions of each of the contracting parties) shall be adjudged to form part of this present treaty.

In order to avoid any differences or misunderstandings with respect to the regulations which may respectively constitute a British or Portuguese vessel, the high contracting parties agree in declaring, that all vessels built in the dominions of his Britannic Majesty, and owned, navigated, and registered according to the laws of Great Britain, shall be considered as British vessels; and that all vessels built in the countries belonging to Portugal, or ships taken by any of the vessels of war belonging to the Portuguese government, or any of the inhabitants of the dominions of Portugal, having commissions or letters of marque and reprisal from the government of Portugal, and condemned as lawful prize in any court of admiralty of the Portuguese government, and owned by the subjects of his Royal Highness the Prince Regent of Portugal, and whereof the master and 3-4ths of the mariners, at least, are subjects of his Royal Highness the Prince Regent of Portugal, shall be considered as Portuguese vessels.

6. The mutual commerce and navigation of the subjects of Great Britain and Portugal, respectively, in the ports and seas of Asia, are expressly permitted, to the same degree as they have heretofore been allowed by the 2 Crowns: and the commerce and navigation thus permitted, shall be placed on the footing of the commerce and navigation of the most favoured nation trading in the ports and seas of Asia; that is, that neither of the high contracting parties shall grant any favour or privilege in matters of commerce and navigation to the subjects of any other state trading within the ports and seas of Asia, which shall not be also granted, *quam proximè*, on the same terms, to the subjects of the other contracting party. His Britannic Majesty engages not to make any regulation which may be prejudicial or inconvenient to the commerce and navigation of the subjects of his Royal Highness the Prince Regent of Portugal within the ports and seas of Asia, to the extent which is or may hereafter be permitted to the most favoured nation. And his Royal Highness the Prince Regent of Portugal does also engage not to make any regulations which may be prejudicial or inconvenient to the commerce and navigation of the subjects of his Britannic Majesty within the ports, seas, and dominions opened to them by virtue of the present treaty.

13. Packets shall be established for the purpose of furthering the public service of the 2 courts, and facilitating the commercial intercourse of their respective subjects. A convention shall be concluded forthwith on the basis of that which was signed at Rio de Janeiro, on the 14th day of September, 1808, in order to settle the terms upon which the packets are to be established, which convention shall be ratified at the same time with the present treaty.

15. All goods and articles whatsoever of the produce, manufacture, industry, or invention of the dominions and subjects of his Britannic Majesty, shall be admitted into all the ports and dominions of his Royal Highness the Prince Regent of Portugal, as well in Europe as in America, Africa, and Asia, whether consigned to British or Portuguese subjects, on paying, generally and solely, duties to the amount of 15 per cent. according to the value which shall be set upon them by a tariff or Table of valuations, called in the Portuguese language *pauta*, the principal basis of which shall be the sworn invoice cost of

the aforesaid goods, merchandises, and articles, taking also into consideration (as far as may be just or practicable) the current prices thereof in the country into which they are imported. This tariff or valuation shall be determined and settled by an equal number of British and Portuguese merchants of known integrity and honour, with the assistance, on the part of the British merchants, of his Britannic Majesty's consul general, or consul; and on the part of the Portuguese merchants, with the assistance of the superintendant, or administrator general of the customs, or of their respective deputies. And the aforesaid tariff shall be made and promulgated in each of the ports belonging to his Royal Highness the Prince Regent of Portugal, in which there are or may be Custom-houses. And it shall be revised and altered if necessary, from time to time, either in the whole, or in part, whenever the subjects of his Britannic Majesty, resident within the dominions of his Royal Highness the Prince Regent of Portugal, shall make a requisition to that effect through the medium of his Britannic Majesty's consul general, or consul, or whenever the trading and commercial subjects of Portugal shall make the same requisition on their own part.

If any British goods should hereafter arrive in the ports of the Portuguese dominions without having been specifically valued and rated in the new tariff or *pauta*, they shall be admitted on paying the same duties of 15 per cent. *ad valorem*, according to the invoices of the goods, which shall be duly presented and sworn to by the parties importing the same. And in case that any suspicion of fraud, or unfair practices, should arise, the invoices shall be examined, and the real value of the goods ascertained by a reference to an equal number of British and Portuguese merchants of known integrity and honour; and in case of a difference of opinion amongst them, followed by an equality of votes upon the subject, they shall then nominate another merchant, likewise of known integrity and honour, to whom the matter shall be ultimately referred, and whose decision thereon shall be final and without appeal. And in case the invoice should appear to have been fair and correct, the goods specified in it shall be admitted, on paying the duties above mentioned of 15 per cent.; and the expenses, if any, of the examination of the invoice, shall be defrayed by the party who called its fairness and correctness into question. But if the invoice should be found to be fraudulent and unfair, then the goods and merchandises shall be bought up by the officers of the customs on the account of the Portuguese government, according to the value specified in the invoice, with an addition of 10 per cent. to the sum so paid for them by the officers of the customs, the Portuguese government engaging for the payment of the goods so valued and purchased by the officers of the customs within the space of 15 days; and the expenses, if any, of the examination of the fraudulent invoice shall be paid by the party who presented it as just and fair.

17. Articles of military and naval stores brought into the ports of his Royal Highness the Prince Regent of Portugal, which the Portuguese government may be desirous of taking for its own use, shall be paid for without delay at the prices appointed by the proprietors, who shall not be compelled to sell such articles on any other terms.

If the Portuguese government shall take into its own care and custody any cargo, or part of a cargo, with a view to purchase, or otherwise, the Portuguese government shall be responsible for any damage or injury that the same may receive while in the care and custody of the officers of the Portuguese government.

18. His Royal Highness the Prince Regent of Portugal is pleased to grant to the subjects of Great Britain the privilege of being *assignantes* for the duties to be paid in the Custom-houses of his Royal Highness's dominions, on the same terms, and on giving the same security, as are required from the subjects of Portugal.

On the other hand, the subjects of the Crown of Portugal shall receive, as far as it may be just or legal, the same favour in the Custom-houses of Great Britain as is shown to the natural subjects of his Britannic Majesty.

19. His Britannic Majesty does promise and engage, that all goods and articles whatsoever, of the produce, manufacture, industry, or invention of the dominions or subjects of the Prince Regent of Portugal, shall be admitted into the ports and dominions of his Britannic Majesty, on paying generally and only the same duties that are paid upon similar articles by the subjects of the most favoured nation.

If any reduction of duties should take place exclusively in favour of British goods imported into the dominions of Portugal, an equivalent reduction shall take place on Portuguese goods and merchandises imported into his Britannic Majesty's dominions, and *vice versâ*; the articles upon which such equivalent reduction is to take place being settled by previous concert and agreement between the 2 high contracting parties.

It is understood, that any such reduction so granted by either party to the other, shall not be granted afterwards (except upon the same terms and for the same compensation) in favour of any other state or nation whatsoever. And this declaration is to be considered as reciprocal on the part of the 2 high contracting parties.

20. But as there are some articles of the growth and production of Brazil, which are excluded from the markets and home consumption of the British dominions, such as sugar, coffee, and other articles similar to the produce of the British colonies; his Britannic Majesty, willing to favour and protect (as much as possible) the commerce of the subjects of his Royal Highness the Prince Regent of Portugal, consents and permits that the said articles, as well as all others the growth and produce of Brazil, and all other parts of the Portuguese dominions, may be received and warehoused in all the ports of his dominions, which shall be by law appointed to be warehousing ports for those articles, for the purpose of re-exportation, under due regulation, exempted from the greater duties with which they would be charged were they destined for consumption within the British dominions, and liable only to the reduced duties and expenses on warehousing and re-exportation.

21. In like manner, notwithstanding the general privilege of admission thus granted in the 15th article of the present treaty by the Prince Regent of Portugal, in favour of all goods the produce and manufacture of the British dominions, his Royal Highness reserves to himself the right of imposing heavy, and even prohibitory duties on all articles known by the name of *British East Indian Goods* and *West Indian Produce*, such as sugar and coffee, which cannot be admitted for consumption in the Portuguese dominions, by reason of the same principle of colonial policy which prevents the free admission into the British dominions of corresponding articles of Brazilian produce.

But his Royal Highness the Prince Regent of Portugal consents that all the ports of his dominions, where there are or may be Custom-houses, shall be free ports for the reception and admission of all articles whatsoever, the produce and manufacture of the British dominions, not destined for the consumption of the place at which they may be received or admitted, but for re-exportation, either for other ports of the dominions of Portugal, or for those of other states. And the articles thus received and admitted (subject to due regulations) shall be exempted from the duties with which they would be charged, if destined for the consumption of the place at which they may be landed or warehoused, and liable only to the same expenses that may be paid by articles of Brazilian produce received and warehoused for re-exportation in the ports of his Britannic Majesty's dominions.

22. His Royal Highness the Prince Regent of Portugal is pleased to declare the port of St. Catherine to be a *Free Port*, according to the terms mentioned in the preceding article of the present treaty.

23. His Royal Highness the Prince Regent of Portugal is pleased to render Goa a *Free Port*, and to permit the free toleration of all religious sects whatever in that city and its dependencies.

24. All trade with the Portuguese possessions situated upon the eastern coast of the continent of Africa (in articles not included in the exclusive contracts possessed by the Crown of Portugal) which may have been formerly allowed to the subjects of Great Britain, is confirmed and secured to them now, and for ever, in the same manner as the trade which has hitherto been permitted to Portuguese subjects in

the ports and seas of Asia is confirmed and secured to them by virtue of the 6th article of the present treaty.

25. His Britannic Majesty consents to waive the right of creating factories or incorporated bodies of British merchants, within the dominions of Portugal: provided, however, that this shall not deprive the subjects of his Britannic Majesty, residing within the dominions of Portugal, of the full enjoyment, as individuals engaged in commerce, of any of those rights and privileges which they did or might possess as members of incorporated commercial bodies; and also that the commerce and trade carried on by British subjects shall not be restricted, or otherwise affected, by any commercial company whatever, possessing exclusive privileges and favours within the dominions of Portugal. And his Royal Highness the Prince Regent of Portugal does also engage, that he will not permit that any other nation or state shall possess factories or incorporated bodies of merchants within his dominions, so long as British factories shall not be established therein.

26. The two high contracting parties agree, that they will forthwith proceed to the revision of all other former treaties subsisting between the 2 Crowns, for the purpose of ascertaining what stipulations contained in them are, in the present state of affairs, proper to be continued or renewed.

It is agreed that the stipulations contained in former treaties concerning the admission of the wines of Portugal on the one hand, and the woollen cloths of Great Britain on the other, shall at present remain unaltered. In the same manner it is agreed, that the privileges and immunities granted by either contracting party to the subjects of the other, whether by treaty, decree, or *alvara*, shall remain unaltered, except the power granted by former treaties, of carrying in the ships of either country goods of any description whatever, the property of the enemies of the other country, which power is now mutually and publicly renounced and abrogated.

27. The reciprocal liberty of commerce and navigation, declared by the present treaty, shall be considered to extend to all goods whatsoever, except those articles the property of the enemies of either power, or contraband of war.

28. Under the name of contraband or prohibited articles shall be comprehended not only arms, cannon, arquebusses, mortars, petards, bombs, grenades, saucisses, carcasses, carriages for cannon, musket-rests, bandoliers, gunpowder, match, saltpetre, ball, pikes, swords, head pieces, helmets, cuirasses, halberts, javelins, holsters, belts, horses, and their harness, but generally all other articles that may have been specified as contraband in any former treaties concluded by Great Britain or by Portugal with other powers. But goods which have not been brought into the form of warlike instruments, or which cannot become such, shall not be reputed contraband, much less such as have been already wrought and made up for other purposes, all which shall be deemed not contraband, and may be freely carried by the subjects of both sovereigns, even to places belonging to an enemy, excepting only such places as are besieged, blockaded, or invested by sea or land.

29. In case any vessels of war, or merchantmen, should be shipwrecked on the coasts of either of the high contracting parties, all such parts of the vessels, or of the furniture or appurtenances thereof, as also of goods as shall be saved, or the produce thereof, shall be faithfully restored upon the same being claimed by the proprietors or their factors duly authorised, paying only the expenses incurred in the preservation thereof, according to the rate of salvage settled on both sides (saving at the same time the rights and customs of each nation, the abolition or modification of which shall, however, be treated upon in the cases where they shall be contrary to the stipulations of the present article); and the high contracting parties will mutually interpose their authority, that such of their subjects as shall take advantage of any such misfortune may be severely punished.

30. It is further agreed, that both his Britannic Majesty and his Royal Highness the Prince Regent of Portugal shall not only refuse to receive any pirates or sea-rovers whatsoever into any of their havens, ports, cities, or towns, or permit any of their subjects, citizens, or inhabitants, on either part, to receive or protect them in their ports, to harbour them in their houses, or to assist them in any manner whatsoever; but further, that they shall cause all such pirates and sea-rovers, and all persons who shall receive, conceal, or assist them, to be brought to condign punishment for a terror and example to others. And all their ships, with the goods or merchandises taken by them, and brought into the ports belonging to either of the high contracting parties, shall be seized, as far as they can be discovered, and shall be restored to the owners, or the factors duly authorised or deputed by them in writing, proper evidence being first given to prove the property, even in case such effects should have passed into other hands by sale, if it be ascertained that the buyers knew or might have known that they had been piratically taken.

31. If at any time there should arise any disagreement, breach of friendship, or rupture between the Crowns of the high contracting parties, which God forbid (which rupture shall not be deemed to exist until the recalling or sending home of their respective ambassadors and ministers), the subjects of each of the 2 parties residing in the dominions of the other, shall have the privilege of remaining and continuing their trade therein, without any manner of interruption, so long as they behave peaceably, and commit no offence against the laws and ordinances; and in case their conduct should render them suspected, and the respective governments should be obliged to order them to remove, the term of 12 months shall be allowed them for that purpose, in order that they might retire with their effects and property, whether intrusted to individuals or to the state.

At the same time it is to be understood that this favour is not to be extended to those who shall act in any manner contrary to the established laws.

32. The present treaty shall be unlimited in point of duration, that the obligations and conditions expressed or implied in it shall be perpetual and immutable; and they shall not be changed or affected in any manner in case his Royal Highness the Prince Regent of Portugal should again establish the seat of the Portuguese monarchy within the European dominions of that Crown.

33. But the 2 high contracting parties do reserve to themselves the right of jointly examining and revising the several articles of this treaty at the end of 15 years, counted in the first instance from the date of the exchange of the ratifications thereof*, and of then proposing, discussing, and making such amendments or additions, as the real interests of their respective subjects may seem to require. It being understood that any stipulation which at the period of revision of the treaty shall be objected to by either of the high contracting parties, shall be considered as suspended in its operation until the discussion concerning that stipulation shall be terminated, due notice being previously given to the other contracting party of the intended suspension of such stipulation, for the purpose of avoiding mutual inconvenience.

34. The several stipulations and conditions of the present treaty shall begin to have effect from the date of his Britannic Majesty's ratification thereof; and the mutual exchange of ratifications shall take place in the city of London, within the space of 4 months, or sooner if possible, to be computed from the day of the signature of the present treaty.

Done in the city of Rio de Janeiro, on the 19th day of February, in the year of our Lord 1810.

STRANGFORD. CONDE DE LINHARES.

Agreement between the British and Portuguese Commissioners, on Four Points connected with the Execution of the Treaty of 1810. *Signed at London, 18th of December*, 1812.

1. The official certificate of registry, signed by the proper officer of the British customs, shall be deemed sufficient to identify a British built ship; and on the production of such certificate she shall be admitted as such in any of the ports within the dominions of Portugal.

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* These ratifications were exchanged in London, on the 19th of June, 1810.

2. Upon the importation of any goods from the United Kingdom, into any of the ports in the dominions of Portugal, all such goods shall be accompanied by the original cockets, signed and sealed by the proper officers of the British customs at the port of shipping, and the cockets belonging to each ship shall be numbered progressively, the total number stated on the first and last cocket, by the proper officers of customs, at the final clearance of each vessel at the British port: and it is further agreed, that prior to the final clearance by the searchers at the shipping port, the cockets for each ship must be collected and fastened together, to which shall be annexed a paper, with the number of the cockets, sealed with the official seal, and signed by the searchers; the cockets, so collected, shall be produced, together with the manifest sworn to by the captain, to the Portuguese consul, who shall certify the same on the manifest; the cockets, thus secured together, and the manifest, so authenticated, to be returned to the searcher, in order to the final clearance of the ship.

3. It is agreed to place the Portuguese merchant on the same footing with the British, both with regard to the duties of scavage and package payable to the corporation of London, and the duties payable on shipping to the corporation of the Trinity House in London. To effect this, and at the same time to preserve the chartered rights of the corporation of London, and of the Trinity House, it will be necessary that those duties should, in the first instance, be paid as at present; and in all cases where it shall appear that the Portuguese merchant shall have paid more than the British, the difference to be returned without expense, in such manner as the British government shall direct.

4. The importer shall, on making the entry at the Portuguese Custom-house, sign a declaration of the value of his goods, to such amount as he shall deem proper; and in case the Portuguese examining officers should be of opinion that such valuation is insufficient, they shall be at liberty to take the goods, on paying the importer the amount, according to his declaration, with the addition of 10 per cent., and also returning the duty paid.

The amount to be paid on the goods being delivered to the Portuguese officer, which must be within 15 days from the first detention of the goods.

London, 18th of December, 1812.

R. Frewin. A. T. Sm. Payo.
Wm. Burn. A. I. Da Costa.

Prussia.

Convention of Commerce between His Britannic Majesty and the King of Prussia, signed at London, April 2. 1824.

Article 1. From and after the 1st day of May next, Prussian vessels entering or departing from the ports of the United Kingdom of Great Britain and Ireland, and British vessels entering or departing from the ports of his Prussian Majesty's dominions, shall not be subject to any other or higher duties or charges whatever, than are or shall be levied on national vessels entering or departing from such ports respectively.

2. All articles of the growth, produce, or manufacture of any of the dominions of either of the high contracting parties, which are or shall be permitted to be imported into or exported from the ports of the United Kingdom and of Prussia, respectively, in vessels of the one country, shall, in like manner, be permitted to be imported into and exported from those ports in vessels of the other.

3. All articles not of the growth, produce, or manufacture of the dominions of his Britannic Majesty, which can legally be imported from the United Kingdom of Great Britain and Ireland, into the ports of Prussia, in British ships, shall be subject only to the same duties as are payable upon the like articles if imported in Prussian ships; and the same reciprocity shall be observed in the ports of the United Kingdom, in respect to all articles not the growth, produce, or manufacture of the dominions of his Prussian Majesty, which can legally be imported into the ports of the United Kingdom in Prussian ships.

4. All goods, which can legally be imported into the ports of either country, shall be admitted at the same rate of duty, whether imported in vessels of the other country, or in national vessels; and all goods which can be legally exported from the ports of either country, shall be entitled to the same bounties, drawbacks, and allowances, whether exported in vessels of the other country, or in national vessels.

5. No priority or preference shall be given, directly or indirectly, by the government of either country, or by any company, corporation, or agent, acting on its behalf, or under its authority, in the purchase of any article, the growth, produce, or manufacture of either country, imported into the other, on account of, or in reference to, the character of the vessel in which such article was imported; it being the true intent and meaning of the high contracting parties, that no distinction or difference whatever shall be made in this respect.

6. The present convention shall be in force for the term of 10 years from the date hereof; and further, until the end of 12 months after either of the high contracting parties shall have given notice to the other of its intention to terminate the same; each of the high contracting parties reserving to itself the right of giving such notice to the other, at the end of the said term of 10 years: and it is hereby agreed between them, that, at the expiration of 12 months after such notice shall have been received by either party from the other, this convention, and all the provisions thereof, shall altogether cease and determine.

7. The present convention shall be ratified, and the ratifications shall be exchanged at London, within 1 month from the date hereof, or sooner if possible.

In witness whereof the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at London, the second day of April, in the year of our Lord one thousand eight hundred and twenty-four. George Canning. W. Huskisson. Werther.

An order in council, dated May 25. 1824, directs that from May 1. 1824, Prussian vessels entering or departing from the ports of the United Kingdom of Great Britain and Ireland, shall not be subject to any other or higher duties or charges whatever than are or shall be levied on British vessels entering or departing from such ports; that all articles of the growth, produce, or manufacture of any of the dominions of his Prussian Majesty, which are or shall be permitted to be imported into or exported from the ports of the United Kingdom of Great Britain and Ireland in British vessels, shall, in like manner, be permitted to be imported into and exported from the said ports in Prussian vessels; that all articles not of the growth, produce, or manufacture of the dominions of his Prussian Majesty, which can legally be imported from Prussia into the ports of the United Kingdom in Prussian vessels, shall be subject only to the same duties as are payable upon the like articles if imported in British ships; that all goods which can legally be imported into the ports of the United Kingdom, shall be admitted at the same rate of duty, when imported in Prussian vessels, that is charged on similar articles imported in British vessels; and that all goods which can be legally exported from the ports of the United Kingdom, shall be entitled to the same bounties, drawbacks, and allowances, when exported in Prussian vessels, that are granted, paid, or allowed on similar articles when exported in British vessels.

A Treasury letter, dated October 13. 1824, directs, that with respect to pilotage and all other duties charged on vessels belonging to Prussia, Sweden, and Norway, Denmark, Hanover, and Hamburgh, which have entered, or which may enter, the ports of the United Kingdom, either from stress of weather or from any other causes, it was the intention of the Lords of the Committee of Privy Council for Trade, that such dues should not be higher than are charged upon British vessels, and that it is only to the case of goods imported into this kingdom, and not brought direct from the country to which the vessel belongs, that the equality of duty does not apply.

An order in council, dated May 3. 1823, states, that his Majesty is pleased to declare, that the ships of and belonging to the dominions of his Majesty the King of Prussia are entitled to the privileges granted by the law of navigation, and may import from the dominions of his Majesty the King of Prussia, into any of the British possessions abroad, goods the produce of such dominions, and may export goods from such British possessions abroad, to be carried to any foreign country whatever.

Russia.

Convention between His Britannic Majesty and the Emperor of Russia, signed at Petersburgh in February, 1825.

Article 1. It is agreed that the respective subjects of the high contracting parties shall not be troubled or molested, in any part of the ocean commonly called the Pacific Ocean, either in navigating the same, in fishing therein, or in landing at such parts of the coast as shall not have been already occupied, in order to trade with the natives, under the restrictions and conditions specified in the following articles.

2. In order to prevent the right of navigating and fishing, exercised upon the ocean by the subjects of the high contracting parties, from becoming the pretext for an illicit commerce, it is agreed that the subjects of his Britannic Majesty shall not land at any place where there may be a Russian establishment, without the permission of the governor or commandant; and, on the other hand, that Russian subjects shall not land, without permission, at any British establishment on the north-west coast.

3. The line of demarcation between the possessions of the high contracting parties, upon the coast of the continent, and the islands of America to the north-west, shall be drawn in the manner following: —

Commencing from the southernmost point of the island called Prince of Wales Island, which point lies in the parallel of 54 degrees 40 minutes north latitude, and between the 131st and 133d degree of west longitude (meridian of Greenwich), the said line shall ascend to the north along the channel, as far as the point of the continent where it strikes the 56th degree of north latitude; from this last mentioned point, the line of demarcation shall follow the summit of the mountains situated parallel to the coast, as far as the point of intersection of the 141st degree of west longitude (of the same meridian); and, finally, from the said point of intersection, the said meridian line of the 141st degree, in its prolongation as far as the Frozen Ocean, shall form the limit between the Russian and British possessions on the continent of America to the north-west.

4. With reference to the line of demarcation laid down in the preceding article, it is understood;

1st. That the island called Prince of Wales Island shall belong wholly to Russia.

2d. That wherever the summit of the mountains which extend in a direction parallel to the coast, from the 56th degree of north latitude to the point of intersection of the 141st degree of west longitude, shall prove to be at the distance of more than 10 marine leagues from the ocean, the limit between the British possessions and the line of coast which is to belong to Russia, as above mentioned, shall be formed by a line parallel to the windings of the coast, and which shall never exceed the distance of 10 marine leagues therefrom.

5. It is moreover agreed, that no establishment shall be formed by either of the 2 parties, within the limits assigned by the 2 preceding articles to the possessions of the other: consequently, British subjects shall not form any establishment either upon the coast, or upon the border of the continent comprised within the limits of the Russian possessions, as designated in the 2 preceding articles; and, in like manner, no establishment shall be formed by Russian subjects beyond the said limits.

6. It is understood, that the subjects of his Britannic Majesty, from whatever quarter they may arrive, whether from the ocean, or from the interior of the continent, shall for ever enjoy the right of navigating freely, and without any hindrance whatever, all the rivers and streams which, in their course towards the Pacific Ocean, may cross the line of demarcation upon the line of coast described in article 3. of the present convention.

7. It is also understood that, for the space of 10 years from the signature of the present convention, the vessels of the 2 powers, or those belonging to their respective subjects, shall mutually be at liberty to frequent, without any hinderance whatever, all the inland seas, the gulfs, havens, and creeks, on the coast mentioned in article 3., for the purposes of fishing and of trading with the natives.

8. The port of Sitka, or Novo Archangelsk, shall be open to the commerce and vessels of British subjects for the space of 10 years from the date of the exchange of the ratifications of the present convention. In the event of an extension of this term of 10 years being granted to any other power, the like extension shall be granted also to Great Britain.

9. The above-mentioned liberty of commerce shall not apply to the trade in spirituous liquors, in fire-arms or other arms, gunpowder, or other warlike stores; the high contracting parties reciprocally engaging not to permit the above-mentioned articles to be sold or delivered, in any manner whatever, to the natives of the country.

10. Every British or Russian vessel navigating the Pacific Ocean, which may be compelled, by storms or by accident, to take shelter in the ports of the parties, shall be at liberty to refit therein, to provide itself with all necessary stores, and to put to sea again, without paying any other than port and light-house dues, which shall be the same as those paid by national vessels. In case, however, the master of such vessel should be under the necessity of disposing of a part of his merchandise in order to defray his expenses, he shall conform himself to the regulations and tariffs of the place where he may have landed.

11. In case of complaint of an infraction of the articles of the present convention, the civil and military authorities of the high contracting parties, without previously acting or taking any forcible measure, shall make an exact and circumstantial report of the matter to their respective courts, who engage to settle the same, in a friendly manner, and according to the principles of justice.

12. The present convention shall be ratified, and the ratifications shall be exchanged at London, within the space of 6 weeks, or sooner if possible.

In witness whereof the respective plenipotentiaries have signed the same, and have affixed thereto the seals of their arms.

Done at St. Petersburgh, the 28th [16th] of February, 1825.

Stratford Canning.
The Count de Nesselrode.
Pierre de Poletica.

The Two Sicilies.

Treaty of Commerce and Navigation between His Britannic Majesty and the King of the Two Sicilies, signed at London, September 26. 1816.

Article 1. His Britannic Majesty consents, that all the privileges and exemptions which his subjects, their commerce and shipping, have enjoyed, and do enjoy, in the dominions, ports, and domains of his Sicilian Majesty, in virtue of the treaty of peace and commerce concluded at Madrid on the 10th of May (23d of May), 1667, between Great Britain and Spain; of the treaties of commerce between the same powers, signed at Utrecht, the 9th of December, 1713, and at Madrid, the 13th of December, 1715; and of the convention concluded at Utrecht, the 8th of March, 1712-1713, between Great Britain and the kingdom of Sicily, shall be *abolished;* and it is agreed upon in consequence, between their said Britannic and Sicilian Majesties, their heirs and successors, that the said privileges and exemptions, whether of persons, or of flags and shipping, are and shall continue for ever abolished.

2. His Sicilian Majesty engages not to continue, nor hereafter to grant, to the subjects of any other power whatever, the privileges and exemptions abolished by the present convention.

3. His Sicilian Majesty promises that the subjects of his Britannic Majesty shall not be subjected, within his dominions, to a more rigorous system of examination and search by the officers of customs, than that to which the subjects of his said Sicilian Majesty are liable.

4. His Majesty the King of the Two Sicilies promises that British commerce in general, and the British subjects who carry it on, shall be treated throughout his dominions upon the same footing as the most favoured nations, not only with respect to the persons and property of the said British subjects, but also with regard to every species of article in which they may traffic, and the taxes or other charges payable on the said articles, or on the shipping in which the importation shall be made.

5. With respect to the personal privileges to be enjoyed by the subjects of his Britannic Majesty in the kingdom of the Two Sicilies, his Sicilian Majesty promises that they shall have a free and undoubted right to travel, and to reside in the territories and dominions of his said Majesty, subject to the same precautions of police which are practised towards the most favoured nations. They shall be entitled to occupy dwellings and warehouses, and to dispose of their personal property of every kind and description, by sale, gift, exchange, or will, and in any other way whatever, without the smallest loss or hinderance being given them on that head. They shall not be obliged to pay, under any pretence whatever, other taxes or rates than those which are paid, or that hereafter may be paid, by the most favoured nations in the dominions of his said Sicilian Majesty. They shall be exempt from all military service, whether by land or sea; their dwellings, warehouses, and every thing belonging or appertaining thereto for objects of commerce or residence, shall be respected. They shall not be subjected to any vexatious search or visits. No arbitrary examination or inspection of their books, papers, or accounts, shall be made under the pretence of the supreme authority of the state, but these shall alone be executed by the legal sentence of the competent tribunals. His Sicilian Majesty engages on all these occasions to guarantee to the subjects of his Britannic Majesty who shall reside in his states and dominions, the preservation of their property and personal security, in the same manner as those are guaranteed to his subjects, and to all foreigners belonging to the most favoured and most highly privileged nations.

6. According to the tenor of the articles 1. and 2. of this treaty, his Sicilian Majesty engages not to declare null and void the privileges and exemptions which actually exist in favour of British commerce within his dominions, till the same day, and except by the same act, by which the privileges and exemptions, whatsoever they are, of all other nations, shall be declared null and void within the same.

7. His Sicilian Majesty promises, from the date when the general abolition of the privileges according to the articles 1, 2. and 6. shall take place, to make a reduction of 10 per cent. upon the amount of the duties payable according to the tariff in force the 1st of January, 1816, upon the total of the merchandise or production of the United Kingdom of Great Britain and Ireland, her colonies, possessions, and dependencies, imported into the states of his said Sicilian Majesty, according to the tenor of article 4. of the present convention; it being understood that nothing in this article shall be construed to prevent the King of the Two Sicilies from granting, if he shall think proper, the same reduction of duty to other foreign nations.

8. The subjects of the Ionian Islands shall, in consequence of their being actually under the immediate protection of his Britannic Majesty, enjoy all the advantages which are granted to the commerce and to the subjects of Great Britain by the present treaty; it being well understood that, to prevent all abuses, and to prove its identity, every Ionian vessel shall be furnished with a patent, signed by the Lord High Commissioner or his representative.

9. The present convention shall be ratified, and the ratifications thereof exchanged in London, within the space of 6 months, or sooner if possible.

In witness whereof the respective plenipotentiaries have signed it, and thereunto affixed the seal of their arms.

Done at London, the 26th of September, 1816.

CASTLEREAGH. CASTELCICALA.

Separate and Additional Article.

In order to avoid all doubt respecting the reduction upon the duties in favour of British commerce, which his Sicilian Majesty has promised in the 7th article of the convention signed this day between his Britannic Majesty and his Sicilian Majesty, it is declared, by this present separate and additional article, that by the concession of 10 per cent. of diminution, it is understood that in case the amount of the duty should be 20 per cent. upon the value of the merchandise, the effect of the reduction of 10 per cent. is to reduce the duty from 20 to 18; and so for other cases in proportion. And that for the articles which are not taxed *ad valorem* in the tariff, the reduction of the duty shall be proportionate; that is to say, a deduction of a tenth part upon the amount of the sum payable shall be granted.

The present separate and additional article shall have the same force and validity as if it had been inserted word for word in the convention of this day — it shall be ratified, and the ratification thereof shall be exchanged at the same time.

In witness whereof the respective plenipotentiaries have signed it, and have thereunto affixed the seal of their arms.

Done at London, the 26th of September, 1816.

CASTLEREAGH. CASTELCICALA.

TURKEY.

Capitulations and Articles of Peace between Great Britain and the Ottoman Empire, as agreed upon, augmented, and altered, at different Periods, and, finally, confirmed by the Treaty of Peace concluded at the Dardanelles, in 1809.

SULTAN MEHEMED,

MAY HE LIVE FOR EVER.

"Let every thing be observed in conformity to these capitulations, and contrary thereto let nothing be done."

1. The English nation and merchants, and all other merchants sailing under the English flag, with their vessels and merchandise of all descriptions, may pass safely by sea, and go and come into our dominions, without any the least prejudice or molestation being given to their persons, property, or effects, by any person whatsoever, but they shall be left in the undisturbed enjoyment of their privileges, and be at liberty to attend to their affairs.

2. If any of the English coming into our dominions by land be molested or detained, such persons shall be instantly released, without any further obstruction being given to them.

3. English vessels entering the ports and harbours of our dominions shall and may at all times safely and securely abide and remain therein, and at their free will and pleasure depart therefrom, without any opposition or hinderance from any one.

4. If it shall happen that any of their ships suffer by stress of weather, and not be provided with necessary stores and requisites, they shall be assisted by all who happen to be present, whether the crews of our Imperial ships, or others, both by sea and land.

5. Being come into the ports and harbours of our dominions, they shall and may be at liberty to pur-

chase at their pleasure, with their own money, provisions and all other necessary articles, and to provide themselves with water, without interruption or hinderance from any one.

6. If any of their ships be wrecked upon any of the coasts of our dominions, all beys, cadis, governors, commandants, and others our servants, who may be near or present, shall give them all help, protection, and assistance, and restore to them whatsoever goods and effects may be driven ashore; and in the event of any plunder being committed, they shall make diligent search and inquiry to find out the property, which, when recovered, shall be wholly restored by them.

7. The merchants, interpreters, bankers, and others, of the said nation, shall and may, both by sea and land, come into our dominions, and there trade with the most perfect security; and in coming and going, neither they nor their attendants shall receive any the least obstruction, molestation, or injury, either in their persons or property, from the beys, cadis, sea captains, soldiers, and others our slaves.

17. Our ships and galleys, and all other vessels, which may fall in with any English ships in the seas of our dominions, shall not give them any molestation, nor detain them by demanding any thing, but shall show good and mutual friendship the one to the other, without occasioning them any prejudice.

19. If the corsairs or galliots of the Levant be found to have taken any English vessels, or robbed or plundered them of their goods and effects, also if any one shall have forcibly taken any thing from the English, all possible diligence and exertion shall be used and employed for the discovery of the property, and inflicting condign punishment on those who may have committed such depredations; and their ships, goods, and effects, shall be restored to them without delay or intrigue.

21. Duties shall not be demanded or taken of the English, or the merchants sailing under the flag of that nation, on any piastres and sequins they may import into our sacred dominions, or on those they may transport to any other place.

36. English merchants, and all others sailing under their flag, may, freely and unrestrictedly, trade and purchase all sorts of merchandise (prohibited commodities alone excepted), and convey them, either by land or sea, or by way of the river Tanais, to the countries of Muscovy or Russia, and bring back thence other merchandise into our sacred dominions, for the purposes of traffic, and also transport others to Persia and other conquered countries.

38. Should the ships bound for Constantinople be forced by contrary winds to put into Caffa, or any other place of those parts, and not be disposed to buy or sell any thing, no one shall presume forcibly to take out or seize any part of their merchandise, or give to the ships or crews any molestation, or obstruct the vessels that are bound to those ports.

40. On their ships arriving at any port, and landing their goods, they may, after having paid their duties, safely and securely depart, without experiencing any molestation.

41. English ships bound to Constantinople, Alexandria, Tripoli of Syria, Scanderoon, or other ports of our sacred dominions, shall in future be bound to pay duties, according to custom, on such goods only as they shall, of their own free will, land with a view to sale; and for such merchandise as they shall not discharge, no duty shall be demanded, neither shall the least molestation or hinderance be given to them.

44. English and other merchants navigating under their flag, who trade to Aleppo, shall pay such duties on the silks, brought and laden by them on board their ships, as are paid by the French and Venetians, and not one asper more.

55. The Imperial fleet, galleys, and other vessels, departing from our sacred dominions, and falling in with English ships at sea, shall in no wise molest or detain them, nor take from them any thing whatsoever. English ships shall no longer be liable to any further search, or exaction at sea under colour of search or examination.

70. English ships coming to the ports of Constantinople, Alexandria, Smyrna, Cyprus, and other ports of our sacred dominions, shall pay 300 aspers for anchorage duty, without an asper more being demanded of them.

72. No molestation shall be given to any of the aforesaid nation buying camlets, mohairs, or grogram yarn, at Angora and Beghbazar, and desirous of exporting the same from thence, after having paid the duty of 3 per cent., by any demand of customs for the exportation thereof, neither shall one asper more be demanded of them.

75. That it being represented to us that English merchants have been accustomed hitherto to pay no custom or scale duty, either on the silks bought by them at Brussa and Constantinople, or on those which come from Persia and Georgia, and are purchased by them at Smyrna from the Armenians; if such usage or custom really exists, and the same be not prejudicial to the empire, such duty shall not be paid in future.

(*N. B.* — These capitulations may be found entire in *Hertslet's Treaties;* and in *Chitty's Commercial Law*, vol. ii. pp. 290—311. Appen.)

Treaty between Great Britain and the Sublime Porte, concluded at the Dardanelles, the 5th of January, 1809.

1. From the moment of signing the present treaty, every act of hostility between England and Turkey shall *cease*.

5. In return for the indulgence and good treatment afforded by the Sublime Porte to English merchants, with respect to their goods and property, as well as in all matters tending to facilitate their commerce, England shall reciprocally extend every indulgence and friendly treatment to the flags, subjects, and merchants of the Sublime Porte, which may hereafter frequent the dominions of his Britannic Majesty for the purposes of commerce.

6. The last Custom-house tariff established at Constantinople, at the ancient rate of 3 per cent., and particularly the article relating to the interior commerce, shall continue to be observed, as they are at present regulated, and to which England promises to conform.

10. English patents of protection shall not be granted to dependants, or merchants who are subjects of the Sublime Porte, nor shall any passport be delivered to such persons, on the part of ambassadors or consuls, without permission previously obtained from the Sublime Porte.

Done near the Castles of the Dardanelles, the 5th of January, 1809, which corresponds with the year of the Hegira 1223, the 19th day of the Moon Zilkaade.

SEYD MEHEMMED EMIN VAHID EFFENDI.
ROBERT ADAIR.

UNITED STATES.

Convention of Commerce between Great Britain and the United States of America, signed at London, the 3d of July, 1815.

Article 1. There shall be between all the territories of his Britannic Majesty in Europe, and the territories of the United States, a reciprocal liberty of commerce. The inhabitants of the 2 countries respectively shall have liberty freely and securely to come with their ships and cargoes to all such places, ports, and rivers in the territories aforesaid, to which other foreigners are permitted to come, to enter into the same, and to remain and reside in any part of the said territories respectively; and also to hire and occupy houses and warehouses for the purpose of their commerce; and generally the merchants and traders of each nation respectively shall enjoy the most complete protection and security for their commerce; but subject always to the laws and statutes of the 2 countries respectively.

2. No higher or other duties shall be imposed on the importation into the territories of his Britannic Majesty in Europe, of any articles, the growth, produce, or manufacture of the United States, and no

higher or other duties shall be imposed on the importation into the United States, of any articles, the growth, produce, or manufacture of his Britannic Majesty's territories in Europe, than are or shall be payable on the like articles, being the growth, produce, or manufacture of any other foreign country; nor shall any higher or other duties or charges be imposed in either of the two countries on the exportation of any articles to his Britannic Majesty's territories in Europe, or to the United States, respectively, than such as are payable on the exportation of the like articles to any other foreign country; nor shall any prohibition be imposed upon the exportation or importation of any articles, the growth, produce, or manufacture of the United States, or of his Britannic Majesty's territories in Europe, to or from the said territories of his Britannic Majesty in Europe, or to or from the said United States, which shall not equally extend to all other nations.

No higher or other duties or charges shall be imposed in any of the ports of the United States on British vessels, than those payable in the same ports by vessels of the United States; nor in the ports of any of his Britannic Majesty's territories in Europe on the vessels of the United States, than shall be payable in the same ports on British vessels.

The same duties shall be paid on the importation into the United States of any articles, the growth, produce, or manufacture of his Britannic Majesty's territories in Europe, whether such importation shall be in the vessels of the United States, or in British vessels; and the same duties shall be paid on the importation into the ports of any of his Britannic Majesty's territories in Europe, of any articles, the growth, produce, or manufacture of the United States, whether such importation shall be in British vessels, or in vessels of the United States.

The same duties shall be paid, and the same bounties allowed, on the exportation of any articles, the growth, produce, or manufacture of his Britannic Majesty's territories in Europe, to the United States, whether such exportation shall be in vessels of the United States, or in British vessels; and the same duties shall be paid, and the same bounties allowed, on the exportation of any articles, the growth, produce, or manufacture of the United States, to his Britannic Majesty's territories in Europe, whether such exportation shall be in British vessels, or in vessels of the United States.

It is further agreed, that in all cases where drawbacks are or may be allowed upon the re-exportation of any goods, the growth, produce, or manufacture of either country respectively, the amount of the said drawbacks shall be the same, whether the said goods shall have been originally imported in a British or American vessel; but when such re-exportation shall take place from the United States in a British vessel, or from the territories of his Britannic Majesty in Europe in an American vessel, to any other foreign nation, the 2 contracting parties reserve to themselves, respectively, the right of regulating or diminishing, in such case, the amount of the said drawback.

The intercourse between the United States and his Britannic Majesty's possessions in the West Indies, and on the continent of North America, shall not be affected by any of the provisions of this article, but each party shall remain in the complete possession of its rights, with respect to such an intercourse.

3. His Britannic Majesty agrees that the vessels of the United States of America shall be admitted and hospitably received at the principal settlements of the British dominions in the East Indies, viz. *Calcutta*, *Madras*, *Bombay*, and *Prince of Wales' Island*, and that the citizens of the said United States may freely carry on trade between the said principal settlements and the said United States, in all articles of which the importation and exportation respectively, to and from the said territories, shall not be entirely prohibited; provided only, that it shall not be lawful for them, in any time of war between the British government and any state or power whatever, to export from the said territories, without the special permission of the British government, any military stores, or naval stores, or rice. The citizens of the United States shall pay for their vessels, when admitted, no higher or other duty or charge than shall be payable on the vessels of the most favoured European nations, and they shall pay no higher or other duties or charges on the importation or exportation of the cargoes of the said vessels, than shall be payable on the same articles when imported or exported in the vessels of the most favoured European nations.

But it is expressly agreed, that the vessels of the United States shall not carry any articles from the said principal settlements to any port or place, except to some port or place in the United States of America, where the same shall be unladen.

It is also understood, that the permission granted by this article is not to extend to allow the vessels of the United States to carry on any part of the coasting trade of the said British territories; but the vessels of the United States having, in the first instance, proceeded to one of the said principal settlements of the British dominions in the East Indies, and then going with their original cargoes, or any part thereof, from one of the said principal settlements to another, shall not be considered as carrying on the coasting trade. The vessels of the United States may also touch for refreshments, but not for commerce, in the course of their voyage to or from the British territories in India, or to or from the dominions of the Emperor of China, at the Cape of Good Hope, the island of St. Helena, or such other places as may be in the possession of Great Britain, in the African or Indian seas; it being well understood, that, in all that regards this article, the citizens of the United States shall be subject in all respects to the laws and regulations of the British government from time to time established.

4. It shall be free for each of the 2 contracting parties respectively to appoint consuls, for the protection of trade, to reside in the dominions and territories of the other party; but before any consul shall act as such, he shall in the usual form be approved and admitted by the government to which he is sent; and it is hereby declared, that in case of illegal and improper conduct towards the laws or government of the country to which he is sent, such consul may either be punished according to law, if the laws will reach the case, or be sent back, the offended government assigning to the other the reasons for the same.

It is hereby declared, that either of the contracting parties may except from the residence of consuls such particular places as such party shall judge fit to be so excepted.

5. This convention, when the same shall have been duly ratified by his Britannic Majesty and by the President of the United States, by and with the advice and consent of their Senate, and the respective ratifications mutually exchanged, shall be binding and obligatory on his Majesty and on the said United States for 4 years from the date of its signature; and the ratifications shall be exchanged in 6 months from this time, or sooner if possible.

Done at London, the 3d of July, 1815.

Fred. J. Robinson.	John Q. Adams.
Henry Goulburn.	H. Clay.
William Adams.	Albert Galatin.

This convention was subsequently prolonged by conventions for that purpose in 1818 and 1827.

TREBISOND, anciently Trapezus, from its resemblance to a trapezium, a town of Asia Minor, on the south-east coast of the Black Sea, lat. 40° 1′ N., lon. 39° 44′ 52″ E. Population variously estimated at from 15,000 to 30,000. The town is built on the declivity of a hill rising gently from the sea. It is a place of great antiquity; and, from the year 1203 to the final subversion of the Eastern empire by Mohammed II., in the 15th century, was the seat of a dukedom, or, as it was sometimes called, an empire, comprising the country between the Phasis and the Halys. Its fortifications are still of considerable strength, at least for a Turkish city. The space included within the walls

is of great extent; but it is principally filled with gardens and groves. The houses are mean in their outward appearance, and comfortless within. — (*Tournefort, Voyage du Levant*, tome ii. pp. 231—239.; *Kinneir's Journey though Asia Minor, &c.* p. 338.)

Harbour. — Trebisond has two ports, one on the W. and one on the E. side of a small peninsula, or point of land, projecting a short way into the sea. That on the east is the best sheltered, and is the place of anchorage for the largest ships. It is, however, exposed to all but the southerly gales; but it does not appear, that, with ordinary precaution, any danger need be apprehended. The ground, from ¼ to ½ a mile E. from the point, is clean, and holds extremely well. Ships moor with open hawse to the N., and a good hawser and stream anchor on shore, as a stern-fast. At night, the wind always comes off the land. Captain Middleton says that the only bad weather is from the N. W.; but that, though the swell be considerable, it does not cause any heavy strain upon the cables. — (*Nautical Magazine*, vol. ii. p. 181.) — At Platana, near Trebisond, and quite as exposed, Turkish vessels have from time immemorial rode in safety the whole winter; a satisfactory proof that the dangers supposed to be incident to the roads along the coast are wholly visionary. — (*Ibid.* p. 244.)

Navigation of the Black Sea. — We are happy to have this opportunity to state that Captain Middleton, who has been repeatedly in the Black Sea, agrees entirely with Tournefort — (see *antè*, p. 860.) — as to the groundlessness of the notions that have got abroad of its navigation being peculiarly dangerous. He shows that the "thick weather," supposed to prevail in this sea, is "quite imaginary."—"There are fogs in it occasionally, but these *never last long*; and, like fogs every where else, are unaccompanied by much wind. Gales sometimes occur, but they rarely amount to storms, and their duration is short. Except on its northern coast, it has deep water all over. It may, in fact, be considered a sea almost without a hidden danger." The only difficulty attaching to its navigation consists, as formerly observed (*antè*, p. 860.), in making the Bosphorus. But this, also, has been much exaggerated; and ships able to keep out to sea, and properly navigated, quit it without encountering any considerable risk.—(For further particulars as to this interesting subject, the reader is referred to Captain Middleton's paper in the 2d volume of the *Nautical Magazine*, — a useful and excellent publication, well entitled to the public patronage.)

Trade. — In antiquity, and in more modern times, previously to the conquest of Constantinople by the Turks, and the exclusion of all foreign vessels from the Black Sea, Trebisond was the seat of an extensive trade. Any one, indeed, who casts his eye over a map of Asia, must be satisfied that this city is the natural emporium of all the countries to the S. E. of the Black Sea, from Kars on the east, round by Diarbeker to Amasia on the west. Erzeroum, the principal city of Armenia, is only about 135 miles S.E. from Trebisond. Its merchants are distinguished by their superior attainments, and by their enterprise and activity. For a lengthened period, they have derived most part of their supplies of European commodities by way of Smyrna or Constantinople: nothing, however, but the impossibility of obtaining them at so convenient a port as Trebisond, could have made them resort to such distant markets as those now mentioned; and it may well excite surprise, considering the period during which the Black Sea has been open, that efforts were not sooner made to establish an intercourse with Armenia, Georgia, and the north-western parts of Persia, through this channel. We are glad, however, to have to state, that within these few years this has been done; and notwithstanding the difficulties that necessarily attach to every attempt to open new channels of commerce with semi-civilised nations, the experiment has proved more than ordinarily successful.

The policy of Russia has recently, also, given to Trebisond an importance it did not formerly possess. Previously to 1831, foreign commodities were admitted at the low duty of 5 per cent. into the Russian port of Redoutkalé, and others on the coast of Mingrelia, whence they were distributed over Georgia, and as far as Persia. But a ukase, issued at the epoch referred to, put an end to all the immunities with respect to duties enjoyed by the Russian provinces to the south of Mount Caucasus, and extended to them the same customs'regulations that obtain in the other parts of the empire. Considerable deductions are, it is true, made from the duties charged on certain articles imported into these provinces, provided they be carried in the first instance to Odessa, and there reshipped for Mingrelia; but those that go direct to the latter are subjected to the same duties and conditions as if they went to Petersburgh or Riga. Printed cottons, and some other important articles, are in all cases prohibited.

The opening of a port on the S.E. extremity of the Black Sea, to which goods might be sent direct from Europe, and be thence conveyed to Armenia, Persia, &c., has, under these circumstances, become an object of a good deal of interest to the commercial world. There can be no doubt, indeed, did any thing like order or regular government prevail in the Turkish provinces of Asia Minor, Armenia, &c., that Trebisond would speedily become a considerable emporium. At present, however, and for a long time back, these beautiful provinces, in common with most other parts of the Turkish empire, have been in a state of extreme disorder; and, owing to the imbecility and ignorance of the government, there seems but little prospect of improvement so long as it is suffered to exist.

The principal articles of import are manufactured cottons, mostly from Great Britain, sugar, coffee, rum, salt, tin, wine, &c. Cottons are sold at long credits; sugar, coffee, &c. are sold at shorter credits, and are more regularly paid. The exports consist of silk, sheep's wool, tobacco, shawls and carpets, galls, and drugs of various sorts, box wood, nuts, &c. There are very rich copper mines in the mountains to the south of Trebisond; but they are but little wrought; and the Turks are so blind to their own interests, as to prohibit the exportation of copper, as well as of corn, and wax. It is difficult, therefore to obtain return cargoes. More than half the articles imported, are destined for Persia. In 1832, no fewer than 9,189 packages passed through Trebisond for Tabreez; and it is believed, that of these, fully 8,000 consisted of British manufactures.

Money, Weights, and Measures, same as at Constantinople; which see.

Arrivals.—In 1832, there arrived at Trebisond, 6 ships under the British flag, of the burden of 718 tons. — (*Parl. Paper*, No. 756. Sess. 1833.) — During the same year, there arrived 19 foreign vessels, of the burden of 4,438 tons: of these, 10 were Austrian; 5 Sardinian; and 4 Russian. The total imports may, perhaps, be valued at about 300,000*l*. The exports are comparatively trifling.

TRIESTE, a large city and sea-port of the Austrian dominions, the capital of a district of Illyria, situated near the N. E. extremity of the Gulf of Venice, lat. 45° 38′ 37″ N., lon. 13° 46′ 27″ E. Population 48,000. It is divided into the old and new towns. The former is built upon elevated ground; the latter, which is lower down, is laid out with greater regularity, and is partly intersected by a canal, into which vessels not drawing more than 9 or 10 feet water enter to load and unload.

Harbour. — The harbour of Trieste, though rather limited in size, is easy of access and convenient. It is protected from southerly gales by the *Molo Teresiano*, so called from the Empress Maria Theresa, at the extremity of which the new light-house, mentioned below, has been constructed. The port, with the mole, forms a crescent 1½ mile in length, being a continued quay, faced with hewn stones, with stairs and jetties for the convenience of embarkation. On the north side of the port is a dock or harbour, appropriated exclusively for vessels performing quarantine. It is walled round; and is furnished with hotels, warehouses, and every sort of accommodation required for the use of passengers and goods. Ships under 300 tons burden lie close to the quays; those of greater size mooring a little further out.

The principal defects of the port are, its limited size, and its being exposed to the N.W. winds, which sometimes blow with much violence, and throw in a heavy sea. The gales, however, are seldom of long continuance; and the holding ground being good, when the anchors are backed and proper precautions taken, no accidents occur. The tide at Trieste is scarcely perceptible; but the depth of water is influenced by the wind, being increased by a long continued sirocco or S. E. wind, and diminished by the prevalence of the E. N. E. wind, known by the name of *Boro*. The access to the port is not obstructed by any bar or shallow; and there is good anchorage in the roads, in from 6 to 8 and 10 fathoms water. A good sailing vessel may beat in by night or by day, except it blow hard from the N. E. or E.N. E., when she had better anchor in the Bay of Roses, or Pirano, where she will ride in perfect safety.

Pilots. — Ships bound for Trieste are under no obligation to take pilots; but those entering the port for the first time would do well to take one on making the coast of Istria. Boats are always hovering off Rovigno; they are not manned by regular pilots, but by fishermen, who, though unfit to be trusted with the management of the ship, know the bearings of the places and the depth of water. The fee usually paid them for pilotage is 20 dollars; in addition to which, they are supported at the ship's expense during the performance of quarantine.

Light-houses. — The light-house at the extremity of the Theresian mole is 106 feet (Eng.) high. The light is intermittent; and may be seen, supposing the eye of the observer to be elevated 12 feet above the level of the sea, about 12 nautical miles, or from Pirano on the side of Istria, and the shoals of Grado on the Italian coast. A light-house has also been erected on the point of Salvore, bearing from Trieste W. by S., distant about 18 miles. The lantern is elevated about 103 feet above the level of the sea. From this point Pirano Bay opens, where vessels may anchor in safety in all sorts of weather.

Money. — Mercantile accounts are usually kept at Trieste in what is commonly called *convention* money, from an agreement entered into with respect to it by some of the German princes, in 1763. The current coins that are legal tender are dollars, ½ dollars or florins, and zwanzigers, or pieces of 20 kreutzers. Ten dollars are coined out of the Cologne marc (3,608 gr. Eng.) of pure silver, so that the value of the dollar is 4*s.* 3*d.* sterling.

The florin, or ½ dollar = 2*s.* 1½*d.* sterling; zwanzigers, or pieces of 20 kreutzers (60 to the marc), = 8½*d.* sterling. Hence it follows that 1*s.* sterling = 28⅞ kreutzers (60 to a florin); and the pound sterling = 9 fl. 24⅜ kr., or, as it is commonly taken, 9 fl. 25 kr. All contracts are either expressly declared, or are understood, to be in silver money; gold coins, not being legal tender, pass only as merchandise.

Weights and Measures. — Those chiefly in use at Trieste are those of Vienna and Venice. The commercial pound contains 4 quarters, 16 ounces, or 32 loths: it is = 8,639 English grains. Thus, 100 lbs. at Trieste = 123·6 lbs. avoirdupois; or 90½ lbs. of Trieste = 112 lbs. avoirdupois.

The principal dry measure is the stajo or staro = 2·34 Winch. bushels. The Vienna metzen, which is sometimes used, = 1·723 Winch. bushel. The polonick = 0·861 Winch. bushel.

The principal liquid measure is the orna or eimer = 40 boccali = 15 wine or 12½ Imperial gallons very nearly. The barile = 173½ English wine gallons.

The orna of oil contains 5½ caffisi, and weighs about 107 commercial pounds. It is = 17 wine or 14·16 Imperial gallons.

The ell woollen measure = 26·6 English inches. The ell for silk = 25·2 English inches.

Trade. — Trieste has no command of internal navigation; but being the most convenient, or rather the only sea-port, not merely of the Illyrian provinces, but of the duchy of Austria, and the greater part of Hungary, she possesses an extensive commerce. This has been increased by the facilities afforded to all sorts of mercantile transactions by the privilege of *porto franco* conferred on the town, and a considerable extent of contiguous country. Under this franchise, all goods, with but very few exceptions, may be imported into and exported from the city free of all duties whatever. Foreign products, when taken for consumption into the interior, are subject to the duties mentioned under the head *Tariff*, in a subsequent part of this article.

Exports. — These are very various, consisting partly of the raw, and partly of the manufactured products of Austria Proper, Illyria, Dalmatia, Hungary, and Italy; with foreign articles imported and warehoused. Among the principal articles of raw produce may be specified, corn, chiefly wheat and maize, with rice, wine, oil, shumac, tobacco, wax, &c.; silk, silk rags and waste, hemp, wool, flax, linen rags, hides, furs, skins, &c.; the produce of the mines makes an important item, consisting of quicksilver, cinnabar, iron, lead, copper, brass, litharge, alum, vitriol, &c.; the forests of Carniola furnish timber, for ship building and other purposes, of excellent quality and in great abundance, with staves, cork wood, box, hoops, &c.; marble also ranks under this head. Of manufactured articles, the most important are, thrown silk, silk stuffs, printed cottons from Austria and Switzerland, coarse and fine linens, and all sorts of leather; under this head are also ranked soap, Venetian treacle, liqueurs, &c., with jewellery, tools and utensils of all sorts, glass ware and mirrors, Venetian beads, refined sugar, and a host of other articles. Of foreign articles imported and reshipped, the most important are sugar, coffee, and dye stuffs. Trieste is also a considerable *depôt* for all sorts of produce from the Black Sea, Turkey, and Egypt.

It is not possible to obtain any accurate account of the quantity and value of the exports; but Mr. Money, the British consul, who has carefully inquired into the subject, supposes that they may amount in all, exclusive of those shipped for Venice, Fiume, and other Austrian ports, to about 1,800,000*l.* a year, which he divides as follows: —

	£
Raw Produce, viz. — Grain, rice, oil, honey, wax, shumac, tobacco, &c.	350,000
Silk, hemp, wool, rags, hides and skins	380,800
Metals, mineral and other products; as, quicksilver, iron, lead, copper, brass, zinc, litharge, argol, antimony, arsenic, alum, vitriol, potash, turpentine, marbles, &c.	230,000
Timber, plank, boards, &c.	180,000
Manufactures of silk, cotton, wool, linen, leather, &c.	235,000
Soap, candles, Venetian treacle, and medicines	80,000
Tools, machinery, arms, &c.	25,000
Household furniture, musical instruments, glass and glass wares, porcelain, &c.	20,000
Foreign Articles reshipped for exportation, exclusive of those for Lombardy and the Papal States	300,000
Total	£1,800,000

Mr. Money further supposes that these articles are distributed amongst the countries trading with Trieste, as follows: —

	£
To Turkey and the Levant	380,000
Egypt	300,000
Greece, the Ionian Islands, and Malta	130,000
the Kingdom of the Two Sicilies	350,000
Ports in France, Sardinia, and Tuscany	100,000
Spain, Portugal, and Barbary	120,000
Great Britain	220,000
Ports in the North of Germany	150,000
the United States of America	30,000
South America and the West Indies	20,000
Total exports	£1,800,000

Perhaps these estimates are a little below the mark. We have been assured by high mercantile authority, that the entire value of the exports from Trieste to foreign countries is not under 2,000,000*l.* a year.

Imports. — There is a great difference between the imports into and the exports from Trieste; the value of the former being certainly not less than 4,000,000*l* sterling. The excess of imports is explained, partly by the fact that large quantities of foreign goods imported into Trieste are subsequently transhipped by coasting vessels to Venice, Fiume, and other ports, partly by the residence of English and other foreigners at Vienna, and partly by there being an excess of exports as compared with imports from other parts of the empire. The great articles of import are sugar, cotton goods and raw cotton, oil, coffee, wheat, silks, indigo and other dye stuffs, valonia, &c. The following Table contains all the information that can be desired as to the import trade of Trieste in 1829, 1830, and 1831: —

Statement of the Quantity and Value, in British Money, Weights, and Measures, of the principal Articles imported into Trieste during each of the Three Years ending with 1831, specifying the Quantity and Value of those furnished by each Country.

Countries from which imported.	Articles.	1829.			1830.			1831.		
		English Weight or Measure.	Quantity.	Value Sterling.	English Weight or Measure.	Quantity.	Value Sterling.	English Weight or Measure.	Quantity.	Value Sterling.
				L.			*L.*			*L.*
Great Britain	Coffee	cwt.	20,360	38,900	cwt.	26,290	51,442	cwt.	12,990	25,470
	Sugar	—	72,788	109,283	—	92,962	129,640	—	76,501	96,878
	Rum	gallons	39,860	4,333	gallons	31,200	3,380	gallons	41,200	5,100
	Spices	- -	- -	15,300	- -	- -	17,450	- -	- -	9,300
	Indigo	lbs.	65,000	24,170	lbs.	70,000	25,900	lbs.	52,300	13,500
	Drugs	- -	- -	16,120	- -	- -	18,451	- -	- -	17,816
	Iron	cwt.	12,000	6,000	cwt.	25,000	13,000	cwt.	19,000	9,500
	Tin	—	4,000	22,877	—	7,500	33,000	—	3,000	15,700
	Cotton goods	- -	- -	345,000	- -	- -	461,000	- -	- -	310,000
	Woollen goods	- -	- -	8,100	- -	- -	13,500	- -	- -	11,550
	Hardwares	packages	120	6,000	packages	135	7,750	packages	110	5,500
	Earthenware	—	300	3,000	—	350	3,900	—	180	2,160
America, U. S.	Coffee	cwt.	39,721	72,600	cwt.	51,597	92,885	cwt.	25,980	58,950
	Sugar	—	143,576	219,965	- -	185,924	259,980	—	153,008	193,756
	Cotton	—	26,860	80,500	—	32,750	90,800	—	33,400	100,100
	Rum	gallons	46,000	4,400	gallons	46,860	5,080	gallons	42,180	5,320
	Tea	lbs.	11,000	1,400	lbs.	700	85	lbs.	3,000	360
Brasil	Sugar	cwt.	149,620	225,412	cwt.	189,200	261,250	cwt.	161,220	200,120
	Coffee	—	45,850	88,510	—	78,290	143,142	—	36,290	82,400
	Hides	- -	- -	73,100	- -	- -	65,120	- -	- -	76,510
	Dyeing woods	cwt.	52,972	26,900	cwt.	36,084	14,770	cwt.	45,842	18,700
	Drugs	- -	- -	48,000	- -	- -	61,000	- -	- -	21,000
West Indies	Sugar	cwt.	71,123	130,000	cwt.	81,500	125,600	cwt.	66,204	90,500
	Coffee	—	19,200	39,000	- -	21,300	44,250	—	10,500	24,380
	Pimento	—	1,742	5,770	cwt.	1,579	4,110	—	1,650	3,800
	Rum	gallons	5,950	950	gallons	4,000	700	gallons	6,100	1,100
Levant	Cotton	cwt.	37,700	90,800	cwt.	35,830	106,950	cwt.	54,310	150,300
	Currants	—	85,600	61,350	—	161,500	125,400	—	90,800	69,200
	Gums	—	7,464	33,720	—	6,918	29,012	—	6,448	28,420
	Furs	skins	80,000	9,000	skins	75,000	7,000	skins	108,000	10,500
	Galls	cwt.	5,480	14,000	cwt.	7,712	20,450	cwt.	7,638	18,230
	Valonia	—	90,000	40,000	—	100,000	44,000	—	130,000	60,000
	Wax	—	5,000	35,000	—	6,000	38,000	—	5,500	39,000
Black Sea	Wheat	quarters	54,015	94,354	quarters	103,178	167,190	quarters	113,100	198,900
Egypt	Cotton	cwt.	16,385	44,350	cwt.	17,910	53,400	cwt.	26,250	69,124
	Grain	quarters	50,000	70,400	quarters	65,000	78,000	quarters	49,000	68,000
	Pulse	—	70,000	80,000	—	45,000	60,000	—	30,000	36,000
	Seed	—	60,000	85,000	—	16,000	23,000	—	12,000	21,000
	Madder	cwt.	1,153	1,794	cwt.	6,088	12,140	cwt.	3,900	6,400
Sicily	Fruits	- -	- -	10,000	- -	- -	12,000	- -	- -	9,000
Naples	Oil	tuns	6,700	207,000	tuns	9,900	306,000	tuns	6,700	234,000
Malta	Cotton	cwt.	800	2,800	cwt.	950	2,850	cwt.	600	1,800
	Fruits	- -	- -	1,000	- -	- -	1,500	- -	- -	2,500
Italy	Hemp	cwt.	30,000	36,000	cwt.	35,000	42,000	cwt.	30,000	35,000
	Rice	—	46,000	58,000	—	51,000	41,000	—	54,000	42,000
	Silk, raw	—	4,000	18,000	—	8,000	35,000	—	9,000	40,000
Sweden	Codfish	—	47,000	24,000	—	60,000	40,000	—	20,000	12,000
France	Wines	- -	uncertain	2,000	- -	- -	3,000	- -	- -	2,000
	Silks	- -	—	100,000	- -	- -	120,000	- -	- -	100,000
Spain	Lead	cwt.	18,000	10,000	cwt.	14,000	8,200	cwt.	7,000	4,100
	Fruits	- -	- -	5,000	- -	- -	5,000	- -	- -	4,000
Portugal	Sugar	cwt.	25,000	37,000	cwt.	75,000	110,000	cwt.	60,000	92,000
	Coffee	—	15,000	29,000	—	18,800	35,000	—	12,000	23,400
	Cocoa	—	2,500	2,100	—	5,200	4,500	—	6,000	5,600
Sumatra	Pepper	—	6,000	9,500	- -	- -	- -	—	10,800	16,000
Greece	Oil	tuns	1,000	50,000	tuns	2,500	76,000	tuns	1,100	35,000
	Wax	cwt.	2,500	17,500	cwt.	3,000	19,000	cwt.	2,500	16,000
	Figs	- -	- -	3,000	- -	- -	3,500	- -	- -	3,000
	Currants	cwt.	42,300	29,110	cwt.	18,500	12,000	cwt.	37,000	24,000

Tariff. — Trieste being a free port, goods destined for its consumption, and that of the adjoining territory, pay no duties whatever, and are exported and imported without notice by the customs. Goods brought from the interior for export at Trieste, are charged an export duty on passing the Custom-house line. Goods imported at Trieste, to be conveyed through the Austrian dominions to those of any other power, are charged a small transit duty. The principal foreign goods taken for consumption in the interior of the empire, pay the duties specified in the subjoined Table.

See Table in next page.

Gunpowder, salt, and tobacco, being articles monopolised by government, are not allowed to be imported into Trieste except for sale to the government or its contractors. Vessels arriving with gunpowder on board, deliver it at the arsenal, and on their clearing out it is returned to them free of expense. The utmost vigilance is exerted to prevent the introduction of tobacco; but with very little effect. The only articles, the exportation of which from the Austrian dominions is at present prohibited, are gold and silver in bars, and silk cocoons.

Statement of the Customs' Duties on the principal Articles imported from Trieste into the Interior of the Austrian Empire.

Articles.	Duty in Currency.		Amount in Sterling.		
	Fl.	*kr.*	*L.*	*s.*	*d.*
Almonds, for every 100 lbs. weight of Vienna (equal to 123½ lbs. avoirdupois)	6	0	0	12	0
Asphor, do.	1	15	0	2	6
Barley, do.	0	15	0	0	6
Beans, French, do.	0	13½	0	0	5·4
Bobbinet, for every lb. weight of Vienna	10	0	1	0	0
Cassia, do.	0	13	0	0	5·2
Cinnamon, do.	1	30	0	3	0
Cloves, do.	1	3	0	2	1·2
Cod and herrings, for every 100 lbs. weight of Vienna	2	0	0	4	0
Cocoa, do.	21	0	2	2	0
Coffee, do.	21	0	2	2	0
Cotton wool, do.	2	30	0	5	0
Figs, do.	1	12	0	2	4·8
Frankincense, do.	7	30	0	15	0
Galls, do.	0	45	0	1	6
Gums, medicinal, do.	6	30	0	13	0
others, do.	0	48	0	1	7·2
Hare skins, do.	1	17	0	2	6·8
Hemp, do.	0	12	0	0	4·8
Hides, for every hide	0	5½	0	0	2·2
Indigo, for every 100 lbs. weight of Vienna	7	30	0	15	0
Linseed, do.	0	18	0	0	7·2
Liquorice, do.	4	0	0	8	0
Madder root, do.	0	20	0	0	8
Maize, do.	0	17	0	0	6·8
Mohair, do.	1	12	0	2	4·8
Nankeens, do.	0	40	0	1	4
Oats, do.	0	11	0	0	4·4
Oil, olive, for every 100 lbs. weight of Vienna	4	0	0	8	0
Pepper and pimento, do.	20	0	2	0	0
Raisins and currants, do.	4	0	0	8	0
Rice, do.	0	54	0	1	9·6
Rum, do.	13	21	1	6	8·4
Rye, do.	0	16	0	0	6·4
Shumac, do.	0	9	0	0	3·6
Silk, raw, do.	0	39	0	1	5·6
Soda, do.	0	11	0	0	4½
Spirits, do.	5	0	0	10	0
Sugar, refined, crushed, and raw, for every 100 lbs. weight of Vienna	21	0	2	2	0
Sugar, raw, white, for the use of the refiners in the interior, do.	14	0	1	8	0
Sugar, other qualities for same use, do.	7	0	0	14	0
Sulphur, do.	2	24	0	4	9·6
Tea, do.	0	54	0	1	9·6
Tin, do.	4	30	0	9	0
Twist, mule, to No. 30. inclusive, do.	81	0	8	2	0
water, to No. 12. do.	60	0	6	0	0
mule and water, above those numbers respectively, do.	20	0	2	0	0
Valonia, for every load of 110 lbs. weight of Vienna	0	3½	0	0	1 4
Wax, yellow, for every 100 lbs. weight of Vienna	5	0	0	10	0
Wax, white, do.	12	0	1	4	0
Wheat, do.	0	22½	0	0	9
Woods, dyeing, do.	0	12	0	0	4·8
Wool, do.	0	30	0	1	0

N.B. — It is observable, that in Austria almost all articles (except such as are rated *ad valorem*) are charged by weight, including even grain, and liquids, wine, oil, spirits, &c.

Tariff of the Customs Duties on the principal Articles brought from the Interior of the Austrian Empire to Trieste for Shipment.

Articles.	Duty in Currency.		Amount in Sterling.		
	Fl.	*kr.*	*L.*	*s.*	*d.*
Alum, for 100 lbs. weight of Vienna	0	4½	0	0	1·8
Antimony, do.	0	2½	0	0	1
Argol, do.	0	22½	0	0	9
Arms of all sorts, for every florin value	0	0¼	0	0	0·1
Arsenic, for 100 lbs. weight of Vienna	0	6¼	0	0	2·3
Barley, do.	0	0½	0	0	0·2
Brass, do.	0	19	0	0	7·6
Cinnabar, do.	0	43¾	0	1	5½
Clocks, watches, &c. for every florin value	0	0¼	0	0	0·1
Copper, for 100 lbs. weight of Vienna	0	30	0	1	0
Corkwood, do.	0	4½	0	0	1·7
Cotton manufactures, for every lb. weight of Vienna	0	0¼	0	0	0·1
Cutlery, for every florin value	0	0¼	0	0	0·1
Flax, for 100 lbs. weight of Vienna	0	6	0	0	2·4
Fruits, dried, do.	0	1½	0	0	0·6
Glass wares, do.	0	4	0	0	1·6
Do. crystal and mirrors, for every florin value	0	0¼	0	0	0·1
Hemp, for 100 lbs. weight of Vienna	0	5	0	0	2
Iron, unwrought, do.	0	1¾	0	0	0·7
tools, &c., do.	0	5	0	0	2
Lead, do.	0	2¾	0	0	1·1
Linen manufactures, table linen, &c., for every lb. Vienna	0	0¼	0	0	0·05
Litharge, for 100 lbs. weight of Vienna	0	6½	0	0	2·6
Locks, do.	0	25	0	0	10
Maize, do.	0	0¾	0	0	0·3
Marble, do.	0	0¼	0	0	0·1
Musical instruments, for every florin value	0	0½	0	0	0·1
Oats, for 100 lbs. weight of Vienna	0	0½	0	0	0·2
Oil, olive, do.	0	10	0	0	4
Pitch and tar, do.	0	4½	0	0	1·8
Potash, do.	0	18	0	0	7·2
Quicksilver, do.	0	37½	0	1	3
Rags, linen, do.	1	0	0	2	0
Rice, do.	0	2½	0	0	0·9
Rye, do.	0	0¾	0	0	0·3
Shumac, do.	0	1½	0	0	0·6
Silk, raw, do.	45	0	4	10	0
thrown, do.	22	30	2	5	0
stuffs, &c., for every lb. weight of Vienna	0	1½	0	0	0⅝
Skins, lamb & kid, for 100 lbs. weight of Vienna	3	37½	0	7	3
Staves, pipe, &c., for every florin value	0	0¼	0	0	0·1
Sugar, refined, for 100 lbs. weight of Vienna	0	18¾	0	0	7½
Timber, ship, for every florin value	0	3	0	0	1·2
other sorts	0	0½	0	0	0·2
Vitriol, for 100 lbs. weight of Vienna	0	7	0	0	2·8
Wax, do.	0	30	0	1	0
Wheat, do.	0	1	0	0	0·4
Wine, common, do.	0	2	0	0	0·8
Woods, rose, olive, do.	0	6¼	0	0	2½
box, do.	0	3¾	0	0	1½
Wool, do.	1	0	0	2	0

N. B. — Trieste being without the line of customs, these duties on exportation are payable on goods entering the territory or liberties of the port, whether for consumption or for exportation by sea. The duties on raw and thrown silk are tantamount to a prohibition.

Smuggling. — In consequence of the prohibition of tobacco, and of the high duties imposed on refined sugar, coffee, &c., these articles are very extensively smuggled into the Austrian dominions. Most part, too, of the cotton goods sent from this country to Trieste and Venice, are sold to smugglers, by whom they are introduced into the interior with very little difficulty. It would be absurd, indeed, to suppose, seeing the extent to which smuggling is practised in England and France — (see *antè*, p.1055.), — that it should not be in a flourishing condition in Austria, whose frontier is so much more difficult to guard. It is, in fact, carried on to a very great extent; prohibited and overtaxed goods being introduced with the greatest regularity, either by defeating the vigilance of the officers, or, which is said to be the more common case, by making them parties to, and gainers by, the fraud. The transit of foreign goods through the Austrian states gives considerable facilities to the smuggler. But, independently of this, their introduction is so very easy, that nothing but the repeal of the existing prohibitions, and the effectual reduction of the duties, can give any considerable check to smuggling.

We would fain hope that the Austrian government is becoming sensible of this truth. Its commercial policy is, in many respects, far from illiberal; and the alterations recently made in the tariff have contributed to facilitate importation. The slightest reflection must, indeed, satisfy every one, that in such a country, restrictions on importation can be of no real advantage to the home producers; and that their only effect is to divert trade into illegitimate channels, to deprive the public treasury of the revenue it might derive from moderate duties, and to enrich those who despise and trample on the law, at the expense of the sober and industrious citizen.

Considering the vast variety of valuable and desirable products furnished by Lombardy, Hungary, Austria Proper, and the other Austrian States, it is not easy to estimate the extent to which their commerce might be carried, under a free system that should develope all the resources of the country. At

present, however, there is, in Austria and most other parts of the Continent, a strong disposition to believe that our recommendations of a freer system of commercial policy are dictated solely by selfish, interested motives. They naturally attach greater weight to our practice than to our professions. So long, indeed, as our present corn laws and timber duties are suffered to pollute our statute book, so long shall we make but few practical converts to our doctrines. Such a modification of the former as would render our ports always open to the importation of corn under reasonable duties, combined with the equalisation of the timber duties, and the reduction of the exorbitant duties on olive oil and cheese, would show that we are disposed to practise those liberal doctrines we so freely recommend to others; and would do more to extend our trade with Italy and Austria than any measure it is in our power to adopt.

Shipping. — Since the loss of Flanders, the mercantile navy of Austria has been confined wholly to the ports on the Adriatic. But it is, notwithstanding, very considerable; and engrosses at this moment a very large share of the trade of the Mediterranean and Black Sea. The oak timber of Carniola and the Dalmatian coast is reckoned about the very best in the world; so that the Austrian ships, being built of it, are very strong, at the same time that they are particularly handsome. They are also well manned and provided. The seamen are expert, temperate, and orderly; and Mr. Money says, that the laws for the regulation of the merchant service are excellent.

By far the greater number of vessels of large burden belong to Trieste. The rest belong to Venice, Fiume, Ragusa, and the Bocche di Cattaro. On the other hand, the smaller vessels employed in the coasting trade, which is very considerable, are more equally divided; Venice having, probably, as many as Trieste, while a good number belong to the ports of Istria, Hungary, and Dalmatia.

The foreign trade of this port comprises all voyages beyond the limits of the Adriatic; and may be divided as follows: —

1. The Levant trade, including the Ionian Islands, Greece, Constantinople, Smyrna, Odessa, &c., the ports in Syria, Cyprus, Candia, and Egypt, more especially Alexandria.

2. The *ponente* or Mediterranean trade, in the west, comprising the coast of Barbary, Spain, France, and Italy; being principally carried on with Marseilles, Genoa, and Leghorn.

3. The commerce on the ocean, which the Austrian merchants have attempted with considerable success. Several ships sail for Brazil, the United States, England, Hamburgh, &c.

The number of Austrian vessels at present employed in foreign trade is believed to be about 780, of the burden of about 153,000 tons, manned by about 15,000 men and boys. In the coasting trade about 200 vessels are employed, averaging 40 tons each. The fishing trade is inconsiderable.

There has been no sensible increase or diminution in the tonnage for the last 5 years; but there is every probability of a gradual increase in future, proportioned to the anticipated improvement of trade in the Mediterranean, which has of late years been interrupted and depressed by political events.

The following Table shows the number of ships, and their tonnage, arriving at, and sailing from Trieste during each of the 3 years ending with 1831, specifying the number and tonnage of those under each flag.

Movement of Shipping at Trieste, during each of the Three Years ending with 1831.

Flags.	1829.				1830.				1831.			
	Arrived.		Sailed.		Arrived.		Sailed.		Arrived.		Sailed.	
	Ships.	*Tonnage.*	*Ships.*	*Tonnage.*	*Ships.*	*Tonnage.*	*Ships.*	*Tonnage.*	*Ships.*	*Tonnage.*	*Ships.*	*Tonnage.*
American	66	16,873	69	18,132	47	11,629	48	12,106	38	9,587	35	8,875
Austrian	343	67,854	373	74,165	354	72,764	341	69,320	456	88,332	489	96,210
Bremen	-	-	-	-	-	-	-	-	1	160		
British	129	22,776	129	22,776	160	28,743	160	28,743	129	22,337	129	22,337
Danish	14	2,105	14	2,300	18	3,374	14	2,443	13	2,160	18	3,073
Dutch	2	481	2	481	7	1,129	3	613	6	1,698	10	2,223
French	8	1,283	8	1,388	11	1,432	7	832	7	961	6	880
Greek	43	5,498	41	5,132	51	5,766	45	5,576	63	7,076	57	6,970
Hanoverian	8	1,370	5	850	4	674	4	626	4	470	5	770
Ionian	33	3,256	35	3,782	18	1,748	15	1,998	22	2,065	23	1,983
Portuguese	-	-	-	-	2	415	2	415	2	141	2	141
Roman	13	775	6	376	21	1,803	10	676	39	5,237	11	1,159
Russian	10	1,371	10	1,506	16	3,632	11	1,883	14	2,975	16	3,315
Sardinian	26	4,014	24	3,638	26	3,759	31	4,418	25	4,134	19	2,945
Sicilian	67	11,985	71	13,015	108	17,619	108	17,585	70	10,452	69	10,147
Spanish	6	411	7	440	11	858	10	813	12	666	12	666
Swedish	26	4,333	28	6,566	26	5,019	24	5,289	11	1,983	20	3,510
Turkish	1	40	1	40	4	89	3	64	3	66	3	66
Tuscan	3	617	3	423	6	615	5	787	6	648	8	859
Total	798	143,012	826	153,440	890	157,888	842	152,487	901	159,148	932	166,139

Customs' Regulations. — The Custom-house at Trieste has nothing whatever to do with the entry, reporting, &c. of vessels. When a ship arrives, she is reported to the Health Office; which publishes a list of arrivals and departures, with a statement of their cargoes, as they appear in the manifests. Ships are cleared by the same office; the masters being assisted by the consuls of the country to which they belong. As soon as a vessel has performed quarantine, she loads or unloads without any interference or inspection by the customs' officers, or by any one else. Goods unsusceptible of contagion may be landed during quarantine.

Being a free port, the bonding and warehousing system is, of course, unknown at Trieste.

Port Charges. — These are paid at the office of the harbour master on clearing out. They are the same, whatever may be the ship's stay; and are, perhaps, the most moderate of any in Europe.

Port Charges paid by Austrian and Foreign Ships.

Austrian, and foreign privileged ships:	*Fl. kr.*
Anchorage, per ton admeasurement	0 4
Light-house	0 3
Cargo duty, per ton weight of goods	0 3

N.B. — If grain, per 20 staja.

Foreign ships not privileged:	*Fl. kr*
Anchorage, light-house, and cargo as above, per ton admeasurement, and per ton weight of goods	0 10
New tonnage duty, per ton admeasurement	0 16
Abboraggio, payable by ships departing in ballast, or with less than half a cargo	0 9

Comparative Statement of the Port Charges paid at Trieste, respectively, by a Native and privileged Foreign Ship, and a Foreign Ship not privileged, each of 300 Tons Burden, with mixed Cargoes.

Native and privileged	*Fl. kr.*
Anchorage and light, as above, 300 tons, at 7 kreutzers per ton admeasurement	35 0
Cargo duty, 300 tons, at 3 kreutzers	15 0
Total	50 0

or about 4*l.* 18*s.* sterling.

Foreign, not privileged:	*Fl. kr.*
Anchorage, light and cargo duty, as above	50 0
Tonnage duty, 300 tons, at 16 kreutzers	80 0
Total	130 0

or about 12*l.* 10*s.* sterling.

If the ship depart in ballast or with less than ½ a cargo, there is a further charge of 9 kreutzers per ton, or 45 florins; making in all, 175 florins.

Importations and Arrivals of 1833. — The following statement is interesting, as it exhibits the principal articles imported into Trieste from America, the West Indies, and Western Europe, in 1833, specifying the quantities furnished by each country, and the ships by which the same was imported. It shows that Austrian ships are pretty extensively employed in the Transatlantic trade.

Principal Importations and Arrivals during 1833.

Great Britain.—In 42 British, 1 Sardinian, and 1 Austrian vessel: coffee, 2 tons Jamaica, 162 tons Havannah, 88 tons St. Jago, 168 tons Rio, 7 tons Surinam, 5 tons Mocha, 7 tons Cheribon, and 11 tons Triage; sugar, 146 casks refined, 2,256 casks crushed, 400 boxes white Havannah, 185 cases Bahia, 288 cases Pernambuco, 116 tierces white, and 65 cases muscovado Brazil; cocoa, 15 tons; cassia lignea, 155 tons; cinnamon, 3 tons; pepper, 230 tons; pimento, 52 tons; ginger, 59 tons; cochineal, 4 serons; rum, 628 puncheons; indigo, 268 chests and 8 serons; logwood, 30 tons; Nicaragua wood, 21 tons; tin, 3,769 ingots, 423 barrels bars, 1,544 boxes plates; iron, 377 tons; lead, 151 ingots; cotton, 719 bales American; nankeens, 21,900 pieces; manufactures, 5,842 packages; herrings, 1,629 barrels; pilchards 1,000 barrels; hides, 41,784.

United States.—In 21 American and 6 Austrian vessels: coffee, 205 tons Havannah, 111 tons St. Jago, 530 tons Rio, 11 tons Berbice, 76 tons Mocha, 187 tons Porto Rico, 365 tons St. Domingo, and 101 tons Triage; sugar, 47 casks crushed, 300 boxes yellow Havannah, and 497 bags Manilla; cocoa, 2 tons; pepper, 360 tons; pimento, 50 tons; cassia lignea, 27 tons; indigo 134 chests; rum, 261 puncheons; logwood, 955 tons; Nicaragua wood, 147 tons; fustic, 90 tons; nankeens, 4,300 pieces; cotton, 3,911 bales; hides, 29,656.

Brazils.—In 42 British, 4 American, 1 Hamburgh, 3 Danish, 1 French, 1 Neapolitan, 3 Sardinian, 3 Spanish, 1 Swedish, and 11 Austrian vessels—(28 vessels from Rio, 29 Bahia, 10 Pernambuco, 1 Para, and 2 from Santos): coffee, 3,704 tons Rio, 124 tons Bahia; sugar, 2,205 cases, 267 barrels, 1,511 bags white, and 602 cases muscovado Rio; 7,191 cases, 145 barrels white, and 2,087 cases muscovado Bahia; 2,340 cases, 1,806 barrels, 54 bags white, and 127 cases muscovado Pernambuco; and 9,061 bags Santos; cocoa, 116 tons Para; rum, 138 puncheons; cotton, 362 bales Bahia, 50 bales Para; fustic, 45 tons; hides, 39,483.

Cuba.—In 2 British, 6 American, 1 Belgian, and 2 Spanish vessels—(9 vessels from St. Jago, and 2 from Matanzas): coffee, 1,192 tons St. Jago, 231 tons Matanzas; sugar, 172 boxes white, 1,621 boxes yellow Matanzas, 168 boxes white, 819 boxes yellow St. Jago; logwood, 15 tons; fustic, 117 tons.

St. Domingo.—In 1 British vessel: coffee, 158 tons; cotton, 41 bales; logwood, 3 tons.

Sumatra.—In 2 American vessels: pepper, 550 tons.

Marseilles.—In 1 French, 22 Austrian, 4 Neapolitan, 7 Roman, and 4 Sardinian vessels: coffee, 91 tons St. Jago, 242 tons Rio, 4 tons Jamaica, 61 tons Porto Rico, 96 tons St. Domingo, and 5 tons Triage; sugar, 2,218 casks refined, 100 cases white Bahia, cocoa, 3 tons; pepper, 63 tons; pimento, 34 tons; cloves, 263 packages; cinnamon, 1 ton; cassia lignea, 1 ton; cochineal, 21 serons; cotton, 270 bales; logwood, 716 tons; Nicaragua wood, 85 tons; rum, 55 puncheons; nankeens, 4,000 pieces; lead, 9,168 ingots; hides, 9,107.

Bordeaux.—In 4 French and 1 Swedish vessel: coffee, 21 tons Havannah; 216 tons St. Jago; sugar, 50 boxes white Havannah; pepper, 8 tons.

Gibraltar and Malta.—In 6 British, 9 Austrian, and 1 Roman vessel: coffee 4 tons Havannah, 3 tons Porto Rico; sugar, 20 cases white Bahia, 16 cases muscovado Brazil; cocoa, 81 tons; pepper, 23 tons; pimento, 5 tons; rum, 4 puncheons; logwood, 41 tons; cotton, 125 bales; hides, 1,683.

Spain.—In 9 Spanish, 1 Austrian, and 1 Russian vessel: coffee, 18 tons Porto Rico; lead, 8,761 ingots; hides, 500.

Portugal.—In 2 British, 7 Austrian, 1 Danish, and 2 Sardinian vessels: coffee, 91 tons Rio; sugar, 167 cases Bahia, 153 cases Pernambuco, 121 cases Rio, and 201 barrels white, 180 cases muscovado Brazil; cocoa, 220 tons; cotton, 3,303 bales; cassia lignea, 1 ton; hides, 13,397.

Hamburgh.—In 3 Austrian, and 3 Bremen vessels: sugar, 12 casks refined; fish oil, 1,744 barrels; calf skins, 231 bales; zinc, 14,492 bars; herrings, 51 barrels.

Holland.—In 2 Austrian, and 1 Danish vessel: sugar, 113 casks refined, 176 casks crushed; tobacco, 154 bales; cheese, 117 packages; sandal wood, 3,127 pieces; tin, 50 ingots.

Norway.—In 1 British, 4 Hanoverian, 1 Danish, and 1 Dutch vessel: stockfish, 1,303 tons.

Sweden.—In 2 Swedish vessels: tar, 2,314 barrels.

Statement of *Lang, Freeland, & Co.*

Quarantine is strictly enforced at Trieste, and the establishments for facilitating its performance are complete and efficient. The Board of Health at this port is the central or principal one for the Austrian States; and maintains an active correspondence with all the principal ports, both in the Mediterranean and elsewhere. There are 2 lazarettos,—that called St. Teresa, or Lazaretto *Nuovo*, is appropriated to vessels from the Levant and Egypt, which are, for the most part, subjected to the long or full quarantine of 40 days. It is spacious, and properly guarded; having a sufficient number of military and medical officers and assistants; with extensive quays and magazines for housing and airing goods, dwelling houses and apartments for resident officers and passengers, &c. It is, in fact, one of the most perfect establishments of the kind in existence. The other, or old (*Vecchio*) lazaretto, contiguous to the great mole, is appropriated to ships and passengers performing a quarantine of not more than 28 days; and, though inferior to the former, is sufficiently capacious and convenient. The sanitary offices, including that of harbour master, are near the centre of the port; where also are moored vessels under observation for a term not exceeding 8 days. Here also are facilities for communicating *vivâ voce* with persons under quarantine; and spacious warehouses, with adequate guards and other officers. But, notwithstanding these conveniences, if a vessel arrive having an infectious malady on board, she is not allowed to enter either lazaretto at Trieste, but is sent to an island near Venice, fitted out for the purpose, where assistance may be afforded with less risk of propagating infection.

The ordinary Board of Health consists of a president; two assistants, one of whom is a doctor of medicine; and three provisors, two of whom are merchants.

Quarantine Charges payable at the Port of Trieste, by all Ships.

Arrival.	Currency. Fl. kr.	Sterling. s. d.	*Departure.*	Currency. Fl. kr.	Sterling. s. d.
In pratique:			In pratique:		
Entry with or without cargo, ships 100 tons and upwards	1 30	3 0	Bill of health, ships 100 tons & upwards	0 45	1 6
50 to 99	1 0	2 0	50 to 99	0 30	1 0
15—49	0 17	0 6·8	15—49	0 9	0 3·6
In quarantine:			Certificate of goods shipped in pratique	0 17	0 6·8
For the interrogatory of master	1 30	3 0	In quarantine:		
For do. of guardian on admission to pratique	0 34	1 1·6	Patent	1 8	2 3·2
			Pay of the guardian on board during the performance of quarantine, per diem	1 8	2 3·2
			His provisions do.	0 20	0 8

Quarantine Dues payable on Goods.—Non-susceptible goods pay *ad valorem* at the rate of 6 kreutzers per 100 florins or 1 mille. Susceptible goods pay an extra charge, according to tariff, or to circumstances. Besides the above *ad valorem* duty, goods not susceptible pay 4 kreutzers (1¾*d.*) per every 1,000 lbs. weight of Vienna. Grain is subject to an extra charge of about ½ per cent.

Brokers, Commission Merchants, Brokerage, &c.—There are a few exceptions to the freedom generally enjoyed of settling and exercising any trade at Trieste. Brokers, for example, are limited in number, and appointed by the Chamber of Commerce. They are obliged to give security, are under various regulations, and may not themselves trade as principals. They are of 3 classes: 1st, brokers for the sale and purchase of merchandise, who are again subdivided into particular classes, according to the articles they are conversant with, as grain, oil, cotton, drugs, hides and leather, colonial produce, manufactures, &c.; 2d, bill brokers, or exchange agents; and, 3d, ship and insurance brokers. Such authorised brokers are alone allowed to extend contracts, certificates, surveys, or other documents; and they are considered as public functionaries, whose depositions are received as legal evidence.

Any one may be a commission merchant or factor, but he may not issue printed circulars or lists of prices; nor will his books, however regularly kept, be considered as evidence in a court of justice, unless he is *matriculated*, for which the possession of a certain amount of capital is required. This, however, is little more than mere form, and a great deal of business is done by persons acting both as merchants and brokers, without being duly authorised.

The usual rate of a merchant's or factor's commission on the purchase of goods is 2 per cent. On sales, ½ per cent.; *del credere* is sometimes added.

A merchant's commission for collecting freights, and doing other shipping business, is 2 per cent. on the inward cargo; and by custom of the place, the house to which a ship is consigned or recommended by the charterers, is entitled to a commission of 2 per cent. on the outward cargo, whether it has or has not been instrumental in procuring the goods that are laden outwards.

A broker's commission for freighting a ship, or procuring a charter, is 2 per cent. This does not include the charge for writing charter, or for any other services performed in the clearance. In case of general

cargoes, when the broker has to collect goods from different merchants, he charges 3 per cent. commission. A bill broker's commission (courtage) is sometimes 1 per mille, more commonly ½ per mille. Brokerage for the sale or purchase of merchandise varies from ½ per cent. to 1 per cent., according to circumstances, and the nature of the article.

Insurance.—The insurance of ships is carried on to a considerable extent at Trieste. The security is unexceptionable, the terms more moderate than in England, and losses are said to be adjusted promptly and liberally. The oppressive duties on policies of insurance in England have been the cause that most insurances on ships for the Adriatic, that were formerly effected in London, Liverpool, &c., are now effected at Trieste. The insurance of houses is universal; and that of lives is also, of late years, practised to a considerable extent. House insurance is carried on by joint stock companies, of limited responsibility.

Bankruptcy is not of very frequent occurrence at Trieste. The laws with respect to it do not differ much from those in force in most other countries. Frauds are punishable by imprisonment; but here, as elsewhere, they are very difficult to detect. Honest bankrupts are discharged, on making a complete disclosure of their affairs, and a surrender of their assets. Property settled on a wife is not affected by the debts of the husband; a regulation which, it is evident, must lead to fraud.

Communications by Land.—The intercourse between Trieste and Austria, Hungary, &c. is necessarily all carried on by land. The roads leading to Vienna, and to the Hungarian towns, particularly the first, are kept in good repair, and the tolls are moderate; but owing to the rugged nature of the country, the ascent is in some places very considerable. The diligence from Trieste to Vienna, 340 English miles, performs the journey in 72 hours. The draught horses employed on the roads are excellent; but, in some of the mountainous districts, bullocks are used.

Repeated surveys have been made of the country between Vienna and Trieste, in the view of forming a canal. But the difficulties in the way of such a project seem to be all but insuperable. The ground is not only rugged, but the subsoil of the country stretching northwards to a considerable distance from Trieste is so very porous, that, unless precautions were taken to obviate it, the water in the canal would speedily escape. A rail-road has been proposed, and it might, no doubt, be accomplished. But the expense would be so very great, that it is extremely problematical whether it would ever yield any thing like a return. We subjoin a statement of the

Rates of Land Carriage from Trieste to various Places.

From Trieste to	Currency Florins.		Amount in Sterling.			From Trieste to	Currency Florins.		Amount in Sterling.		
	Fl.	*kr.*	*L.*	*s.*	*d.*		*Fl.*	*kr.*	*L.*	*s.*	*d.*
Lubian, per 100 lbs. weight Vienna (= 123½ lbs. avoird.)	0	45	0	1	6	Augsburg, per 100 lbs. wt. Vienna (= 123½ lbs. avoird.)	4	30	0	9	0
Gratz, do.	1	45	0	3	6	Nuremberg, do.	5	30	0	11	0
Vienna, do.	2	45	0	5	6	Munich, do.	4	30	0	9	0
Prague, do.	4	0	0	8	0	Innspruck, do.	3	0	0	6	0
Leipsic, do.	6	45	0	13	6	Lindau, do.	4	45	0	9	6
Dresden, do.	6	15	0	12	6	Zurich, do.	5	0	0	10	0
Berlin, do.	9	15	0	18	6	Milan, per 100 kilogs. francs	10½	0	0	8	5
Breslaw, do.	5	45	0	11	6						

Careening, Stores, &c.—Timber at Trieste is excellent, workmen good, and their wages moderate; so that it is a very favourable place for careening and repairing. Water is very good, but rather scarce; so that, if a large supply be required, due notice must be given. Ships are served in regular rotation. Beef is very good, but rather high priced. Butter and cheese are dear; and fuel is excessively so. On the whole, therefore, Trieste cannot be considered as a favourable place for the provisioning of a ship. Subjoined is an account of the

Average Prices of the principal Articles of Provisions at Trieste in 1831.

Articles.	Prices in Currency.		Prices in Sterling.			Articles.	Prices in Currency.		Prices in Sterling.		
	Fl.	*kr.*	*L.*	*s.*	*d.*		*Fl.*	*kr.*	*L.*	*s.*	*d.*
Beef, fresh, per lb. weight of Vienna (= 1·235 lb. avoirdupois)	0	8½	0	0	3·4	Coffee, per 100 lbs. weight Vienna (= 123½ lbs. avoirdupois)	33	0	3	6	0
Do. salted, per barrel, of about 200 lbs. avoirdupois	30	0	3	0	0	Flour, wheat, do.	7	0	0	14	0
Pork, salted, do.	35	0	3	10	0	Do. maize, do.	4	0	0	8	0
Biscuit, per 100 livres Venetian weight (= 104½ lbs. avoirdupois)	5	0	0	10	0	Oil, per urna, equal to 14·16 gls. Im.	21	0	2	2	0
Bread, per lb. weight of Vienna	0	3½	0	0	1·4	Rice, per 100 lbs. weight of Vienna	11	30	1	3	0
Butter, do.	0	17	0	0	6·8	Potatoes, do.	1	30	0	3	0
Cheese, do.	0	25	0	0	10	Vegetables (assorted), do.	5	0	0	10	0
						Sugar, refined, do.	23	0	2	6	0
						Tea, per lb. weight of Vienna	3	0	0	6	0

Average Prices of Wheat, and other sorts of Grain, at Trieste, during each of the Ten Years ending with 1831, per Imperial Quarter, and in Sterling Money.

Grain.	1822.	1823.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.
	s. *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
Wheat	31 6	27 10	23 2	21 2	25 5	31 7	38 9	34 4	32 0	34 0
Maize	19 4	19 6	17 2	15 6	16 0	18 9	29 5	29 3	26 9	24 5
Rye	22 4	20 11	16 11	15 1	16 7	21 11	28 3	28 1	24 2	28 8
Barley	18 2	17 3	11 6	10 2	14 1	14 11	20 1	21 1	18 3	17 2
Oats	17 5	13 10	9 10	9 7	10 0	13 2	16 2	15 3	15 2	15 1

Banking.—There are no public banks at Trieste. The Bank of Vienna has an office here, but it is merely for the exchange of its notes for cash, or, more frequently, of large notes for small ones. These notes, being guaranteed by government, are legal tender, and in general circulation, but no other company is allowed to issue notes to be used as a circulating medium. There is not, however, any deficiency of currency. Banking business is transacted by private companies, or by individuals, who are subject to certain regulations, and are obliged to lay before competent authority an attested statement of the capital embarked in their concerns. Their business principally consists in procuring bills of exchange from other places for the use of the merchants of Trieste, or in discounting, (in which latter operation they have many private competitors,) at the rate of from 4 to 6 per cent. per annum, according to the nature of the paper offered, and in proportion to the scarcity or abundance of cash.

The principal bankers of Trieste are of undoubted solidity, and do not indulge in dangerous speculations; and notwithstanding the apparent want of great banking establishments, the business of buying and selling, and of making payments and remittances, whether in bills or specie, is transacted at this port with great facility; and there seldom arises any distress, pressure, or stagnation, from want of money or credit.

It is not usual for respectable bankers to give interest on deposits. The partners in joint stock companies, banks, &c. are, in general, responsible only to the extent of their declared capital; and the individuals composing them are only liable each to the extent of their share. The same individual is frequently a general merchant, a partner in a banking house, and a member of an insurance company. All these businesses may at present be said to be prosperous.

Credit. — Goods imported into Trieste are sometimes sold for ready money, a discount being usually understood, and allowed in such case, of 2 or 2½ per cent. But they are commonly sold at 3 months, credit, that is, by bills of that date; occasionally, but rarely, they are sold at 6 months.

Bills thus obtained, though offering no other guarantee than the signature of the drawer or acceptor, may be discounted or insured at a moderate rate by companies who dedicate themselves to this branch of business, and who, from their extensive dealings, are good judges of the risk. This practice has become almost universal; and it not only facilitates sales, but has a tendency to prevent bankruptcies, as it is difficult for a house long to conceal its insolvency; and its credit is, by this mode of trial, soon ascertained.

Tares. — Real tare is allowed on most articles of export; and on all articles of import, except cotton and sugar. The tare on Brazil sugar in chests depends on their length and size, but in general it amounts to from 15 to 18 per cent.; on Brazil sugar in bags the tare is 3 per cent.; on Havannah sugar a tare is allowed of 62 lbs. English per box, being from 13 to 14 per cent.; on Jamaica sugar the tare is 14 per cent. Tare on American cotton, 4 per cent.

The answers to the *Circular Queries* by Mr. Taylor Money, consul general at Milan, are amongst the most valuable that have been received, and reflect the greatest credit on his industry and talent for observation. We have been largely indebted to them.

TRINITY HOUSE. This society was incorporated by Henry VIII., in 1515, for the promotion of commerce and navigation, by licensing and regulating pilots, and ordering and erecting beacons, light-houses, buoys, &c. A similar society, for the like purposes, was afterwards established at Hull; and also another at Newcastle-upon-Tyne, in 1537; which 3 establishments, says Hakluyt, were in imitation of that founded by the Emperor Charles V. at Seville in Spain; who, observing the numerous shipwrecks in the voyages to and from the West Indies, occasioned by the ignorance of seamen, established, at the *Casa de Contratacion*, lectures on navigation, and a pilot-major for the examination of other pilots and mariners; having also directed books to be published on that subject for the use of navigators.

Henry VIII., by his charter, confirmed to the Deptford Trinity House Society all the ancient rights, privileges, &c. of the shipmen and mariners of England, and their several possessions at Deptford, from which it is plain that the Society had existed long previously. The corporation was confirmed, in 1685, in the enjoyment of its privileges and possessions, by letters patent of the 1st of James II. by the name of the Master, Wardens, and Assistants of the Guild or Fraternity of the most glorious and undivided Trinity, and of St. Clement's, in the Parish of Deptford Strond, in the County of Kent. At first, the corporation appears to have consisted of seamen only; but many gentlemen, and some noblemen, are now amongst its members, or elder brethren. It is governed by a master, 4 wardens, 8 assistants, and 31 elder brothers: but the inferior members of the fraternity, named younger brethren, are of an unlimited number; for every master or mate, expert in navigation, may be admitted as such. Besides the power of erecting light-houses, and other sea-marks, on the several coasts of the kingdom, for the security of navigation — (see LIGHT-HOUSES), — the master, wardens, assistants, and elder brethren are invested by charter with the following powers; viz. the examination of the mathematical scholars of Christ's Hospital, and of the masters of his Majesty's ships; the appointment of pilots to conduct ships into and out of the Thames; the amercement of such unlicensed persons as presume to act as masters of ships of war, or pilots, in a pecuniary fine; settling the several rates of pilotage; granting licences to poor seamen, not free of the city, or past going to sea, to row on the river Thames for their support; preventing aliens from serving on board English ships without licence; hearing and determining the complaints of officers and seamen of British ships, subject to an appeal to the Lords of the Admiralty, &c. To this company belongs the Ballast Office, for clearing and deepening the Thames, by taking up a sufficient quantity of ballast for the supply of all ships that sail out of the river, for which they pay certain rates. — (See BALLAST.) The corporation is authorised to receive voluntary subscriptions, benefactions, &c.; and to purchase, in mortmain, lands, tenements, &c. to the amount of 500*l.* per annum. The ancient Hall of the Trinity House at Deptford, where the meetings of the brethren were formerly held, was pulled down in 1787, and an elegant building erected for the purpose in London, near the Tower.

Trinity House Revenues, &c. — The gross revenue under the management of the Trinity House amounts to about 135,000*l.* a year; but the nett revenue is rather under ½ that sum. It arises from the dues payable to the corporation on account of light-houses, buoyage and beaconage, and ballastage; and from the interest of money in the funds, and the rent of freehold property. In 1831, the receipts were as under: —

	L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
Light-houses. — Total sums received on account of light-houses	- - -	79,249 11 11¼	
Deduct commission on collection	6,174 6 9¼	} 47,323 6 4¾	
Charges on account of maintenance, &c.*	41,148 19 7½		
Nett light-house revenue	- -		31,926 5 6½
Buoyage and Beaconage — gross amount of	- -	12,084 16 11½	
Deduct commission on collection	786 6 0½	} 8,283 4 11	
Charges	7,496 18 10½		
Nett buoyage, beaconage, and revenue	- -		3,801 12 0½
Ballastage — gross amount of	30,239 17 9		
Deduct charges	23,741 15 11		
Nett ballastage revenue	- -		6,498 1 10
Rent of Land and houses, dividends on account of funded property, &c., all charges deducted		- -	10,003 2 3
Total nett revenue	- -	-	52,229 1 7¾ †

* This includes a sum of 10,174*l.* laid out on *new* light-houses, and 1,015*l.* of incidental charges.

† See *Parl. Paper*, No. 88. Sess. 1833. For an account of the light-house revenue, see this work, p. 759., for buoyage and beaconage, see p. 190.; and for ballastage, see p. 60.

By far the greater portion of this large sum is laid out on pensions to poor disabled seamen, and on the maintenance of their widows, orphans, &c. We have seen the number of persons so relieved stated at 3,000; and we believe that the fund is both judiciously and economically administered. Still, however, as we have remarked in another article — (*antè*, p. 758.) — it does appear to us, considering the vast importance to a maritime nation like this of keeping the charges on shipping as low as possible, that it would be good policy to provide otherwise for the poor persons now dependent on the Trinity House, and to reduce the charges on account of lights, &c. to the lowest sum that would suffice to maintain the establishment in a proper state of efficiency. No one, certainly, would wish to see the poor seamen deprived of any part of the pittance they now receive; but a larger amount might be given them from other sources, and be, at the same time, less felt by the public. Every one knows that nothing contributes so much to facilitate a commercial intercourse by land as good roads and low tolls; and good lights, buoys, beacons, &c., and light charges, have precisely the same influence at sea.

TRIPANG, or SEA SLUG (*Biche de Mer*), a species of fish of the genus *Holuthuria*, found chiefly on coral reefs in the Eastern seas, and highly esteemed in China, into which it is imported in large quantities. It is an unseemly looking substance, of a dirty brown colour, hard, rigid, scarcely possessing any power of locomotion, or appearance of animation. Sometimes the slug is as much as 2 feet in length, and from 7 to 8 inches in circumference. A span in length, and 2 or 3 inches in girth, is, however, the ordinary size. The quality and value of the fish, however, do not by any means depend upon its size, but upon properties in it neither obvious to, nor discernible by, those who have not been long and extensively engaged in the trade. In shallow water the animal is taken out by the hand, but in deeper water it is sometimes speared. When taken it is gutted, dried in the sun, and smoked over a wood fire; this being the only preparation it receives. The fishery is carried on from the western shores of New Guinea, and the southern shores of Australia, to Ceylon inclusive. Indeed, within the last few years it has been successfully prosecuted on the shores of the Mauritius. The whole produce goes to China. In the market of Macassar, the great staple of this fishery, not less than *thirty* varieties are distinguished, varying in price from 5 Spanish dollars a *picul* (133⅓ lbs.) to 14 times that price, each variety being distinguished by well known names! The quantity of tripang sent annually to China from Macassar is about 7,000 piculs, or 8,333 cwt.; the price usually varying from 8 dollars a picul to 110 and 115, according to quality. — (*Crawfurd's Indian Archipelago*, vol. iii. p. 441.) There is also a considerable export of tripang from Manilla to Canton.

Besides tripang, *fish-maws* and *sharks' fins* are exported to China from every maritime country of India.

TROY WEIGHT, one of the most ancient of the different kinds used in Britain. The pound English Troy contains 12 ounces, or 5,760 grains. It is used in the weighing of gold, silver, and jewels; the compounding of medicines; in experiments in natural philosophy; in comparing different weights with each other; and is now (by 5 Geo. 4. c. 74.) made the standard of weight.

Troy Weight, *Scotch*, was established by James VI. in the year 1618, who enacted that only one weight should be used in Scotland, viz. the French Troy stone of 16 pounds, and 16 ounces to the pound. The pound contains 7,609 grains, and is equal to 17 oz. 6 dr. avoirdupois. The cwt., or 112 lbs. avoirdupois, contains only 103 lbs. 2½ oz. of this weight, though generally reckoned equal to 104 lbs. This weight is very nearly identical with that formerly used at Paris and Amsterdam; and is generally known by the name of Dutch weight. Though prohibited by the articles of Union, it has been used in most parts of Scotland in weighing iron, hemp, flax, and other Dutch and Baltic goods, meal, butcher's meat, lead, &c. — (See Weights and Measures.)

TRUCK SYSTEM, a name given to a practice that has prevailed, particularly in the mining and manufacturing districts, of paying the wages of workmen in goods instead of money. The plan has been, for the masters to establish warehouses or shops; and the workmen in their employment have either got their wages accounted for to them by supplies of goods from such *depôts*, without receiving any money; or they have got the money, with a tacit or express understanding that they were to resort to the warehouses or shops of their masters for such articles as they were furnished with.

Advantages and Disadvantages of the Truck System. — A great deal of contradictory evidence has been given, and very opposite opinions have been held, as to the practical operation and real effect of this system on the workmen. Nor is this to be wondered at, seeing that every thing depends on the mode in which it is administered, and that it may be either highly advantageous or highly injurious to the labourer. If a manufacturer of character establish a shop supplied with the principal articles required for the use of the workmen in his employment, and give them free liberty to resort to it or not as they please, it can, at all events, do them no harm, and will, most likely, render them material service. The manufacturer, having the command of capital, may, in general, lay in his goods to greater advantage than they can be laid in by the greater number of retail tradesmen in moderate-sized towns; and not being dependent on the profits of his shop for support, he is, even though he had no advantage in their purchase, able to sell his goods at a cheaper rate than they can be afforded by the majority of shopkeepers. Sometimes, also, a factory is established in a district where shops either do not exist at all, or are very deficient; and in such cases the master consults the interest and convenience of those dependent on him when he provides a supply of the principal articles required

for their subsistence. It is easy, therefore, to see, that the keeping of shops by masters for the use of their workmen may be very beneficial to the latter. But to insure its being so, it is indispensable that the masters should be above taking an advantage when it is within their reach, and that their conduct towards the workmen should not be in any degree influenced by the circumstance of the latter dealing or not dealing with their shops.

Such disinterestedness is, however, a great deal more than could be rationally expected from the generality of men; and hence, though many instances may be specified in which the truck system was advantageous to the workmen, those of a contrary description were, unfortunately, far more numerous. It is obvious, indeed, that a practice of this sort affords very great facilities for fraudulent dealings. Under the old law, a manufacturer who had a shop, had means, supposing he were inclined to use them, not possessed by any ordinary shopkeeper as respects his customers, for forcing upon his workmen inferior goods at an exorbitant price. They are at first supplied on liberal terms, and are readily accommodated with goods in anticipation of wages, till they get considerably into debt. The pernicious influence of this deceitful system then begins fully to disclose itself. The workmen cease to be free agents; they are compelled to take such goods and at such prices as the master pleases; for, were they to attempt to emancipate themselves from this state of thraldom by leaving their employment, they would be exposed to the risk of prosecution and imprisonment for the debts they had incurred. It is not easy to imagine the extent to which these facilities for defrauding the labouring class were taken advantage of in various districts of the country. In many instances, indeed, the profits made by the shops exceeded those made by the business to which they were contingent; and thousands of workmen, whose wages were nominally 30*s.* a week, did not really receive, owing to the bad quality and high price of the goods supplied to them, more than 20*s.*, and often not so much.

Abolition of the Truck System. — A system of dealing with the labouring classes, so very susceptible of abuse, and which, in point of fact, was very extensively abused, was loudly and justly complained of. A bill was in consequence introduced for its suppression by Mr. Littleton, which, after a great deal of opposition and discussion, was passed into a law — 1 & 2 Will. 4. c. 32. — (*See abstract subjoined.*)

Those who opposed this act did so on two grounds; — 1st, that it was improper to interfere at all in a matter of this sort; and, 2d, that the interference would not be effective. The first of these objections does not appear entitled to any weight. In suppressing the truck system, the legislature did nothing that could in anywise regulate or fetter the fair employment of capital: it interfered merely to put down abuse; to carry, in fact, the contract of wages into full effect, by preventing the workman from being defrauded of a portion of the wages he had stipulated for. The presumption no doubt is, in questions between workmen and their employers, that government had better abstain from all interference, and leave it to the parties to adjust their disputes on the principle of mutual interest and compromised advantage. Still, however, this is merely a presumption; and must not be viewed as an absolute rule. Instances have repeatedly occurred, where the interference of the legislature to prevent or suppress abuse, on occasions of the sort now alluded to, has been imperiously required, and been highly advantageous. Those who claim its interposition are, indeed, bound to show clearly that it is called for to obviate some gross abuse, or that it will materially redound to the public advantage; and this, we think, was done in the completest manner, by the opponents of the truck system. Regard for the interests of the more respectable part of the masters, as well as for those of the workmen, required its abolition; for, while it continued, those who despised taking an advantage of their dependants were less favourably situated than those who did. It is ludicrous, therefore, in a case of this sort, to set up a cuckoo cry about the "freedom of industry." The good incident to the truck system was in practice found to be vastly overbalanced by the abuses that grew out of it; and as these could not, under the existing law of debtor and creditor, be separately destroyed, the legislature did right in attempting to suppress it altogether.

It was said, indeed, that this would be found to be impracticable; that the manufacturers would enter underhand into partnerships with the keepers of shops, and that the system would really be continued, in another and, perhaps, more objectionable form. This anticipation has, we believe, been in some degree realised; but the system has notwithstanding been in many places abandoned, and is nowhere practised to any thing like the extent to which it was carried previously to the passing of Mr. Littleton's act. It will not, however, be completely rooted out, till all small debts, however they originate, be put beyond the pale of the law. We have already vindicated the expediency of this measure on other grounds — (see CREDIT); and the influence it would have in effectually destroying whatever is most pernicious in the truck system, is a weighty additional recommendation in its favour. Were all right of action upon debts for less than 50*l.* or 100*l.* taken away, no master would think of acquiring a control over the free agency of

his workmen, by getting them in debt to him; and no workman would, under such circumstances, submit to be directed in his choice of shops or goods. The case of the Scotch colliers affords a curious illustration of what is now stated. Down to 1775, these persons were really *adscripti glebæ*, or prædial slaves; that is, they and their descendants were bound to perpetual service at the works to which they belonged,—a right to their labour being acquired by any new proprietor to whom the works were sold! The 15 Geo. 3. c. 28. was passed for the emancipation of the colliers from this state of bondage. It, however, failed of practically accomplishing its object; for the masters speedily contrived, by making them advances in anticipation of their wages, to retain them as completely as ever under their control! To obviate this abuse, the 39 Geo. 3. c. 56. was passed; which most properly took from the masters all title to pursue the colliers for loans, unless advanced for the support of the collier and his family during sickness. This act had the desired effect; and the colliers have since been as free as any other class of labourers.—(See my edition of the *Wealth of Nations*, vol. ii. p. 186.) In fact, were small debts put beyond the pale of the law, it would not be necessary to interfere directly with the truck system; for it would not then be possible to pervert it to any very injurious purpose.

The following are the principal clauses in the act 1 & 2 Will. 4. c. 37., entitled, "An Act to prohibit the Payment, in certain Trades, of Wages in Goods, or otherwise than in the Current Coin of the Realm:"—

1. In all contracts hereafter to be made for the hiring of any artificer in any of the trades herein-after enumerated, or for the performance by any artificer of any labour in any of the said trades, the wages of such artificer shall be made payable only in the current coin of this realm, and not otherwise; any contract to the contrary being illegal, null, and void.

2. If such contract contain any stipulations as to the manner in which the wages shall be expended, it is void.

3. Wages must be paid to the workman in coin only. Payment in goods illegal and void.

4. Artificers may recover wages, if not paid in the current coin.

5. In an action brought for wages, no set-off shall be allowed for goods supplied by the employer, or by any shop in which he is interested.

6. No employer shall have any action or suit in equity against his artificer, for goods supplied to him on account of wages, or supplied by any shop in which he has an interest.

7. If the artificer, or his wife or children, become chargeable to the parish, the overseers may recover any wages earned within the 3 preceding months, and not paid in cash.

8. Nothing in this act is to invalidate the payment of wages in bank notes or drafts on any bankers within 15 miles, if artificer consents.

9. Any employer of any artificer in any of the trades herein-after enumerated, who shall, by himself or by the agency of any other person, directly or indirectly enter into any contract, or make any payment hereby declared illegal, shall for the first offence forfeit a sum not exceeding 10*l.* nor less than 5*l.*, and for the second offence any sum not exceeding 20*l.* nor less than 10*l.*, and for a third offence he shall be guilty of a misdemeanour, and be punished by fine only, at the discretion of the court, so that the fines shall not in any case exceed 100*l.*

10. Offences shall be inquired of and fines recovered before 2 justices, and the amount of the fines shall be in the discretion of such justices, or in cases of misdemeanour, of the court before which the offence may be tried; and in case of a second, offence, it shall be sufficient evidence of the previous conviction, if a certificate, signed by the officer having the custody of the record, be produced, stating in a compendious form the general nature of the offence. But a second or third offence shall only be punished as a first or second offence, if committed within 10 days after the prior conviction; and a fourth or any subsequent offence shall be punished as a third offence. But no second or third offence shall be prosecuted after more than 2 years from the commission of the next preceding offence.

11. Justices may compel the attendance of witnesses, on the request of the parties. Penalty for non-attendance without excuse, and after proof of due service of summons at the usual place of abode for such persons, 24 hours at the least before the time appointed for appearance, a commitment to some prison within the jurisdiction of the justices, without bail or mainprize, for not exceeding 14 days, or until such person shall submit to be examined.

Sections from 12. to 18. inclusive, regulate proceedings.

19. Act only to apply to the following trades:—Making, casting, converting, or manufacturing of iron or steel, or any parts, branches, or processes thereof; working any mines of coal, ironstone, limestone, salt rock; or working or getting stone, slate, or clay; or making or preparing salt, bricks, tiles, or quarries; or making or manufacturing any kinds of nails, chains, rivets, anvils, &c., keys, &c., or any other articles or hardwares made of iron or steel, or of iron and steel combined, or of any plated articles of cutlery, or of any goods or wares made of brass, tin, lead, pewter, or other metal, or of any japanned goods or wares whatsoever; or making, spinning, throwing, doubling, winding, weaving, combing, knitting, bleaching, dyeing, printing, or otherwise preparing any kinds of woollen, worsted, yarn, stuff, kersey, linen, fustian, cloth, serge, cotton, leather, fur, hemp, flax, mohair, or silk manufactures whatsoever, or any manufactures whatsoever made of the said last mentioned materials, whether the same be or be not mixed one with another; or making or otherwise preparing, ornamenting, or finishing any glass, porcelain, china, or earthenware whatsoever, or any parts, branches, or processes thereof, or any materials used in any of such last mentioned trades; or making or preparing of bone, thread, silk or cotton lace, or of lace made of any mixed materials.

20. Not to extend to any domestic servant, or servant in husbandry.

21. No one engaged in any of the trades or occupations enumerated, or his father, son, or brother, shall act as a justice.

22. County magistrates to act in cases where those of towns are disqualified as above.

23. Not to prevent any employer from supplying or contracting to supply to any artificer any medicine or medical attendance, or any fuel, or any materials, tools, or implements to be by such artificer employed in his trade or occupation, if such artificers be employed in mining, or any hay, corn, or other provender to be consumed by any horse or other beast of burden employed by any such artificer in his trade and occupation; nor from demising to any artificer employed in any of the trades or occupations enumerated the whole or any part of any tenement at any rent; nor from supplying or contracting to supply to any such artificer any victuals dressed or prepared under the roof of any such employer, and there consumed by such artificer; nor from making or contracting to make any deduction from the wages of any artificer for any such rent, or medicine or medical attendance, or fuel, materials, tools, implements, hay, corn, or provender, or such victuals, or for any money advanced to such artificer for any such purpose; but such deduction shall not exceed the true value of such fuel, materials, tools, implements, hay, corn, and provender, and shall not be in any case made from the wages of such artificer unless the agreement for such deduction shall be in writing and signed by such artificer.

24. Not to prevent any such employer from advancing to any such artificer any money to be by him contributed to any friendly society or bank for savings, or for his relief in sickness, or for the education of any child of such artificer, nor from deducting or contracting to deduct any money from the wages of such artificers for the education of any such child, provided the agreement for such deduction shall be in writing and signed by such artificer.

25. Workmen, labourers, and other persons in any manner engaged in any employment or operation, in or about the several trades and occupations aforesaid, shall be deemed "artificers;" and all masters, bailiffs, foremen, managers, clerks, and other persons engaged in the hiring, employment, or superintendence of the labour of any such artificers shall be deemed to be "employers;" and any money or other thing had or contracted to be paid, or given as a remuneration for any labour done or to be done, whether within a certain time or to a certain amount, or for a time or an amount uncertain, shall be deemed to be the "wages" of such labour; and any agreement, understanding, device, contrivance, collusion, or arrangement whatsoever on the subject of wages, whether written or oral, whether direct or indirect, to which the employer and artificer are parties, or are assenting, or by which they are mutually bound to each other, or whereby either of them shall have endeavoured to impose an obligation on the other of them, shall be deemed a "contract."

TRUFFLES, a sort of vegetable production, like a mushroom, formed under ground. A few have been found in Northamptonshire; they are pretty abundant in Italy, the south of France, and several other countries. They are reckoned a great delicacy. The *pâtés au truffes d'Angoulême* are highly esteemed, and are sent as presents to very distant places.—(*Rees's Cyclopædia.*)

TUNIS, the capital of the regency of the same name, on the northern coast of Africa, the Goletta fort being in lat. 36° 48′ 30″ N., lon. 10° 25′ 45″ E. The bay of Tunis is somewhat in the form of a horseshoe. Its western extremity, Cape Carthage,

is situated about 4 miles N.E. from the Goletta; and its eastern extremity, Cape Zafran, bears from Cape Carthage E. by S., distant about 13 miles. The bay is about 16 miles deep, and has good anchorage all over, in from 10 to 4 fathoms water. It is exposed to the N. and N.E. gales; but they seldom occasion any damage. Tunis lies on the west side of the bay, being separated from it by a large lagoon, having, where deepest, about 7 feet water. The port is at the Goletta, or channel, passing through the narrow belt of land separating the lagoon from the sea; the entrance to it is by a canal, in which there is at all times 15 feet water; and ships may use it on paying a fee of 3 dollars a day. It is not, however, much resorted to; all vessels of considerable burden loading and unloading from their moorings in the bay, by means of lighters. The population of Tunis has been variously estimated; and may probably amount to 100,000, being the most populous of any African city after Cairo. The streets are narrow, unpaved, and filthy. The buildings, though of stone, are mean and poor; and the inhabitants present the picture of poverty and oppression. There is a fort at the Goletta, of considerable strength.

Trade. — Notwithstanding the various drawbacks arising out of the nature of the government, and the ignorance and prejudices of the people, commerce and industry are in a more advanced state in Tunis, than in any other part of Northern Africa, Egypt excepted. Though subject to droughts, the climate is, on the whole, excellent. The soil still preserves that exuberant fertility for which it was famous in antiquity.

Non quicquid Libycis terit
Fervens area messibus. — (*Senec. in Thyest.*)

It seldom receives any other manure than that of sometimes burning the weeds and stubble; and yet, in despite of its slovenly culture, the crops are luxuriant; and there is generally a considerable excess of wheat and barley for exportation. Corn is principally shipped at Biserta, about 50 miles W. of Tunis. Olive oil is one of the principal articles of export. It is of various qualities; some good, and some very indifferent. Susa is said to be the best place for its shipment. Soap of an excellent quality is largely manufactured in the regency. It may be had either soft or in wedges. The soft is made of barilla and pure oil, and is much esteemed. The hard soap is made from the lees of oil, and is reckoned very strong. The principal soap-works are at Susa. Little, however, is prepared on a speculative anticipation of a demand for exportation; but any quantity may be had by contracting for it a few months before the period when it is wanted. A sort of woollen scull-caps are largely exported. They are in extensive demand all over the Levant, and are nowhere made in such perfection as here. Ivory and gold dust, hides, wax, morocco leather, sponge, barilla, coral, dates, ostrich feathers, &c. are among the articles of export.

The imports from Europe consist of woollens, coarse German and Irish linens, cotton stuffs, hardware, sugar, coffee, spices, tin plates, lead, alum, dye stuffs, wine, silk, Spanish wool, &c. There is very little direct trade between Tunis and England; but a good deal is indirectly carried on, through the intervention of Malta and Gibraltar. Marseilles has probably the largest share of the trade with the regency. In 1830, there entered the different ports of Tunis 194 ships, of the burden of 20,747 tons, exclusive of those engaged in the trade with the other African states and Turkey.

Exclusive of the trade by sea, a considerable trade is carried on between Tunis and the interior of Africa, by means of caravans. These import slaves, gold dust, ivory, feathers, drugs, &c. They carry back cotton stuffs, linens, hardware, spices, cochineal, &c.

Naval and military stores imported into Tunis pay no duty. Other articles pay a duty of 3 per cent. *ad valorem* on a rated tariff. Obstructions arising out of monopolies, &c. are occasionally thrown in the way of exportation; and in general it is necessary, before proceeding to ship, to obtain a *tiskery*, or licence to that effect from the bey. That, however, may be, for the most part, procured without much difficulty.

Money. — Accounts are kept in piastres of 16 carobas or 52 aspers. The piastre is worth about 1*s.* 1*d.* sterling. The asper is an imaginary money. The value of foreign coins depends on the state of the exchange.

Weights. — Gold, silver, and pearls are weighed by the ounce of 8 meticals; 16 of these ounces make the Tunis pound = 7,773·5 Eng. grs. The principal commercial weight is the cantaro, containing 100 lbs., or rottoli, being equivalent to 111·05 lbs. avoird., or 50·36 kilog.

Measures. — The principal corn measure is the cafiz, divided into 16 whibas; and the whiba into 12 sahas. One cafiz = 14½ Imperial bushels.

The wine measure is the millerolle of Marseilles = 14·1 Imp. gallons, or 64·33 litres. It is divided into 6½ mitres.

The principal oil measure is the metal or mettar = 5·125 wine gallons, or 19·39 litres; but it is of different dimensions in different parts of the country; and is larger at Susa, whence most of the oil is exported, than at Tunis.

The pic, or principal long measure, is of 3 sorts; viz. the pic woollen measure = 26·5 Eng. inches; the pic silk measure = 24·8 do.; and the pic linen measure = 18·6 do.

For further particulars, see that chapter of *Shaw's Travels in Barbary, &c.* (one of the most learned and excellent works of the kind in the English language), that treats of the kingdom of *Tunis*; *Macgill's Account of Tunis*, passim; *Jackson's Commerce of the Mediterranean*, pp. 55—96.; *Kelly's Cambist, &c.*

Ruins of Carthage. — The famous city of Carthage, one of the greatest emporiums of the ancient world, long the mistress of the sea, and the most formidable enemy of Rome, was situated near the cape which still bears her name, about 10 miles N.E. from Tunis. Such, however, have been the alterations on the coast, that the port of the city, within whose ample expanse whole navies used to ride, is now wholly filled up; antiquaries differ as to its situation; and the sea has in some places receded from 2 to 3 miles from the ruins of the buildings by which it was formerly skirted. The common sewers are still in a very perfect state, as are several cisterns, public reservoirs, and other remains of that sort, with the fragment of a noble aqueduct that supplied the city with water. But besides these, and a very few Punic inscriptions that have been dug up, there is nothing left to attest the ancient grandeur and magnificence of the city, or to identify it with the illustrious people by whom it was founded and occupied till its destruction by Scipio Nasica. There are no temples, no triumphal arches, no granite columns or obelisks covered with Phœnician characters, and no ancient entablatures. These have all fallen a sacrifice to hostile attacks, or to the destroying hand of time.

Nunc passim, vix reliquias, vix nomina servans,
Obruitur, propriis non agnoscenda ruinis.

Such mutilated fragments of buildings as still remain, are evidently the work of a later age; of those who occupied the city between the period when a colony was sent to it by Augustus, and its final subversion by the Saracens in the 7th century.

TURBITH, or TURPETH, the cortical part of the root of a species of *Convolvulus*, brought from different parts of the East Indies. It is a longish root, about the thickness of the finger, resinous, heavy, of a brownish hue without and whitish within. It is imported cloven in the middle, lengthwise, and the heart or woody matter taken out. The best is ponderous, not wrinkled, easy to break, and discovers to the eye a large quantity of resinous matter. At first it makes an impression of sweetness on the taste; but, when chewed for some time, betrays a nauseous acrimony. It is used in medicine, but only to a small extent. — (*Lewis's Mat. Med.*)

Turbith (Mineral), the name given by chemists to the subsulphate of mercury.

TURBOT (*Pleuronectes maximus*), a well known and highly esteemed species of fish. Very considerable quantities of turbot are now taken on various parts of our coasts, from the Orkneys to the Land's End, yet a preference is given in the London markets to those caught by the Dutch. The latter are said to have sometimes drawn as much as 80,000*l.* in a single year, for turbots sold in London.

Fresh turbots, however taken, or in whatever ship imported, may be imported free of duty. — (See Fish.)

TURMERIC, the root of the *Curcuma longa*. It is externally greyish, and internally of a deep lively yellow or saffron colour; very hard; and not unlike, either in figure or size, to ginger. That should be preferred, which is large, new, resinous, difficult to break, and heavy. It is imported from Bengal, Java, China, &c.; but some of a superior quality is said to have been brought from Tobago. Small quantities of it have also been grown in England. It has a somewhat aromatic, and not very agreeable smell; and a bitterish, slightly acrid, and rather warm taste. It used to be in considerable estimation as a medicine; but in Europe it is now used only as a dye. It yields a beautiful bright yellow colour; which, however, is extremely fugitive, and no means have hitherto been discovered of fixing it. It is sometimes employed to heighten the yellows made with weld, and to give an orange tint to scarlet; but the shade imparted by the turmeric soon disappears. The Indians use it to colour and season their food. — (*Lewis's Mat. Med.*; *Bancroft on Colours*, vol. i. p. 276.)

The imports of turmeric from all places eastward of the Cape of Good Hope were, in 1830, 1,867,764 lbs.; in 1831, 1,292,028 lbs.; and in 1832, 1,004,045 lbs.

Its price in bond in the London market, in March, 1834, was — Bengal, per cwt., 15*s.* to 16*s.*; Java, 24*s.* to 25*s.*; China, 25*s.* to 26*s.*

The duty on turmeric is 2*s.* 4*d.* per cwt. on that brought from a British possession, and 10*s.* per cwt. on that from a foreign country. The only effect of this injurious distinction is to force the use of an inferior article.

TURPENTINE (Ger. *Turpentin*; Fr. *Térébenthine*; It. *Trementina*; Rus. *Skipidar*; Pol. *Terpentyna*). There are several species of turpentine, but all of them possess the same general and chemical properties.

1. *Common Turpentine*, is a resinous juice which exudes from the Scotch fir or wild pine (*Pinus sylvestris*). The trees which are most exposed to the sun, and have the thickest barks, yield it in the greatest abundance. They begin to produce it when about 40 years old. The bark of the tree is wounded, and the turpentine flows out in drops, which fall into a hole, or sort of cup, previously dug at the foot of the tree, holding about 1½ pint. It is purified by being exposed to liquefy in the sun's rays, in barrels perforated in the bottom, through which it filters. In the United States, the collection of turpentine is confided chiefly to negroes, each of whom has the charge of from 3,000 to 4,000 trees. The process lasts all the year, although the incisions are not made in the trees till the middle of March, and the flow of the turpentine generally ceases about the end of October. The boxes are emptied 5 or 6 times during the year; and it is estimated that 250 boxes will produce a barrel weighing 320 lbs. Turpentine has a strong, somewhat fragrant odour, and a bitter disagreeable taste; its consistence is greater than that of honey; its colour dirty yellow; and it is more opaque than the other sorts. We import it almost entirely from the United States.

2. *Venice Turpentine*, is the produce of the larch (*Pinus Larix*). It is obtained by boring a hole into the heart of the tree about 2 feet from the ground, and fitting into it a small tube through which the turpentine flows into vessels prepared for its reception. It is purified by straining through cloths, or hair sieves. It is more fluid, having the consistence of new honey, a yellowish colour, and is less unpleasant to the smell and taste, than the common turpentine. Genuine Venetian turpentine is principally obtained from the forests of Baye, in Provence; but much of that to be found in the shops comes from America, and is, perhaps, obtained from a different species of fir.

3. *Canadian Balsam*, or *Turpentine*, is obtained from incisions in the bark of the *Pinus Balsamea*, a native of the coldest regions of North America. It is imported in casks, each containing about 1 cwt. It has a strong, not disagreeable odour, and a

bitterish taste; is transparent, whitish, and has the consistence of copaiva balsam. — (See BALSAM.)

4. *Chian*, or *Cyprus Turpentine*, is obtained from the *Pistacia Terebinthus*, a native of the north of Africa and the south of Europe, and cultivated in Chios and Cyprus. It flows out of incisions made in the bark of the tree in the month of July; and is subsequently strained and purified. It has a fragrant odour, a moderately warm taste, devoid of acrimony or bitterness, and a white or very pale yellow colour; it is about as consistent as thick honey, is clear, transparent, and tenacious. From its comparative high price, Chian turpentine is seldom procured genuine, being for the most part adulterated either with Venetian or common turpentine. The different species of turpentine may be dissolved in rectified spirit, or pure alcohol; and, by distillation, they all give similar oils, which, from their being distilled (and not from any resemblance to alcohol, or spirits properly so called), are vulgarly termed spirits of turpentine. If the distillation be performed with water, the produce is an essential oil, the common spirit of turpentine; and if the distillation be carried on in a *retort*, without water, the product is more volatile and pungent, — a concentrated oil, as it were, — and is called the ethereal spirit of turpentine. The residuum that is left, in both cases, is a brownish resinous mass, brittle, capable of being melted, highly inflammable, insoluble in water, but mixing freely with oils: it is the common rosin of commerce. — (*Lib. of Entert. Knowledge, Vegetable Substances; Thomson's Dispensatory.*)

The entries of turpentine for home consumption in 1831 and 1832 amounted, at an average, to 322,239 cwt. a year. It is almost entirely imported from the United States; so much so, that of 317,895 cwt. imported in 1831, 317,095 were supplied by them: the residue came from France.

TURPENTINE, OIL OF (Ger. *Terpentinöl*; Fr. *Eau de raze, Huile de térébenthine*; It. *Acqua di rasa*; Sp. *Aguarras*), the essential oil drawn from turpentine by distillation. There are two sorts of this oil: the best, red; and the second, white. It is very extensively used by house painters, and in the manufacture of varnish, &c. The distillers have been charged with using it in the preparation of gin. Oil of turpentine is very often adulterated.

TURQUOISE (Ger. *Türkiss*; Fr. *Turquoise*; It. *Turchina*; Sp. *Turquesa*), a precious stone in considerable estimation. Its colour, which is its principal recommendation, is a beautiful celestial blue, which migrates into pale blue, and is sometimes tinged with green. Specific gravity, 3·127. It is destitute of lustre, opaque, and does not admit of a very high polish. It is much worn in necklaces, and in every part of ornamental jewellery, from the size of a pin's head to that of an almond: it contrasts beautifully with brilliants, or pearls, set in fine gold, and appears to most advantage when cut spheroidal. — (*Mawe on Diamonds*, 2d ed. p. 129.)

Real turquoises are exclusively furnished by Persia. The mines whence they are obtained are situated near Nishapore. They are the property of the Crown, and are farmed to the highest bidder. They bring a rent of from 2,000*l.* to 2,700*l.* a year. — (*Fraser's Travels on the Shores of the Caspian*, pp. 343—347.)

TUTENAG, the name given in commercial language to the zinc or spelter of China. — (See ZINC.) This commodity used to be smuggled from China (the exportation of unwrought metals from that empire being prohibited) to Hindostan, the Malay Archipelago, and neighbouring countries, to the amount, it is supposed, of about 50,000 cwt. a year. In 1820, the British free traders introduced German spelter for the first time into the Indian market. In 1826, the importation of tutenag from China into Calcutta ceased; and it has now been totally superseded throughout India by spelter. Of this latter commodity there were exported from Great Britain to all places eastward of the Cape of Good Hope, except China, at an average of the 3 years ending with 1832, 49,946 cwt. a year, besides the quantities furnished by Hamburgh, Rotterdam, Antwerp, and other continental ports.

TYRE, the principal city of Phœnicia, and the most celebrated emporium of the ancient world. This famous city was situated on the S. E. coast of the Mediterranean, where the inconsiderable town of Tsour now stands, in lat. 33° 17′ N., lon. 35° 14′ 35″ E. The trade that is at present carried on at Tsour is too trifling to deserve notice; but as this work is intended to give some account, however imperfect, of the revolutions in the channels of commercial enterprise, we may, perhaps, be excused for submitting a few statements with respect to the commerce carried on by so renowned a people as the Tyrians.

Tyre was founded by a colony from Sidon, the most ancient of the Phœnician cities. The date of this event is not certainly known, but Larcher supposes it to have been 1,690 years before the Christian era. — (*Chronologie d'Hérodote*, cap. ii. p. 131.) It is singular, that while Homer mentions Sidon, he takes no notice of Tyre, whose glory speedily eclipsed that of the mother city; but this is no conclusive proof that the latter was not then a considerable emporium. The prophets Isaiah, Jeremiah, and Ezekiel, who flourished from 700 to 600 years before Christ, represent Tyre as a city of unrivalled wealth, whose "merchants were princes, and her traffickers the honourable of

the earth." Originally, the city was built on the main land: but having been besieged for a lengthened period by the Babylonian monarch Nebuchadnezzar, the inhabitants conveyed themselves and their goods to an island at a little distance, where a new city was founded, which enjoyed an increased degree of celebrity and commercial prosperity. The old city was, on that account, entitled Palætyre, and the other simply Tyre. The new city continued to flourish, extending its colonies and its commerce on all sides, till it was attacked by Alexander the Great. The resistance made by the Tyrians to that conqueror showed that they had not been enervated by luxury, and that their martial virtues were nowise inferior to their commercial skill and enterprise. The overthrow of the Persian empire was effected with less difficulty than the capture of this single city. The victor had not magnanimity to treat the vanquished as their heroic conduct deserved. In despite, however, of the cruelties inflicted on the city, she rose again to considerable eminence. But the foundation of Alexandria, by diverting the commerce that had formerly centered at Tyre into a new channel, gave her an irreparable blow; and she gradually declined till, consistently with the denunciation of the prophet, her palaces have been levelled with the dust, and she has become "a place for the spreading of nets in the midst of the sea."

Commerce, Colonies, &c. of Tyre. — Phœnicia was one of the smallest countries of antiquity. It occupied that part of the Syrian coast which stretches from Aradus (the modern Rouad) on the north, to a little below Tyre on the south, a distance of about 50 leagues. Its breadth was much less considerable, being for the most part bounded by Mount Libanus to the east, and Mount Carmel on the south. The surface of this narrow tract was generally rugged and mountainous; and the soil in the valleys, though moderately fertile, did not afford sufficient supplies of food to feed the population. Libanus and its dependent ridges were, however, covered with timber suitable for ship building; and besides Tyre and Sidon, Phœnicia possessed the ports of Tripoli, Byblos, Berytus, &c. In this situation, occupying a country unable to supply them with sufficient quantities of corn, hemmed in by mountains, and by powerful and warlike neighbours, on the one hand, and having, on the other, the wide expanse of the Mediterranean, studded with islands, and surrounded by fertile countries, to invite the enterprise of her citizens, they were naturally led to engage in maritime and commercial adventures; and became the boldest and most experienced mariners, and the greatest discoverers, of ancient times.

From the remotest antiquity, a considerable trade seems to have been carried on between the Eastern and Western worlds. The spices, drugs, precious stones, and other valuable products of Arabia and India, have always been highly esteemed in Europe, and have exchanged for the gold and silver, the tin, wines, &c. of the latter. At the first dawn of authentic history, we find Phœnicia the principal centre of this commerce. Her inhabitants are designated in the early sacred writings by the name of Canaanites, — a term which, in the language of the East, means merchants. The products of Arabia, India, Persia, &c. were originally conveyed to her by companies of travelling merchants, or caravans; which seem to have been constituted in the same way, and to have performed exactly the same part in the commerce of the East, in the days of Jacob, that they do at present. — (*Gen.* xxxvii. 25. &c.) At a later period, however, in the reigns of David and Solomon, the Phœnicians, having formed an alliance with the Hebrews, acquired the ports of Elath and Eziongeber, at the north-east extremity of the Red Sea. Here they fitted out fleets, which traded with the ports on that sea, and probably with those of Southern Arabia, the west coast of India, and Ethiopia. The ships are said to have visited Ophir; and a great deal of erudition has been expended in attempting to determine the exact situation of that emporium or country. We agree, however, with Heeren, in thinking that it was not the name of any particular place; but that it was a sort of general designation given to the coasts of Arabia, India, and Africa, bordering on the Indian Ocean; somewhat in the same loose way as we now use the terms East and West Indies. — (See the chapter on the *Navigation and Commerce of the Phœnicians*, in the translation of Heeren's work.)

The distance of the Red Sea from Tyre being very considerable, the conveyance of goods from the one to the other by land must have been tedious and expensive. To lessen this inconvenience, the Tyrians, shortly after they got possession of Elath and Eziongeber, seized upon Rhinocolura, the port in the Mediterranean nearest to the Red Sea. The products of Arabia, India, &c., being carried thither by the most compendious route, were then put on board ships, and conveyed by a brief and easy voyage to Tyre. If we except the transit by Egypt, this was the shortest and most direct, and for that reason, no doubt, the cheapest, channel by which the commerce between Southern Asia and Europe could then be conducted. But it is not believed that the Phœnicians possessed any permanent footing on the Red Sea after the death of Solomon. The want of it does not, however, seem to have sensibly affected their trade; and Tyre continued, till the foundation of Alexandria, to be the grand emporium for Eastern products, with

which it is abundantly supplied by caravans from Arabia, the bottom of the Persian Gulf, and from Babylon, by way of Palmyra.

The commerce of the Phœnicians with the countries bordering on the Mediterranean was still more extensive and valuable. At an early period, they established settlements in Cyprus and Rhodes. The former was a very valuable acquisition, from its proximity, the number of its ports, its fertility, and the variety of its vegetable and mineral productions. Having passed successively into Greece, Italy, and Sardinia, they proceeded to explore the southern shores of France and Spain, and the northern shores of Africa. They afterwards adventured upon the Atlantic; and were the first people whose flag was displayed beyond the pillars of Hercules.*

Of the colonies of Tyre, Gades, now Cadiz, was one of the most ancient and important. It is supposed by M. de St. Croix to have originally been distinguished by the name of Tartessus or Tarshish, mentioned in the sacred writings. — (*De l'Etat et du Sort des Anciennes Colonies*, p. 14.) Heeren, on the other hand, contends, as in the case of Ophir, that by Tarshish is to be understood the whole southern part of Spain, which was early occupied and settled by Phœnician colonists. — (See also *Huet, Commerce des Anciens*, cap. 8.) At all events, however, it is certain that Cadiz early became the centre of a commerce that extended all along the coasts of Europe as far as Britain, and perhaps the Baltic. There can be no doubt that by the Cassiterides, or Tin Islands, visited by the Phœnicians, is to be understood the Scilly Islands and Cornwall. — (See Tin.) The navigation of the Phœnicians, probably, also, extended a considerable way along the western coast of Africa; of this, however, no details have reached us.

But, of all the colonies founded by Tyre, Carthage has been by far the most celebrated. It was at first only a simple factory; but was materially increased by the arrival of a large body of colonists, forced by dissensions at home to leave their native land, about 883 years before Christ. — (*St. Croix*, p. 20.) Imbued with the enterprising mercantile spirit of their ancestors, the Carthaginians rose in no very long period to the highest eminence as a naval and commercial state. The settlements founded by the Phœnicians in Africa, Spain, Sicily, &c. gradually fell into their hands; and after the destruction of Tyre by Alexander, Carthage engrossed a large share of the commerce of which it had previously been the centre. The subsequent history of Carthage, and the misfortunes by which she was overwhelmed, are well known. We shall only, therefore, observe, that commerce, instead of being, as some shallow theorists have imagined, the cause of her decline, was the real source of her power and greatness; the means by which she was enabled to wage a lengthened, doubtful, and desperate contest with Rome herself for the empire of the world.

The commerce and navigation of Tyre probably attained their maximum from 650 to 550 years before Christ. At that period the Tyrians were the factors and merchants of the civilised world; and they enjoyed an undisputed pre-eminence in maritime affairs. The prophet Ezekiel (chap. xxvii.) has described in magnificent terms the glory of Tyre; and has enumerated several of the most valuable productions found in her markets, and the countries whence they were brought. The fir trees of Senir (Hermon), the cedars of Lebanon, the oaks of Bashan (the country to the east of Galilee), the ivory of the Indies, the fine linen of Egypt, and the purple and hyacinth of the isles of Elishah (Peloponnesus), are specified among the articles used for her ships. The inhabitants of Sidon, Arvad (Aradus), Gebel (Byblos), served her as mariners and carpenters. Gold, silver, lead, tin, iron, and vessels of brass; slaves, horses, mules, sheep, and goats; pearls, precious stones, and coral; wheat, balm, honey, oil, spices, and gums; wine, wool, and silk; are mentioned as being brought into the port of Tyre by sea, or to its markets by land, from Syria, Arabia, Damascus, Greece, Tarshish, and other places, the exact site of which it is difficult to determine.†

Such, according to the inspired writer, was Tyre, the "Queen of the waters," before she was besieged by Nebuchadnezzar. But, as has been already remarked, the result of that siege did not affect her trade, which was as successfully and advantageously carried on from the new city as from the old. Inasmuch, however, as Carthage soon after began to rival her as a maritime and mercantile state, this may, perhaps, be considered as the era of her greatest celebrity.

It would not be easy to over-rate the beneficial influence of that extensive commerce from which the Phœnicians derived such immense wealth. It inspired the people with whom they traded with new wants and desires, at the same time that it gave them the means of gratifying them. It every where gave fresh life to industry, and a new and powerful stimulus to invention. The rude uncivilised inhabitants of Greece, Spain,

* Mons Calpe and Mons Abyla, the Gibraltar and Ceuta of modern times.

† There is, in Dr. Vincent's *Commerce and Navigation of the Ancients in the Indian Ocean* (vol. ii. pp. 624—652), an elaborate and (like the other parts of that work) prolix commentary on this chapter of Ezekiel, in which most of the names of the things and places mentioned are satisfactorily explained. — (See also *Heeren on the Phœnicians*, cap. iv.)

and Northern Africa acquired some knowledge of the arts and sciences practised by the Phœnicians; and the advantages of which they were found to be productive secured their gradual though slow advancement.

Nor were the Phœnicians celebrated only for their wealth, and the extent of their commerce and navigation. Their fame, and their right to be classed amongst those who have conferred the greatest benefits on mankind, rest on a still more unassailable foundation. Antiquity is unanimous in ascribing to them the invention and practice of all those arts, sciences, and contrivances that facilitate the prosecution of commercial undertakings. They are held to be the inventors of arithmetic, weights and measures, of money, of the art of keeping accounts, and, in short, of every thing that belongs to the business of a counting-house. They were, also, famous for the invention of ship building and navigation; for the discovery of glass — (see GLASS); for their manufactures of fine linen and tapestry; for their skill in architecture, and in the art of working metals and ivory; and still more for the incomparable splendour and beauty of their purple dye. — (See the learned and invaluable work of the President de Goguet, *Sur L'Origine des Loix, &c.* Eng. trans. vol. i. p. 296., and vol. ii. pp. 95—100.; see also the chapter of Heeren on the *Manufactures and Land Commerce of the Phœnicians.*)

But the invention and dissemination of these highly useful arts form but a part of what the people of Europe owe to the Phœnicians. It is not possible to say in what degree the religion of the Greeks was borrowed from theirs; but that it was to a pretty large extent seems abundantly certain. Hercules, under the name of Melcarthus, was the tutelar deity of Tyre; and his expeditions along the shores of the Mediterranean, and to the straits connecting it with the ocean, seem to be merely a poetical representation of the progress of the Phœnician navigators, who introduced arts and civilisation, and established the worship of Hercules, wherever they went. The temple erected in honour of the god at Gades was long regarded with peculiar veneration.

The Greeks were, however, indebted to the Phœnicians, not merely for the rudiments of civilisation, but for the great instrument of its future progress — the gift of letters! No fact in ancient history is better established than that a knowledge of alphabetic writing was first carried to Greece by Phœnician adventurers: and it may be safely affirmed, that this was the greatest boon any people ever received at the hands of another.

Before quitting this subject, we may briefly advert to the statement of Herodotus with respect to the circumnavigation of Africa by Phœnician sailors. The venerable father of history mentions, that a fleet fitted out by Necho king of Egypt, but manned and commanded by Phœnicians, took its departure from a port on the Red Sea, at an epoch which is believed to correspond with the year 604 before the Christian era, and that, keeping always to the right, they doubled the southern promontory of Africa; and returned, after a voyage of 3 years, to Egypt, by the Pillars of Hercules. — (*Herod.* lib. iv. § 42.) Herodotus further mentions, that they related that, in sailing round Africa, they had the sun on their right hand, or to the north, — a circumstance which he frankly acknowledges seemed incredible to him, but which, as every one is now aware, must have been the case if the voyage was actually performed.

Many learned and able writers, and particularly Gosselin (*Recherches sur la Géographie Systématique et Positive des Anciens*, tome i. pp. 204–217.), have treated this account as fabulous. But the objections of Gosselin have been successfully answered in an elaborate note by Larcher (*Hérodote*, tome iii. pp. 458—464. ed. 1802.; and Major Rennell has sufficiently demonstrated the practicability of the voyage (*Geography of Herodotus*, p. 682. &c.). Without entering upon this discussion, we may observe, that not one of those who question the authenticity of the account given by Herodotus, presume to doubt that the Phœnicians braved the boisterous seas on the coasts of Spain, Gaul, and Britain; and that they had, partially at least, explored the Indian Ocean. But the ships and seamen that did this much, might, undoubtedly, under favourable circumstances, double the Cape of Good Hope. The relation of Herodotus has, besides, such an appearance of good faith; and the circumstance which he doubts, of the navigators having the sun on the right, affords so strong a confirmation of its truth; that there really seems no reasonable ground for doubting that the Phœnicians preceded, by 2,000 years, Vasco de Gama in his perilous enterprise.

Present State of Syria. — The principal modern ports on the coast of Syria are Alexandretta, Latakia, Tripoli, Beyrout, Seyde, and Acre. The commerce which they carry on is but inconsiderable. This, however, is not owing to the badness of the ports, the unsuitableness of the country, or to any natural cause, but wholly to long continued oppression and misgovernment. There is a passage in the dedication to Sandys' *Travels*, that describes the modern state of Syria, Asia Minor, Egypt, &c. with a force and eloquence which it is not very likely will soon be surpassed: —

"Those countries, once so glorious and famous for their happy estate, are now, through vice and ingratitude, become the most deplored spectacles of extreme misery; the wild beasts of mankinde having broken in upon them and rooted out all civilitie, and the

pride of a sterne and barbarous tyrant possessing the thrones of ancient and just dominion. Who, ayming onely at the height of greatnesse and sensualitie, hath in tract of time reduced so great and goodly a part of the world, to that lamentable distresse and servitude under which (to the astonishment of the understanding beholders) it now faints and groneth. Those rich lands at this present remain waste and overgrowne with bushes, receptacles of wild beasts, of theeves and murderers; large territories dispeopled or thinly inhabited; goodly cities made desolate; sumptuous buildings become ruines; glorious temples either subverted, or prostituted to impietie; true religion discountenanced and oppressed; all nobilitie extinguished; no light of learning permitted, nor vertue cherished: violence and rapine insulting over all, and leaving no securitie save to an abject mind and unlookt or povertie."

Those who compare this beautiful passage with the authentic statements of Volney — incomparably the best of the modern travellers who have visited the countries referred to — will find that it is as accurate as it is eloquent.

U. V.

VALONIA, a species of acorn, forming a very considerable article of export from the Morea and the Levant. The more substance there is in the husk, or cup of the acorn, the better. It is of a bright drab colour, which it preserves so long as it is kept dry: any dampness injures it; as it then turns black, and loses both its strength and value. It is principally used by tanners, and is always in demand. Though a very bulky article, it is uniformly bought and sold by weight. A ship can only take a small proportion of her registered tonnage of valonia, so that its freight per ton is always high. The price in the London market, in March, 1834, varied from 12*l.* to 15*l.* per ton.

The entries of valonia for home consumption in 1831 and 1832 amounted, at an average, to 146,846 cwt. a year. Of 134,307 cwt. of valonia, imported in 1831, 102,226 were brought from Turkey and Continental Greece, exclusive of the Morea; 17,645 cwt., mostly at second hand, from Italy and the Italian islands; 7,461 cwt. from the Ionian Islands; 3,116 from the Morea and the Greek islands; and 3,859 cwt. from the Philippines.

VALPARAISO, the principal sea-port of Chili, in lat. 33° 1′ 48″ S., lon. 71° 31′ 8″ W. Population uncertain, perhaps 6,000 or 7,000. The water in the bay is deep, and it affords a secure anchorage, except during northerly gales, to the violence of which it is exposed; but as the holding ground is good, and the pull of the anchor against a steep hill, accidents seldom occur to ships properly found in anchors and cables. There is no mole or jetty; but the water close to the shore is so deep, that it is customary for the smaller class of vessels to carry out an anchor to the northward, and to moor the ship with the stern ashore by another cable made fast to the shore. Large ships lie a little further off, and load and unload by means of lighters. The best shelter is in that part called the Fisherman's Bay, lying between the castle and fort St. Antonio, where, close to a clear shingle beach, there is 9 fathoms water. In the very worst weather, a landing may be effected in this part of the bay. — (See *Miers's Travels in Chili and La Plata*, vol. i. p. 440., where there is a plan of Valparaiso.) The harbours of Valdivia and Concepcion are much superior to that of Valparaiso; the former being, indeed, not only the best in Chili, but second to few in any part of the world. But Valparaiso, being near the capital, Santiago, and being the central *dépôt* for the resources of the province, is most frequented. The town is inconveniently situated, at the extremity of a mountainous ridge; most of the houses being built either upon its acclivity or in its breaches. Large quantities of corn and other articles of provision are shipped here for Callao and Panama, but principally for the former. Exclusive of wheat, the principal articles of export are tallow and hides, copper, the precious metals, indigo, wool, sarsaparilla, &c. It appears from the accounts laid beforethe reader in another article — (see *antè*, p. 943.), — that the produce of the gold mines of Chili had materially increased during the 20 years ending with 1829, as compared with the previous 20 years. At present, the average produce of both the gold and silver mines may, we believe, be taken at about 175,000*l.* a year. There is a great want of capital in the country; and the anarchy and insecurity that have prevailed since the commencement of the revolutionary war have been very unfavourable to all sorts of industry. There can, however, be no doubt that Chili has already gained considerably, and that she will every day gain more, by her emancipation from the yoke of Old Spain. The trade we carry on with this distant country already amounts to above 1,000,000*l.* a year; and there can be no doubt that it will become far more extensive. In 1831, the declared or real value of the exports of British produce and manufactures from this country to Chili amounted to 651,617*l.*; of this sum, the exports of cotton goods amounted to about 460,000*l.*, those of woollens to 158,000*l.*,

linen to 19,000*l.* &c. Chili also imports spices, tea, wine, sugar, coffee, tobacco, &c. A small part, however, of the imports are re-exported for Peru.

A country with a scanty population, which imports so extensively, cannot be in the wretched condition that Mr. Miers and other disappointed travellers would have us believe. The candour and good sense of M. de la Perouse are above all question; and every one who compares his remarks on the condition of Chili with what has now been stated, must see that its commerce, at least, has gained prodigiously by the revolution.

"The influence of the government is in constant opposition to that of the climate. The system of prohibition exists at Chili in its fullest extent. This kingdom, of which the productions would, if increased to their maximum, supply all Europe; whose wool would be sufficient for the manufactures of France and England; and whose herds, converted into salt provisions, would produce a vast revenue; — this kingdom, alas! has no commerce. Four or five small vessels bring, every year, from Lima, tobacco, sugar, and some articles of European manufacture, which the miserable inhabitants can obtain only at second or third hand, after they have been charged with heavy customs duties at Cadiz, at Lima, and lastly, at their arrival in Chili; in exchange they give their tallow, hides, some deals, and their wheat, which, however, is at so low a price, that the cultivator has no inducement to extend his tillage. Thus Chili, with all its gold, and articles of exchange, can scarcely procure sugars, tobacco, stuffs, linens, cambrics, and hardware, necessary to the ordinary wants of life." — (*Perouse's Voyage*, vol. i. p. 50. Eng. ed.)

Instead, however, of 4 or 5 small ships from Lima, in 1831, 43 British ships, carrying 8,281 tons, entered Valparaiso only, besides several at the other ports! All sorts of European goods are carried direct to Chili, and are admitted at reasonable duties. The advantages resulting from this extensive intercourse with foreigners, and from the settlement of English adventurers in the country, have been already immense, and will every day become more visible. It was impossible, considering the ignorance of the mass of the people, that the old system of tyranny and superstition could be pulled to pieces without a good deal of violence and mischief; but the foundations of a better order of things have been laid; nor can there be a doubt that Chili is destined to become an opulent and a flourishing country.

Monies, Weights, and Measures of Chili are the same as those of Spain; for which, see CADIZ. The quintal of 4 arrobas, or 100 lbs., = 101·44 lbs. avoirdupois. The fanega, or principal corn measure, contains 3,439 English cubic inches, and is therefore = 1·599 Winch. bushels. Hence 5 fanegas = 1 Winch. quarter very nearly. The vara, or measure of length, = 33·384 Eng. inches.

VAN DIEMEN'S LAND, a large island belonging to Great Britain, forming part of Australia, lying between 41° 20′ and 43° 30′ S. lat., and 144° 40′ and 148° 20′ W. lon. It is supposed to contain about 15,000,000 acres. — (See the *Mercator's Chart* prefixed to this work.)

This land was discovered by the Dutch navigator Tasman, in 1642, and was named in honour of Anthony Van Diemen, at that time governor-general of the Dutch possessions in the East Indies. Previously to 1798, it was supposed to form part of New Holland, but it was then ascertained to be an island. It was taken possession of by the British in 1803; and in 1804, Hobart Town, the capital, was founded.

The surface is generally hilly and mountainous; but, though none of the land be of the first quality, there are several moderately fertile plains, and a good deal of the hilly ground is susceptible of being cultivated. On the whole, however, it is not supposed that more than about a third part of the entire surface of the island can be considered arable; but about a third more may be advantageously used as sheep pasture. As compared with New Holland, it is well watered. The climate, though very variable, is, generally speaking, good, and suitable for European constitutions; and it is not exposed to the tremendous droughts that occasion so much mischief in New South Wales. Wheat is raised in considerable quantities. Wool, however, is at present the staple produce of the colony.

Van Diemen's Land, like New South Wales, was originally intended to serve as a penal colony, and convicts are still sent to it; latterly, however, it has received a very considerable number of free settlers. In 1830, the total population of the island, exclusive of aborigines, amounted to 23,169, of whom about 10,000 were convicts. The disparity between the sexes is not quite so great here as in New South Wales.

The prosperity of the colony was formerly a good deal retarded by the enormities committed by a banditti of runaway convicts, known by the name of bush-rangers; and more recently by the hostilities of the naties. Vigorous measures have, however, been adopted for the suppression of such outrages, by confining the natives within a limited district; and it is to be hoped that they may be effectual.

Hobart Town is situated in the southern part of the island, on the west side of the river Derwent, near its junction with Storm Bay, in lat. 42° 54′ S., lon. 147° 28′ E. The water is deep, and the anchorage good. A jetty has been constructed, accessible to the largest ships. The situation appears to have been very well chosen; and the

town has been judiciously laid out. In December, 1832, the district of Hobart Town contained 10,101 inhabitants, of which were, *free*, males 3,850, females 2,776; *convicts*, males 2,699, females 776. The population of the town itself, at the epoch referred to, was about 9,600. The houses are supposed to be worth, at an average, 50*l.* a year. There are several printing establishments in the town, and no fewer than 9 or 10 newspapers, some of them very well conducted. There is also a Book Society a Mechanics' Institute, and several respectable schools and academies. The Van Diemen's Land Banking Company, the Derwent Bank, and the Commercial Bank, have each offices in Hobart Town. They are joint stock companies.

Launceston, the second town in the island, is situated in the northern part, at the head of the navigable river Tamar, which falls into Port Dalrymple. Its population may amount to about 5,000. It has a considerable trade with Sydney and Hobart Town, and recently it has begun to trade direct to England.

Trade of Van Diemen's Land. — Imports. — Malt liquors, rum, brandy, and wine, form the principal part of the imports into the colony. Next to them are piece goods, hardware, tea, sugar, &c.

Account of the Exports from the United Kingdom to Van Diemen's Land during each of the Five Years ending with 1831.

Articles.	1827.	1828.	1829.	1830.	1831.
British and Irish produce and manufactures, *Declared value.*					
Apparel, slops, and haberdashery - - *L.*	18,068	23,351	13,674	26,119	36,018
Beer and ale - - - - - -	7,655	6,280	6,040	7,253	2,540
Cabinet and upholstery wares - - - -	540	168	315	1,356	462
Cotton manufactures - - - - -	11,107	11,288	4,934	8,365	19,018
Glass and earthenware - - - -	3,591	6,185	3,549	4,872	5,078
Iron, steel, and hardwares - - - -	8,717	12,928	7,378	10,839	16,011
Leather and saddlery - - - -	1,959	3,820	1,986	3,569	2,660
Linens - - - - - -	4,099	2,618	1,246	3,158	3,340
Sheep - - - - - -	336	2,390	108	193	80
Silks - - - - - -	940	1,902	1,956	2,291	5,261
Soap and candles - - - - -	3,070	840	552	899	929
Stationery - - - - - -	3,067	3,165	1,770	1,983	2,547
Woollen goods - - - - -	6,724	5,387	4,248	7,919	8,376
All other articles - - - - -	16,132	20,592	8,225	15,614	17,124
Total - - *L.*	86,006	100,751	55,981	94,430	119,444
Foreign and colonial produce, *Quantities.*					
Sheep - - - - - number	306	695	- -	115	
Spirits, brandy - - - - - proof gals.	12,894	35,352	7,315	1,776	2,273
geneva - - - - - —	3,857	4,420	4,231	1,758	1,679
rum - - - - - —	79,178	77,132	21,441	20,204	58,983
of the British North American colonies - - —	7,865				
Tea - - - - - - lbs.	2,446	3,553	860	2,076	2,036
Wines - - - - - - gallons	53,532	30,458	15,198	16,084	18,118

Exclusive of the imports from the mother country, Van Diemen's Land imports sugar from the Mauritius, wine and fruit from the Cape, tea from China or Singapore, piece goods from India, tobacco from Brazil, and beef, bacon, cheese, horses, &c. from New South Wales. According to the statement in the papers published by the Board of Trade (vol. i. p. 251.) the total value of the imports in 1830, was 255,298*l.*; of which, 153,478*l.* was supplied by Great Britain, 93,251*l.* by British possessions, and 8,569*l.* by foreign states.

Exports. — Wool forms by far the principal article of export, and next to it is wheat, principally sent to Sydney, whale oil, whalebone, timber, mimosa bark, live stock, potatoes, &c. The increase in the exports of wool is quite extraordinary. It is almost wholly brought to England.

Account of the Imports of Wool from Van Diemen's Land into the United Kingdom from 1827 to 1833, both inclusive.

Years.	Lbs.	Years.	Lbs.	Years.	Lbs.	Years.	Lbs.
1827	192,075	1829	925,320	1831	1,359,203	1833	1,547,201 *
1828	528,846	1830	993,979	1832	951,131		

In 1831, the imports of whale oil from Van Diemen's Land amounted to 848 tuns; and during the same year, 39,264 cwt. of bark were imported. The total real value of the articles exported in 1830 was estimated at 170,000*l.*, distributed as follows: —

Articles.	Amount.	Articles.	Amount.
	L.		*L.*
Wool - - - -	48,000	Hides - - - -	600
Wheat - - - -	40,000	Seal skins - - -	400
Oil - - - -	17,000	Opossum and kangaroo ditto - -	400
Whalebone - - -	6,000	Mimosa bark - - -	2,000
Flour - - - -	3,000	Timber - - - -	1,000
Live stock - - -	5,000	Unenumerated goods - -	41,600
Potatoes - - - -	4,500		
Barley and oats - - -	500	Total - - *L.*	170,000

Coins, Weights, and Measures, same as in England. The Spanish dollar circulates at 4*s.* 4*d.*

Shipping, &c. — In 1830, there belonged to the island 26 vessels, of the aggregate burden of 2,151 tons.

* The imports of wool from New South Wales in 1833, were 1,969,508 lbs.; making the total imports from Australia in that year, 3,516,869 lbs.

Arrivals at Hobart Town in 1832.—There arrived during the year, 51 ships, of the burden of 18,214 tons; 25 brigs, of 4,201 tons; and 29 schooners, of 1,948 tons: making in all, 105 vessels, of the burden of 24,363 tons. Of these, were from England 41, New South Wales 35, India and China 3, Swan River 3, New Zealand 6, fishery 2, Mauritius 5, Launceston 10, and Desolation Island 1.

Revenue, &c. — The customs duties collected in the colony amount to about 50,000*l.* a year, and the whole ordinary revenue is about 70,000*l.*; to which has to be added, the revenue derived from the sale of land, and other sources. Government contributes about 120,000*l.* a year in aid of the colonial revenue, to defray the expenses of the convict establishments, &c.

For the regulations as to the granting of land in Van Diemen's Land, &c., see SYDNEY.

Immigrants.—Of these there arrived at Van Diemen's Land, during 1832, men 926, women 769, children 416; in all, 2,131.

Prices of Provisions at Hobart Town, December, 1832.

	s. d.		s. d.
Beef, per lb.	0 9	to	0 10
Mutton, do.	0 5½	—	0 6
Veal, do.	0 8	—	0 9
Pork, do.	0 8	—	0 9
Geese	9 0	—	10 0
Turkey	12 0	—	14 0
Bread, the quartern loaf			0 8

The average prices during the year 1832 were—

	s. d.		s. d.
Stall-fed beef, per lb.	0 8	to	0 11
Mutton, do.	0 4½	—	0 7½
Pork, do.	0 8	—	0 9
Veal, do.	0 9	—	0 10

Hay, from 4*l.* to 9*l.* 9*s.* per ton.

By comparing these prices with those of Sydney (*ante*, p. 1194.), the greater cheapness of the principal necessaries of life at the latter is obvious; house rent is also higher at Hobart Town. But it would appear that wages are rather higher in Van Diemen's Land than in New South Wales. Drunkenness is the great vice of the free, as well as of the convict population; and it is this, and not the facility of acquiring land, that renders it so difficult to procure good servants in Australia. Lieutenant Breton says, that the free women sent to the colony by government have proved no great acquisition, except by increasing the population; but we hardly think that this can be the case.

Encouragement to Emigrants.—Government has recently come to a resolution to advance, by way of loan, a sum not exceeding 20*l.* each, to a given number of young and married agricultural labourers, intending to emigrate to Australia with their wives and families. The following are the conditions as to this advance:—

Conditions under which Government will make advances to Emigrants to New South Wales and Van Diemen's Land.—No advance will be made except to young and married agricultural labourers, who intend taking their wives and families with them; and a strict inquiry will be instituted into their character and habits of industry, before the assistance they solicit will be granted to them.

No 1 family will be allowed an advance exceeding 20*l.*; and it will be useless therefore for parties, who may not possess the remainder of the sum requisite for defraying the expense of their passage, to apply for assistance.

Every person desirous of receiving the proposed advance must fill up, and send back to the Under Secretary of State for the Colonial Department, the Return hereto annexed. (Copies of this Return may be had from any of the agents for emigration mentioned below.) If the information contained in this Return, and the answers to the inquiries which may be addressed to the parties who certify the correctness of the return, shall be considered satisfactory, the applicant will receive notice to that effect. He may then proceed to make his agreement with the owners or masters of ships proceeding to New South Wales or Van Diemen's Land; and as soon as any ship owner or master shall notify (in a form which will be provided for that purpose) that the emigrant has taken the other necessary steps for engaging his passage, an order will be granted for the payment, in the colony, of 20*l.* to the agent or master of the vessel in which this emigrant may arrive. The emigrant will of course be able to obtain a corresponding deduction from the amount to be paid by himself in this country.

The order for payment will be intrusted to the master of the vessel in which the emigrant is to proceed, and will consist of a sealed despatch to the governor, containing the name and description of the party on whose account the money is to be paid, and enclosing a promissory note, which he will be required to sign in acknowledgment of his debt;—which note must be witnessed by the captain and chief mate of the vessel. But arrangements will be made, by which the payment of this order will not take place in the colony, until the captain shall have produced the parties, on whose account it is to be made, before the officer appointed for that purpose; and they shall have entered into a fresh obligation for the repayment of the advance made to them. For it is the intention of his Majesty's government, and cannot be too clearly understood by all persons who may accept this loan, that repayment of the debt (in such proportions, and at such intervals, as may not be unsuitable to the circumstances of each emigrant) shall be strictly enforced, by means of the ample powers which the laws of the colony render available for that purpose.

Government agents for emigration have been appointed at Liverpool, Bristol, Dublin, Cork, Limerick, Belfast, and Greenock; who have been instructed to afford gratuitous information to all persons applying to them, as to the best means of carrying their schemes of emigration into effect. Parties, therefore, who may reside in the neighbourhood of these agents, are requested to apply to them either personally (or if by letter, post paid) for information on this subject.

All applications for the assistance of government must be made by letter only, addressed to R. W. Hay, Esq., Under Secretary of State, London; and should the number of applications be greater than the funds at their disposal will enable them to comply with, priority of date will form the rule of selection among applications in which there shall appear no other ground of distinction.

Downing Street, 6th April, 1834.

CUSTOM-HOUSE REGULATIONS, RATES OF PILOTAGE, HARBOUR DUES, ETC.

Custom house Regulations.

(Hours for public business from 10 to 3 daily, excepting on Saturday, from 10 to 12.)

	L.	s.	d.
Entry of a British vessel, not colonial, with merchandise	1	10	0
Entry of any foreign vessel	3	0	0
Permission to trade	1	1	0
Dues on each bond	0	10	6
Dues on port clearance and fee	0	7	6

Transports are free from port charges.

Colonial Vessels.—Entry, and clearance to the outports	0	4	0
Fee on ditto	0	2	0
Entry and clearance to the fishery or to the out settlement	0	10	0
Fee on ditto	0	2	0
Clearance of an open boat	0	1	0
Annual licence for a boat	0	2	6
Duties.—On brandy, per gallon	0	10	0
On Hollands or geneva, per gallon	0	10	0
On rum, per gallon, the produce of the West Indian colonies	0	7	6
On British gin, per gallon	0	7	6
On tobacco, per lb.	0	1	6

The duty on all spirits, either British or foreign, is increased in proportion to strength, if over proof, according to Sykes's hydrometer.

On all merchandise of foreign produce or manufacture, an *ad valorem* duty of 5 per cent. on importation, agreeably to the act of 4 Geo. 4. c. 96., with the exception of wine, which is subjected to a duty of 15 per cent. Goods of British manufacture are not subjected to any duty.

	L.	s.	d.
Wharfage.—On landing each cask, bale, or package	0	0	9
On landing iron, per ton	0	9	0
On landing salt, per ton	0	3	0
On landing timber, per 1,000 feet	0	2	0
On shipping each cask, bale, or package	0	0	3
On shipping iron, per ton	0	3	0
On shipping salt, per ton	0	1	0

Colonial produce, when landed or shipped, is not subjected to any charge, except for a sufferance.

	L.	s.	d.
Fees.—A sufferance to land or ship goods	0	1	0
A warrant to remove goods from under bond	0	1	0
On landing each cask or package of spirits or wine	0	0	6
On the registry of vessels not exceeding 40 tons	2	0	0
On the registry of vessels above 40 tons, per ton	0	1	0
To the chief clerk, on the registry of vessels	0	10	0
On indorsing change of master	0	10	0

Warehouse Rent and Charges.—A government order published the 7th of February, 1826, fixes the following rents on spirits and tobacco, in the king's bonded stores, viz.—

1st. All spirituous liquors, 1*s.* 3*d.* per tun of 252 gallons, for every week, or any period less than a week, during which the same shall be deposited.

2dly. Tobacco, 6*d.* per ton for every week, or any period less than a week, during which the same shall be deposited.

3dly. The amount of all such warehouse rent, in respect of any cask or package required to be delivered, must be paid before the same can be so delivered.

4thly. No allowance whatsoever will at any time be made, in respect of, nor will the government be answerable for, any loss by fire, leakage, robbery, or casualty of any kind.

Government Order, 28th of February, 1829.—Representations having been made to the lieutenant governor, of the incon-

venience and delay attending the stowing and unstowing of goods in the bonded warehouses, a gang of men has been appointed to be employed under the storekeeper for this purpose exclusively, and the following scale of charges will be required to be paid:—

For Spirits. — Per pipe, ½ pipe, or puncheon, each, stowing 9*d.*, unstowing 1*s.* 6*d.*

Per ¼ pipe, hogshead, or barrel, stowing 6*d.*, unstowing 2*s.*

Per case containing 3 or more dozen bottles, stowing 3*d.*, unstowing 4*d.*

Per case containing a less quantity than 3 dozen, stowing 2*d.*, unstowing 3*d.*

For Tobacco. — In large serons, each, stowing 6*d.*, unstowing 9*d.*

In cases, each, stowing 3*d.*, unstowing 4*d.*

In kegs, each, stowing 2*d.*, unstowing 3*d.*

In baskets, rolls, or small serons, stowing 1*d.*, unstowing 1*d.*

In consequence of this arrangement, it is to be understood that no labourers are to be admitted into, or employed at, the bonded warehouse, except the storekeeper's gang.

Goods intended to be warehoused under bond must be landed before 12 o'clock.

Hours of attendance at the Custom-house quay, from 8 o'clock till 4 from the 1st of September to the 30th of April, and from 9 till 4 from the 1st of May till the 31st of August.

The appointed days for opening the bonding warehouse for the delivery of goods, are, Mondays and Thursdays in every week, at 1 o'clock, on which days the duties must be paid prior to 12 o'clock. Tobacco is issued on the same days, from 10 to 12 o'clock.

Rates of Pilotage at the Derwent.

Draught of water.	Into. L.	s.	d.	Out. L.	s.	d.
10 feet and under	3	0	11½	2	7	4⅝
11 ditto	3	3	4½	2	9	3½
12 ditto	3	8	3	2	13	1½
13 ditto	3	15	6¾	9	18	9½
14 ditto	4	5	3½	2	6	4
15 ditto	4	19	11¼	3	17	8½
16 ditto	5	17	0	4	11	0
17 ditto	7	1	4½	5	9	11
18 ditto	8	13	0¾	6	14	7½
19 ditto	10	14	6	8	6	10
20 ditto	13	3	3	10	4	9

At Port Dalrymple.

Proceeding above Whirlpool Reach.	L.	s.	d.	Remaining below Whirlpool Reach. L.	s.	d.
7 feet and under	2	5	6	1	10	4
Above 7 feet, per foot	0	6	6	0	4	4

If the pilot does not board the vessel outside the middle ground at the Heads at George Town, or, the weather not permitting his going outside, if he be not ready to show the channel by keeping his boat in the fair way until the ship can be boarded, he shall forfeit ½ the pilotage inwards.

For every number of inches below 6, no charge is to be made; for ½ a foot and upwards, 1 foot is to be charged.

Colonial vessels are exempted from the payment of pilotage, unless the master shall make the signal for a pilot and accept his service.

Harbour Dues at the Derwent.

	L.	s.	d.
For mooring and unmooring a vessel within the harbour, per register ton	0	0	1
For each removal of the ship within the harbour, per register ton	0	0	1

Colonial vessels under 80 tons per register, to be exempted from the payment of the foregoing dues, unless the services of the harbour master be specifically required.

At Port Dalrymple.

	L.	s.	d.
For each removal of a ship or vessel from anchorage or moorings, to other anchorage or moorings, under 200 tons	0	15	0
200 tons and under 300	1	0	0
300 tons and under 400	1	10	0
400 tons and under 500	2	0	0
500 tons and upwards	2	10	0

Each vessel entering the harbour will be charged with 2 removes.

Vessels belonging to the port are not to pay harbour dues.

No vessels to be deemed colonial that are not registered in Van Diemen's Land.

These details have been principally derived from *An Account of Van Diemen's Land*, published at Hobart Town in 1833; and partly from Lieut. Breton's book, and different *Parliamentary Papers.*

VANILLA, the fruit of the *Epidendrum Vanilla*, a species of vine extensively cultivated in Mexico. It has a trailing stem, not unlike the common ivy, but not so woody, which attaches itself to any tree that grows near it. The Indians propagate it by planting cuttings at the foot of trees selected for that purpose. It rises to the height of 18 or 20 feet; the flowers are of a greenish yellow colour, mixed with white; the fruit is about 8 or 10 inches long, of a yellow colour when gathered, but dark brown or black when imported into Europe; it is wrinkled on the outside, and full of a vast number of seeds like grains of sand, having, when properly prepared, a peculiar and delicious fragrance. It is principally used for mixing with and perfuming chocolate; and is, on that account, largely imported into Spain; but as chocolate, owing to oppressive duties, is little used in England, vanilla is not much known in this country.

Vanilla is principally gathered in the intendancy of Vera Cruz, in Mexico, at Misantla, Colipa, Vacuatla, and other places. It is collected by the Indians, who sell it to the whites (*gente de razon*), who prepare it for market. They spread it to dry in the sun for some hours, then wrap it in woollen cloths to sweat. Like pepper, it changes its colour in this operation — becoming almost black. It is finally dried by exposing it to the sun for a day. There are four varieties of vanilla, all differing in price and excellence; viz. the *vanilla fina*, the *zacate*, the *rezacate*, and the *vasura*. The best comes from the forests surrounding the village of Zentila, in the intendancy of Oaxaca. According to Humboldt, the mean exportation of vanilla from Vera Cruz may amount to from 900 to 1,000 millares, worth at Vera Cruz from 30,000 to 40,000 dollars. — Vanilla is also imported from Brazil, but it is very inferior. The finest Mexican vanilla is extremely high priced. All sorts are subjected in this country to a duty of 5*s.* per lb. — (See *Humboldt, Nouvelle Espagne*, 2d edit. tome iii. pp. 37. 46.; *Poinsett's Notes on Mexico*, p. 194. &c.)

VELLUM, a species of fine parchment. — (See PARCHMENT.)

VENICE, a famous city of Austrian Italy, formerly the capital of the republic of that name, situated on a cluster of small islands towards the northern extremity of the Adriatic, in lat. 45° 25′ 53″ N., lon. 12° 20′ 31″ E. Population about 100,000. The commerce of Venice, once the most extensive of any European city, is now comparatively trifling; and the population is gradually diminishing both in numbers and wealth. Her imports consist of wheat, and other sorts of grain, from the adjoining provinces of Lombardy and the Black Sea; olive oil, principally from the Ionian Islands; cotton stuffs and hardware from England; sugar, coffee, and other colonial products from England, the United States, Brazil, &c.; dried fish, dye stuffs, &c. The exports principally consist of grain, raw and wrought silk, paper, woollen manufactures, fruits, cheese, &c., the products of the adjoining provinces of Italy, and of her own industry; but her manufactures, so famous in the middle ages, are now much decayed.

Port. — The islands on which Venice is built lie within a line of long, low, narrow islands, running N. and S., and enclosing what is termed the lagoon, or shallows, that surround the city, and separate it from the main land. The principal entrance from the sea to the lagoon is at Malamocco, about 1½ league S. from the city; but there are other, though less frequented, entrances, both to the S. and the N. of this one. There is a bar outside Malamocco, on which there are not more than 10 feet at high water at spring tides; but there is a channel between the western point of the bar and the village of San Pietro, which has 16 feet water at springs, and 14 at neaps. Merchant vessels usually moor off the ducal palace; but sometimes they come into the grand canal which intersects the city, and sometimes they moor in the wider channel of the Giudecca. Vessels coming from the south for the most part make Pirano or Rovigno on the coast of Istria, where they take on board pilots, who carry them to the bar opposite to Malamocco. But the employment of Istrian pilots is quite optional with the master, and is not, as is sometimes represented, a compulsory regulation. When one is taken, the usual fee from Pirano or Rovigno to the bar is 20 Austrian dollars, or about 4*l.* On arriving at the bar, ships are conducted across it and into port by pilots, whose duty it is to meet them outside, or on the bar, and of whose services they must avail themselves. — (For the charges on account of pilotage, see *post.*)

Money. — Formerly there were various methods of accounting here; but now accounts are kept, as at Genoa, in lire Italiane, divided into centesimi, or 100th parts. The lira is supposed to be of the same weight, fineness, and, consequently, value as the franc. But the coins *actually in circulation*, denominated lire, are respectively equal in sterling value to about 5*d.* and 4½*d.* The latter are coined by the Austrian government.

Weights and Measures. — The commercial weights are here, as at Genoa, of two sorts; the *peso sottile* and the *peso grosso.* The French kilogramme, called the libbra Italiana, is also sometimes introduced.

100 lbs. peso grosso = 105·186 lbs. avoirdupois.	100 lbs. peso sottile = 66·428 lbs. avoirdupois.
— 127·830 lbs. Troy.	— 80·728 lbs. Troy.
— 47·698 kilogrammes.	— 30·123 kilogrammes.
— 98·485 lbs. of Hamburgh.	— 62·196 lbs. of Hamburgh.
— 96·569 lbs. of Amsterdam.	— 60·986 lbs. of Amsterdam.

The moggio, or measure for corn, is divided into 4 staje, 16 quarte, or 64 quartaroli. The staja = 2·27 Winch. bushels.

The measure for wine, anfora = 4 bigonzi, or 8 mastelli, or 48 secchii, or 192 bozze, or 768 quartuzzi. It contains 137 English wine gallons.

The botta = 5 bigonzi. Oil is sold by weight or measure. The botta contains 2 migliaje, or 80 miri of 25 lbs. peso grosso. The miro = 4·028 English wine gallons.

The braccio, or long measure, for woollens = 26·6 English inches; the braccio for silks = 24·8 do. The foot of Venice = 13·68 English inches. — (*Nelkenbrecher*, and *Dr. Kelly.*)

Historical Notice. — Venice was the earliest, and for a lengthened period the most considerable, commercial city of modern Europe. Her origin dates from the invasion of Italy by Attila in 452. A number of the inhabitants of Aquileia, and the neighbouring territory, flying from the ravages of the barbarians, found a poor but secure asylum in the cluster of small islands opposite to the mouth of the Brenta, near the head of the Adriatic Gulf. In this situation they were forced to cultivate commerce and its subsidiary arts, as the only means by which they could maintain themselves. At a very early period they began to trade with Constantinople and the Levant; and notwithstanding the competition of the Genoese and Pisans, they continued to engross the principal trade in Eastern products, till the discovery of a route to India by the Cape of Good Hope turned this traffic into a totally new channel. The crusades contributed to increase the wealth, and to extend the commerce and the possessions of Venice. Towards the middle of the 15th century, when the Turkish sultan, Mahomet II., entered Constantinople sword in hand, and placed himself on the throne of Constantine and Justinian, the power of the Venetians had attained its maximum. At that period, besides several extensive, populous, and well cultivated provinces in Lombardy, the republic was mistress of Crete and Cyprus, of the greater part of the Morea, and most of the isles in the Egean Sea. She had secured a chain of forts and factories that extended along the coasts of Greece from the Morea to Dalmatia; while she monopolised almost the whole foreign trade of Egypt. The preservation of this monopoly, of the absolute dominion she had early usurped over the Adriatic, and of the dependence of her colonies and distant establishments, were amongst the principal objects of the Venetian government; and the measures it adopted in that view were at once skilfully devised, and prosecuted with inflexible constancy. With the single exception of Rome, Venice, in the 15th century, was by far the richest and most magnificent of European cities; and her singular situation in the midst of the sea, on which she seems to float, contributed to impress those who visited her with still higher notions of her wealth and grandeur. Sannazarius is not the only one who has preferred Venice to the ancient capital of the world; but none have so beautifully expressed their preference.

Viderat Adriacis Venetam Neptunus in undis,
  Stare urbem, et toto ponere jura mari.
Nunc mihi Tarpeïas quantumvis, Jupiter, arces
  Objice, et illa tua mœnia Martis, ait:
Si Tiberim pelago præfers, urbem aspice utramque,
  Illam homines dicas, hanc posuisse Deos.

Though justly regarded as one of the principal bulwarks of Christendom against the Turks, Venice had to contend, in the early part of the 16th century, against a combination of the European powers. The famous league of Cambray, of which Pope Julius II. was the real author, was formed for the avowed purpose of effecting the entire subjugation of the Venetians, and the partition of their territories. The emperor and

the kings of France and Spain joined this powerful confederacy. But, owing less to the valour of the Venetians, than to dissensions amongst their enemies, the league was speedily dissolved without materially weakening the power of the republic. From that period the policy of Venice was comparatively pacific and cautious. But notwithstanding her efforts to keep on good terms with the Turks, the latter invaded Cyprus in 1570; and conquered it after a gallant resistance, continued for 11 years. The Venetians had the principal share in the decisive victory gained over the Turks at Lepanto in 1571: but owing to the discordant views of the confederates, it was not properly followed up, and could not prevent the fall of Cyprus.

The war with the Turks in Candia commenced in 1645, and continued till 1670. The Venetians exerted all their energies in defence of this valuable island; and its acquisition cost the Turks above 200,000 men. The loss of Candia, and the rapid decline of the commerce of the republic, now almost wholly turned into other channels, reduced Venice, at the close of the 17th century, to a state of great exhaustion. She may be said, indeed, to have owed the last 100 years of her existence more to the forbearance and jealousies of others than to any strength of her own. Nothing, however, could avert that fate she had seen overwhelm so many once powerful states. In 1797, the "maiden city" submitted to the yoke of the conqueror: and the last surviving witness of antiquity — the link that united the ancient to the modern world — stripped of independence, of commerce, and of wealth, is now slowly sinking into the waves whence she arose.

The foundation of Venice is described by Gibbon, c. 35.; and in his 60th chapter he has eloquently depicted her prosperity in the year 1200. Mr. Hallam, in his work on the *Middle Ages* (vol. i. pp. 470—487.), has given a brief account of the changes of the Venetian government. Her history occupies a considerable space in the voluminous work of M. Sismondi on the *Italian Republics;* but his details as to her trade and commercial policy are singularly meagre and uninteresting. All previous histories of Venice have, however, been thrown into the shade by the admirable work of M. Daru (*Histoire de la République de Vénise*, 2d ed. 8 vols. 8vo. Paris, 1821.) Having had access to genuine sources of information, inaccessible to all his predecessors, M. Daru's work is as superior to theirs in accuracy, as it is in most other qualities required in a history.

Trade, Navigation, and Manufactures of the Venetians in the 15th Century. — The Venetian ships of the largest class were denominated galeasses, and were fitted up for the double purpose of war and commerce. Some of them carried 50 pieces of cannon, and crews of 600 men. These vessels were sometimes, also, called argosers or argosies. They had early an intercourse with England; and argosies used to be common in our ports. In 1325, Edward II. entered into a commercial treaty with Venice, in which full liberty is given to them, for 10 years, to sell their merchandise in England, and to return home in safety, without being made answerable, as was the practice in those days, for the crimes or debts of other strangers. — (*Anderson's Chron. Deduction, Anno* 1325.) Sir William Monson mentions, that the last argosie that sailed from Venice for England was lost, with a rich cargo and many passengers, on the coast of the Isle of Wight, in 1587.

In the beginning of the 15th century, the annual value of the goods exported from Venice by sea, exclusive of those exported to the states adjoining her provinces in Lombardy, was estimated, by contemporary writers, at 10,000,000 ducats; the profits of the out and home voyage, including freight, being estimated at 4,000,000 ducats. At the period in question, the Venetian shipping consisted of 3,000 vessels of from 100 to 200 tons burden, carrying 17,000 sailors; 300 ships with 8,000 sailors; and 45 galleys of various size, kept afloat by the republic for the protection of her trade, &c., having 11,000 men on board. In the dock-yard, 16,000 labourers were usually employed.* The trade to Syria and Egypt seems to have been conducted principally by ready money; for 500,000 ducats are said to have been annually exported to these countries; 100,000 were sent to England. — (*Daru*, tome ii. p. 189. &c.) The vessels of Venice visited every port of the Mediterranean, and every coast of Europe; and her maritime commerce was, probably, not much inferior to that of all the rest of Christendom. So late as 1518, 5 Venetian galeasses arrived at Antwerp, laden with spices, drugs, silks, &c. for the fair at that city.

The Venetians did not, however, confine themselves to the supply of Europe with the commodities of the East, and to the extension and improvement of navigation. They attempted new arts, and prosecuted them with vigour and success, at a period when they were entirely unknown in other European countries. The glass manufacture of Venice was the first, and for a long time the most celebrated, of any in Europe; and her manufactures of silk, cloth of gold, leather, refined sugar, &c. were deservedly esteemed. The jealousy of the government, and their intolerance of any thing like free discussion, was unfavourable to the production of great literary works. Every scholar is, however, aware of the fame which Venice early acquired by the perfection to which

* This is the statement of the native authorities; but there can be no doubt that it is much exaggerated; — 1,600 would be a more reasonable number.

she carried the art of printing. The classics that issued from the Aldine presses are still universally and justly admired for their beauty and correctness. The Bank of Venice was established in the 12th century. It continued throughout a bank of deposit merely, and was skilfully conducted.

But the policy of government, though favourable to the introduction and establishment of manufactures, was fatal to their progressive advancement. The importation of foreign manufactured commodities into the territories of the republic for domestic consumption was forbidden under the severest penalties. The processes to be followed in the manufacture of most articles were regulated by law. — "*Dès l'année* 1172, *un tribunal avoit été crée pour la police des arts et métiers, la qualité et la quantité des matières furent soigneusement déterminées.*" — (*Daru*, tome iii. p. 153.) Having, in this way, little to fear from foreign competition, and being tied down to a system of routine, there was nothing left to stimulate invention and discovery; and during the last century the manufactures of Venice were chiefly remarkable as evincing the extraordinary perfection to which they had early arrived, and the absence of all recent improvements. An unexceptionable judge, M. Berthollet, employed by the French government to report on the state of the arts of Venice, observed, "*Que l'industrie des Vénitiens, comme celle des Chinois, avoit été précoce, mais étoit restée stationnaire.*" — (*Daru*, tome iii. p. 161.)

M. Daru has given the following extract from an article in the statutes of the State Inquisition, which strikingly displays the real character of the Venetian government, and their jealousy of foreigners: — "If any workman or artisan carry his art to a foreign country, to the prejudice of the republic, he shall be ordered to return; if he do not obey, his nearest relations shall be imprisoned, that his regard for them may induce him to come back. If he return, the past shall be forgiven, and employment shall be provided for him at Venice. If, in despite of the imprisonment of his relations, he persevere in his absence, an *emissary shall be employed to despatch him;* and after his death his relations shall be set at liberty!" — (Tom. iii. p. 150.)

The 19th book of M. Daru's history contains a comprehensive and well-digested account of the commerce, manufactures, and navigation of Venice. But it was not possible, in a work on the general history of the republic, to enter so fully into the details as to these subjects as their importance would have justified. The *Storia Civile e Politica del Commercio de' Venezioni*, di Carlo Antonio Marin, in 8 vols. 8vo, published at Venice at different periods, from 1798 to 1808, is unworthy of the title. It contains, indeed, a great many curious statements; but it is exceedingly prolix; and while the most unimportant and trivial subjects are frequently discussed at extreme length, many of great interest are either entirely omitted, or are treated in a very brief and unsatisfactory manner. The commercial history of Venice remains to be written; and were it executed by a person of competent attainments, it would be a most valuable acquisition.

Present Trade of Venice. — From the period when Venice came into the possession of Austria, down to 1830, it seems to have been the policy of the government to encourage Trieste in preference to Venice; and the circumstance of the former being a free port, gave her a very decided advantage over the latter. Latterly, however, a more equitable policy has prevailed. In 1830, Venice was made a free port; and has since fully participated in every privilege conferred on Trieste. But, notwithstanding this circumstance, the latter still continues to preserve the ascendancy; and the revival of trade that has taken place at Venice has not been so great as might have been anticipated. The truth is, that except in so far as she is the *entrepôt* of the adjoining provinces of Lombardy, Venice has no considerable natural advantage as a trading city; and her extraordinary prosperity during the middle ages is more to be ascribed to the comparative security enjoyed by the inhabitants, and to their success in engrossing the principal share of the commerce of the Levant, than to any other circumstance. Still, however, the trade is far from inconsiderable. But, unfortunately, there are no means by which to ascertain its precise amount. The statements subjoined are to be regarded merely as rough approximations; they have, however, been obtained from the best sources, and come as near the mark as it is perhaps possible to attain. By far the largest part of the exports from Venice are made through Trieste by coasting vessels, that are every day passing between the two cities. The smuggling of prohibited and overtaxed articles into Austrian Lombardy is also practised to a great extent. It is believed that fully 2-3ds of the coffee made use of in Lombardy is clandestinely introduced; and sugar, British cottons, and hardware, with a variety of other articles, are supplied through illegitimate channels. The facilities for smuggling, owing to the nature of the frontier, and the ease with which the officers are corrupted, are such, that the articles passing through the hands of the fair trader affords no test of the real extent of the business done. It is to be hoped that the Austrian government will take an enlightened view of this important matter. It cannot but be anxious for the suppression of smuggling; and it may be assured that this is not practicable otherwise than by a reduction of the duties. The regulations as to the payment of the duties on goods destined for the interior, the clearing of ships, &c., are the same at Venice as Trieste; which see.

Shipping. — There belonged to Venice in 1832—

Vessels.	No.	Tonnage.	Men.
In foreign trade - - - - -	104	21,841	1,114
coasting do. - - - - -	107	8,208	646
	211	30,049	1,760

Fishing boats are not of a size to be rated as vessels of tonnage; but Mr. Money thinks that not less than 16,000 of the population subsist by fishing near the port and over the lagoon. The tonnage of Venice has not recently been either on the increase or the decline. Its inconsiderable amount, compared with what it once was, is a striking proof of the decline of this famous emporium.

Arrivals of Ships in the Port of Venice during the Years 1829, 1830, and 1831.

Under what Flag.	1829.		1830.		1831.	
	Number of Vessels.	Tonnage.	Number of Vessels.	Tonnage.	Number of Vessels.	Tonnage.
British	10	1,537	26	3,520	25	3,098
Hanoverian	1	108	2	320	1	80
Ionian	1	44				
Austrian	103	23,273	157	29,101	170	35,829
French	1	99	4	369	1	87
Dutch	1	318	5	1,009	2	458
Swedish	5	978	8	1,049	7	1,125
Danish	-	-	3	367	3	440
Neapolitan	45	12,565	30	7,630	28	6,609
Papal	1	62	5	409	5	559
Sardinian	2	396	5	625	3	488
Greek	4	122	4	320	7	434
Tuscan	-	-	1	51		
Russian	-	-	4	615	2	461
Turkish	-	-	-	-	1	200

A steam-packet has been established between Venice and Trieste; but it is of indifferent construction, and has not succeeded so well as might have been expected.

Shipping Charges in the Port of Venice on Ships of different Nations, of the Burden of 300 Tons.

Description of Charge.	If Austrian, or of a Nation having a Treaty of Reciprocity with Austria.		If of a Nation *not* having a Treaty of Reciprocity with Austria.	
	Austrian Livres.	*L. s. d.*	*Austrian Livres.*	*L. s. d.*
Pilotage.				
From the bar to the place of finally mooring	61 57	2 1 0½	61 57	2 1 0½
Out of the port of departure	61 57	2 1 0½	61 57	2 1 0½
Tonnage Duty.				
One Austrian livre (8*d.* sterling) per ton (Originally levied on all ships not Austrian.)	Free.	- -	300 0	10 0 0
Clearing Charges.				
If to a port out of the Gulf of Venice (but if to a port in the Gulf, 1*s.* 3½*d.* less in all cases)	2 30	0 1 6½	16 78	0 11 2½
Quarantine Charges.				
If performing 7 days, being the usual time for vessels from England	39 27	1 6 2	53 38	1 15 7
Total of ordinary charges	164 71	5 9 9½	493 20	16 8 10½
If in long quarantine, all ships pay extra	25 74	0 17 2	25 74	0 17 2
If departing in ballast, or with less than ⅓ a cargo, all ships, not Austrian, or not under treaty to be charged as such, pay extra tonnage duty, 45 cents (about 3½*d.* sterling) per ton, being, on a 300 ton ship	Free.	- -	135 0	4 10 0
Total of extreme charges	190 45	6 6 11½	653 94	21 16 0½

Imports. — A Statement of the Quantity and Value in British Sterling Money, Weights, &c. of the different Articles furnished by each of the subjoined Places, and imported into Venice, during the Years 1829, 1830, and 1831.

Places.	Articles.	1829.			1830.			1831.		
		English Weight or Meas.	Quantity.	Value in Sterling.	English Weight or Measure.	Quantity.	Value in Sterling.	English Weight or Meas.	Quantity.	Value in Sterling.
				L.			*L.*			*L.*
England	Coffee	-	-	-	cwt.	385	751	cwt.	511	996
	Cotton wool	-	-	-	—	380	1,132	—	512	1,526
	Dye woods	-	-	-	-	-	-	value	-	642
	Fish, herrings, pilchards	tons	9,500	13,684	barrels	11,200	13,131	barrels	2,767	3,756
					—	3,267	9,801	—	5,562	16,686
	Indigo	-	-	-	lbs.	18,400	2,776	lbs.	7,600	1,212
	Iron	-	-	-	tons	49	220	tons	1,627	8,135
	Manuf. cotton	-	-	-	sup. value	-	50,000	sup. val.	-	50,000
	Sugar	-	-	-	tons	713	17,403	tons	1,205	30,483
	Tinned plates	-	-	-	value	-	1,100	value	-	854
Ionian Islands	Olive oil	tons	4,219	121,202	tons	5,524	207,683	tons	5,928	238,080
Norway	Pitch and tar	—	6,322	4,200						
	Stockfish	—	2,151	35,733	tons	173	2,607	tons	172	2,583
France (Marseilles)	Coffee	-	-	-	cwt.	889	1,731	cwt.	286	558
	Cinnamon	-	-	-	-	-	-	lbs.	3,100	108
	Pepper	-	-	-	-	-	-	cwt.	196	293
Portugal (Lisbon)	Coffee	-	-	-	cwt.	930	1,813	—	1,120	2,184
	Sugar	-	-	-	—	1,110	1,404	—	11,950	15,117
Amer. (Bahia & Rio)	Do.	-	-	-	—	10,635	12,188	—	34,164	43,218
Alexandria	Coffee	-	-	-	—	55	107	—	65	127
	Cotton wool	value	-	1,500	—	1,010	3,010	—	1,240	3,695
	Linseed, &c.	-	-	-	quarters	4,600	8,300			
Ancona	Indian corn	-	-	-	—	4,988	3,741	quarters	6,968	5,226
Naples	Do.	quarters	10,000	7,500	—	20,370	15,277	—	9,809	6,682
Sicily	Linseed	-	-	-	-	-	-	—	3,590	6,820
Puglia	Olive oil	tons	2,109	65,489	tons	2,762	79,841	tons	2,964	70,510
Odessa	Wheat	-	-	-	quarters	8,786	9,315	quarters	6,843	11,976
Trieste	Coffee	*	-	-	cwt.	21,088	41,010	cwt.	31,586	53,981
	Cotton wool	-	-	-	—	10,256	30,563			
	Grain, wheat	-	-	-	quarters	10,959	12,800	quarters	10,228	17,900
	maize	-	-	-	—	969	652	—	2,064	1,548
	linseed, &c.	-	-	-	—	1,113	5,960	—	1,603	3,078
	Indigo	-	-	-	lbs.	21,700	7,170	lbs.	14,500	4,219
	Iron	-	-	-	tons	1,824	9,120	value	-	100
	Manufact. silk	-	-	-	sup. value	-	80,000	sup. val.	-	75,000
	wool	-	-	-	—	-	23,000	—	-	18,000
	cotton	-	-	-	—	-	90,000	—	-	80,000
	Stockfish	-	-	-	tons	55	838	tons	433	6,506
	Sugar	-	-	-	—	1,831	46,272	—	2,102	53,181

* With the above exceptions, Trieste may be said to have wholly supplied Venice in the year 1829.

EXPORTS. — An approximate Statement of the Quantities and Value in British Weights, Money, &c. of the principal Articles exported from the Venetian Provinces, during the Years 1829, 1830, and 1831.

Articles.	1829.			1830.			1831.		
	English Weight.	Quantity.	Value Pounds Sterling.	English Weight.	Quantity.	Value Pounds Sterling.	English Weight.	Quantity.	Value Pounds Sterling.
Books	value	- -	7,272	value	- -	3,667	value	- -	5,352
Brick and stone	cwt.	10,442	578	cwt.	87,763	4,862	cwt.	135,418	7,502
Cattle (for Venice)	value	- -	10,637	value	- -	7,142	value	- -	11,182
Cream of tartar	cwt.	376	1,706	cwt.	91	278	cwt.	4	15
Cotton manufactures	—	135	5,039	—	176	6,581	—	477	17,769
Grain: wheat	—	126,334	58,482	—	55,088	25,434	—	52,414	24,260
maize	—	14,297	6,435	—	36,219	16,310	—	33,587	15,128
rice	—	35,158	30,625	—	24,561	22,681	—	25,274	25,339
seeds	—	327	302	—	386	429	—	361	402
Hemp, raw	—	797	1,106	—	706	1,104	—	1,859	2,576
ropes, &c.	—	2,626	4,850	—	412	759	—	258	476
cloth, &c.	—	536	4,955	—	1,713	15,860	—	2,090	19,327
Iron bars and plates	—	1,839	1,863	—	2,960	2,827	—	1,947	1,979
beaten (steel)	—	904	2,007	—	1,245	2,861	—	1,118	3,031
manufactures	—	1,526	3,898	—	2,179	6,177	—	208	390
Oil of low quality	—	301	2,797	—	79	696	—	87	799
Silk, raw	—	122	8,662	—	128	8,417	—	231	14,991
sewing	—	947	91,085	—	940	85,462	—	404	40,067
spun	—	283	20,987	—	131	9,785	—	314	25,078
manufactures	- -	- -	- -	—	41	6,828	—	90	15,017
Salted fish	cwt.	7,435	5,506	—	1,312	998	—	2,171	1,604
Timber, &c.	value	- -	46,253	value	- -	11,432	value	- -	9,129
Wax, manufactured	cwt.	955	7,761	cwt.	190	1,443			
Woollen, manufactured	—	1,321	54,863	—	763	27,999	cwt.	1,004	29,799
Venice treacle	—	121	1,812	—	37	586			
Paper	—	19,291	71,146	—	24,585	90,826	cwt.	21,950	81,282

Banking Establishments. — The old bank of Venice was founded so far back as 1171, being the most ancient establishment of the kind in Europe. It was a bank of deposit; and such was the estimation in which it was held, that its paper continued to bear an agio as compared with coin down to 1797, when the bank fell with the government by which it had been guaranteed. At present there are no corporate banking establishments in the city; and no bank notes are in circulation. There are, however, several private banking houses, which buy, sell, and discount bills; and make advances on land and other securities. They are under no legal regulations of any sort, except formally declaring the amount of their capital to the authorities when they commence business. The legal and usual rate of interest and discount is 6 per cent. It is not the practice to allow interest on deposits. Bills on London are usually drawn at 3 months, and on Trieste at 1 month.

Brokers, Commission, &c. — The number of brokers is limited, and they are licensed by government; but the business of commission merchant and factor is open to every one. Before, however, commencing any trade or profession at Venice, a petition must be presented for leave to the authorities: but this is more a matter of form than any thing else; its prayer being rarely, if ever, refused.

The usual rate of commission and factorage on the purchase or sale of colonial produce is 2 per cent., and on manufactured goods 3 per cent., inclusive of broker's commission, 1 per cent. A ship broker's commission on the freight of a whole cargo is 2 per cent., and on a general cargo 4 per cent. By the custom of the place, merchants charge 2 per cent. on the inward, and 2 per cent. on the outward, freight of all ships consigned to them; and this, though they had done no more than recommend the master to a broker! A bill broker's commission is ½ per mille. Merchants and bankers charge a commission on internal bills of ¼ per cent., and on foreign do. of 1 per cent.

Insurances are effected by companies and individuals. The government charges no duty on the policies.

Communications with Lombardy are effected by flat-bottomed vessels, which, passing through the lagoon, enter the canals and rivers, and make their way through most part of the country watered by the Po and its tributaries. The freight of goods from Milan to Venice, distant about 170 miles, is about 1*l.* per ton. The principal products they bring down are grain, silk, hemp, and flax, cheese, rhubarb, &c. The country to the north of Venice affords large quantities of deals, which are shipped for Malta, Sicily, and the Levant.

Quarantine is enforced here the same as at Trieste. Ships coming from without the Straits of Gibraltar, provided there be no infectious disease on board, are admitted to *pratique* on performing a short quarantine of 7 days in a part of the lagoon, about a mile from the city. Long quarantine is performed a little farther off. The lazaretto, and establishments for passengers, &c. performing quarantine, are among the best in Europe. Ships having foul bills, or coming from suspicious places, are sent thither from Trieste. — (For the quarantine charges, see *antè*.)

Provisions, Ships' Stores, &c. — These articles may all be had at Venice of excellent quality, but not cheap, with, perhaps, the exception of bread. Water is conveyed to the city by lighters, and is, consequently, pretty dear; fuel is very scarce, and very high priced. We subjoin an account of the

Average Prices in Sterling Money, per Imperial Quarter, of the several Sorts of Grain at Venice for the Ten Years ending with 1831.

Years.	Wheat.	Maize.	Oats.	Rye.	Years.	Wheat.	Maize.	Oats.	Rye.
	L. s. d.	*L. s. d.*	*L. s. d.*	*L. s. d.*		*L. s. d.*	*L. s. d.*	*L. s. d.*	*L. s. d.*
1822	1 8 8	1 0 2	0 14 4	1 1 0	1827	1 19 10	1 2 0	0 14 9	1 3 11
1823	1 6 3	1 0 8	1 0 4	1 0 4	1828	1 19 3	1 14 1	0 17 6	1 5 3
1824	1 2 10	0 17 10	0 11 7	0 17 7	1829	1 19 5	1 7 3	0 17 1	1 8 10
1825	1 0 5	0 16 9	0 11 0	0 14 10	1830	1 13 0	1 10 6	0 16 0	1 6 5
1826	1 7 3	0 15 9	0 9 9	0 17 5	1831	1 17 4	1 6 10	0 16 4	1 12 4

Tares. — On goods leaving the free port of Venice for the interior of the Austrian states, the Custom-house allows no tares; but cases, casks, and other coverings go into the scale with their contents, and the duty is levied on the gross weight. Wine, spirits, &c. consumed in this city, being liable to an excise duty to cover the municipal expenses, have an allowance, if in iron-bound casks, of 18 per cent. on the weight; and if not in iron-bound casks, of 12 per cent. The tares allowed between merchants are as follow: —

Cotton wool, Pernambuco and Bahia	2 per cent.
East India, &c.	4 —
Sugar, Brazil	15 to 18 per cent.
Jamaica, muscovado	14 —
Bourbon, brown and yellow, and East India of all colours	5 —
refined, crushed	12 —
Brimstone	10 —
Italian hemp	2 —
Madder root	4 —
Hungary potash	10 —

On other articles, real tares are usually taken.

These details with respect to the present trade of Venice have been mostly derived from the well-digested and very valuable answers returned by the consul-general, Mr. Money, to the *Circular Queries*.

VERA CRUZ, the principal sea-port on the western coast of Mexico; lat. 19° 11′ 52″ N., lon. 96° 8′ 45″ W. Population (supposed) 16,000. Opposite the town, at the distance of about 400 fathoms, is a small island, on which is built the strong castle of St. Juan d'Ulloa, which commands the town. The harbour lies between the town and the castle, and is exceedingly insecure; the anchorage being so very bad, that no vessel is considered safe unless made fast to rings fixed for the purpose in the castle wall: nor is this always a sufficient protection from the fury of the northerly winds (*los nortes*), which sometimes blow with tremendous violence. Humboldt mentions, in proof of what is now stated, that a ship of the line, moored by 9 cables to the castle, tore, during a tempest, the brass rings from the wall, and was dashed to pieces on the opposite shore. — (*Nouvelle Espagne*, ed. 2de, tome iv. p. 59.) Its extreme unhealthiness is, however, a more serious drawback upon Vera Cruz, than the badness of its port. It is said to be the original seat of the yellow fever. The city is well built, and the streets clean; but it is surrounded by sand hills and ponds of stagnant water, which, within the tropics, are quite enough to generate disease. The inhabitants, and those accustomed to the climate, are not subject to this formidable disorder; but all strangers, even those from Havannah and the West India islands, are liable to the infection. No precautions can prevent its attack; and many have died at Xalapa, on the road to Mexico, who merely passed through this pestilential spot. During the period that the foreign trade of Mexico was carried on exclusively by the *flota*, which sailed periodically from Cadiz, Vera Cruz was celebrated for its fair, held at the arrival of the ships. It was then crowded with dealers from Mexico, and most parts of Spanish America; but the abolition of the system of regular fleets in 1778 proved fatal to this fair, as well as to the still more celebrated fair of Portobello.

A light-house has been erected on the N.W. angle of the castle of St. Juan. The light, which is a revolving one of great power and brilliancy, is elevated 79 feet above the level of the sea.

The distance in a direct line from Mexico to Vera Cruz is about 70 leagues; but by the road it is about 93. Mexico being situated on a *plateau* elevated about 8,000 feet above the level of the sea, and the country being in many places very rugged, the road originally was so bad as to be hardly practicable, even for mules. During the last 30 years, immense sums have been laid out on its improvement; and a considerable part of it has been completed in the best, and, indeed, most splendid manner; but in many places it is still rough and unfinished, and does not admit of carriages being used. M. Humboldt seems to think, that were this road completed, wheat and flour brought from the table land of Mexico might be shipped at Vera Cruz, and sold in the West Indies cheaper than the wheat and flour of the United States. But we agree with Mr. Poinsett in regarding any such expectation as quite chimerical. Though the advantage on the side of Mexico in respect of superior fertility of soil and cheapness of labour were decidedly greater than it really is, it would not balance the enormous expense of 300 miles of land carriage upon such bulky and heavy articles, more especially as the wagons would, in most cases, have to return empty. It is plain, however, that the advantage of getting the produce of the mines, and the peculiar productions of the country, as cochineal, indigo, sugar, vanilla, tobacco, &c., conveyed with comparative facility to market, and of receiving back European goods at a proportionally less expense, will more than indemnify all the outlay that may be required to perfect the road, and will be of the very greatest importance to the republic; but it is quite out of the question to imagine that Vera Cruz is ever destined to become a rival of New Orleans in the exportation of corn and flour.

For a considerable period after the town of Vera Cruz had thrown off the Spanish yoke, the castle of St. Juan d'Ulloa continued in possession of the Spaniards. During this interval, the commerce of Vera Cruz was almost entirely transferred to the port of Alvarado, 12 leagues to the south-east. Alvarado is built upon the left bank of a river of the same name. The bar at the mouth of the river, about 1½ mile below the town, renders it inaccessible for vessels drawing above 10 or 12 feet water. Large ships are obliged to anchor in the roads, where they are exposed to all the violence of the north winds, loading and unloading by means of lighters. Alvarado is supposed, but probably without much foundation, to be a little healthier than Vera Cruz. The trade has now mostly reverted to its old channel.

But within these few years, Tampico has risen to considerable importance as a commercial sea-port. It is situated about 60 leagues N. N.W. of Vera Cruz, in lat. 22° 15′ 30″ N., lon. 97° 52′ W., being about 104 leagues from Mexico. Hitherto it is said to have been free from fever. The shifting of the bar at the mouth of the river, and the shallowness of the water on it, which is sometimes under 8, and rarely above 15 feet, are serious obstacles to the growth of the port. Vessels coming in sight are boarded by pilots, who conduct them, provided they do not draw too much water, over the bar. Those that cannot enter the port load and unload by means of lighters;

mooring so that they may get readily to sea in the event of a gale coming on from the north.

Exports and Imports. — The precious metals have always formed the principal article of export from Mexico. During the 10 years ending with 1801, the average annual produce of the Mexican mines amounted, according to M. Humboldt, to 23,000,000 dollars — (*Nouvelle Espagne*, tome iv. p. 137.); and in 1805, the produce was 27,165,888 dollars. — (*Id.* tome iv. p. 83.) But during the revolutionary war, the old Spanish capitalists, to whom most of the mines belonged, being proscribed, emigrated with all the property they could scrape together: and this withdrawal of capital from the mines, added to the injury several of them sustained by the destruction of their works during the contest, the interruption of all regular pursuits which it occasioned, and the insecurity and anarchy that afterwards prevailed, caused an extraordinary falling off in the produce of the mines. Within these few years, however, a considerable improvement has taken place. The efforts, and the lavish expenditure, of a few of the companies formed in this country for working the mines, have been so far successful, that some of them have been got again into good order, and that a large increase of produce may be fairly anticipated, provided they are permitted to prosecute their operations without molestation. But, as we have elsewhere stated (see *antè*, p. 803.), some of the parties who sold or leased the mines, began to put forward claims never heard of before, the moment they perceived that there was a reasonable prospect of the companies succeeding; and in some instances they have not scrupled to enforce their claims by violence! It is to be hoped that the Mexican government will exert itself to repress these outrages. If it have power to put down, and yet wink at or tolerate such disgraceful proceedings, it will make itself responsible for the consequences; and will merit chastisement as well as contempt.

The total quantity of gold and silver coined in the different Mexican mints during the 4 years ending with 1829, was —

In 1826	8,608,278 dollars.	In 1828	9,982,905 dollars.
1827	10,619,217 —	1829	11,787,133 —

(*Parl. Paper*, No. 338. Sess. 1833.)

Besides the precious metals, cochineal, sugar, flour, indigo, provisions, leather, sarsaparilla, vanilla, jalap, soap, logwood, and pimento, are the principal articles exported from Vera Cruz.

The imports consist principally of linen, cotton, woollen, and silk goods, paper, brandy, cacao, quicksilver, iron, steel, wine, wax, &c.

According to the statement published by the Mexican government, the value of the imports and exports at Vera Cruz and Alvarado, in 1824, was as follows: —

	Dollars.
Imports from other Mexican ports	284,087
from American ports	4,360,568
from European and other foreign ports	7,437,375
Total	12,082,030
Exports for other Mexican ports	202,042
for American ports	3,022,422
for European and other ports	1,468,093
Total	4,592,557

This account is exclusive of the imports by government on account of the loan negotiated in London.

According to Humboldt, the imports at Vera Cruz, before the revolutionary struggles, might be estimated, at an average, at about 15,000,000 dollars, and the exports at about 22,000,000 ditto.

It must, however, be observed that this statement refers only to the *registered* articles, or to those that paid the duties on importation and exportation. But exclusive of these, the value of the articles clandestinely imported by the ports on the Gulf, previously to the revolution, was estimated at 4,500,000 dollars a year; and 2,500,000 dollars were supposed to be annually smuggled out of the country in plate and bars, and ingots of gold and silver. A regular contraband trade used to be carried on between Vera Cruz and Jamaica: and notwithstanding all the efforts of government for their exclusion, and the excessive severity of its laws against smuggling, the shops of Mexico were always pretty well supplied with the products of England and Germany. — (*Humboldt, Nouvelle Espagne*, tome iv. p. 125.; *Poinsett's Notes on Mexico*, p. 133.)

M. Humboldt states, that the total population of Mexico, exclusive of Guatemala, may be estimated at about 7,000,000. Of this number ½ about are Indians, the rest being Europeans, or descendants of Europeans, and mixed races. But notwithstanding this large amount of population, the trade we carry on with Mexico is very inferior to that

which we carry on with Brazil. The following is an account of the real or declared value of all sorts of British produce and manufactures exported to the States of Central and Southern America in 1831:—

	£		£
Mexico	728,858	States of the Rio de la Plata	339,870
Guatemala	nil.	Chili	651,617
Colombia	248,250	Peru	409,003
Brazil	1,238,371		

The imports of British goods at second hand into Mexico and Colombia, from Jamaica, and the other West India islands, are no longer of any considerable importance; but considerable quantities are imported from New Orleans.

Mexico being, with the exception of the United States, the richest and most populous of all the American countries, the smallness of its trade with England may justly excite surprise. It originates principally, we believe, in the want of good ports and large cities on the coast, and the distance and difficulty of the roads from Vera Cruz and other ports to the healthy and elevated part of the country. These circumstances, coupled with the obstacles which the restrictive policy of the Spaniards threw in the way of the importation of foreign products, led to the establishment of manufactures in the interior. Previously to the commencement of the revolutionary struggles, some of these manufactures were in a very advanced state; and were sufficient to supply the population with most of the clothes and other articles required for their consumption. They have since declined considerably; but as it is pretty certain that the wealth of the inhabitants has declined still more, this circumstance has had little effect in increasing importation.

Revenues.—The revenues of Mexico have been, during the years (ended 30th of January),

1826	13,715,801 dollars.	1830	14,493,189 dollars.
1827	13,289,682 —	1831	18,922,299 —
1828	10,494,299 —	1832	16,413,060 —
1829	12,232,385 —		

Of these sums, about ⅓ have been produced by the customs duties. The latter amounted, in 1832, to 8,802,920 dollars. During the same year, the duties on imported cottons were 1,150,000 dollars, and those on the exportation of the precious metals 309,472 dollars. The total receipts of the Custom-house of Vera Cruz, in 1832, were 2,962,299 dollars, and those of Tampico 1,428,992 dollars.

Port Charges.—Foreign ships pay in the port of Vera Cruz—

	Dols.	*reals.*
Tonnage duty, &c. (per ton)	2	1
Pilotage on entering	15	4
— on leaving	19	0

A 5th part, or 20 per cent., is deducted from the duties on all commodities brought from a foreign port in Mexican ships. The Mexican Congress is, at this moment, engaged in discussions respecting a modification of the tariff.

Monies, Weights, and Measures, same as in Spain; for which, see CADIZ.

Duties, &c. at Vera Cruz.—The Mexican government issued, on the 16th of November, 1827, a new tariff, to which the following regulations were prefixed:—

Regulations as to the Mexican Tariff.

Vessels of all nations in amity with the United States of Mexico will be admitted to entry at the privileged ports of the republic, upon payment of the duties, and subject to the regulations to be observed at the maritime Custom-house, according to this tariff.

The anchorage duty is abolished, and all vessels arriving from foreign ports are to pay 2 dol. 1 real per ton tonnage duty.

Foreign vessels will not be allowed to trade coastwise with the ports of the republic.

All vessels putting into any of the ports of this republic, by stress of weather or for refitment, will be allowed the requisite time to complete their repairs or provisions, and will only have to pay such charges as are customary.

All vessels on their arrival are to present their manifests by triplicate, specifying the marks and numbers of the packages, with the particulars of their respective contents.

The duties will be levied on all goods according to their specification in the manifest, whether they are landed or not; and any article that shall be found not specified in the manifest, or any alteration in the quantity or quality, will subject such goods to seizure.

The weights and measures designated in the tariff are those used in Mexico; and any article exceeding the maximum annexed to the same shall, for every ⅛ of such excess in measurement, pay ⅛ increase of the duty affixed to the said article.

All articles not specified or enumerated in the tariff shall pay a duty of 40 per cent. on the valuation that may be fixed on the same at the port of entry; and for every such valuation, 3 brokers shall be appointed, 1 of whom is to be chosen by the importer, and the other 2 on the part of the Custom-house.

The *averia*, and all other duties lately payable in this republic under various denominations (excepting the State duty), are abolished.

The importer shall be liable for the whole amount of the duties; ½ of which is to be paid within 90 days from the day the goods are landed, and the other ½ within 90 days after the expiration of the latter period. No article will be allowed to be taken out of the Custom-house until the duties shall have been paid, or security given for the due payment of the same, to the satisfaction of the proper authorities.

All articles imported prior to this law taking effect are liable to the international duties as before.

After the duties have been once paid, no deduction or allowance whatever can be made on the same, excepting in cases where an error may have occurred.

No article will be allowed to be re-exported without previous payment of the import duties.

All goods that may arrive damaged shall be examined in presence of the proper authorities, and an allowance made according to the damage such goods shall have sustained.

All goods arriving direct from the place of their growth or manufacture, in vessels under the Mexican flag, are to pay 1-5th less duty than in foreign vessels.

The tariff may be altered at any time, whenever the Congress shall deem it expedient so to do; but no alteration which may be prejudicial to commerce in general shall be put in force until 6 months after such alteration shall have been decided upon.

The basis contained in the preceding articles are not intended to interfere with any separate treaty of commerce which has or may be entered into by this nation.

These regulations are to be put in force within 60 days from the date hereof.

Articles admitted into Mexico Duty free.

Quicksilver.
Carts upon foreign construction.
Wooden frames for houses.
Printed books, maps, and music.
Philosophical, mathematical, and optical instruments.
Slates of all sorts.
Instruments for agriculture, mines, and artificers.
Carding wire.
Plants and seeds

Articles prohibited to be imported into Mexico.

Anuseeds, cummins, and caraways.
Rum and molasses.
Sugar, raw or refined.
Coffee and chocolate.
Rice.
Leather.
Boots and shoes.
Saddlery of every description.
Salted and dried meats of all kinds.
Lard.
Wax, wrought.
Tallow.
Soap, hard or soft.
Epaulets, gold and silver lace, galloons, &c.
Tapes of cotton.
Shawls of silk or cotton.
Beds, bedding, and bed linen, made up, of every kind and description.
Copper, in sheets or pigs.
Lead, in sheet, pigs, or shot.
Biscuit.
Flour and wheat.
Vermicelli.
Cotton thread, under No. 20.
Stone ware.
Trunks and portmanteaus.
Woollen cloths, coarse and ordinary.
Parchment.
Wearing apparel of every description.
Common salt.
Hats, common, stuff, and leather.
Tobacco, in leaf or manufactured.

Export Duties. — All articles, the growth and produce of this republic, are free of duty on exportation, excepting gold in coin, or wrought, which pays 2 per cent. *ad valorem*; silver in coin, or wrought, which pays 5½ per cent. *ad valorem*.

N. B. — Gold and silver ore, or in ingots or dust, are prohibited under penalty of seizure.

Notices to Masters of Vessels and Passengers proceeding to any Mexican Port.

Notice is hereby given to all masters of vessels proceeding from London to any port or ports of the United States of Mexico, that the passengers they take out should be provided with passports, signed by his Excellency the minister of the republic, otherwise the vessels will be liable to detention on their arrival at those ports, and the passengers on board unprovided with such passports will not be permitted to land in the ports of Mexico. No plea for the want of them will be admitted.

Masters of vessels proceeding to and from those States are required to have on board all necessary papers and vouchers, which, according to the orders conveyed through his Excellency the Mexican minister plenipotentiary at the court of his Britannic Majesty, to this consulate, ought to consist of, besides the regular ship's papers, all the invoices of shippers, with the corresponding bills of lading. Merchandise found on board, which should not appear inserted in the invoices certified by the consul, or that otherwise is falsely described, either in quality or quantity, shall be considered and dealt with as contraband.

A bill of health, certified by the consul, will also be required from vessels on arrival, by the authorities at the Mexican ports.

The above regulations are to be in force from the date of this notice, Nov. 28. 1830.

Notice is hereby given, that the Congress of the United States of Mexico decreed, the 12th of October of the last year, that the Mexican envoys and consular agents must henceforward charge for each passport to Mexico 2 dollars, and for each certification and signature 4 dollars.

20, Austin-friars, 9th of Jan. 1831. The Vice-Consul, J. SCHEIDNAGEL.

VERDIGRIS (Ger. *Grünspan*; Fr. *Vert-de-gris, Verdet*; It. *Verderame*; Sp. *Cardenillo, Verdete, Verde-gris*; Rus. *Jar*), a kind of rust of copper, of a beautiful bluish green colour, formed from the corrosion of copper by fermented vegetables. Its specific gravity is 1·78. Its taste is disagreeably metallic; and, like all the compounds into which copper enters, it is poisonous. It was known to the ancients, and various ways of preparing it are described by Pliny. It is very extensively used by painters, and in dyeing; it is also used to some extent in medicine. The best verdigris is made at Montpellier; the wines of Languedoc being particularly well suited for corroding copper, and forming this substance. It is generally exported in cakes of about 25 lbs. weight each. It is also manufactured in this country, by means of the refuse of cider, &c.; the high duty of 2*s.* per lb. on the foreign article giving the home producers a pretty complete monopoly of the market. The goodness of verdigris is judged of from the deepness and brightness of its colour, its dryness, and its forming, when rubbed on the hand with a little water or saliva, smooth paste, free from grittiness. — (*Thomson's Chemistry*; *Rees's Cyclopædia.*)

VERJUICE (Ger. *Agrest*; Fr. *Verjus*; It. *Agresto*; Sp. *Agraz*), a kind of harsh, austere vinegar, made of the expressed juice of the wild apple, or crab. The French give this name to unripe grapes, and to the sour liquor obtained from them.

VERMICELLI (Ger. *Nudeln*; Du. *Meelnoepen, Proppen*; Fr. *Vermicelli*; It. *Vermicelli, Tagliolini*; Sp. *Aletrias*), a species of wheaten paste formed into long, slender, hollow tubes, or threads, used amongst us in soups, broths, &c.

Vermicelli is the same substance as maccaroni; the only difference between them being that the latter is made into larger tubes. Both of them are prepared in the greatest perfection in Naples, where they form the favourite dish of all classes, and the principal food of the bulk of the population. The flour of the hard wheat (*grano duro*) imported from the Black Sea is the best suited for the manufacture of maccaroni. Being mixed with water, it is kneaded by means of heavy wooden blocks wrought by levers, till it acquires a sufficient degree of tenacity; it is then forced, by simple pressure, through a number of holes, so contrived that it is formed into hollow cylinders. The name given to the tubes depends on their diameter; those of the largest size being maccaroni, the next to them vermicelli, and the smallest fedelini. At Genoa, and some other places, the paste is coloured by an admixture of saffron; but at Naples, where its preparation is best understood, nothing is used except flour and water; the

best being made of the flour of hard wheat, and the inferior sorts of the flour of soft wheat. When properly prepared and boiled to a nicety, Neapolitan maccaroni assumes a greenish tinge. It is then taken out of the caldron, drained of the water, and being saturated with concentrated meat gravy, and sprinkled with finely grated cheese, it forms a dish of which all classes from the prince to the beggar are passionately fond. But the maccaroni used by the poor is merely boiled in plain water, and is rarely eaten with any condiment whatever. The maccaroni usually served up in England, is said, by those familiar with that of Naples, to be a positive disgrace to the name it bears. When properly prepared, maccaroni is nutritious and easy of digestion. The lazzaroni pique themselves on the dexterity with which they swallow long strings of maccaroni and vermicelli without breaking them! (We have derived these details from an excellent article on maccaroni in the *Penny Magazine* for the 10th of August, 1833.)

VERMILION. See CINNABAR.

VINEGAR (Ger. *Essig*; Du. *Azyn*; Fr. *Vinaigre*; It. *Aceto*; Sp. and Port. *Vinagre*; Rus. *Ukzus*; Lat. *Acetum*). — (See ACID (ACETIC), for a description of vinegar.) A duty being imposed on vinegar of 2*d.* the gallon, its manufacture is placed under the control of the excise. A licence, costing 5*l.*, and renewable annually, has to be taken out by every maker of vinegar, or acetous acid.

All places for manufacturing or keeping vinegar must be entered, under a penalty of 50*l.* No vinegar maker is to receive any vinegar, or acetous acid, or sugar wash, or any preparation for vinegar, without giving 12 hours' notice to the excise, under penalty of 100*l.* Any person sending out or receiving vinegar shall, unless the duty on it be paid, and it be accompanied by a permit, forfeit 200*l.* All vinegar makers are to make entries at the next Excise-office of the quantity made within each month, and are bound to clear off the duties within a month of such entry, on pain of double duties. — (See 58 *Geo.* 3., c. 65., and *Burn's Justice of the Peace*, Marriott's ed.)

Account of the Quantity of Vinegar charged with Duty in the United Kingdom, in each Year from 1820, with the Nett Revenue accruing thereon.

Years.	Gallons.	Nett Revenue.	Years.	Gallons.	Nett Revenue.	Years.	Gallons.	Nett Revenue.
	Gallons.	*L.*		*Gallons.*	*L.*		*Gallons.*	*L.*
1820	2,497,468	40,586	1825	2,310,812	45,518	1830	2,097,404	17,862
1821	2,754,004	43,802	1826	3,028,891	25,136	1831	2,559,058	19,318
1822	2,604,659	45,638	1827	2,967,864	24,746	1832	2,911,755	22,988
1823	2,406,563	47,124	1828	2,682,867	24,475	1833	2,860,601	
1824	2,560,126	46,541	1829	2,558,798	22,541			

Rate of duty previously to 1826, 4*d.* per gallon; since then, 2*d.* The manufacture is almost wholly confined to England; the quantity produced in Scotland and Ireland not amounting to 100,000 gallons.

VITRIOL. See COPPERAS.

VITRIOL, OIL OF. See ACID (SULPHURIC).

ULTRAMARINE (Ger. *Ultramarin*; Fr. *Bleu d'outremer*; It. *Oltramarino*; Sp. *Ultramar*; Rus. *Ultramarin*), a very fine blue powder made from the blue parts of *lapis lazuli*. It has the valuable property of neither fading, nor becoming tarnished, on exposure to the air, or a moderate heat; and on this account is highly prized by painters. Owing to its great price, it is very apt to be adulterated. It was introduced about the end of the fifteenth century.

USANCE, a period of *one*, *two*, or *three* months, or of so many days, after the date of a bill of exchange, according to the custom of different places, before the bill becomes due. Double or treble usance, is double or treble the usual time; and ½ usance is ½ the time. When a month is divided, the ½ usance, notwithstanding the differences in the lengths of the months, is uniformly 15 days. Usances are calculated exclusively of the date of the bill. Bills of exchange drawn at usance are allowed the usual days of grace, and on the last of the 3 days the bill should be presented for payment. — (See EXCHANGE.)

USURY. See INTEREST AND ANNUITIES.

W.

WALNUTS, the fruit of the *Juglans*, or walnut-tree, of which there are several varieties. The walnut is a large, handsome tree, with strong spreading branches. The fruit is a pretty large, smooth, ovate nut, containing an oily kernel, divided into four lobes. The nut has been always held in high estimation; it was called by the Romans *Jovis glans*, the acorn or mast of Jove, and hence the name of the tree. The walnut tree is indigenous to Persia and the countries bordering on the Caspian Sea. It has long been introduced into Great Britain; but the fruit seldom ripens in the more northerly parts of the island. Previously to the very general introduction of mahogany, the wood of the walnut tree was extensively used amongst us in making of furniture; and it continues to be largely employed for that purpose in many parts of the Continent. It is

much used by turners; and is superior to every other sort of wood for the mounting of guns; a circumstance which caused great devastation among our walnut plantations during the latter years of the war. Great numbers of walnut trees are annually consumed in the Haute Vienne and other departments of France, in the manufacture of the wooden shoes or clogs used by the peasantry. The nuts are either gathered when ripe, being served up at desserts without any preparation; or they are plucked green, and pickled. — (*Poiret, Histoire Philosophique des Plantes*, tome vii. p. 213.; *Rees's Cyclopædia, &c.*)

Account of Walnuts imported, exported, and retained for Home Use, during 1831 and 1832, with the Nett Duty thereon, and the Rate of Duty.

Years.	Imports.	Exports.	Retained for Home Use.	Duty.	Rate of Duty.
	Bush.	*Bush.*	*Bush.*	*L.*	*Per Bush.*
1831	23,578	160	24,147	2,458	2*s.*
1832	16,913	551	15,229	1,518	2*s.*

WANGHEES, sometimes called JAPAN CANES, a species of cane imported from China. They should be chosen pliable, tough, round, and taper; the knots at regular distances from each other; and the heavier the better. Such as are dark-coloured, badly glazed, and light, should be rejected. — (*Milburn's Orient. Com.*)

WAREHOUSING SYSTEM. By this system is meant the provisions made for lodging imported articles in public warehouses, at a reasonable rent, without payment of the duties on importation till they be withdrawn for home consumption. If re-exported, no duty is ever paid.

1. *Expediency and Origin of the Warehousing System.* — It is laid down by Dr. Smith, in one of his justly celebrated maxims on the subject of taxation, that "Every tax ought to be levied at the time and in the manner that is most likely to be convenient for the contributor to pay it." — (*Wealth of Nations*, vol. iii. p. 368.) No one can doubt the soundness of this maxim; and yet it was very strangely neglected, down to 1803, in the management of the customs. Previously to this period, the duties on most goods imported had either to be paid at the moment of their importation, or a *bond*, with sufficient security for their future payment, had to be given to the revenue officers. The hardship and inconvenience of such a system is obvious. It was often very difficult to find sureties; and the merchant, in order to raise funds to pay the duties, was frequently reduced to the ruinous necessity of selling his goods immediately on their arrival, when, perhaps, the market was already glutted. Neither was this the only inconvenience that grew out of this system; for the duties having to be paid all at once, and not by degrees as the goods were sold for consumption, their price was raised by the amount of the profit on the capital advanced in payment of the duties; competition, too, was diminished in consequence of the greater command of funds required to carry on trade under such disadvantages; and a few rich individuals were enabled to monopolise the importation of those commodities on which heavy duties were payable. The system had, besides, an obvious tendency to discourage the carrying trade. It prevented this country from becoming an *entrepôt* for foreign products, by hindering the importation of such as were not immediately wanted for home consumption; and thus tended to lessen the resort of foreigners to our markets, inasmuch as it rendered it difficult, or rather impossible, for them to complete an assorted cargo. And in addition to all these circumstances, the difficulty of granting a really equivalent drawback to the exporters of such commodities as had paid duty, opened a door for the commission of every species of fraud.

But these disadvantages and drawbacks, obvious as they may now appear, did not attract the public attention till a comparatively late period. Sir Robert Walpole seems to have been one of the first who had a clear perception of their injurious influence; and it was the principal object of the famous *Excise Scheme*, proposed by him in 1733, to oblige the importers of tobacco and wine to deposit them in public warehouses; relieving them, however, from the necessity of paying the duties chargeable on them till they were withdrawn for home consumption.

No doubt can now remain in the mind of any one, that the adoption of this scheme would have been of the greatest advantage to the commerce and industry of the country. But so powerful was the delusion generated in the public mind with respect to it, that its proposal well nigh caused a rebellion. Most of the merchants of the day had availed themselves of the facilities which the existing system afforded of defrauding the revenue; and they dexterously endeavoured to thwart the success of a scheme which would have given a serious check to such practices, by making the public believe that it would be fatal to the commercial prosperity of the country. The efforts of the merchants were powerfully seconded by the spirit of party, which then ran very high. The political opponents of the ministry, anxious for an opportunity to prejudice them in the

public estimation, contended that the scheme was only the first step towards the introduction of such a universal system of excise as would inevitably prove alike subversive of the comfort and liberty of the people. In consequence of these artful misrepresentations, the most violent clamours were everywhere excited against the scheme. On one occasion Sir Robert Walpole narrowly escaped falling a sacrifice to the ungovernable fury of the mob, which beset all the avenues to the House of Commons; and, after many violent and lengthened debates, the scheme was ultimately abandoned.

The disadvantages of the old plan, and the benefits to be derived from the establishment of a voluntary warehousing system, were most ably pointed out by Dean Tucker, in his "Essay on the Comparative Advantages and Disadvantages of Great Britain and France with respect to Trade," published in 1750. But so powerful was the impression made by the violent opposition to Sir Robert Walpole's scheme, and such is the force of prejudice, that it was not till 1803 that this obvious and signal improvement — the greatest, perhaps, that has been made in our commercial and financial system — could be safely adopted.

2. *Regulations as to Warehousing.* — The statute of 43 Geo. 3. c. 132. laid the foundation of this system; but it was much improved and extended by subsequent statutes, the regulations of which have been embodied in the act 3 & 4 Will. 4. c. 57., which took effect on the 1st of September, 1833.

This act empowers the commissioners of the customs, under the authority and direction of the Lords of the Treasury, to nominate the ports at which goods may be warehoused without payment of duty, and the warehouses in which particular descriptions of goods may be deposited. It also fixes the time during which goods are allowed to remain in the warehouse; and prescribes the regulations as to their removal from port to port, their sale and stowage in the warehouse, the remission of the duties in case of loss by accident, the allowances for waste, &c. But as this statute is of much importance, we subjoin a full abstract of it.

ABSTRACT OF THE ACT 3 & 4 WILL. 4. C. 57. FOR THE WAREHOUSING OF GOODS.

Commencement of Act. — Act to commence the 1st day of September 1833, except where any other commencement is particularly directed. — § 1.

Treasury to appoint warehousing Ports. — It shall be lawful for the commissioners of the treasury to appoint the ports in the U. K. which shall be warehousing ports for the purposes of this act; and it shall be lawful for the commissioners of customs, subject to the directions of the commissioners of the treasury, to appoint in what warehouses or places of special security, or of ordinary security, as the case may require, in such ports, and in what different parts or divisions of such warehouses or places, and in what manner any goods, and what sorts of goods, may be warehoused and secured without payment of any duty upon the first entry thereof, or for exportation only, in cases wherein the same may be prohibited to be imported for home use; and also to direct in what cases (if any) security by bond shall be required in respect of any warehouse so appointed by them. — § 2.

Warehouse of special Security by Appointment. — Whenever any warehouse shall have been approved by the said commissioners, as being a warehouse of special security, it shall be stated in their order of appointment that it is appointed as a warehouse of special security: provided, that all warehouses connected with wharfs for the landing of the goods to be lodged therein, and enclosed together with such wharfs within walls, such as are or shall be required by any act for the constructing of such warehouses and wharfs, and being appointed to be legal quays, shall, without any order of the commissioners of the customs, be warehouses for the purposes of this act, for all goods landed at such wharfs or quays at any port appointed by the commissioners of the treasury to be a warehousing port, and all such warehouses shall be warehouses of special security. — § 3.

Bonds given previous to Act to continue in force. — All appointments of warehouses made under the authority of any other act in force at the commencement of this act shall continue in force as if the same had been made under the authority of this act, and all bonds given in respect of any goods warehoused under any act in force at the commencement of this act shall continue in force for the purposes of this act. — § 4.

Commissioners to provide Warehouses for Tobacco. — The commissioners of customs shall, out of the monies arising from the duties of customs, provide from time to time warehouses for the warehousing of tobacco at the ports into which tobacco may be legally imported: provided, that for every hogshead, chest, or case of tobacco so warehoused the importer or proprietor thereof shall pay, for warehouse rent, such sum or sums, not exceeding any sum payable under any act in force at the commencement of this act, and at such periods and in such manner as the commissioners of the treasury shall direct; and all such sums shall be paid and appropriated as duties of customs. — § 5.

Power to revoke or alter an Appointment. — It shall be lawful for the commissioners of the treasury by their warrant, and for the commissioners of the customs by their order, to revoke any former warrant or any former order, or to make any alteration in or addition to any former warrant or any former order made by them respectively. — § 6.

Publication of Appointment in Gazette. — Every order made by the commissioners of customs in respect of warehouses of special security, as well those of original appointment as those of revocation, alteration, or addition, shall be published in the London Gazette, for those appointed in Great Britain, and in the Dublin Gazette for those appointed in Ireland. — § 7.

Warehouse-keeper may give general Bond. — Before any goods be entered to be warehoused in any warehouse in respect of which security by bond is required, the proprietor or occupier of such warehouse, if he be willing, shall give general security by bond, with 2 sufficient sureties, for the payment of the full duties of importation on all such goods as shall at any time be warehoused therein, or for the due exportation thereof; and if such proprietor or occupier be not willing to give such general security, the different importers of the separate quantities of goods shall, upon each importation, give such security in respect of the particular goods imported by them respectively, before such goods be entered to be warehoused. — § 8.

Sale of Goods in Warehouse by Proprietor to be valid. — If any goods lodged in any warehouse be the property of its occupier, and be *bonâ fide* sold by him, and upon such sale there shall have been a written agreement, signed by the parties, or a written contract of sale made, executed, and delivered by a broker or other person legally authorised on behalf of the parties respectively, and the amount of

the price stipulated in the said agreement or contract shall have been actually paid or secured to be paid by the purchaser, every such sale shall be valid, although such goods shall remain in such warehouse; provided a transfer of such goods, according to such sale, shall have been entered in a book to be kept for that purpose by the officer of the customs having the charge of such warehouse, who is hereby required to keep such book, and to enter such transfers, with the dates thereof, upon application of the owners of the goods, and to produce such book upon demand made. — § 9.

Stowage in Warehouse to afford easy Access. — All goods warehoused shall be stowed in such manner as that easy access may be had to every package and parcel of the same; and if the occupier shall omit so to stow the same, he shall for every such omission forfeit the sum of 5*l.*; and if any goods be taken out of the warehouse without due entry of the same with the proper officers of the customs, the occupier of the warehouse shall be liable to the payment of the duties due thereon. — § 10.

Goods fraudulently concealed or removed, forfeited, &c. — If any goods warehoused be fraudulently concealed in or removed from the warehouse, the same shall be forfeited; and if any importer or proprietor of any goods warehoused, or any person in his employ, shall by any contrivance fraudulently open the warehouse or gain access to the goods, except in the presence of the proper officer acting in the execution of his duty, such importer or proprietor shall forfeit and pay for every such offence the sum of 500*l.* — § 11.

Examination on Entry and landing. — Within 1 month after any tobacco shall have been warehoused, and upon the entry and landing of any goods to be warehoused, the proper officer of the customs shall take a particular account of the same, and shall mark the contents on each package, and shall mark the word "prohibited" on such packages as contain goods prohibited to be imported for home use; and all goods shall be warehoused and kept in the packages in which they have been imported, and no alteration shall be made in the packages or the packing of any goods in the warehouse, except in the cases herein provided. — § 12.

Goods to be carried to Warehouse under Authority of Officers of Customs. — All goods entered to be warehoused, or to be re-warehoused, shall be carried to the warehouse under the care or with the authority or permission of the proper officer of customs, and in such manner, and by such persons, and by such roads or ways, and within such spaces of time, as the said officer shall authorise, permit, or direct; and all such goods not so carried shall be forfeited. — § 13.

Goods to be cleared in 3 Years, and Ship's Stores in 1 Year. — All goods which have been warehoused shall be duly cleared, either for exportation or for home use, within 3 years, and all surplus stores of ships within 1 year from the day of the first entry thereof (unless further time be given by the commissioners of the treasury); and if any such goods be not so cleared, it shall be lawful for the commissioners of customs to cause them to be sold, and the produce shall be applied to the payment of warehouse rent and other charges, and the overplus, if any, paid to the proprietor; and such goods, when sold, shall be held subject to all the conditions to which they were subject previous to such sale, except that a further time of 3 months from the date of the sale shall be allowed to the purchaser for clearing such goods from the warehouse; and if the goods so sold shall not be duly cleared within such 3 months, the same shall be forfeited: provided, that if the goods so to be disposed of shall have been imported by the East India Company, or be of the description called "piece goods," imported from places within the limits of their charter into the port of London, the same shall, at the requisition of the commissioners of customs, be duly exposed to sale by the said company at their next ensuing sale, and shall be sold for the highest price then publicly offered for them. — § 14.

In case of Accident, Duty to be remitted. — If any goods entered to be warehoused, or entered to be delivered from the warehouse, be lost or destroyed by any unavoidable accident, either on shipboard or in the landing or shipping of the same, or in the receiving into or delivering from the warehouse, the commissioners of customs shall remit or return the duties payable or paid on the goods so lost or destroyed. — § 15.

Entry for Exportation or Home Use. — No goods which have been warehoused shall be taken or delivered from the warehouse except upon due entry, and under care of the proper officers for exportation, or upon due entry and payment of the full duties payable thereon for home use; except goods delivered into the charge of the searchers to be shipped as stores, and which shall and may be so shipped without entry or payment of any duty for any ship of the burden of 70 tons at least, bound upon a voyage to foreign parts, the probable duration of which out and home will not be less than 40 days: provided that such stores shall be duly borne upon the ship's victualling bill, and shall be shipped in such quantities and subject to such directions and regulations as the commissioners of customs shall direct and appoint. — § 16.

Rum for Stores and surplus Stores may be shipped without Entry. — Any rum of the British plantations may be delivered into the charge of the searcher, to be shipped as stores for any ship without entry or payment of any duty, and any surplus stores of any ship may be delivered into the charge of the searcher, to be reshipped as stores for the same ship, or for the same master in another ship, without entry or payment of duty, such rum and such surplus stores being duly borne upon the victualling bills of such ships respectively; and if the ship for the future use of which any surplus stores have been warehoused shall have been broken up or sold, such stores may be so delivered for the use of any other ship belonging to the same owners, or may be entered for payment of duty, and delivered for the private use of such owners, or any of them, or of the master or purser of such ship. — § 17.

Duties to be paid on original Quantities, except in certain Cases. — Upon the entry of any goods to be cleared from the warehouse, if the same be for home use, the person entering such goods inwards shall deliver a bill of the entry, and duplicates thereof, in like manner as is directed in the case of goods entered to be landed, as far as the same is applicable, and at the same time shall pay down to the proper officer of the customs the full duties of customs payable thereon, and not being less in amount than according to the account of the quantity first taken of the respective packages or parcels of the goods in such entry at the examination thereof at the time of the first entry and landing of the same, without any abatement on account of any deficiency, except as by this act is otherwise provided; and if the entry be for exportation or for removal to any other warehouse, and any of the packages or parcels of the goods be deficient of their respective quantities, according to the account first taken, a like entry inwards shall also be passed in respect of the quantities so deficient, and the full duties shall be paid on the amount thereof before such packages or parcels of goods shall be delivered or taken for exportation or removal, except as by this act is otherwise provided; and if any goods so deficient in quantity shall be such as are charged to pay duty according to the value thereof, such value shall be estimated at the price for which the like sorts of goods of the best quality have been last or lately sold, either at any sale of the East India Company, or in any other manner, as the case may be. — § 18.

Duties on Tobacco, Sugar, and Spirits to be charged on Quantities delivered, except in certain Cases. — The duties payable upon tobacco, sugar, and spirits respectively, when taken out of warehouse for home use, shall be charged upon the quantities ascertained by the weight, measure, or strength of the same actually delivered; except that if the sugar shall not be in a warehouse of special security, no greater abatement on account of deficiency of the quantity first ascertained as aforesaid shall be made than shall be after the rate of 3 per cent. of such quantity for the first 3 months, and 1 per cent. for every subsequent month during which such sugar shall have been warehoused; and except, that if the spirits (being any other spirits than rum of the British plantations) shall not be in a warehouse of special security, no greater abatement on account of deficiency of the quantity or strength first ascertained as aforesaid shall be made than shall be after the several rates of allowances following; viz.

For every 100 gallons, hydrometer proof; viz.	
For any time not exceeding 6 months - -	1 gallon
For any time exceeding 6 months and not exceeding 12 months - - - -	2 gallons
For any time exceeding 12 months and not exceeding 18 months - - -	3 gallons
For every 100 gallons, hydrometer proof; viz.	
For any time exceeding 18 months and not exceeding 2 years - - - -	4 gallons
For any time exceeding 2 years - -	5 gallons

Provided that no abatement shall be made in respect of any deficiency in quantity of any spirits occasioned either by leakage or accident, and not by natural evaporation, in whatever warehouse the same may be, except as by this act is otherwise specially provided. — § 19.

Importer may enter Goods for Home Use, &c., although not actually warehoused. — If after any goods have been duly entered and landed to be warehoused, and before the same have been deposited in the warehouse, the importer shall further enter the same or any part thereof for home use or for exportation as from the warehouse, the goods so entered shall be considered as virtually and constructively warehoused, although not actually deposited in the warehouse, and may be delivered and taken for home use or for exportation, as the case may be. — § 20.

Goods may be removed to other Ports to be rewarehoused. — Any goods which have been warehoused at some port in the U. K. may be removed by sea or inland carriage to any other port in the same, in which the like goods may be warehoused upon importation, to be rewarehoused at such other port, and again as often as may be required to any other such port, to be there rewarehoused, subject to the regulations hereinafter mentioned; viz. 12 hours notice in writing of the intention to remove such goods shall be given to the warehouse officer, specifying the particular goods intended to be removed, and the marks, numbers, and descriptions of the packages in which the same are contained, in what ship imported, when and by whom entered inwards to be warehoused, and, if subsequently rewarehoused, when and by whom rewarehoused, and to what port the same are to be removed; and thereupon the warehouse officer shall take a particular account of such goods, and shall mark the contents on every package in preparation for the delivering of the same for the purposes of such removal, and previous to the delivery thereof may cause the proper seals of office to be affixed thereto: provided that tobacco, the produce of the British possessions in America or of the United States of America, and purchased for the use of his Majesty's navy, may be removed by the purser of any ship of war in actual service to the ports of Rochester, Portsmouth, or Plymouth, to be there rewarehoused, in name of such purser, in a warehouse approved for that purpose by the commissioners of customs. — § 21.

Entry of Goods for Removal. — Before such goods be delivered to be removed due entry of the same shall be made, and a proper bill of such entry, with duplicates thereof, be delivered to the collector or comptroller, containing the before-mentioned particulars, and an exact account of the quantities of the different sorts of goods; and such bill of entry, signed by the collector and comptroller, shall be the warrant for the removal of such goods; and an account of the same, containing all such particulars, shall be transmitted by the officers of the port of removal to the officers of the port of destination; and upon the arrival of such goods at the port of destination due entry of the same to be rewarehoused shall in like manner be made with the collector and comptroller at such port, containing all the particulars and accounts before mentioned, together with the name of the port from which such goods have been removed, and the description and situation of the warehouse in which they are to be warehoused; and the bill of such entry, signed by such collector and comptroller, shall be the warrant to the landing officer and the warehouse officer to admit such goods to be there rewarehoused, under such examination as is made of the like goods when first warehoused upon importation from parts beyond the seas; and the particulars to be contained in such notice and in such entries shall be written and arranged in such form and manner as the collector and comptroller shall require; and the officers at the port of arrival shall transmit to the officers at the port of removal an account of the goods so arrived, according as they shall upon examination prove to be, and the warehouse officers at the port of removal shall notify such arrival in their books. — § 22.

Bond to rewarehouse, which may be given at either Port. — The persons removing such goods shall at the time of entering the same give bond, with 1 sufficient surety, for the due arrival and rewarehousing of such goods within a reasonable time, (with reference to the distance between the respective ports, to be fixed by the commissioners of customs), which bond may be taken by the collector and comptroller either of the port of removal or of the port of destination, as shall best suit the residence or convenience of the persons interested in the removal of such goods; and if such bond be given at the port of destination, a certificate thereof, under the hands of the collector and comptroller of such port shall, at the time of entering the goods, be produced to the collector or comptroller of the port of removal. — § 23.

Bond how to be discharged. — Such bond shall not be discharged unless such goods shall have been duly rewarehoused at the port of destination within the time allowed for such removal, or shall have been otherwise accounted for to the satisfaction of the said commissioners, nor until the full duties due upon any deficiency of such goods shall have been paid, nor until fresh security have been given in respect of such goods as herein-after provided, unless such goods shall be lodged in some warehouse in respect of which general security has been given by the proprietor or occupier, or in some warehouse in respect of which no security is required. — § 24.

Goods rewarehoused held on Terms of the first Warehousing. — Such goods when so rewarehoused may be entered and shipped for exportation, or entered and delivered for home use, as the like goods may be when first warehoused upon importation, and the time when such goods shall be allowed to remain rewarehoused at such port shall be reckoned from the day when the same were first entered to be warehoused. — § 25.

On Arrival, after Forms of rewarehousing, Parties may enter to export, &c.—If upon the arrival of such goods at the port of destination the parties shall be desirous forthwith to export the same, or to pay duty thereon for home use, without lodging the same in the warehouse for which they have been entered and examined to be rewarehoused, it shall be lawful for the officers of the customs at such port, after all the formalities of entering and examining such goods for rewarehousing have been duly performed (except the actual labour of carrying and lodging the same in the warehouse), to consider the same as virtually or constructively rewarehoused, and to permit them to be entered and shipped for exportation, or to be entered and delivered for home use, upon payment of the duties due thereon; and the account taken for the rewarehousing of such goods may serve as the account for delivering the same as if from the warehouse, either for shipment or for payment of duties, as the case may be; and all goods so exported, or for which the duties have been so paid, shall be deemed to have been duly cleared from the warehouse. — § 26.

Removal in the same Port. — Any goods which have been warehoused in some warehouse in the port of London may, with the permission of the commissioners of customs first obtained, be removed to any other warehouse in the said port in which the like goods may be warehoused; and any goods which have been warehoused in any other port may, with the permission of the collector and comptroller of such port first obtained, be removed to any other warehouse in the same port in which like goods may be warehoused, under such regulations as the commissioners of customs shall direct. — § 27.

Goods and Parties subject to original Conditions. — All goods which shall have been removed from one warehouse to another, whether in the same or in a different port, and all proprietors of such goods, shall be subject to all the conditions to which they would have been subject had such goods remained in the warehouse where they were originally warehoused. — § 28.

Goods sold, new Owner may give Bond. — If any goods have been warehoused in respect of which general security by bond shall not have been given by the proprietor or occupier, and particular security, as in such case is required, shall have been given by the importer of such goods, and the goods shall have

been sold or disposed of, so that the original bonder shall be no longer interested in or have controul over such goods, it shall be lawful to admit fresh security to be given by the bond of the new proprietor of such goods, or persons having the controul over the same, with his sufficient surety, and to cancel the bond given by the original bonder, or to exonerate him and his surety to the extent of the fresh security so given. — § 29.

Bond of Remover to be in force until Bond be given by new Owner. — If the person removing any goods from 1 port to another, and who shall have given bond in respect of such removal and rewarehousing, shall continue to be interested in such goods after the same have been duly rewarehoused, and such goods shall have been so rewarehoused in some warehouse, in respect of which security is required, and the proprietor or occupier of the same shall not have given general security, the bond in respect of such removal and rewarehousing shall be conditioned and continue in force, for the rewarehousing of such goods, until fresh bond be given by some new proprietor or other person, in manner herein-before provided. — § 30.

To sort, separate, and repack in same or equal Packages. — It shall be lawful in the warehouse to sort, separate, pack, and repack any goods, and to make such lawful alterations therein, or arrangements thereof, as may be necessary either for the preservation of such goods, or in order to the sale, shipment, or legal disposal of the same; provided that such goods be repacked in the same packages in which the same goods, or some part of the whole quantity of the same parcel of goods, were imported, or in packages of entire quantity equal thereto, or in such other packages as the commissioners of customs shall permit (not being less in any case, if the goods be to be exported or to be removed to another warehouse, than may be required by law for the importation of such goods); and also in the warehouse to draw off any wine, or any rum of the British plantations into reputed quart bottles or reputed pint bottles, for the purpose only of being exported from the warehouse; and also to draw off any such rum into casks containing not less than 20 gallons each, for the purpose only of being disposed of as stores for ships; and also to draw off any other spirits into reputed quart bottles, under such regulations as the commissioners of customs shall from time to time direct, for the purpose only of being exported from the warehouse; and also to draw off and mix with any wine any brandy secured in the same warehouse, not exceeding the proportion of 10 gallons of brandy to 100 gallons of wine; and also to fill up any casks of wine or spirits from any other casks of the same, respectively secured in the same warehouse; and also in any warehouse of special security to rack off any wine from the lees, and to mix any wines of the same sort, erasing from the casks all import brands; and also to take such moderate samples of goods as may be allowed by the commissioners of customs, without entry and without payment of duty, except as the same may eventually become payable, on a deficiency of the original quantity. — § 31.

No Alteration in Goods or Package but according as the Commissioners direct. — No alteration shall be made in any goods or packages, nor shall any wine, rum, brandy, or spirits be bottled, drawn off, mixed, or filled up, nor shall any samples be taken except after such notices given by the respective importers or proprietors, and at such times and in such manner, and under such regulations and restrictions, as the commissioners of customs shall require and direct. — § 32.

Repacking in proper Packages. — Whereas it may happen, that after the repacking into proper packages of any parcel of goods which have been unpacked and separated or drawn off from the original package in any of the cases herein-before provided for, there may remain some surplus quantities of the respective parcels of such goods, which may not be sufficient to make or fill up any 1 of such proper packages, or it may happen that some part of such goods, when separated from other parts, may be such refuse, or in so damaged a state as to be worthless, or that the total quantity of such parcel of goods may be reduced by the separation of dirt or sediment, or by the dispersion of dust or otherwise: and whereas the duties payable on such goods may have been levied at a rate having regard to a just allowance for the state in which such goods are imported, and it is not proper that any manufacturing process should be performed in such warehouse to the detriment of the revenue; it is therefore enacted, that after such goods have been repacked in proper packages, the commissioners of customs, at the request of the importer or proprietor of such goods, may permit any of such refuse, damaged, or surplus goods not contained in any of such packages, to be destroyed; and if the goods be such as may be delivered for home use, the duties shall be immediately paid upon any part of such surplus as may remain, and the same shall be delivered for home use accordingly; and if they be such as may not be so delivered, such surplus as may so remain shall be disposed of for the purpose of exportation in such manner as the commissioners shall direct; and thereupon the quantity contained in each of such packages shall be ascertained and marked upon the same, and the deficiency shall be ascertained by a comparison of the total quantity in such packages with the total quantity first warehoused, and the proportion which such deficiency may bear to the quantity in each package shall also be marked on the same, and added to such quantity, and the total shall be deemed to be the imported contents of such package, and be held subject to the full duties of importation, except as otherwise provided by this act: provided that it shall be lawful for the commissioners of customs to accept the abandonment, for the duties, of any quantity of tobacco, coffee, pepper, cocoa, lees of wine, and also of any whole packages of other goods, and to cause or permit the same to be destroyed, and to deduct such quantity of tobacco or coffee, or pepper, or cocoa, or the contents of such whole packages, from the total quantity of the same importation, in computing the amount of the deficiency of such total quantity. — § 33.

No Foreign Casks, &c. to be used for repacking. — No foreign casks, bottles, corks, packages, or materials whatever, except any in which some goods shall have been imported and warehoused, shall be used in the repacking of any goods in the warehouse, unless the full duties have been first paid thereon. — § 34.

Silks, Linens, &c. to be delivered out of Warehouse, to be cleaned. — It shall be lawful for the commissioners of the customs to permit any stuffs or fabrics of silk, linen, cotton, or wool, or of any mixture of them with any other material, to be taken out of warehouse to be cleaned, refreshed, dyed, stained, or calendered, or to be bleached or printed, without payment of duty of customs, under security, nevertheless, by bond to their satisfaction, that such goods shall be returned to the warehouse within the time that they shall appoint; and it shall be lawful for the said commissioners, in like manner and under like security, to permit any rice, the produce of places within the limits of the East India Company's Charter, to be delivered out of warehouse to be cleaned, making such allowance for waste as to the said commissioners shall appear to be reasonable. — § 35.

Copper Ore may be taken out of Warehouse to be smelted. — It shall be lawful for the importer or proprietor of any copper ore warehoused to give notice to the proper officers of his intention to take such ore out of warehouse to be smelted, stating in such notice the quantity of copper computed to be contained in such ore, and delivering to such officers sufficient samples or specimens for ascertaining by proper assays, at the expense of the proprietor, such quantity of copper, and giving sufficient security by bond for returning such quantity of copper into the warehouse; and if such officers shall be satisfied of the fairness of the samples or specimens of such ore, and of the assays made of the same, and of the security given, they shall deliver such ore for the purpose of being smelted: provided that if any copper ore intended to be so smelted shall be imported into any port where such ore or where copper cannot be warehoused, the same may be entered as being to be warehoused at the port at which the copper after smelting is to be warehoused, and such ore shall thereupon be taken account of and delivered for the purposes aforesaid, in like manner as if the same had been warehoused: provided also, that all copper so produced by smelting shall be deemed to be copper imported, and shall be warehoused as such. — § 36.

Goods in Bulk delivered. — No parcels of goods so warehoused which were imported in bulk shall be delivered, except in the whole quantity of each parcel, or in a quantity not less than 1 ton weight, unless by special leave of the proper officers. — § 37.

Packages to be marked before Delivery. — No goods so warehoused shall be delivered, unless the same or the packages containing the same shall have been marked in such distinguishing manner as the commissioners of customs shall from time to time direct. — § 38.

Decrease and Increase may be allowed, under Regulations of the Treasury. — It shall be lawful for the commissioners of the treasury to make regulations for ascertaining the amount of the decrease or increase of the quantity of any particular sorts of goods, and to direct in what proportion any abatement of duty payable under this act for deficiencies shall, upon the exportation of any such goods, be made on account of such decrease: provided, that if such goods be lodged in warehouses of special security, no duty shall be charged for any amount whatever of deficiency of any of such goods on the exportation thereof, except in cases where suspicion shall arise that part of such goods has been clandestinely conveyed away, nor shall any such goods (unless they be wine or spirits) be measured, counted, weighed, or gauged for exportation, except in such cases of suspicion. — § 39.

Allowances for Waste of Wine, Spirits, &c. in Warehouses not of special Security. — For any wine, spirits, coffee, cocoa nuts, or pepper lodged in warehouses not of special security, the following allowances for natural waste, in proportion to the time during which such goods have remained in warehouse, shall be made upon the exportation thereof; viz.

Wine, upon every cask; *viz.*	
For any time not exceeding 1 year - -	1 gallon
For any time exceeding 1 year, and not exceeding 2 years - - - -	2 gallons
For any time exceeding 2 years - - -	3 gallons
Spirits, upon every 100 gallons hydrometer proof; *viz.*	
For any time not exceeding 6 months - -	1 gallon
For any time exceeding 6 months, and not exceeding 12 months - - -	2 gallons
Spirits, upon every 100 gallons hydrometer proof; *viz.*	
For any time exceeding 12 months, and not exceeding 18 months - - -	3 gallons
For any time exceeding 18 months, and not exceeding 2 years - - - -	4 gallons
For any time exceeding 2 years - -	5 gallons
Coffee, cocoa nuts, pepper, for every 100 lbs., and so in proportion for any less quantity - -	2 lbs.

— § 40.

Embezzlement and Waste by Officers to be made good to Proprietor. — In case any embezzlement, waste, spoil, or destruction shall be made of any goods or merchandise warehoused in warehouses under the authority of this act, through any wilful misconduct of any officer of customs or excise, such officer shall be deemed guilty of a misdemeanor, and shall upon conviction suffer such punishment as may be inflicted by law in cases of misdemeanor; and if such officer shall be so prosecuted to conviction by the importer, consignee, or proprietor of the goods or merchandise so embezzled, wasted, spoiled, or destroyed, no duty of customs or excise shall be payable for such goods or merchandise so embezzled, &c., and no forfeiture or seizure shall take place of any goods and merchandise so warehoused in respect of any deficiency caused by such embezzlement, waste, spoil, or destruction, and the damage occasioned by such embezzlement, &c. of such goods or merchandise shall be repaid and made good to such importer, consignee, or proprietor by the commissioners of customs or excise, under such orders as shall be given by the commissioners of the treasury, or any 3 of them. — § 41.

On Entry outwards Bond for due shipping and landing shall be given. — Upon the entry outwards of any goods to be exported from the warehouse to parts beyond the seas, and before cocket be granted, the person in whose name the same be entered shall give security by bond in double the value of such goods, with 1 sufficient surety, that such goods shall be duly shipped and exported, and shall be landed at the place for which they be entered outwards, or otherwise accounted for to the satisfaction of the commissioners of customs. — § 42.

Bond for Beef and Pork exported from Warehouse. — Upon the entry outwards of any salted beef or salted pork to be exported from the warehouse to parts beyond seas, and before cocket be granted, the person in whose name the same be entered shall give security by bond in treble the value of the goods, with 2 sufficient sureties, of whom the master of the exporting ship shall be 1, that such beef or pork shall be duly shipped and exported, and that no part thereof shall be consumed on board such ship, and that the same shall be landed at the place for which it be entered outwards; and that a certificate of such landing shall be produced within a reasonable time, according to the voyage, to be fixed by the commissioners of customs, and mentioned in the bond, such certificate to be signed by the officers of the customs or other British officer, if the goods be landed at a place in the British dominions, or by the British consul, if the goods be landed at a place not in the British dominions, or such goods shall be otherwise accounted for to the satisfaction of said commissioners; and such master shall make and sign a declaration that such beef or pork is to be laden on board such ship as merchandise, to be carried to and landed at parts beyond the seas, and not as stores for the said ship; and if such ship shall not have on board at the time of clearance outwards a reasonable supply or stock of beef or pork, according to the intended voyage, borne upon the victualling bill, the master of such ship shall forfeit the sum of 100*l.* — § 43.

Restriction as to the Isle of Man. — No goods shall be exported from the warehouse to the Isle of Man, except such goods as may be imported into the said island with licence of the commissioners of customs, and in virtue of any such licence first obtained. — § 44.

Goods removed from Warehouse under Care of Customs' Officers. — All goods taken from the warehouse for removal or for exportation shall be removed or carried to be shipped, under the care or with the authority or permission of the proper officer of customs, and in such manner, and by such persons, and within such spaces of time, and by such roads or ways as he shall authorise or direct; and all such goods not so removed or carried shall be forfeited. — § 45.

Ships to be not less than 70 Tons for exporting warehoused Goods. — It shall not be lawful for any person to export any goods so warehoused, nor to enter for exportation to parts beyond the seas any goods so warehoused, in any ship not of the burden of 70 tons or upwards. — § 46.

Goods landed in Docks liable to Claims for Freight as before landing. — All goods or merchandise which shall be landed in docks, and lodged in the custody of their proprietors, under this act, not being goods seized as forfeited, shall be subject or liable to the same claim for freight in favour of the master and owner or owners of the respective ships or vessels, or of any other person or persons interested in the freight of the same, as they were subject and liable to before landing; and the directors and proprietors of such docks are empowered and required, upon due notice in that behalf given to them, to detain and keep such goods and merchandise, not being seized as forfeited, in the warehouses belonging to the said docks, until the respective freights to which the same are subject and liable be duly paid, together with the rates and charges to which the same shall have been subject and liable, or until a deposit be made by the owners or consignees of such goods or merchandise, equal in amount to the demands made by the master, owner or owners of the ships or vessels, or other persons, on account of freight; which deposit the directors or proprietors of such docks, or their agents are directed to receive and hold in trust, until the claim or demand for freight upon such goods shall be satisfied; upon proof of which, and demand made by the persons, their executors, &c. by whom the said deposit has been made, and the rates and charges due upon the said goods being paid, the deposit shall be returned to them by the said directors or proprietors. — § 47.

Warehousing Ports, &c. — Certain ports only are warehousing ports; nor may all sorts of goods be warehoused in every warehousing port. We subjoin a list of the warehousing ports in Great Britain and Ireland, and a specification of the goods that may be warehoused in each, classed in tables.

REHOUSING SYSTEM.

England.

Arundel — Goods in Table C.
Barnstaple — All goods except tobacco, East India goods, and goods in Table F, other than sugar.
Bideford — Goods in Table A, wine and spirits in Table B, and goods in Table C.
Boston — Wine and spirits in Table B.
Bridgewater — Wine and spirits in Table B, and wood and tar in Table C, rum, and tallow.
Bridport — Rum, brandy, wine, hemp, iron in bars, timber, barilla, alum, tallow, ashes, hides and skins, sugar, currants, and other fruit.
Bristol — East India goods, and goods in Tables A, B, C, D, E and F.
Chepstow — Timber, deals, hemp, linseed, staves, tallow, and tar.
Chester — Rum in Table A, and wine and spirits in Table B.
Chichester — Wood, pitch, tar, and iron in table C, and wool in Table E.
Colchester — Rum in Table A, and wine and spirits in Table B.
Cowes — Goods in Tables A, B, and D; and timber and deals in Table C.
Dartmouth — Goods in Tables A, B, C, and D (except tobacco).
Dover — Goods in Table B (except tobacco), and timber and wood in Table C.
Exeter — All goods except tobacco, East India goods, and goods enumerated in Table F, other than sugar.
Falmouth — Goods in Tables A, B, C, and D.
Gloucester — Spirits in Table A, wine and spirits in Table B, tallow in Table C, and barilla in Table E; sugar not East India, and all other goods not East India produce, and not in Table F.
Goole, near Hull — All articles, except tobacco and snuff.
Grimsby, ditto — Goods in Tables A, B, C, D, and E (except tobacco).
Hull — East India goods, and goods in Tables A, B, C, D, and E.
Ipswich — Wine and spirits in Tables A and B, and barilla.
Lancaster — Goods in Tables A, B, C, and E.
Liverpool — East India goods, and goods in Tables A, B, C, D, E, and F.
London — East India goods, and goods in Tables A, B, C, D, E, and F.
Lynn — Rum in Table A, wine and spirits in Table B, and timber and wood in Table C.
Maldon — Wood goods.
Milford — Goods in Tables C and D.
Newcastle — Goods in Tables A, B, C, D, and E.
Newhaven — Rum in Table A, wine and spirits in Table B, and timber and wood in Table C.
Plymouth — Goods in Tables A, B, C, D, and E.
Pool — Goods in Tables A, B, C, D, and E (except tobacco).
Portsmouth — Goods in Tables A, B, C, and E (except tobacco), and hides in Table D.
Rochester — Rum in Table A, wine and spirits in Table B, and timber and wood goods in Table C.
Rye — Wine in Table B, wood in Table C, and clover seed in Table E.
Shoreham — Wine and spirits in Table B, and goods in Table C.
Southampton — Spirits in Table A, wine and spirits in Table B, goods in Tables C, D, and E, and East India goods removed for exportation to Guernsey and Jersey.
Stockton — Rum in Table A, wine and spirits in Table B, timber and goods in Table C, clover seed and green fruit in Table E, potashes, sugar, coffee, hides, &c.
Sunderland — Goods in Tables A, B, C, D, and E (except tobacco).
Swansea — Goods in Table C.
Weymouth — Rum in Table A, wine and spirits in Table B, wood in Table C, almonds of all sorts, barilla, clover seed, currants, figs, oil of olives, salad oil, prunes, raisins of all sorts, and liquorice juice in Table E.
Whitby — Goods in Tables C and D.
Whitehaven — Goods in Tables A, B, C, and E.
Wisbech — Wood goods.
Yarmouth — Rum in Table A, wine and spirits in Table B, hemp and iron in Table C, and goods in Table E.

Scotland.

Aberdeen — East India and all other goods.
Borrowstoness — Timber and wood in Table C.
Dumfries — Wine in Table B.
Dundee — Wine and spirits in Tables A and B; iron, pitch, tar, timber, and wood, in Table C.
Glasgow — East India goods, and goods in Tables A, B, C, D, and E.
Grangemouth — Fustic, hemp, iron, logwood, mahogany, pitch, rosin, staves, tar, tallow, tow, turpentine, timber, and wood, in Table C, and flax in Table E.
Greenock — East India goods, and goods in Tables A, B, C, D, and E.
Leith — East India goods, and goods in Tables A, B, C, D, and E.
Montrose — Wine, spirits, and sugar; and goods in Tables C and D; ashes, butter, cheese, coffee, feathers, hams, hides, honey, spruce beer, seeds, vinegar, and yarn.
Port Glasgow — East India goods, and goods in Tables A, B, C, and E.

Ireland.

Dublin, Belfast, Cork } East India and all other goods, including sugar in Table F, and excepting the other articles enumerated in that Table.
Coleraine — All goods, except East India goods and tobacco.
Drogheda, Dundalk, Galway, Limerick, Londonderry, Newry, Sligo, Waterford } All goods (except East India goods, and the articles enumerated in Table F, with the exception of sugar).
Wexford — Wine, sugar, hemp, iron, tallow, foreign spirits, and vinegar, coffee, cocoa, rice, pepper, ginger, and pimento.

Table A.

Annatto or rocou	Cocoa nuts	Sugar
Cassia fistula	Coffee	

Not being the produce of, nor imported from, any place within the limits of the East India Company's charter.

Angustura bark	Indigo	Pimento
Cotton wool	Mahogany	Rum
Ginger	Molasses	Wine

Imported from the West Indies.

Cocoa nuts	Indigo	Pimento
Coffee	Mahogany	Rum
Cotton wool	Molasses	Sugar
Ginger		

The growth and produce of, and imported direct from, any of the territories or dominions of the crown of Portugal.

Table B.

Brandy	Rice	Tobacco
Geneva, & other spirits	Shrub	Wine

Not being the produce of, nor imported from, any place within the limits of the East India Company's charter (spirits and wine excepted), or not being imported from the West Indies.

Cocoa nuts	Indigo	Pimento
Coffee	Mahogany	Rum
Cotton wool	Molasses	Sugar
Ginger		

Being the growth or produce of, and imported direct from, any of the territories or dominions of the crown of Portugal.

Spirits and wine

Being the produce of any place within the limits of the East India Company's charter, and imported otherwise than by the said Company.

Table C.

Brimstone	Kelp	Staves
Cork	Linseed	Tallow
Hemp, undressed	Mahogany	Tar
Iron, in bars or slit, or hammered into rods, & iron drawn or hammered less than ¾ of an inch square.	Marble blocks	Timber
	Oil of turpentine	Tow
	Pitch	Turpentine
	Rapeseed	Wood
	Rosin	Zaffre or cobalt

Not being the produce of, nor imported from within the limits of, the East India Company's charter, nor imported from the West Indies.

Table D.

Hides	Blubber of British fishing	shaved, and skins and furs of all sorts, not tanned, tawed, or in any way dressed
Oil of British fishing		
Oil of spermaceti, or head matter	Whale fins of British fishing	
Train oil, and all other fish oil	Indian deer skins, half dressed or	

Not being the produce of, nor imported from within the limits of, the East India Company's charter, and not being imported from the West Indies.

Table E.

Alkermes	Hams	Oils, chemical and perfumed, not otherwise enumerated
Almonds	Harp-strings	
Anchovies	Hones	
Angustura bark	Jalap	
Aniseed	Jesuits' bark	Opium
Annatto or rocou	Jet	Orange flower water ointment
Arrowroot	India rubber	
Ashes	Indigo	Ottar of roses
Balsam of all sorts	Isinglass	Pearl barley
Barilla	Juice of lemons	Pictures
Beads of amber and of coral	Limes and oranges	Pigs' chops and faces
	Juniper berries	
Bees' wax	Lamp-black	Pimento
Black or Dantzic beer	Plain linen (except sail-cloth)	Pitch, Burgundy
		Platting of straw or chip
Bristles, undressed	Linseed cakes	
Buck wheat	Liquorice powder	Pots, melting
Cantharides	Maccaroni	Prunes
Carpets, Turkey	Madder, ground	Quicksilver
Cassia fistula	Mahogany	Radix serpentariæ
Catlings or lute-strings	Manna	Rags
	Mercury	Raisins of all sorts
Cheese	Mohair yarn	Rape cakes
Chip hats	Molasses	Rhinehurst
Citrate of lime	Oil of almonds	Rhubarb
Citron in salt and water	amber	Rum
	aniseed	Saccharum saturn
Clover seed	bay	Saffron
Cochineal and cochineal dust	cajeputa	Sal ammoniacus
	carraway	gem
Cocoa nuts	cassia	limonum, or acetosella
Coffee	castor	
Copal	cinnamon	prunella
Cotton wool and cotton yarn	cloves	succini
	jessamine	Saphora
Currants	juniper	Sarsaparilla
Elephants' teeth	lavender	Senna
Essence of bergamot and of lemon	linseed	Silk, raw, thrown, or waste
	mace	
Essence of British America spruce, imported from thence	marjoram	Smalts
	nutmegs	Straw hats
	olives	Succus liquoritiæ
	oranges	Sugar
Euphorbium	palm	Tapioca
Feathers for beds	pine	Tar, Barbadoes
Figs	rock	Tornsal
Flax	rosemary and rosewood	Toys
German sausages		Verdigris
Ginger	salad	Vermicelli
Ginseng	sassafras	Vermilion
Granilla	spike	Vanelloes, and all other goods unmanufactured
Gum Arabic	thyme	
Guaiacum, and Senegal	turpentine and walnut	

Not being the produce of, nor imported from within, the East India Company's charter, and not being imported from the West Indies.

TABLE F.

Agates, rough and polished	Columba root	Inkle, wrought
Almond paste	Coral of all sorts	Lace of all kinds
Aloes	Corks, ready made	Lapis lazuli
Ambra liquida	Cuttle shells	Mace, imported by licence
Ambergris	Dice	Manna Mercury
Balsams of all sorts	Eau de Cologne	Metheglin
Beads of all kinds	Enamel	Morels
Beer Benjamin	Essences of all sorts	Musical boxes
Bottles	Extracts of all sorts	Musk Myrrh
Bugles of all kinds	Feathers, ostrich and others, not otherwise enumerated, dressed or undressed	Nutmegs, imported by licence
Cambric		Nux vomica
Camphor Candles		Opium Or molu
Cantharides		Ottar of roses
Cardamoms	Flowers, artificial	Paper Pearls
Cards Carmine	Garnets	Perry Pictures
Cassia buds, lignea, fistula	Gauze of all kinds	Plate Platina
Castor	Ginger, preserved	Platting of all sorts
China ware and porcelain	Glass of all kinds	Powder of bronze and of brass
Crystals Cider	Grains of Paradise and of Guinea	Powder, not otherwise enumerated, which will serve for the same use as starch
Cinnamon, imported under licence	Gum opoponax	
Citron water	Hair, human powder	
Civet	Hats and bonnets of all sorts	
Cloves, imported under licence	Jalap Jet	Quicksilver
Clocks Cochineal	Jewels, emeralds, rubies, and all other precious stones, except diamonds	Radix ipecacuanhæ and rhataniæ
Cocculus Indicus		Resina jalapæ
Coloquintida		Rhubarb Saffron
Sal limonum and succini	Storax of all kinds	Verdigris Vinegar
Scammony	Succades Sugar	Watches of all sorts
Silk, raw and organzined	Threads of all kind	Watch glasses
Snuff Soap	Tobacco	Waters, mineral and strong, of all sorts
Spikenard Starch	Tortoiseshell	
Stones, bezoar	Treacle of Venice	
	Truffles Turbith	Wires
	Vanelloes Vellum	Yarn, mohair

And also all goods and merchandise of every description, which, under the provisions of the warehousing act, may be imported for the purpose of exportation only; all which goods may be deposited only in warehouses enclosed by and surrounded with walls, or in other warehouses, or in places of special security, especially to be approved by the commissioners of the treasury.

WAREHOUSE RENT.

Rates for warehouse rent on goods deposited in the king's warehouses at the several outports, viz. —

On large cases and vats containing toys or other merchandise, and packages of wine and other liquids, per week, 6*d* each.

Packages of baggage, small packages of presents; viz. boxes, kegs, jars, &c., per week, 2*d*. each. All other packages not before described (excet tobacco), per week, 4*d*. each.

For every hogshead of tobacco deposited in the king's warehouse at London, 2*s*.; and for every hogshead taken out of the same, 2*s*. For every hogshead of tobacco warehoused in the king's warehouse at the outports, 1½*d*. per week. — (*Treasury Orders*, Nov. 27. 1824, and March 19. 1830.)

Quantities of the Principal Articles of Foreign Merchandise remaining in Warehouse under the Locks of the Crown, in the Ports of London, Liverpool, Bristol, and Hull, on or about the 5th of January, 1832 and 1833. — (*Papers published by Board of Trade*, vol. ii. p. 66.)

Articles.		January, 1832.	January, 1833.
Alkanet root	lbs.	183,506	683,905
Annatto	—	336,175	232,328
Ashes	cwt.	14,005	12,882
	casks	1,606	135
Barilla	cwt.	147,820	35,568
Borax	lbs.	12,788	27,776
	chests	166	14
Bristles	lbs.	89,351	452,025
	casks	426	248
Cassia lignea	lbs.	82,234	352,942
	packages	2,327	1,611
buds	lbs.	28,085	1,154
	packages	1,258	2,511
Camphor	lbs.	12,237	12,113
	chests	1,147	890
Cinnamon	lbs.	886,099	404,854
Cloves	—	775,992	820,849
Cochineal	—	323,261	335,387
	serons, &c.	77	136
Cocoa	casks	3,603	1,168
	bags	13,485	2,772
	lbs.	454,187	401,527
Coffee	tierces	17,097	17,440
	barrels	1,195	1,683
	bags	77,789	132,429
	bales	13,207	2,969
	lbs.	4,692,008	5,087,989
Currants	cwt.	57,673	37,652
	caroteels and butts	630	2,601
Figs	cwt.	5,634	2,148
	drums	84,463	77,586
	packages	5,030	12,431
Fustic	tons	5,591	899
Galls	cwt.	905	917
	bags	1,676	1,112
Ginger	cwt.	2,351	808
	casks & bags	4,516	288
Hemp	cwt.	127,660	32,479
	bundles	1,857	336
Hides	cwt.	26,418	11,440
	number	28,401	23,881
India rubber	lbs.	129,683	158,321
Indigo	—	544,255	214,822
	chests	36,834	29,670
Iron, bar	tons	5,974	6,301
	bars	26,790	13,411
	cwt.	1,635	
Lac dye	lbs.	545,368	637,738
	chests	7,830	6,813
Lead	cwt.	5,336	5,084
Logwood	tons	5,591	7,524
Mace	lbs.	77,795	2,761
Madder	cwt.	9,018	28,938
	casks	247	177
roots	cwt.	2,528	5,081
	casks	24	210
Molasses	cwt.	24,644	7,672
	casks	1,634	1,708
Nicaragua wood	tons	866	502
Nutmegs	lbs.	274,486	228,546
Oil, castor	—	118,177	65,710
	packages	3,488	225
olive	tuns	9,860	1,132
	casks	895	172
palm	cwt.	3,241	2,285
	casks	983	1,211
Opium	chests		81
	lbs.	10,674	20,517
Pepper	—	254,479	478,750
	bags	60,429	73,951
Piece goods of India, calicoes,	pieces	599,580	489,009
silks	—	133,685	181,738
nankeens	—	1,219,240	846,085
Pimento	casks & bags	21,561	18,174
	lbs.	540,735	483,220
Quicksilver	—	107,555	24,189
Raisins	cwt.	16,204	34,291
Raisins	packages	41,695	35,228
Rhubarb	lbs.	16,149	17,583
	chests	669	450
Rice	cwt.	42,967	45,907
	bags	12,255	14,580
Sago	cwt.	20,696	18,400
	chests	2,326	1,529
Saltpetre	cwt.	35,821	68,865
Sarsaparilla	lbs.	91,337	123,791
	bundles	519	746
Shellac	cwt.	1,055	2,101
	chests	311	244
Shumac	cwt.	7,083	11,138
	bags	3,122	4,877
Silk, raw	lbs.	2,067,194	2,095,550
thrown	—	755,788	89,575
Smalts	—	194,172	294,092
Spirits, brandy	gallons	612,420	725,697
	puncheons	772	1,148
	hhds.	2,283	3,864
geneva	gallons	13,035	27,550
	casks	92	99
	cases	35	178
rum	puncheons	58,932	51,967
	hhds.	10,525	8,281
	gallons	1,365,181	694,618
Steel	cwt.	11,456	9,952
	kegs	1,528	516
Sugar	hhds.	66,642	55,268
	tierces	4,436	3,018
	barrels	2,060	1,688
	bags	136,272	93,953
	chests	10,373	7,521
	boxes	15,600	42,226
	cwt.	281,513	263,703
Tallow	—	38,261	51,375
	casks	12,565	6,250
Tea, black	lbs.	42,256,432	42,067,145
green	—	11,264,692	11,279,163
Tin	cwt.	3,800	2,197
	casks	40	4,223
Tobacco	cwt.	146,541	959,176
	hhds.	8,780	7,612
	packages	270	23
Turpentine	cwt.	41,062	42,263
	casks	3,050	3,571
Turmeric	cwt.	6,124	8,466
	bags	11,477	10,844
Valonia	cwt.	17,607	9,430
Wine, Cape	gallons	488,011	222,985
	pipes	412	595
	hhds.	1,436	588
French	gallons	340,681	352,569
	hhds.	536	858
	cases	1,493	1,430
Madeira	gallons	395,548	361,594
	pipes	300	354
	hhds.	316	442
Port	gallons	2,246,904	1,576,837
	pipes	925	499
	hhds.	1,458	1,099
Rhenish	gallons	48,529	47,037
	casks	169	43
Spanish	gallons	2,596,214	2,241,538
	butts	795	1,133
	hhds.	2,259	3,293
unrated	gallons	172,559	132,978
	pipes	243	143
	hhds.	553	307
Wool, cotton	bales	10,081	8,123
	cwt.	34,708	102,110
sheep's	lbs.	2,078,248	211,474
	bags	2,506	3,751
Zinc	cwt.	37,163	52,825
	plates	3,698	3,933
	casks	18	25

WATCHES (Ger. *Uhren, Taschenuhren*; Fr. *Montres*; It. *Oriuoli da tasca, o da saccoccia*; Sp. *Relojes de faltriquera*; Rus. *Karmannüe tschasü*), portable machines, generally of a small size and round flat shape, that measure and indicate the successive portions of time; having, for the most part, their motions regulated by a spiral spring. When constructed on the most approved principles, and executed in the best manner, a watch is not only an exceedingly useful, but a most admirable piece of mechanism. It has exercised the genius and invention of the most skilful mechanics, as well as of some of the ablest mathematicians, for nearly 3 centuries. And, considering the smallness of its size, its capacity of being carried about uninjured in every variety of position, the number and complexity of its movements, and the extraordinary accuracy with which it represents the successive portions of time as determined by the rotation of the earth on its axis, we need not wonder at Dr. Paley having referred to it as a striking specimen of human ingenuity.

Spring watches are constructed nearly on the same principle as pendulum clocks. Instead of the pendulum in the latter, a spring is used in the former, the isochronism of the vibrations of which corrects the unequal motions of the balance.

Historical Notice. — The invention of spring watches dates from about the middle of the 16th century, and has been warmly contested for Huygens and Hooke. The English writers generally incline in favour of the latter. Dr. Hutton says — (*Mathematical Dictionary*, art. *Watch*), that the words "Rob. Hooke invenit, 1658," were inscribed on the dial plate of a watch presented to Charles II. in 1675. But Montucla affirms (*Histoire des Mathématiques*, tom. ii. p. 413. ed. 1800), that Huygens made this "*belle découverte*" in 1656, and presented a spring watch to the States of Holland in 1657. Comparing these statements, it certainly appears that the claim of Huygens to the priority of the discovery is the better established of the two. We do not, however, believe that either of those distinguished persons owed, in this respect, any thing to the other. The probability seems to be, that the happy idea of employing a spring to regulate the motion of watches occurred to them both nearly at the same time.

Improvement of Watches. — Owing to the facility with which the longitude may be determined by the aid of accurately going watches, it is of great importance to have them made as perfect as possible. In this view liberal premiums have been given to the makers of the best marine watches, or chronometers, by the governments of England, France, Spain, &c. In the reign of Queen Anne, parliament offered a reward of 20,000*l.* to any one who should make a watch, or other instrument, capable of determining the longitude at sea, within certain limits. This magnificent premium was awarded, in 1764, to the celebrated John Harrison, for a marine watch, which, being tried in a voyage to Barbadoes, determined its longitude with even more than the required accuracy. Other premiums, though of inferior amount, were subsequently given to Messrs. Mudge, Arnold, Earnshaw, &c. Since 1822, 2 prizes, one of 300*l.* and one of 200*l.*, have been annually given to the makers of the 2 chronometers adjudged to be the best, after having been submitted to a twelvemonth's trial at the Royal Observatory at Greenwich. And to such perfection has the manufacture attained, that some of the chronometers employed by navigators, though carried into the most opposite climates, have not varied to the extent of 2 seconds in their mean rate of going throughout the year.

Watch Manufacture. — The watch-making business is carried on to a great extent in London; the artists of which have attained to an unrivalled degree of excellence in this department. There are about 14,000 gold and 85,000 silver watches annually assayed at Goldsmith's Hall, London — (*Jacob on the Precious Metals*, vol. ii. p. 413.) — the aggregate value of which is, probably, not much under 600,000*l.* The manufacture is also carried on to a considerable extent at Liverpool, Coventry, Edinburgh, &c. Watch movements used to be extensively manufactured at Prescot in Lancashire; but latterly, we believe, the manufacturers have been withdrawing to Liverpool.

On the Continent, watches are principally manufactured at Paris, Geneva, and in Neufchâtel. Some of the French and Swiss watches are excellent; but, generally speaking, they are slight, and inferior to those made in London. Paris and Geneva watches are largely exported to foreign countries; and are every where in high estimation, particularly among the ladies.

Watches impressed with any mark or stamp, appearing to be or to represent any legal British assay mark or stamp, or purporting by any mark or appearance to be of the manufacture of the United Kingdom, or not having the name and place of abode of some foreign maker abroad visible on the frame and also on the face, or not being in a complete state, with all the parts properly fixed in the case, may not be imported into the United Kingdom, even for the purpose of being warehoused. — (3 & 4 *Will.* 4. c. 52. § 58. See *antè*, p. 662.)

Watches in China. — Pretty considerable numbers of European watches are imported into China; and we anticipate, now that the monopoly is put down, a large increase of the trade. It may be worth mentioning, that those among the Chinese, as well as among some other Eastern nations, who can afford it, uniformly *wear watches in pairs!* This sort of extravagance is not, however, confined to watches, but extends to a variety of other articles. Shawls, for example, are invariably worn in India in pairs of exactly the same pattern; and it is hardly possible, indeed, to find a native dealer who will sell a single shawl.

In 1832, there were exported from Great Britain 18,678 watches of British manufacture; of these, 13,379 were silver, 4,187 metal, 435 gold, 671 being without cases. The duty on foreign watches and clocks is an *ad valorem* one of 25 per cent., and no account is kept of the numbers of each imported. In 1832, their aggregate value amounted to 25,232*l.*: the total value of the foreign clocks and watches exported during the same year being 1,054*l.* — (*Parl. Paper*, No. 490. Sess. 1833.)

WATER. It may be thought unnecessary, perhaps, to say any thing in a work of this sort with respect to a fluid so well known and so abundant. But, besides being an indispensable necessary of life, water is, in most large cities, an *important commercial article*. It is in the latter point of view, principally, that we mean to consider it. — Inasmuch, however, as the mode of supplying different places with water, and its price, necessarily vary in every possible way, we shall limit our remarks on these subjects to the metropolis only. The few remarks we intend to offer of a general nature will apply indifferently to any populous place, the supply of which with water occasions a considerable expense.

1. *Quality of Water.* — Dr. Ure has made the following statements with respect to the quality of water: — "Water," says he, "is a very transparent fluid, possessing a moderate degree of activity with regard to organised substances, which renders it friendly to animal and vegetable life, for both which it is, indeed, indispensably necessary. Hence it acts but slightly on the organs of sense, and is therefore

said to have neither taste nor smell. It appears to possess considerable elasticity, and yields in a perceptible degree to the pressure of air in the condensing machine.

"Native water is seldom, if ever, found perfectly pure. The waters that flow within or upon the surface of the earth contain various earthy, saline, metallic, vegetable, or animal particles, according to the substances over or through which they pass. Rain and snow waters are much purer than these, although they also contain whatever floats in the air, or has been exhaled along with the watery vapours.

"The purity of water may be known by the following marks or properties of pure water: —

"1. Pure water is lighter than water that is not pure.

"2. Pure water is more fluid than water that is not pure.

"3. It has no colour, smell, or taste.

"4. It wets more easily than the waters containing metallic and earthy salts, called hard waters, and feels softer when touched.

"5. Soap, or a solution of soap in alcohol, mixes easily and perfectly with it.

"6. It is not rendered turbid by adding to it a solution of gold in aqua regia; or a solution of silver, or of lead, or of mercury, in nitric acid; or a solution of acetate of lead in water.

"Water was, till modern times, considered as an elementary or simple substance; but it is now ascertained to be a compound of oxygen and hydrogen."

2. *Supply of Water.* — London was very ill supplied with water previously to the early part of the 17th century, when the New River water was introduced into the city. This exceedingly useful work was planned and carried into effect by the famous Sir Hugh Middleton, who expended his whole fortune on the project; having, like many other public benefactors, entailed poverty on himself and his posterity by embarking in an undertaking productive of vast wealth to others, and of great public utility. The New River has its principal source near Chadwell, between Hertford and Ware, about 20 miles from London; but the artificial channel in which the water is conveyed is about 40 miles in length. Sir Hugh Middleton encountered innumerable difficulties during the progress of the undertaking, which it is probable would have been abandoned, at least for a time, but for the aid afforded by James I. The New River Company was incorporated in 1619, 6 years after the water had been brought to the reservoir at Islington. The undertaking yielded very little profit for a considerable number of years; but it has since become extremely profitable; so much so, that an original 500*l.* share has been sold for 13,000*l.*!

The Chelsea Water-Works Company was formed in 1723, and (with the aid of 3 smaller companies, none of which are now in existence) it, and the New River, supplied all that part of the metropolis north of the Thames with water, down to the year 1810. In that year, however, 3 new companies, the East London, West Middlesex, and Grand Junction, were established, under the authority of different acts of parliament. At this moment the metropolis is supplied with water by the following companies: —

New River,	Grand Junction,
Chelsea,	Lambeth,
East London,	Vauxhall, or South London, and
West Middlesex,	Southwark Water Works.

The following statements with respect to these companies are taken from Mr. Wade's valuable treatise on the police of the metropolis. The Report of the commissioners appointed by government in 1827, to inquire into the state of the supply of water in the metropolis, is the principal authority on which they are founded.

"*The New River Company* get their supply from the spring at Chadwell, between Hertford and Ware. It comes in an open channel, of about 40 miles in length, to reservoirs at Clerkenwell. There are 2 reservoirs, having between them a surface of about 5 acres, and an average depth of 10 feet. These reservoirs are 84½ feet above low water mark in the Thames; and, by means of steam engines and a stand-pipe, an additional height of 60 feet can be given to the water, so that all the mains belonging to this Company are kept full by a considerable pressure of water. The highest service given by the New River is the cistern on the top of Covent Garden Theatre. The aqueduct by which the water is brought has only a fall of 2 inches per mile; thus it wastes, by evaporation, during the drought of summer, and is impeded by frost in the winter. At these times the Company pump an additional supply from the Thames, at Broken Wharf, between Blackfriars and Southwark Bridges. To this, however, they seldom have recourse; and their engine, erected since the works at London Bridge were broken down, has worked only 176 hours in the year. The New River Company supply 66,600 houses with water, at an annual average of about 1,100 hogsheads each, or, in all, about 75,000,000 hogsheads annually.

"*The East London Water Works* are situated at Old Ford, on the river Lea, about 3 miles from the Thames, and a little below the point to which the tide flows up the Lea. By the act of parliament, this Company must take its water when the tide runs up and the mills below have ceased working. The water is pumped into reservoirs and allowed to settle; and a supply of 6,000,000 gallons is daily distributed to about 42,000 houses. This Company supply no water at a greater elevation than 30 feet, and the usual height at which the delivery is made to the tenants is 6 feet above the pavement; they have 200 miles of iron pipes, which, in some places, cost them 7 guineas a yard. This and the New River are the only companies which do not draw their supply of water entirely from the Thames.

"*The West Middlesex* derive their supply of water from the Thames, at the upper end of Hammersmith, about 9½ miles above London Bridge, and where the bed of the Thames is gravel. The water is forced by engines to a reservoir at Kensington, 309 feet long, 123 wide, and 20 deep, paved and lined with bricks, and elevated about 120 feet above low water in the Thames. They have another reservoir on Little Primrose Hill, about 70 feet higher, and containing 88,000 hogsheads of water, under the pressure of which the drains are kept charged, in case of fires. They serve about 15,000 tenants, and the average daily supply is about 2,250,000 gallons.

"*The Chelsea Water Works* derive their supply from the Thames, about ¼ of a mile east of Chelsea Hospital; and they have 2 reservoirs — one in the Green Park and another in Hyde Park — the former having an elevation of 44 feet, and the latter of 70. These reservoirs, till within these few months, had never been cleaned, nor had there been any preparation made for that purpose in their construction. About ⅓ of the water served out by this Company is allowed to settle in these reservoirs, and the remaining ⅔ are sent directly from the Thames. Latterly, the Company have

been making preparations for filtering the water; and also for allowing it to settle in reservoirs, at Chelsea, before it is delivered into the mains. The Chelsea Company serve about 12,400 houses, and the average daily supply is 1,760,000 gallons.

"*The Grand Junction Company* derive the whole of their supply from the Thames, immediately adjoining Chelsea Hospital; thence it is pumped, without any filtration or settling, into 3 reservoirs at Paddington. These reservoirs are about 71, 86, and 92 feet above high water mark in the Thames; their united contents are 19,355,840 gallons; and by means of a stand-pipe, the water is forced to the height of 147 feet, or about 61 feet above the average height in the reservoir. The number of houses supplied by the Grand Junction Company is 7,700, and the average daily supply is about 2,800,000 gallons.

"*The Lambeth Company* take their supply from the Thames, between Westminster and Waterloo Bridges. It is drawn from the bed of the river by a suction pipe, and delivered to the tenants without being allowed to subside; there being only a cistern of 400 barrels at the works, as a temporary supply, until the engines can be started. The greatest height to which the Company force water is about 40 feet; the number of houses that they supply is 16,000, and the average service is 1,244,000 gallons daily.

"*The South London*, or *Vauxhall Company*, take their supply from the river Thames by a tunnel, which is laid 6 feet below low water mark, and as far into the river as the third arch of Vauxhall Bridge. At that particular place, the bed of the Thames is described as being always clean, and without any of those depositions of mud and more offensive substances that are found in many other places. Besides the greater purity of the bed of the Thames here than where any other Company on the south side take their supply, the Company allow the water to settle in reservoirs. The Vauxhall Company supply about 10,000 houses with about 1,000,000 gallons of water daily.

"*The Southwark Water Works* [the property of an individual] are supplied from the middle of the Thames, below Southwark and London Bridges; and the water thus taken is sent out to the tenants without standing to settle, or any filtration further than it receives from passing through wire grates and small holes in metallic plates. The number of houses supplied by these works is about 7,000, and the average daily supply about 720,000 gallons."

The results may be collected into a Table, as follows: —

Companies.	Services.	Average per Day, Gallons.	Gallons Annually.	Average per House, Gallons.
1. New River	67,000	13,000,000	4,056,000,000	182
2. East London	42,000	6,000,000	1,872,000,000	143
3. West Middlesex	15,000	2,250,000	702,000,000	150
4. Chelsea	12,400	1,760,000	549,120,000	142
5. Grand Junction	7,700	2,800,000	873,600,000	363
6. Lambeth	16,000	1,244,000	388,128,000	77
7. South London	10,000	1,000,000	312,000,000	100
8. Southwark	7,000	720,000	224,640,000	102
Total	183,100	28,774,000	8,977,388,000	157

Average per house north of the river - 196 gallons.
Average per house south of the river - 93 ditto.

It would appear from this Table, as if the supply of water were either excessive on the Middlesex side of the river, or very deficient on the Surrey side. But this discrepancy is more apparent than real. The inhabitants in the northern district are, speaking generally, decidedly richer than those in the southern district; they have, particularly in the west end of the town, larger families, and a much greater number of horses. There is also a much larger expenditure of water upon the roads in Middlesex than in Surrey. Still, however, we believe that there is a more liberal supply in the former than in the latter.

Monopoly of the Water Companies. — The sanction of parliament was given to the 3 new companies formed in 1810, not so much in the view of increasing the actual supply of water, as of checking monopoly, and reducing the rates by their competition. But these expectations have not been realised. For a while, indeed, the competition of the several companies was exceedingly injurious to their interests, and occasioned the total destruction of some of the inferior ones; but no sooner had this happened, than the others discovered that their interests were in reality the same, and that the true way to promote them was to concert measures together. In furtherance of this object, the 5 companies for the supply of that part of the metropolis north of the river proceeded to divide the town into as many districts, binding themselves, under heavy penalties, *not to encroach on each other's estates:* and having in this way gone far to secure themselves against any new competitors, their next measure was to add *five and twenty* per cent. to the rates established in 1810; and these have, in several instances, been still further augmented! The benefits that were expected to result from their multiplication have, therefore, proved quite imaginary; and though the supply of water has been increased, it is neither so cheap nor so good as it might have been under a different system.

The following statement of the rates and profits of the 5 principal Water Companies in 1820 and 1827, is extracted from the *Report* of the Select Committee of the House of Commons on the supply of water in 1828: —

Comparative Returns of 1820 with 1827.

Years.	Houses.	Average Rate per House.	Gross Annual Income.	Gross Expenditure.	Nett Profit.	Remarks.
		s.	*L. s. d.*	*L. s. d.*	*L. s. d.*	
			West Middlesex.			
1820	10,350	47	24,252 6 10	9,000 0 0	15,252 6 10	
1827	14,500	51	37,000 0 0	13,000 0 0	24,000 0 0	
			Grand Junction.			
1820	7,180	57	20,153 11 7	8,916 6 5	11,237 5 7	
1827	7,509	61	24,702 5 0	10,674 8 4	14,027 16 8	
			Chelsea.			
1820	8,631	35	15,150 7 11	12,255 11 0	2,894 16 11	
1827	12,409	30	18,589 16 1	12,532 2 9	6,057 13 4	
			East London.			
1820	32,071	22	35,358 14 9	16,336 1 0	19,022 13 9	There was also a non-permanent expenditure in 1827, amounting to 23,217*l.* 18*s.* 2*d.*
1827	42,000	21	45,442 19 5	14,050 6 3	31,392 13 2	
			New River.			
1820	52,082	25	67,275 2 4	48,109 18 4	19,165 4 0	
1827	66,600	28	95,657 15 10	59,204 13 3	36,453 2 7	
			South London.			
1820	5,200	18	4,708 3 4	- - -	- - -	
1827	10,000	16	8,293 2 7	7,991 13 7	301 9 0	Incomplete.
			Lambeth.			
1820	11,487	16	9,335 0 0	8,552 0 0	783 0 0	
1827	15,987	16	12,370 0 0	9,500 0 0	2,870 0 0	
			Southwark.			
1820	- -	-	- - -	- - -	- - -	Returns incomplete.
1827	6,900	-	- - -	- - -	- - -	

Total North of the Thames.

Years.	Houses.	Gross Annual Income.	Gross Expenditure.	Nett Profit.
		L. *s.* *d.*	*L.* *s.* *d.*	*L.* *s.* *d.*
1820	110,314	162,190 3 5	94,617 16 4	67,572 7 1
1827	143,318	221,392 16 4	109,461 10 7	111,931 5 9

Total South of the Thames. — Returns not complete.

The truth is, as we endeavoured to show in the article COMPANIES, that certain restrictions ought, in almost all cases, to be imposed on companies for the supply of water to a large city. These are not undertakings that can be safely trusted to the free principles that may generally be relied upon. If there be only one set of springs adjacent to a town, or if there be certain springs more conveniently situated for supplying it with water than any other, a company acquiring a right to such springs, and incorporated for the purpose of conveying the water to town, would thereby gain an *exclusive advantage;* and if no limits were set to its dividends, its partners might make an enormous profit at the expense of the public, and without its being possible materially to reduce them by means of competition. What has happened in the case of the New River Company sufficiently evinces the truth of what has now been stated. Had its dividends been limited to any thing like a reasonable profit, the water that is at present supplied by its means might have been furnished for a small part of what it actually costs. But in cases of this sort, priority of occupation, even without any other peculiar advantage, goes far to exclude all regular and wholesome competition. A company that has got pipes laid down in the streets may, if threatened by the competition of another company, lower its rates so as to make the latter withdraw from the field; and as soon as this is done, it may revert to its old, or even to higher charges. It is not, in fact, possible, in cumbrous concerns of this sort, to have any thing like competition, in the ordinary sense of the term; and experience shows that whenever it is attempted, it only continues for a limited period, and is sure to be in the end effectually suppressed. We are, therefore, clearly of opinion, that no company ought ever to be formed for the conveyance of water into a large city, without a maximum being set both to the rates and the dividends; giving the company an option, in the event of the maximum rate yielding more than the maximum dividend, either to reduce the rate, or to apply the surplus to the purchase of the company's stock; so that ultimately the charge on account of the dividends may be got rid of.

We are glad to have to add, that we are supported in what is now stated by the *Report* of the Select Committee of the House of Commons on the supply of water for the metropolis, printed in 1821. It is there said — "The public is at present without any protection even against a further indefinite extension of demand. In cases of dispute, there is no tribunal but the Boards of the companies themselves, to which individuals can appeal; there are no regulations but such as the companies may have voluntarily imposed upon themselves, and may therefore at any time revoke, for the continuance of the supply in its present state, or for defining the cases in which it may be withdrawn from the householder. All these points, and some others of the same nature, indispensably require legislative regulation, where the subject matter is an article of the first necessity, and the supply has, from peculiar circumstances, got into such a course that it is not under the operation of those principles which govern supply and demand in other cases.

"The principle of the acts under which these companies were instituted, was to encourage competition; and certainly in this, as in other cases, it is only from competition, or the expectation of competition, that a perfect security can be had for a good supply. But your committee are satisfied, that, from the peculiar nature of these undertakings, the principle of competition requires to be guarded by particular checks and limits in its application to them, in order to render it effectual, without the risk of destruction to the competing parties, and thereby, ultimately, of a serious injury to the public." And the committee proceeds to remark — "The submission of their accounts annually to parliament, for a few years, would necessarily throw light on this part of the question."

We think that it would be highly expedient to adopt the suggestion of the committee, by calling upon the companies to lay annually detailed statements of their affairs before parliament. They should be obliged in these statements to give an account of the rates charged by them, and to make a special report as to every case in which they have withdrawn water from a householder. It is to no purpose to repeat, in opposition to this proposal, the common-places about competition securing for the citizens a sufficient supply of water at the lowest prices, in the same way that the competition of bakers and butchers secures them supplies of beef and bread! The statements already made show that there is no analogy whatever in the circumstances under which these articles are supplied. If a man be dissatisfied with any particular butcher or baker, he may go to another; but *it is not possible for him to change his water merchant*, unless he also change the place of his residence. No water company will encroach upon the district assigned to another; and supposing an individual unlucky enough to quarrel with those who have the absolute *monopoly* of the supply of the district in which he resides, he must either migrate to another, or be without water, unless he can get a supply upon his own premises! Such being the actual state of things, it is quite ludicrous to talk about competition affording any real security against extortion and abuse. Even the publication of the proceedings of the companies would be a very inadequate check on their conduct; but such as it is, it is perhaps the only one that can now be resorted to; and as it would have considerable influence, it ought not, certainly, to be neglected.

3. *Quality of the London Water.* — All the companies, with the exception of the New River and East London Companies, derive their supplies of water from the Thames; and in consequence of their taking it up within the limits to which the tide flows, it is necessarily, in the first instance, loaded with many impurities. But the reports that were recently so very prevalent, with respect to the deleterious quality of the water taken from the river, have been shown to be very greatly exaggerated. The statement of Dr. Bostock, given in the *Report* of the commissioners, shows that by far the greater part of the impurities in the Thames water are mechanically suspended in, and not chemically combined with, it; and that they may be separated from it by filtration, or by merely allowing it to stand at rest. Most of the companies have recently made considerable efforts to improve their water; and though they have not done in this respect as much as they might and ought to have done, a considerable improvement has, on the whole, been effected: and notwithstanding all that has been said to the contrary, we have been assured, by those best qualified to form an opinion on such a subject, that, though not nearly so pure as a little pains would render it, there is not the slightest foundation for the notion that its impurities have been such as to affect, in any degree, the health of the inhabitants.

4. *Water for Ships.* — Various improvements have been made in the art of preserving water on board ships. Of these, the principal are the charring the inside of the casks in which the water is kept, and the substitution of iron tanks for casks. The latter, being made of the required shape, may be conveniently stowed into any part of the ship. In men-of-war, the iron tanks serve as ballast; the water being brought up by a forcing pump. Water is found to preserve better in them than in any other sort of vessel. Drip-stones may be employed with much advantage in the purification of water. When water is taken on board from a river into which the tide flows, it should, of course, be raised at low ebb.

WAX (Ger. *Wachs;* Fr. *Cire;* It. and Sp. *Cera;* Rus. *Wosk*), a vegetable product. Several plants contain wax in such abundance, as to make it worth while to extract it from them. But bees' wax is by far the most generally known. The honey is first

pressed from the comb, and the wax is then melted into cakes. It has a slight odour of honey, is insipid, and of a bright yellow hue. It is brittle, yet soft, and somewhat unctuous to the touch. It is often adulterated with earth, pea meal, resin, &c. The presence of the former may be suspected when the cake is very brittle, or when its colour inclines more to gray than to yellow; and the presence of resin may be suspected when the fracture appears smooth and shining, instead of being granulated. Wax, when bleached or purified, is white, perfectly insipid, inodorous, and somewhat translucent; it is harder, less unctuous to the touch, heavier, and less fusible, than yellow wax. It is sometimes adulterated with the white oxide of lead to increase its weight, with white tallow, and with potato starch. The first is detected by melting the wax in water, when the oxide falls to the bottom; the presence of tallow is indicated by the wax being of a dull opaque white, and wanting the transparency which distinguishes pure wax; and starch may be detected by applying sulphuric acid to the suspected wax, as the acid carbonises the starch, without acting on the wax. — (*Thomson's Chemistry*, and *Dr. A T. Thomson's Dispensatory.*)

Notwithstanding the large supply of wax produced at home, a considerable quantity is imported from abroad; and there can be no doubt that the import would be much greater, were it not for the magnitude of the duty, which, notwithstanding its late reduction, still amounts to 1*l.* 10*s.* per cwt. The total quantity imported, in 1831, amounted to 7,203 cwt.; of which 3,892 cwt. came from Western Africa, 1,551 cwt. from Tripoli, Barbary, &c., 910 cwt. from the United States, and the rest from Russia, Germany, &c.

Account of the Imports and Exports of Wax, the Quantities retained for Home Use, the Rates of Duty thereon, and the Nett Produce of the Duty, in 1831 and 1832. — (*Papers published by the Board of Trade*, vol. ii. p. 29.)

	Imports.		Exports.		Retained for Home Consumption.		Rate of Duty.			Produce of Duty.		
	1831.	1832.	1831.	1832.	1831.	1832.						
	Cwt.	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*Cwt.*	*L.*	*s.*	*d.*	*L.*	*s.*	*d.*
Wax, unbleached	7,005	4,349	1,878	2,536	10,902	326	1	10	0	10,262	0	0
bleached	198		504		94		3	0	0	823	0	0

The price of wax varies (duty included) from 5*l.* to 10*l.* a cwt.

WEIGHTS AND MEASURES. Weights are used to ascertain the gravity of bodies, — a quality depending partly on their magnitude, and partly on their density. Measures are used to determine the magnitude of bodies, or the space which they occupy.

(For an account of the weights and measures used in foreign countries, and their equivalents in English weights and measures, see the notices of the great sea-port towns dispersed throughout this work. Thus, for the Russian weights and measures, see PETERSBURGH; for those of China, see CANTON; &c.)

Neither the magnitude nor the weight of any one body can be determined, unless by comparing it with some other body selected as a standard. It is impossible, indeed, to form any idea in respect of magnitude or weight, except in relation to some definite space or weight with which we are acquainted. We say that one article weighs 1 pound, another 2 pounds, a third 3, and so on; meaning not only that these weights are to each other as 1, 2, 3, &c., but also that the weight or specific gravity of the first is equal to the known and determinate weight denominated a pound, that the second is equal to 2 pounds, and so on.

Standards of Weight and Measure. — Standards of lineal measure must have been fixed upon at the earliest period, and appear to have consisted principally of parts of the human body, — as the cubit, or length of the arm from the elbow to the tip of the middle finger: the foot; the *ulna*, arm, or yard; the span; the digit, or finger; the fathom, or space from the extremity of one hand to that of the other, when they are both extended in opposite directions; the pace, &c. Large spaces were estimated by measures formed out of multiples of the smaller ones; and sometimes in day's journeys, or by the space which it was supposed an ordinary man might travel in a day, using a reasonable degree of diligence.

But lineal measures can only be used to determine the magnitude of solid bodies; the magnitude of bodies in a liquid or fluid state has to be determined by what are called measures of capacity. It is probable that, in the infancy of society, shells, or other hollow instruments afforded by nature, were used as standards. But the inaccuracy of the conclusions drawn from referring to them must soon have become obvious; and it early occurred, that to obtain an accurate measure of liquids nothing more was necessary than to constitute an artificial one, the dimensions, and consequently the capacity, of which should be determined by the lineal measures previously adopted.

The determination of the gravity or weight of different bodies supposes the invention of the balance. Nothing is known of the steps which led to its introduction; but it was used in the remotest antiquity. It seems probable that, at first, cubes of some common lineal measure, as a foot, or the fraction of a foot, formed of copper, iron, or some other metal, were used as standards of weight. When the standard was selected, if it was de-

sired to ascertain the specific gravity or weight of any given article, all that was necessary was to put it into one of the scales of the balance; and as many cubes, or parts of cubes, on the other, as might be necessary to counterpoise it.

Weights have, however, been frequently derived from grains of corn. Hence, in this, and in some other European countries, the lowest denomination of weight is a *grain*; and 32 of these grains are directed, by the ancient statute called *Compositio Mensurarum*, to compose a pennyweight, whereof 20 make an ounce, 12 ounces a pound, and so upwards.

In every country in which commercial transactions are extensively carried on, the importance of having weights and measures determined by some fixed standard becomes obvious to every one. But as the size of different parts of the human body differ in different individuals, it is necessary to select some durable article, — a metallic rod, for example, — of the length of an ordinary cubit, foot, &c., and to make it a standard with which all the other cubits, feet, &c. used in mensuration shall correspond. These standards have always been preserved with the greatest care: at Rome, they were kept in the temple of Jupiter; and among the Jews, their custody was intrusted to the family of Aaron. — (*Paucton, Métrologie*, p. 223.)

The principal standards used in the ancient world, were, the cubit of the Jews, from which their other measures of length, capacity, and weight were derived; and the foot of the Greeks and Romans.

In England, our ancient historians tell us that a new, or rather a revived, standard of lineal measure was introduced by Henry I., who ordered that the ulna, or ancient ell, which corresponds to the modern yard, should be made of the exact length of his own arm, and that the other measures of length should be raised upon it. This standard has been maintained, without any sensible variation. In 1742, the Royal Society had a yard made, from a very careful comparison of the standard ells or yards of the reigns of Henry VII. and Elizabeth kept at the Exchequer. In 1758, an exact copy was made of the Royal Society's yard; and this copy having been examined by a committee of the House of Commons, and reported by them to be equal to the standard yard, it was marked as such; and this identical yard is declared, by the act 5 Geo. 4. c. 74., to be the standard of lineal measure in Great Britain. The clause in the act is as follows: —

"From and after the 1st day of May, 1825 (subsequently extended to the 1st of January, 1826), the straight line or distance between the centres of the 2 points in the gold studs in the straight brass rod, now in the custody of the clerk of the House of Commons, whereon the words and figures 'STANDARD YARD, 1760,' are engraved, shall be the original and genuine standard of that measure of length or lineal extension called a yard; and the same straight line or distance between the centres of the said 2 points in the said gold studs in the said brass rod, the brass being at the temperature of 62° by Fahrenheit's thermometer, shall be and is hereby denominated the 'IMPERIAL STANDARD YARD,' and shall be and is hereby declared to be the unit or only standard measure of extension, wherefrom or whereby all other measures of extension whatsoever, whether the same be lineal, superficial, or solid, shall be derived, computed, and ascertained; and that all measures of length shall be taken in parts or multiples or certain proportions of the said standard yard; and that 1-3d part of the said standard yard shall be a foot, and the 12th part of such foot shall be an inch; and that the pole or perch in length shall contain 5½ such yards, the furlong 220 such yards, and the mile 1,760 such yards." — § 1.

The superficial measures are formed on the basis of the square of this standard; it being enacted, that

"The rood of land shall contain 1,210 square yards, according to the said standard yard; and that the acre of land shall contain 4,840 such square yards, being 160 square perches, poles, or rods." — § 2.

Uniformity of Weights and Measures. — The confusion and inconvenience attending the use of weights and measures of the same denomination, but of different magnitudes, was early remarked; and there is hardly a country in which efforts have not been made to reduce them to the same uniform system. Numerous acts of parliament have been passed, having this object in view, and enjoining the use of the same weights and measures, under very severe penalties. But, owing to the inveteracy of ancient customs, and the difficulty of enforcing new regulations, these statutes have always had a very limited influence, and the greatest diversity has continued to prevail, except in lineal measures. But the statute of 5 Geo. 4. c. 74. seems to have, at length, effected what former statutes failed of accomplishing. It is, perhaps, indebted for its success in this respect to the moderate nature of the changes which it introduced. We have already seen that it made no alteration in the lineal measures previously in use. Neither did it affect the previously existing system of weights: both the Troy and the Avoirdupois weights having been preserved.

"The Troy weight," says Mr. Davies Gilbert, President of the Royal Society, "appeared to us (the commissioners of weights and measures) to be the ancient weight of this kingdom, having, as we have reason to suppose, existed in the same state from the time of St. Edward the Confessor; and there are reasons, moreover, to believe, that the word Troy has no reference to any town in France, but rather to the monkish name given to London, of Troy Novant, founded on the legend of Brute. Troy weight, therefore, according to this etymology, is, in fact, London weight. We were induced, moreover, to preserve the Troy weight, because all the coinage has been uniformly regulated by it; and all medical prescriptions or formulæ now are, and always have been, estimated by Troy weight, under a peculiar subdivision, which the College of Physicians have expressed themselves most anxious to preserve."

It was resolved, therefore, to continue the use of Troy weight; and also, on account of the accuracy of the Troy standard, to raise the Avoirdupois weight from this basis.

"We found," said Mr. Davies Gilbert, "the Avoirdupois weight, by which all heavy goods have been for a long time weighed (probably derived from Avoirs (Averia), the ancient name for goods or chattels, and Poids, weight), to be universally used throughout the kingdom. This weight, however, seems not to have been preserved with such scrupulous accuracy as Troy weight, by which more precious articles have been weighed; but we had reason to believe that the pound cannot differ by more than 1, 2, or 3 grains, from 7,000 grains Troy; some being in excess, and others, though in a less degree, in defect, but in no case amounting to above 1, 2, or 3 grains. It therefore occurred to us, that we should be offering no violence to this system of weights, if we declared that 7,000 grains Troy should be hereafter considered as the pound Avoirdupois."

In accordance with these views, it was enacted, — "That from and after the 1st day of May, 1825, the standard brass weight of 1 pound Troy weight, made in the year 1758, now in the custody of the clerk of the House of Commons, shall be, and the same is hereby declared to be, the original and genuine standard measure of weight, and that such brass weight shall be, and is hereby denominated, the Imperial Standard Troy pound, and shall be, and the same is hereby declared to be, the unit or only standard measure of weight, from which all other weights shall be derived, computed, and ascertained; and that 1-12th part of the said Troy pound shall be an ounce; and that 1-20th part of such ounce shall be a pennyweight; and that 1-24th part of such pennyweight shall be a grain; so that 5,760 such grains shall be a Troy pound; and that 7,000 such grains shall be, and they are hereby declared to be, a pound Avoirdupois, and that 1-16th part of the said pound Avoirdupois shall be an ounce Avoirdupois, and that 1-16th part of such ounce shall be a dram."

The measures of capacity were found to be, at the period of passing the late statute, in the greatest confusion; and a considerable change has consequently been made in them. The wine gallon formerly amounted to 231 cubic inches, the corn gallon to 268·8, and the ale gallon to 282. But these are superseded by the Imperial gallon, which contains 277·274 cubic inches, or 277¼ very nearly. It is deduced as follows: —

"The standard measure of capacity, as well for liquids as for dry goods not measured by heaped measure, shall be THE GALLON, containing 10 lbs. avoirdupois weight of distilled water weighed in air, at the temperature of 62° of Fahrenheit's thermometer, the barometer being at 30 inches; and a measure shall be forthwith made of brass, of such contents as aforesaid, under the directions of the Lord High Treasurer or the commissioners of his Majesty's treasury; and such brass measure shall be, and is hereby declared to be, the Imperial standard gallon, and shall be, and is hereby declared to be, the unit and only standard measure of capacity, from which all other measures of capacity to be used, as well for wine, beer, ale, spirits, and all sorts of liquids, as for dry goods not measured by heap measure, shall be derived, computed, and ascertained; and all measures shall be taken in parts or multiples or certain proportions of the said Imperial standard gallon; and the quart shall be ¼th part of such standard gallon, and the pint shall be ⅛th of such standard gallon, and 2 such gallons shall be a peck, and 8 such gallons shall be a bushel, and 8 such bushels a quarter of corn or other dry goods, not measured by heaped measure." — § 6.

We subjoin a Table showing the contents of the different gallons, both in measure and weight.

	Cubic Inches.	Avoirdupois Weight.			Troy Weight.			
		Lbs.	*oz.*	*dr.*	*Lbs.*	*oz.*	*dwt.*	*grs.*
Imperial gallon	277·274	10	0	0	12	1	16	16
Corn gallon	268·8	9	10	1¾	11	9	7	12
Wine gallon	231	8	5	6¼	10	1	9	22
Ale gallon	282	10	2	11¼	12	4	6	8

Heaped Measures. — The greatest blemish, by far, in the new act, is the continuance and legitimation of the practice of selling by heaped measure. We are astonished at the toleration of such a barbarous custom. All articles that may be sold by heaped measure *ought* to be sold by weight. In Scotland, indeed, the use of heaped measure was legally abolished above 200 years since; and the present ill-advised attempt to revive a practice productive of nothing but fraud has been universally rejected in that country. The clauses in the act as to heaped measure are as follow: —

The standard measure of capacity for *coals, culm, lime, fish, potatoes, or fruit, and all other goods and things commonly sold by heaped measure*, shall be the aforesaid bushel, containing 80 lbs. avoirdupois of water as aforesaid, the same being made round, with a plain and even bottom, and being 19½ inches from outside to outside of such standard measure as aforesaid. — § 7.

In making use of such bushel, all coals and other goods and things commonly sold by heaped measure, shall be duly heaped up in such bushel, in the form of a cone, such cone to be of the height of at least 6 inches, and the outside of the bushel to be the extremity of the base of such cone; and 3 bushels shall be a sack, and 12 such sacks shall be a chaldron. — § 8. It was further enacted, by stat. 6 Geo. 4. c. 12., that from and after the 1st of January, 1826, all such heaped measures shall be made cylindrical, and the diameter of such measures shall be at the least double the depth thereof, and the height of the cone or heap shall be equal to ¼ths of the depth of the said measure, the outside of the measure being the extremity of or base of such cone. — § 2.

Measure of Weight, or Heaped Measure, to be used for Wheat. — Provided always, that any contracts, bargains, sales, and dealings, made or had for or with respect to any coals, culm, lime, fish, potatoes, or fruit, and all other goods and things commonly sold by heaped measure, sold, delivered, done, or agreed for, or to be sold, delivered, done, or agreed for, by weight or measure, shall and may be either according to the said standard of weight, or the said standard for heaped measure; but all contracts, bargains, sales, and dealings, made or had for any other goods, wares, or merchandise, or other thing done or agreed for, or to be sold, delivered, done, or agreed for, by weight or measure, shall be made and had according to the said standard of weight, or to the said gallon, or the parts, multiples, or proportions thereof; and in using the same the measures shall not be heaped, but shall be stricken with a round stick or roller, straight, and of the same diameter from end to end. — (*5 Geo. 4. c. 74. § 9.*)

Models. — The 12th section of the act directs models of the standard weights and measures to be kept in the different counties, cities, burghs, &c. for the verification of the weights and measures in use in such places.

Contracts for Sale, &c. by Weight or Measure. — All contracts, bargains, sales, and dealings, which shall be made or had within any part of the United Kingdom, for any work to be done, or for any goods, wares, merchandise, or other thing to be sold, delivered, done, or agreed for, by weight or measure, where no special agreement shall be made to the contrary, shall be deemed to be made and had according to the

standard weights and measures ascertained by this act; and in all cases where any special agreement shall be made, with reference to any weight or measure established by local custom, the ratio or proportion which every such local weight or measure shall bear to any of the said standard weights or measures shall be expressed, declared, and specified in such agreement, or otherwise such agreement shall be null and void. — § 15.

Existing Weights and Measures may be used, being marked. — And as it is expedient that persons should be allowed to use the several weights and measures which they may have in their possession, although such weights and measures may not be in conformity with the standard weights and measures established by this act; it is therefore enacted, that it shall be lawful for any person or persons to buy and sell goods and merchandise by any weights or measures established either by local custom, or founded on special agreement: provided that, in order that the ratio or proportion which all such measures and weights shall bear to the standard weights and measures established by this act shall be and become a matter of common notoriety, the ratio or proportion which all such customary measures and weights shall bear to the said standard weights and measures shall be painted or marked upon all such customary weights and measures respectively; but nothing herein contained shall extend to permit any maker of weights or measures, or any person or persons whomsoever, to make any weight or measure, at any time after the 1st of May, 1825, except in conformity with the standard weights and measures established under this act. — § 16.

False or deficient Weights, &c. — The 21st section declares that all the powers, rules, and regulations in force by former acts for preventing the use of false and deficient measures are to be applied and put in execution, except such as are expressly repealed or altered by this act.

Invariable or Natural Standards. — As the standards adopted in most countries have been in a great degree arbitrary, it has long been the opinion of scientific men, that, to construct a more perfect system of weights and measures, some natural and unchangeable basis should be adopted. It has, indeed, been contended by Pâucton and Bailly, that the measures of the ancients were deduced from a basis of this sort; and that the *stadium* always formed an aliquot part of the earth's circumference, that part differing amongst different nations and authors. But no learning or ingenuity can induce any one to believe what is so obviously incredible. The ancients had no means of determining the earth's circumference with any thing like the accuracy required to render it the great unit of a system of measures; and, what is equally decisive, no ancient author ever makes the slightest allusion to any such standard.

In more modern times, however, the idea of seeking for a unit of weight and measure in some unchanging natural object has been practically carried into effect. The standards that have been usually proposed for this object, have been some aliquot part of the quadrant of the meridian, or the length of a pendulum vibrating seconds in some given latitude. The latter has been in so far adopted into the existing system of weights and measures established by the act of 1823, that the length of the standard yard, as compared with that of a pendulum vibrating seconds in the latitude of London, is specified in the act as follows: —

"Whereas it has been ascertained by the commissioners appointed by his Majesty to inquire into the subject of weights and measures, that the said yard hereby declared to be the Imperial standard yard, when compared with a pendulum vibrating seconds of mean time in the latitude of London, in a vacuum at the level of the sea, is in the proportion of 36 inches to 39 inches and 1,393 ten-thousandth parts of an inch: be it therefore enacted and declared, that if at any time hereafter the said Imperial standard yard shall be lost, or shall be in any manner destroyed, defaced, or otherwise injured, it shall and may be restored by making, under the direction of the Lord High Treasurer, or the commissioners of his Majesty's treasury of the United Kingdom of Great Britain and Ireland, or any 3 of them for the time being, a new standard yard, bearing the same proportion to such pendulum as aforesaid, as the said Imperial standard yard bears to such pendulum."

TABLES OF ENGLISH WEIGHTS AND MEASURES, ACCORDING TO THE NEW OR IMPERIAL STANDARD.

IMPERIAL TROY WEIGHT.

The standard pound containing 5,760 grs.

			French Grammes.
	1 Grain	=	0·0648
24 Grains	1 Pennyweight	=	1·5552
20 Pennyweights	1 Ounce	=	31·1027
12 Ounces	1 Pound	=	373·2330

Troy weight is used in the weighing of gold, silver, jewels, &c. It is also used in ascertaining the strength of spirituous liquors; in philosophical experiments; and in comparing different weights with each other.

APOTHECARIES' WEIGHT.

			Fr. Gram.
	1 Grain	=	0·0648
20 Grains	1 Scruple	=	1·296
3 Scruples	1 Dram	=	3·888
8 Drams	1 Ounce	=	31·102
12 Ounces	1 Pound	=	373·233

This weight is essentially the same as Troy weight, but differently divided. It is chiefly used for medical prescriptions; but drugs are mostly bought and sold by avoirdupois weight.

DIAMOND WEIGHT. — Diamonds and other precious stones are weighed by carats, the carat being divided into 4 grains, and the grain into 16 parts. The diamond carat weighs $3\frac{1}{5}$ grains Troy: thus,

Diamond Weight.		Troy Weight.	Decigrammes.
16 Parts	1 Grain	$0\frac{8}{10}$ Grains	= $51\frac{1}{2}$
4 Grains	1 Carat	$3\frac{1}{5}$ —	= $205\frac{1}{2}$

IMPERIAL AVOIRDUPOIS WEIGHT.

			Fr. Gram.
	1 Dram	=	1·771
16 Drams	1 Ounce	=	28·346
16 Ounces	1 Pound	=	453·544
28 Pounds	1 Quarter	=	12·699 kil.
4 Quarters	1 Hundred wt.	=	50·796 —
20 Hundred wt.	1 Ton	=	1015·920 —

The dram is subdivided into 3 scruples, and each scruple into 10 grains; the pound, or 7,680 grains avoirdupois, equals 7,000 grains Troy, and hence 1 grain Troy equals 1·097 grains avoirdupois.

Hence also 144 lbs. avoirdupois = 175 lbs. Troy.
and 192 oz. ditto = 175 oz. ditto.

The stone is generally 14 lbs. avoirdupois weight but for butcher's meat or fish it is 8 lbs. Hence the hundred weight (cwt.) equals 8 stone of 14 lbs. or 14 stone of 8 lbs.

A stone of glass is 5 lbs. A seam of glass 24 stone, or 120 lbs.

Hay and straw are sold by the load of 36 trusses. The truss of hay weighs 56 lbs. and of straw 36 lbs. The truss of new hay is 60 lbs. until the 1st of September.

The custom of allowing more than 16 ounces to the pound of butter used to be very general in several parts of the country.

WOOL WEIGHT.

Like all other bulky articles, wool is weighed by avoirdupois weight, but the divisions differ; thus,

7 Pounds	=	1 Clove.	6½ Tods	=	1 Wey.
2 Cloves	=	1 Stone.	2 Weys	=	1 Sack.
2 Stone	=	1 Tod.	12 Sacks	=	1 Last.

A pack of wool contains 240 lbs.

CHEESE AND BUTTER.

8 Pounds	=	1 Clove.
32 Cloves	=	1 Wey in Essex.
42 do.	=	1 do. in Suffolk.
56 Pounds	=	1 Firkin of Butter.

IMPERIAL LONG MEASURE.

			Fr. Metres.
12 Inches	1 Foot	=	0·3048
3 Feet	1 Yard	=	0·9144
5½ Yards	1 Pole or Rod	=	5·0291
40 Poles	1 Furlong	=	201·1632
8 Furlongs	1 Mile	=	1609·3059
3 Miles	1 League	=	4827·9179
60 Geographical, or 69⅙ Eng. Miles	1 Degree	=	111207442

Besides the above, there are the palm, which equals 3 inches; the hand, 4 inches; the span, 9 inches; and the fathom, 6 feet.

IMPERIAL SUPERFICIAL MEASURE.

			Fr. Sq. Metres.
144 Inches	1 Square foot	=	0·0929
9 Square feet	1 Square yard	=	0·8361
30¼ Square yards	1 Square pole	=	25·2916
40 Square poles	1 Rood	=	1011·6662
4 Roods	1 Acre	=	4046·6648

The inch is generally divided, on scales, into 10ths, or decimal parts; but in squaring the dimensions of artificers' work, the duodecimal system is adopted; the inch being divided into 12 parts or lines, each part into 12 seconds, and each second into 12 thirds.

Land is usually measured by a chain of 4 poles, or 22 yards, which is divided into 100 links. Ten chains in length and 1 in breadth make an acre, which equals 160 square perches, or 4,840 square yards.

CUBIC OR SOLID MEASURE.

			Fr. Cubic Metres.
1,728 Cubic inches	1 Cubic foot	=	0283
27 Cubic feet	1 Cubic yard	=	7645
40 Feet of rough timber, or 50 Feet hewn do.	1 Load or ton	=	1·1326 / 1·4157
42 Cubic feet	1 Ton of shipping	=	1·1892

By cubic measure, marble, stone, timber, masonry, and all artificers' works of length, breadth, and thickness, are measured, and also the contents of all measures of capacity, both liquid and dry.

IMPERIAL LIQUID AND DRY MEASURE,

Deduced from the Standard Gallon, containing 10 lbs. weight of distilled water, temperature 62°, barometer 30 inches.

Weight of Water.	Cubic Feet.	Cubic Inches.	Gills.	Pints.	Quarts.	Pottles.	Gallons.	Pecks.	Bushels.	Coombs.	Quarter.
5 oz.		8·665	1								
lbs. 1¼		34·659	4	1							
2½		69·318	8	2	1						
5		138·637	16	4	2	1					
10		277·274	32	8	4	2	1				
20		554·548	64	16	8	4	2	1			
80	1·2837	2218·191	256	64	32	16	8	4	1		
320	5·1347	8872·763	1,024	256	128	64	32	16	4	1	
640	10·2694	17745·526	2,048	512	256	128	64	32	8	2	1

The dimensions of the Imperial standard bushel are as follows: — The outer diameter 19½ inches, and the inner diameter 18½. The depth is 8¼, and the height of the cone, for heaped measure, is 6 inches. The contents of the Imperial heaped bushel are 2815·4887 cubic inches. The subdivisions and multiples are in the same proportion.

OLD MEASURES SUPERSEDED BY THE IMPERIAL SYSTEM.

OLD WINE MEASURE.

		Cub. In.	Fr. Litres.
	1 Pint	28·875	= 0·4731
2 Pints	1 Quart	57·75	= 0·9463
4 Quarts	1 Gallon	231	= 3·3785
42 Gallons	1 Tierce	5·614 feet	= 158·9673
2 Tierces	1 Puncheon	11·228 —	= 317·9345
63 Gallons	1 Hogshead	8·421 —	= 238·4509
2 Hogshds.	1 Pipe or Butt	16·842 —	= 476·9018
2 Pipes	1 Tun	33·684 —	= 953·8036

The pint is subdivided into halves and quarters; the latter is called a gill. A rundlet is 18 gallons, and an anker 9.

Conversion of Old Wine Measure into Imperial Measure. — The old wine gallon contains 231 cubic inches, and the Imperial gallon 277·274 ditto. Hence, to convert wine gallons into Imperial gallons, multiply by $\frac{231}{277·274}$, or by ·83311; and to convert Imperial gallons into wine gallons, multiply by the reciprocal fraction $\frac{277·274}{231}$, or by 1·20032. But for most practical purposes, wine measure multiplied by 5 and divided by 6 will give Imperial measure with sufficient accuracy, and conversely.

N. B. — The multipliers and divisors employed to reduce old wine, ale, &c. measures to Imperial measure, serve also to reduce prices by the former to the latter.

We subjoin, from the very complete and valuable work of Mr. Buchanan, of Edinburgh, on Weights and Measures, a

Table of English Wine Gallons, from 1 to 100, with their Equivalents in Imperial Gallons.

Wine Gallons.	Equivalents in Imperial Galls.	Wine Gallons.	Equivalents in Imperial Galls.	Wine Gallons.	Equivalents in Imperial Galls.	Wine Gallons.	Equivalents in Imperial Galls.
1	0·83311	26	21·66088	51	42·48866	76	63·31643
2	1·66622	27	22·49399	52	43·32177	77	64·14954
3	2·49933	28	23·32711	53	44·15488	78	64·98265
4	3·33244	29	24·16022	54	44·98799	79	65·81576
5	4·16555	30	24·99333	55	45·82110	80	66·64887
6	4·99867	31	25·82644	56	46·65421	81	67·48198
7	5·83178	32	26·65955	57	47·48732	82	68·31509
8	6·66489	33	27·49266	58	48·32043	83	69·14820
9	7·49800	34	28·32577	59	49·15354	84	69·98132
10	8·33111	35	29·15888	60	49·98665	85	70·81443
11	9·16422	36	29·99199	61	50·11976	86	71·64754
12	9·99733	37	30·82510	62	51·65288	87	72·48065
13	10·83044	38	31·65821	63	52·48599	88	73·31376
14	11·66355	39	32·49133	64	53·31910	89	74·14687
15	12·49666	40	33·32444	65	54·15221	90	74·97998
16	13·32977	41	34·15755	66	54·98532	91	75·81309
17	14·16289	42	34·99066	67	55·81843	92	76·64620
18	14·99600	43	35·82377	68	56·65154	93	77·47931
19	15·82910	44	36·65688	69	57·48465	94	78·31242
20	16·66222	45	37·48999	70	58·31776	95	79·14554
21	17·49533	46	38·32310	71	59·15087	96	79·97865
22	18·32844	47	39·15626	72	59·98398	97	80·81176
23	19·16155	48	39·98932	73	60·81710	98	81·64487
24	19·99466	49	40·82243	74	61·65021	99	82·47798
25	20·82777	50	41·65555	75	62·48332	100	83·31109

Hence, supposing the former denominations to be preserved, a tierce of wine = 35 Imperial gallons very nearly; a puncheon = 70 ditto very nearly; a hogshead = 52½ ditto very nearly; a pipe or butt = 105 ditto very nearly; and a tun = 210 ditto very nearly.

OLD ALE AND BEER MEASURE.

		Cub. In.	Fr. Litres.
	1 Pint	35·25	= 0·5776
2 Pints	1 Quart	70·5	= 1·1552
4 Quarts	1 Gallon	282	= 4·6208
8 Gallons	1 Firkin ale	1·305 feet	= 36·9669
9 Gallons	1 ditto beer	1·468 —	= 41·5872
2 Firkins	1 Kilderkin	2·937 —	= 83·1744
2 Kilderkins	1 Barrel	5·875 —	= 166·3488
1½ Barrel	1 Hogshead	8·812 —	= 249·5232
2 Barrels	1 Puncheon	10·750 —	= 332·6876
2 Hogsheads	1 Butt	17·624 —	= 499·0464
2 Butts	1 Tun	35·248 —	= 998·0928

Conversion of Old Ale and Beer Measure into Imperial Measure. — The old ale gallon contains 282 cubic inches, and the Imperial standard gallon 277·274 ditto. Hence, to convert ale gallons into Imperial gallons, multiply by $\frac{282}{277\cdot274}$, or by 1·0170445; and to convert Imperial gallons into ale gallons, multiply by the reciprocal fraction $\frac{277\cdot274}{282}$ or by ·9832411. Unless extreme accuracy be required, the first 3 decimals need only be used. And for most practical purposes, ale measure multiplied by 59 and divided by 60 will give Imperial measure with sufficient accuracy, and conversely.

Table of English Ale Gallons, from 1 to 100, with their Equivalents in Imperial Gallons.

Ale Gallons.	Equivalents in Imperial Galls.	Ale Gallons.	Equivalents in Imperial Galls.	Ale Gallons.	Equivalents in Imperial Galls.	Ale Gallons.	Equivalents in Imperial Galls.
1	1·01704	26	26·44316	51	51·86927	76	77·29538
2	2·03409	27	27·46020	52	52·88631	77	78 31243
3	3·05113	28	28·47725	53	53·90336	78	79·32947
4	4·06818	29	29·49429	54	54·92040	79	80·34652
5	5·08522	30	30·51134	55	55·93745	80	81·36356
6	6·10227	31	31·52838	56	56·95449	81	82·38060
7	7·11931	32	32·54542	57	57·97154	82	83·39765
8	8·13636	33	33·56247	58	58·98858	83	84·41469
9	9·15340	34	34·57951	59	60.00563	84	85·43174
10	10·17045	35	35·59656	60	61·02267	85	86·44878
11	11·18749	36	36·61360	61	62·03971	86	87·46583
12	12·20453	37	37·63065	62	63·05676	87	88·48287
13	13·22158	38	38·64769	63	64·07380	88	89·49992
14	14·23862	39	39·66474	64	65·09085	89	90·51696
15	15·25567	40	40·68178	65	66·10789	90	91·53401
16	16·27271	41	41·69882	66	67·12494	91	92·35105
17	17·28976	42	42·71587	67	68·14198	92	93·56809
18	18·30680	43	43·73291	68	69·15903	93	94·58514
19	19·32385	44	44·74996	69	70·17607	94	95·60218
20	20·34069	45	45·76700	70	71·19312	95	96·61923
21	21·35793	46	46·78407	71	72·21016	96	97·63627
22	22·37498	47	47·80109	72	73·22720	97	98·65332
23	23·39202	48	48·81814	73	74·24425	98	99·67036
24	24·40907	49	49·83518	74	75·26129	99	100·68741
25	25·42611	50	50·85223	75	76·27834	100	101·70445

OLD DRY OR WINCHESTER MEASURE.

			Cub. In.		Fr. Litres.
4 Gills	1 Pint	-	33·6	- =	0·55053
2 Pints	1 Quart	-	67·2	- =	1·10107
2 Quarts	1 Pottle	-	134·4	- =	2·20214
2 Pottles	1 Gallon	-	268·8	- =	4·40428
2 Gallons	1 Peck	-	537·6	- =	8·80856
4 Pecks	1 Bushel	-	2150·42	- =	35·23430
4 Bushels	1 Coom	-	4·977 feet	=	140·93721
2 Cooms	1 Quarter	-	9·954 —	=	281·87443
5 Quarters	1 Wey or Load		49·770 —	=	1409·37216
2 Weys	1 Last	-	99·540 —	=	2818·74432

The Winchester bushel is 18½ inches wide, and 8 inches deep. Corn and seeds are measured by striking the bushel from the brim, with a round piece of light wood, about 2 inches in diameter, and of equal thickness from one end to the other. All other dry goods are heaped.

Conversion of Winchester Bushels into Imperial Bushels. — The Winchester bushel contains 2150·42 cubic inches, and the Imperial standard bushel 2218·192 ditto. Hence, to convert Winchester bushels into Imperial bushels, multiply by $\frac{2150\cdot42}{2218\cdot192}$, or by ·969447; and to convert Imperial bushels into Winchester bushels, multiply by the reciprocal fraction $\frac{2218\cdot192}{2150\cdot42}$, or 1·0315157. For practical purposes, multiply Winchester measure by 31 and divide by 32 for Imperial measure, and the contrary.

In some markets, corn is sold by weight, which is the fairest mode of dealing, though not the most convenient in practice. Even where measures are used, it is customary to weigh certain quantities or proportions, and to regulate the prices accordingly. The average bushel of wheat is generally reckoned at 60 lbs. — of barley 47 lbs. — of oats 38 lbs. — peas 64, beans 63, clover 68, rye and canary 53, and rape 48 lbs. In some places, a load of corn, for a man, is reckoned 5 bushels, and a cart load 40 bushels.

Table of Winchester Quarters, from 1 to 100, with their Equivalents in Imperial Quarters.

Winchester Quarters.	Equivalents in Imperial Qrs.	Winchester Quarters.	Equivalents in Imperial Qrs.	Winchester Quarters.	Equivalents in Imperial Qrs.	Winchester Quarters.	Equivalents in Imperial Qrs.
1	0·96945	26	25·20562	51	49·44180	76	73·67797
2	1·93889	27	26·17507	52	50·41124	77	74·64742
3	2·90834	28	27·14452	53	51·38069	78	75·61687
4	3·87779	29	28·11396	54	52·35014	79	76·58631
5	4·84724	30	29·08341	55	53·31959	80	77·55576
6	5·81668	31	30·05286	56	54·28903	81	78·52521
7	6·78613	32	31·02230	57	55·25848	82	79·49465
8	7·75558	33	31·99175	58	56·22793	83	80·46410
9	8·72502	34	32·96120	59	57·19737	84	81·43355
10	9·69447	35	33·93035	60	58·16682	85	82·40300
11	10·66392	36	34·90009	61	59·13627	86	83·37244
12	11·63336	37	35·86954	62	60·10571	87	84·34189
13	12·60281	38	36·83899	63	61·07516	88	85·31134
14	13·57226	39	37·80843	64	62·04461	89	86·28078
15	14·54171	40	38·77788	65	63·01406	90	87·25023
16	15·51115	41	39·74733	66	63·98350	91	88·21968
17	16·48060	42	40·71677	67	64·95295	92	89·18912
18	17·45005	43	41·68622	68	65·92240	93	90·15857
19	18·41949	44	42·65567	69	66·89184	94	91·12802
20	19·38894	45	43·62512	70	67·86129	95	92·09747
21	20·35839	46	44·79456	71	68·83074	96	93·06691
22	21·32783	47	45·56401	72	69·80018	97	94·03637
23	22·29728	48	46·53346	73	70·76963	98	95·00581
24	23·26673	49	47·50290	74	71·73908	99	95·97525
25	24·23618	50	48·47235	75	72·70853	100	96·94470

COAL MEASURE.

Coals were formerly sold by the chaldron, which bears a certain proportion to Winchester measure.

4 Pecks	- -	=	1 Bushel.
3 Bushels	-	=	1 Sack.
3 Sacks	- -	=	1 Vat.
4 Vats	- -	=	1 Chaldron.
21 Chaldron	-	=	1 Score.

The coal bushel holds 1 Winchester quart more than the Winchester bushel; its contents being 2217·62 cubic inches. It is 19½ inches wide from outside to outside, and 8 inches deep. In measuring coals it was heaped up in the form of a cone, to the height of at least 6 inches above the brim (according to a regulation passed at Guildhall in 1806), the outside of the bushel being the extremity of the cone, so that the bushel should contain at least 2814·9 cubic inches, nearly equal to the Imperial heaped bushel. Hence the chaldron should measure 58·64 cubic feet.

But the sale of coals by measure has, in consequence of the frauds to which it led — (see *antè*, p. 296.), — been abolished; and they are now sold by weight.

Of Wood Fuel, English Measure. — Wood fuel is assized into shids, billets, faggots, fall wood, and cord wood. A shid is to be 4 feet long, and, according as they are marked and notched, their proportion must be in the girth; viz. if they have but 1 notch, they must be 16 inches in the girth; if 2 notches, 23 inches; if 3 notches, 28 inches; if 4 notches, 33 inches; and if 5 notches, 38 inches about. Billets are to be 3 feet long, of which there should be 3 sorts; viz. a single cask, and a cask of 2; the 1st is 7 inches, the 2d 10 inches, and the 3d 14 inches, about: they are sold by the 100 of 5 score. Faggots are to be 3 feet long, and at the band 24 inches about, besides the knot of such faggots; 50 go to the load. Bavins and spray wood are sold by the 100, which are accounted a load. Cord wood is the bigger sort of fire wood, and it is measured by a cord, or line, whereof there are 2 measures; that of 14 feet in length, 3 feet in breadth, and 3 feet in height. The other is 8 feet in length, 4 feet in height, and 4 feet in breadth.

MEASURES OF WOOD.

1,000 Billets of wood	-	=	1 Cord.
10 cwt. of ditto	- -	=	1 Cord.
1 Cord of wood	- -	=	¼ Chaldron of coals.
100 lbs. of wood	-	=	1 Quintal of wood.

French System of Weights and Measures. — The new metrical system established in France subsequently to the Revolution, is founded on the measurement of the quadrant

of the meridian, or of the distance from the pole to the equator. This distance having been determined with the greatest care, the ten-millionth part of it was assumed as the *mètre*, or unit of length, all the other lineal measures being multiples or submultiples of it, in decimal proportion. The mètre corresponds pretty nearly to the ancient French *aune*, or yard, being equal to 3·07844 French feet, or 3·281 English feet, or 39·3708 English inches.

The unit of weight is the *gramme*, which is a cubic centimètre, or the 100th part of a mètre of distilled water of the temperature of melting ice; it weighs 15·434 English Troy grains.

In order to express the decimal proportion, the following vocabulary of names has been adopted, in which the terms for multiplying are Greek, and those for dividing are Latin.

For multipliers, the word

Deca prefixed means	-	10 times.
Hecto	-	100 —
Kilo	-	1,000 —
Myria	-	10,000 —

On the contrary, for divisors,

the word *Deci* expresses the		10th part.
Centi	-	100th —
Milli	-	1,000th —

Thus, *Decamètre* means 10 mètres.
Decimètre — the 10th part of a mètre.
Kilogramme — 1,000 grammes, &c.

The *are* is the element of square measure, being a square decamètre, equal to 3·955 English perches.

The *stère* is the element of cube measure, and contains 35·317 cubic feet English.

The *litre* is the element of all measures of capacity. It is a cubic decimètre, and equals 2·1135 English pints. 100 litres make the hectolitre, which equals 26·419 wine gallons, or 2·838 Winchester bushels.

Systeme usuel, or Binary System. — This new system has the metrical standards for its basis, but their divisions are binary, that is, by 2, 4, 8, &c.; and instead of the new vocabulary, the names of the ancient weights and measures are used, annexing the term *usuel* to each. Thus the half kilogramme is called the livre usuelle, and the double mètre, the toise usuelle.

The following Tables show the proportions between the new or metrical French system and the English system: —

Comparison of French and English Weights and Measures, containing the New or Metrical Weights and Measures of France, with their Proportion to those of England, both according to the Decimal System and the Système usuel.

DECIMAL SYSTEM.

Long Measures.

French.		English.
Millimètre	- =	0·03937 inches.
Centimètre	- =	0·39371 —
Decimètre	- =	3·93710 —
Mètre	- =	39·37100 —
Decamètre	- =	32·80916 feet.
Hectomètre	- =	328·09167 —
Kilomètre	- =	1093·63890 yards.
Myriamètre	- =	10936·38900 — or 6 miles 1 furlong 28 poles.

Measures of Capacity.

Millitre	- =	0·06103 cubic inches.
Centilitre	- =	0·61028 —
Décilitre	- =	6·10280 —
Litre (a cubic decimètre)	- =	61·02803 — or 2·1135 wine pints.
Décalitre	- =	610·28028 cubic inches, or 2·642 wine gallons.
Hectolitre	- =	3·5317 cubic feet, or 26·419 wine gallons, 22 Imperial gallons, or 2·839 Winchester bushels.
Kilolitre	- =	35·3171 cubic feet, or 1 tun and 12 wine gallons.
Myrialitre	- =	353·17146 cubic feet.

Superficial Measures.

Centiare	- =	1·1960 sq. yards.
Are (a square decamètre)	=	119·6046 —
Décare	- =	1196·0460 —
Hectare	- =	11960·4604 — or 2 acres 1 rood 35 perches.

Solid Measures.

Décistère	- =	3·5317 cubic feet.
Stère (a cubic mètre)	- =	35·3174
Décastere	- =	353·1741

Weights.

Milligramme	- =	0·0154 grains.
Centigramme	- =	0·1543
Décigramme	- =	1·5434
Gramme	- =	15·4340
Décagramme	- =	154·3402 or 5·64 drams avoirdupois.
Hectogramme	- =	3·2154 oz. Troy, or 3·527 oz. avoirdupois.
Kilogramme	=	2 lbs. 8 oz. 3 dwt. 2 grs. Troy, or 2 lbs. 3 oz. 4·428 drams avoirdupois.
Myriagramme	- =	26·795 lbs. Troy, or 22·0485 lbs. avoirdupois.
Quintal	- =	1 cwt. 3 qrs. 25 lbs. nearly.
Millier, or Bar	- =	9 tons 16 cwt. 3 qrs. 12 lbs.

SYSTEME USUEL.

Comparison of Weight.

	Grammes.		Troy Weight. Lbs.	oz.	dwt.	gr.	Avoirdupois. Lbs.	oz.	dr.
Kilogramme	1,000	=	2	8	3	2	2	3	4½
Livre usuelle	500	=	1	4	1	13	1	1	10¼
Half	250	=		8	0	18·5		8	13⅛
Quarter	125	=		4	0	9·25		4	6⅝
Eighth	62·5	=		2	0	4·5		2	3¼
Once	31·3	=		1	0	2·25		1	1⅝
Half	15·6	=			10	1·125			8⅞
Quarter	7·8	=			5	0·5			4½
Gros	3·9	=			2	12·25			2¼

Comparison of Linear Measures.

Mesures usuelles.		English Measure. Mètres.	Feet.	Inch.	Parts.
Toise usuelle	- =	2	6		9
Pied, or foot	- =	$0\frac{1}{8}$	1	1	$1\frac{1}{2}$
Inch	- =	$0\frac{1}{36}$	0	1	$1\frac{1}{8}$
Aune	- =	$1\frac{1}{5}$	3	11	3
Half	- =	$0\frac{2}{5}$	1	11	$7\frac{1}{2}$
Quarter	- =	$0\frac{3}{10}$	0	11	$9\frac{3}{4}$
Eighth	- =	$0\frac{3}{20}$	0	5	$10\frac{7}{8}$
Sixteenth	- =	$0\frac{3}{40}$	0	2	$11\frac{1}{16}$
One third of an aune	- =	$0\frac{2}{5}$	3		9
Sixth	- =	$0\frac{1}{5}$	0	7	$10\frac{1}{2}$
Twelfth	- =	$0\frac{1}{10}$	0	3	$11\frac{1}{4}$

Comparison of Measures of Capacity.

	Litres.		Eng. Winch. Bush.
Boisseau usuel	- 12·5	=	0·35474

With halves and quarters in proportion.

	Paris Pinte.	English Pint.
Litron usuel	- - 1·074	$2\frac{1}{9}$

With halves and quarters in proportion.

Ancient Weights and Measures. — This subject is involved in considerable difficulty; and to enter fully into it would be quite inconsistent with our objects and limits. But the following details, abstracted from the best authorities, may be useful to such of our readers as have occasion to look into any of the ancient authors.

TABLE OF VARIOUS ANCIENT WEIGHTS (*according to different Authorities*).

	English Troy Grains.
Attic obolus	8·2 Christiani.
	9·1 Arbuthnot.
Attic drachma	51·9 Chr.
	54·6 Arb.
	69 Paucton.
Lesser mina	3,892 Chr.
Greater mina	5,189 Chr.
	5,464 Arb.
	6,900 Pauc.
Medical mina	6,994 gr. Arb.
Talent = 60 minæ = ½ cwt. English.	
Old Greek drachm	146·5 Eng. Troy gr. Arb.
	62·5 = Roman denarius, Arb.
Old Greek mina	6,425 Do.
Egyptian mina	8,326 Do.
Ptolemaic mina of Cleopatra	8,985 Do.
Alexandrian mina of Dioscorides	9,992 Do.
Roman denarius	51·9 = ⅛ Rom. oz. Chr.
	62·5 = ⅐ Rom. oz. Arb.
Denarius of Nero	54 Pauc.
Papyrius	61·7 Do.
Ounce	415·1 Chr.
	437·2 Arb.
	431·2 Pauc.
Pound of 10 oz.	4,150 Chr.
12 oz.	4,981 Chr.
	5,246 Arb.
	5,174·4 Pauc.

SCRIPTURE MEASURES OF LENGTH.—(*Arbuthnot and Hutton.*)

	Inches.
Digit	0·7425
Palm	2·97
Span	8·91
	Eng. Feet.
Lesser cubit	1·485
Sacred cubit	1·7325
	Yards.
Fathom	2·31
Ezekiel's reed	3·465
Arabian pole	4·62
Schœnus	46·2
Stadium	231
Sabbath day's journey	1,155
	Miles.
Eastern mile	1·886
Parasang	4·158
Day's journey	33·264

GRECIAN MEASURES OF LENGTH.—(*Arbuthnot and Hutton.*)

	Inches.
Dactylos	0·75546
Doron, Dochme	3·02187
Dichas	7·55468
Orthodoron	8·31015
Spithame	9·06562
Pous	12·0875
	Eng. Feet.
Pous	1·00729
Pygme	1·13203
Pygon	1·25911
Pechys	1·51093
	Eng. Paces.
Orgya	1·00729
Stadios, Dulos	100·72916
Milion	805·8333

ROMAN MEASURES OF LENGTH.—(*Arbuthnot and Hutton.*)

	Eng. Inches.
Digitus transversus	0·72525
Uncia, the ounce	0·967
Palmus minor	2·901
Pes, the foot	11·604
	Eng. Feet.
Palmipes	1·20875
Cubitus	1·4505
Gradus	2·4175
	Paces.
Passus	0·967
Stadium	120·875
Milliare	967

ROMAN DRY MEASURES.—(*Arbuthnot and Hutton.*)

	Eng. Pints.
Hemina	0·5074
Sextarius	1·0148
	Eng. Peck.
Modius	1·0141

ATTIC DRY MEASURES.

	Eng. Pints.
Xestes	0·9903
Chenix	1·486
	Winch. Bush.
Medimnus	1·0906

JEWISH DRY MEASURES (*according to Josephus*).

	Eng. Pints.
Gachal	0·1949
Cab	3·874
Gomer	7·0152
	Eng. Peck.
Seah	1·4615
	Winch. Bush.
Ephah	1·0961
Latech	5·4807
	Quarter.
Corom, Chomer	1·3702

ROMAN MEASURES FOR LIQUIDS.—(*Arbuthnot and Hutton.*)

	Eng. Pints.
Hemina	0·59759
Sextarius	1·19518
Congius	7·1712
	Wine Gall.
Urna	3·5857
Amphora	7·1712
	Hhds.
Culeus	2·2766

ATTIC MEASURES FOR LIQUIDS.

	Eng. Pints.
Cotylus	0·5742
Xestes	1·1483
Chous	6·8900
	Wine Gall.
Meteotes	10·3350

JEWISH MEASURES FOR LIQUIDS.

	Eng. Pints.
Caph	0·8612
Log	1·1483
Cab	4·5933
	Wine Gall.
Hin	1·7225
Seah	3·4450
Bath	10·3350
	Hhds.
Coron	1·6405

WELD, OR DYERS' WEED (Ger. *Wau*; Du. *Wouw*, *Wouwe*; Fr. *Gaude*; It. *Guadarella*; Lat. *Luteola*), is an imperfect biennial, with small fusiform roots, and a leafy stem from 1 to 3 feet in height. It is a native of Britain, Italy, and various parts of Europe; and is cultivated for the sake of its stalk, flowers, and leaves, which are employed in the dyeing of yellow, whence its botanical name *Reseda luteola*. Weld requires the growth of nearly 2 summers before it comes to maturity; aud the crop is liable to fail from so many causes, and is besides so exhausting, that its cultivation is by no means profitable, and is only carried on, in this country at least, to a small extent, principally in Essex. Weld is preferred to all other substances in giving the lively green lemon yellow. It is, however, expensive; and it is found, when employed in topical dyeing, to degrade and interfere with madder colours more than other yellows, and to stain the

parts wanted to be kept white. Hence quercitron bark is now employed in calico printing, to the almost total exclusion of weld. It is still, however, employed in dyeing silk a golden yellow, and in paper staining. — (*Loudon's Ency. of Agriculture; Bancroft on Colours*, vol. ii. pp. 95—100.; *Rees's Cyclopædia.*)

WHALEBONE, a substance of the nature of horn, adhering in thin parallel laminæ to the upper jaw of the whale. These vary in size from 3 to 12 feet in length; the breadth of the largest at the thick end, where they are attached to the jaw, is about a foot. They are extremely elastic. All above 6 feet in length is called *size bone.*

Whalebone bore anciently a very high price, when the rigid stays and the expanded hoops of our grandmothers produced an extensive demand for this commodity. The Dutch have occasionally obtained 700*l.* per ton, and were accustomed to draw 100,000*l.* annually from England for this one article. Even in 1763, it brought 500*l.*; but soon fell, and has never risen again to the same value. During the present century, the price has varied between 60*l.* and 300*l.*; seldom falling to the lowest rate, and rarely exceeding 150*l.* Mr. Scoresby reckons the price, in the 5 years ending with 1818, at 90*l.*; while at present (April, 1834), it is stated to be from 130*l.* to 145*l.* This is for what is called the *size bone*, or such pieces as measure 6 feet or upwards in length; those below this standard are usually sold at half price. It may appear singular that whalebone should rise, while oil has been so decidedly lowered; but the one change, it is obvious, causes the other. Oil, being the main product of the fishery, regulates its extent; which being diminished by the low price, the quantity of whalebone is lessened, while the demand for it continuing as great as before, the value consequently rises. — (*Polar Seas and Regions*, p. 321., *Edin. Cab. Lib.*)

It may be worth while to remark, as evincing the ignorance that at one time prevailed with respect to the whale, that, by an old feudal law, the *tail* of all whales belonged to the queen, as a perquisite, to furnish her Majesty's wardrobe with whalebone! — (*Blackstone*, vol. i. p. 233.)

WHALE (COMMON), the *Balæna mysticetus* of Linnæus, a marine animal of the cetaceous species, and the largest of all those with which men are acquainted. The whale has sometimes, it is affirmed, been found 160 feet in length; but this is most probably an exaggeration. In the Northern seas, it is at present seldom found above 60 feet long: being now, however, generally killed before it arrives at its full growth, this is no proof that the animal may not formerly have attained to a much larger size. The bodies of whales are covered, immediately under the skin, with a layer of fat or *blubber*, which, in a large fish, is from 12 to 18 inches thick. In young whales, this fatty matter resembles hog's lard; but in old ones it is of a reddish colour. This is the valuable part of the whale; and the desire to possess it has prompted man to attempt the capture of this mighty animal. The blubber yields, by expression, nearly its own weight of a thick viscid oil (train oil). The common whale is now rarely found, except within the Arctic circle; but at a former period it was not unfrequently met with on our coasts. There is a good account of the common whale, and of the manner in which the fishery is carried on, in Mr. John Laing's "Voyage to Spitzbergen;" one of the shortest, cheapest, and best of the innumerable books published on this hacknied subject.

The *Physeter macrocephalus*, or black-headed spermaceti whale, is chiefly found in the Southern Ocean. It usually measures about 60 feet in length, and 30 in circumference at the thickest part. The valuable part of the fish is the spongy, oily mass dug from the cavity of the head; this is crude spermaceti; and of it an ordinary sized whale will yield about 12 large barrels.

WHALE FISHERY. We do not propose entering, in this article, into any details as to the mode in which the fishery is carried on; but mean to confine ourselves to a brief sketch of its history, and value in a commercial point of view.

It is probably true, as has been sometimes contended, that the Norwegians occasionally captured the whale before any other European nation engaged in so perilous an enterprise. But the early efforts of the Norwegians were not conducted on any systematic plan, and should be regarded only in the same point of view as the fishing expeditions of the Esquimaux. The Biscayans were certainly the first people who prosecuted the whale fishery as a regular commercial pursuit. They carried it on with great vigour and success in the 12th, 13th, and 14th centuries. In 1261, a tithe was laid upon the tongues of whales imported into Bayonne, — they being then a highly esteemed species of food. In 1388, Edward III. relinquished to Peter de Puayanne a duty of 6*l.* sterling a whale, laid on those brought into the port of Biarritz, to indemnify him for the extraordinary expenses he had incurred in fitting out a fleet for the service of his Majesty. This fact proves beyond dispute that the fishery carried on from Biarritz at the period referred to must have been very considerable indeed; and it was also prosecuted to a great extent from Cibourre, Vieux Boucan, and subsequently from Rochelle and other places.*

* See *Mémoire sur l'Antiquité de la Pêche de la Baleine, par Noel*, 12mo. Paris, 1795.

The whales captured by the Biscayans were not so large as those that are taken in the Polar seas, and are supposed to have been attracted southward in pursuit of herrings. They were not very productive of oil, but their flesh was used as an article of food, and the whalebone was applied to a variety of useful purposes, and brought a very high price.

This branch of industry ceased long since, and from the same cause that has occasioned the cessation of the whale fishery in many other places — the want of fish. Whether it were that the whales, from a sense of the dangers to which they exposed themselves in coming southwards, no longer left the Icy Sea, or that the breed had been nearly destroyed, certain it is, that they gradually became less numerous in the Bay of Biscay, and at length ceased almost entirely to frequent that sea; and the fishers being obliged to pursue their prey upon the banks of Newfoundland and the coasts of Iceland, the French fishery rapidly fell off.

The voyages of the Dutch and English to the Northern Ocean, in order, if possible, to discover a passage through it to India, though they failed of their main object, laid open the haunts of the whale. The companions of Barentz, who discovered Spitzbergen in 1596, and of Hudson, who soon after explored the same seas, represented to their countrymen the amazing number of whales with which they were crowded. Vessels were in consequence fitted out for the Northern whale fishery by the English and Dutch, the harpooners and a part of the crew being Biscayans. They did not, however, confine their efforts to a fair competition with each other as fishers. The Muscovy Company obtained a royal charter, prohibiting the ships of all other nations from fishing in the seas round Spitzbergen, on pretext of its having been first discovered by Sir Hugh Willoughby. There can, however, be no doubt that Barentz, and not Sir Hugh, was its original discoverer; though, supposing that the fact had been otherwise, the attempt to exclude other nations from the surrounding seas, on such a ground, was not one that could be tolerated. The Dutch, who were at the time prompt to embark in every commercial pursuit that gave any hopes of success, eagerly entered on this new career, and sent out ships fitted equally for the purposes of fishing, and of defence against the attacks of others. The Muscovy Company having attempted to vindicate its pretensions by force, several encounters took place beween their ships and those of the Dutch. The conviction at length became general, that there was room enough for all parties in the Northern seas; and in order to avoid the chance of coming into collision with each other, they parcelled Spitzbergen and the adjacent ocean into districts, which were respectively assigned to the English, Dutch, Hamburghers, French, Danes, &c.

The Dutch, being thus left to prosecute the fishery without having their attention diverted by hostile attacks, speedily acquired a decided superiority over all their competitors.

When the Europeans first began to prosecute the fishery on the coast of Spitzbergen, whales were every where found in vast numbers. Ignorant of the strength and stratagems of the formidable foe by whom they were now assailed, instead of betraying any symptoms of fear, they surrounded the ships and crowded all the bays. Their capture was in consequence a comparatively easy task, and many were killed which it was afterwards necessary to abandon, from the ships being already full.

While fish were thus easily obtained, it was the practice to boil the blubber on shore in the North, and to fetch home only the oil and whalebone. And, perhaps, nothing can give a more vivid idea of the extent and importance of the Dutch fishery in the middle of the 17th century, than the fact, that they constructed a considerable village, the houses of which were all previously prepared in Holland, on the Isle of Amsterdam, on the northern shore of Spitzbergen, to which they gave the appropriate name of *Smeerenberg* (from *smeeren*, to melt, and *berg*, a mountain). This was the grand rendezvous of the Dutch whale ships, and was amply provided with boilers, tanks, and every sort of apparatus required for preparing the oil and the bone. But this was not all. The whale fleets were attended with a number of provision ships, the cargoes of which were landed at Smeerenberg; which abounded during the busy season with well-furnished shops, good inns, &c.; so that many of the conveniences and enjoyments of Amsterdam were found within about 11 degrees of the Pole! It is particularly mentioned, that the sailors and others were every morning supplied with what a Dutchman regards as a very great luxury — *hot rolls* for breakfast. Batavia and Smeerenberg were founded nearly at the same period, and it was for a considerable time doubted whether the latter was not the more important establishment. — (*De Reste, Histoire des Pêches, &c.* tome i. p. 42.)

During the flourishing period of the Dutch fishery, the quantity of oil made in the North was so great that it could not be carried home by the whale ships; and every year vessels were sent out in ballast to assist in importing the produce of the fishery.

But the same cause that had destroyed the fishery of the Biscayans, ruined that which

was carried on in the immediate neighbourhood of Spitzbergen. Whales became gradually less common, and more and more timid and difficult to catch. They retreated first to the open seas, and then to the great banks of ice on the eastern coast of Greenland. When the site of the fishery had been thus removed to a very great distance from Spitzbergen, it was found most economical to send the blubber direct to Holland. Smeerenberg was in consequence totally deserted, and its position is now with difficulty discoverable.

But though very extensive, the Dutch whale fishery was not, during the first 30 years of its existence, very profitable. This arose from the circumstance of the right to carry it on having been conceded, in 1614, to an exclusive company. The expense inseparable from such great associations, the wastefulness and unfaithfulness of their servants, who were much more intent upon advancing their own interests than those of the company, increased the outlays so much, that the returns, great as they were, proved little more than adequate to defray them, and the fishery was confined within far narrower limits than it would otherwise have reached. But after various prolongations of the charter of the first company, and the formation of some new ones, the trade was finally thrown open in 1642. The effects of this measure were most salutary, and afford one of the most striking examples to be met with of the advantages of free competition. Within a few years the fishery was vastly extended; and though it became progressively more and more difficult from the growing scarcity of fish, it proved, notwithstanding these disadvantages, more profitable to the private adventurers than it had ever been to the company; and continued for above a century to be prosecuted with equal energy and success. The famous John de Witt has alluded as follows to this change in the mode of conducting the trade: —

"In this respect," says he, "it is worthy of observation, that the authorised Greenland Company made heretofore little profit by their fishery, because of the great charge of setting out their ships; and that the train oil, blubber, and whale fins were not well made, handled, or cured; and being brought hither and put into warehouses, were not sold soon enough, nor to the Company's best advantage. Whereas now that every one equips their vessels at the cheapest rate, follow their fishing diligently, and manage all carefully, the blubber, train oil, and whale fins are employed for so many uses in several countries, that they can sell them with that conveniency, that though *there are now* 15 *ships for* 1 *that formerly sailed out of Holland on that account*, and consequently each of them could not take so many whales as heretofore, and notwithstanding the new prohibition of France and other countries to import these commodities, and though there is greater plenty of them imported by our fishers — yet these commodities are so much raised in the value above what they were whilst there was a company, that the common inhabitants do exercise that fishery with profit, to the much greater benefit of our country than when it was (under the management of a company) carried on but by a few."—(*True Interest of Holland*, p. 63. 8vo ed. London, 1746.)

The private ships sent by the Dutch to the whale fishery were fitted out on a principle that secured the utmost economy and vigilance on the part of every one connected with them. The hull of the vessel was furnished by an individual, who commonly took upon himself the office of captain; a sail-maker supplied the sails, a cooper the casks, &c. The parties engaged as adventurers in the undertaking. The cargo being brought to Holland and disposed of, each person shared in the produce according to his proportion of the outfit. The crew was hired on the same principle; so that every one had a motive to exert himself, to see that all unnecessary expenses were avoided, and that those that were necessary were confined within the narrowest limits. This practice has been imitated to some extent in this and some other countries, but in none has it been carried so far as in Holland. It appears to us that it might be advantageously introduced into other adventures.

When in its most flourishing state, towards the year 1680, the Dutch whale fishery employed about 260 ships, and 14,000 sailors.

The English whale fishery, like that of Holland, was originally carried on by an exclusive association. The Muscovy Company was, indeed, speedily driven from the field; but it was immediately succeeded by others, that did not prove more fortunate. In 1725, the South Sea Company embarked largely in the trade, and prosecuted it for 8 years; at the end of which, having lost a large sum, they gave it up. But the legislature, having resolved to support the trade, granted, in 1732, a bounty of 20*s.* a ton to every ship of more than 200 tons burden engaged in it; but this premium being insufficient, it was raised, in 1749, to 40*s.* a ton, when a number of ships were fitted out, as much certainly in the intention of catching the bounty as of catching fish. Deceived by the prosperous appearance of the fishery, parliament imagined that it was firmly established, and in 1777 the bounty was reduced to 30*s.* The effects of this reduction showed the factitious nature of the trade, the vessels engaged in it having fallen off in the course of the next 5 years from 105 to 39! To arrest this alarming decline, the bounty was raised to its old level in 1781, and of course the trade was soon restored to its previous state of apparent prosperity. The hostilities occasioned by the American war reduced the Dutch fishery to less than half its previous amount, and gave a proportional extension to that of England. The bounty, which had in consequence become very heavy, was reduced, in 1787, to 30*s.* a ton; in 1792 it was further reduced to 25*s.*;

and in 1795 it was reduced to 20*s.*, at which sum it continued till 1824, when it ceased.

It appears from accounts given in Macpherson's *Annals of Commerce* (vol. iii. p. 511., vol. iv. p. 130.), that the total bounties paid for the encouragement of the whale fishery, in the interval between 1750 and 1788, amounted to no less than 1,577,935*l.* It will be seen from the official account which follows, that there are no means of furnishing any accurate account of the sums paid as bounties from the year 1789 to 1813 inclusive; but it is, notwithstanding, abundantly certain that the total bounties paid during the period from 1789 to 1824 considerably exceeded 1,000,000*l.* Here, then, we have a sum of upwards of TWO MILLIONS AND A HALF laid out since 1750 in promoting the whale fishery. Now we believe, that if we estimate the entire average value of the *gross* produce of the Northern whale fishery (and it is to it only that the preceding statements apply), during the last 3 or 4 years, at 375,000*l.* a year, we shall be about the mark. But had the 2,500,000*l.* expended in bolstering up this branch of industry been laid out as capital in any ordinary employment, it would have produced 125,000*l.* a year of *nett* profit; and deducting this sum from the above, there remains only 250,000*l.* to replace the capital wasted and ships lost in carrying on the fishery, and to afford *a clear national profit!* Whatever, therefore, may be the value of the whale fishery as a nursery for seamen, it is absurd to regard it as contributing any thing to the public wealth. The remark of Dr. Franklin, that he who draws a fish out of the sea draws out a piece of silver, is ever in the mouths of those who are clamouring for bounties and protection against competition. But we apprehend that even Franklin himself, sagacious as he was, would have found it rather difficult to show how the wealth of those is to be increased, who, in fishing up one piece of silver, are obliged to throw another of equal value into the sea. We subjoin

An Account of the Number of Ships annually fitted out in Great Britain for the Northern Whale Fishery, of the Tonnage and Crews of such Ships, and of the Bounties paid on their Account, from 1789 to 1824.

Years.	Ships.	Tons.	Men.	Bounties paid.
1789	161	46,599		The documents from which the amount of bounties paid in these years could be shown, were destroyed in the fire at the late Custom-house.
1790	116	33,232	4,482	
1791	116	33,906	4,520	
1792	93	26,983	4,667	
1793	82	23,487	3,210	
1794	60	16,386	2,250	
1795	44	11,748	1,601	
1796	51	13,833	1,910	
1797	60	16,371	2,265	
1798	66	18,754	2,633	
1799	67	19,360	2,683	
1800	61	17,729	2,459	
1801	64	18,568	2,544	
1802	79	23,539	3,129	
1803	95	28,608	3,806	
1804	92	28,034	3,597	
1805	91	27,570	3,636	
1806	91	27,697	3,715	
1807 to 1813	There are no documents in this office by which the accounts for these years can be rendered.			
1814	112	36,576	4,708	£ 43,799 11 0
1815	134	43,320	5,783	41,487 14 0
1816	130	41,767	5,542	42,746 13 0
1817	135	43,548	5,768	43,461 6 0
1818	140	45,040	5,903	45,806 1 0
1819	140	45,093	6,291	43,051 8 0
1820	142	45,092	6,137	44,749 18 0
1821	140	44,864	6,074	42,164 0 0
1822	124	38,182	5,234	32,347 4 0
1823	120	37,628	4,984	32,980 2 0
1824	112	35,194	4,867	29,131 15 0

It is not even certain whether the expenditure of 2,500,000*l.* upon bounties would really have had the effect of establishing the whale fishery upon a solid foundation, but for the occupation of Holland by the French, and the consequent hostilities in which she was involved with this country. These did more to promote and consolidate the British fishery than any thing else. The war entirely annihilated that of the Dutch: and our government having wisely offered to the fishers of Holland all the immunities enjoyed by the citizens of Great Britain in the event of their settling amongst us, many availed themselves of the invitation, bringing with them their capital, industry, and skill. In consequence of this signal encouragement, the whale fishery of England was prosecuted with greater success than at any previous period: and at the termination of the late war, in 1815, there were 134 valuable ships and about 5,800 seamen engaged in the Northern fishery, and about 30 ships and 800 men in that to the South.

After peace was restored, the English capitalists and others became apprehensive lest the Dutch should engage anew with their ancient vigour and success in the whale fishery. But these apprehensions were without any real foundation. The Hollanders, during the 30 years they had been excluded from the sea, had lost all that practical acquaintance with the details of the fishery, for which they had long been so famous, and which is so essential to its success. The government attempted to rouse their dormant energies by the offer of considerable premiums and other advantages to those who embarked in the trade. Three companies were in consequence formed for carrying it on; 1 at Rotterdam, 1 at Harlingen, and 1 in South Holland. But their efforts have been very limited, and altogether unfortunate. In 1826, the company of South Holland was dissolved, while that of Harlingen despatched 4 ships, and that of

Rotterdam 2. In 1827, Rotterdam sent only 1 ship, and Harlingen 2: and in 1828, 1 solitary ship sailed from Holland — a feeble and last effort of the company of Harlingen!

Such has been the fate of the Dutch whale fishery. The attempts to revive it failed, not because the ships sent out were ill calculated for the service, but because they were manned by unskilful seamen. In the early ages of the fishery, this difficulty would have been got over, because, owing to the fewness of competitors, and the scanty supply of oil and whalebone, even a small cargo brought a high price; but at present, when the fishery is prosecuted on a very large scale and at a very low rate of profit by the English, the Americans, the Hamburghers, &c., no new competitor coming into the field could expect to maintain himself unless he had nearly equal advantages. The Dutch have, therefore, done wisely in withdrawing from the trade. Any attempt to establish it by the aid of bounties and other artificial encouragements would be one of which the ultimate success must be very doubtful, and which could lead to no really useful result. During the 20 years preceding the late French war, the fishery of Holland was gradually declining, and had, in a great measure, ceased to be profitable. It would be folly to endeavour to raise anew, and at a great expense, a branch of industry that had become unproductive at a former period, when there is no ground for supposing that it would be more productive at this moment.

We have already noticed several changes of the localities in which the whale fishery has been carried on at different periods; within these few years another has taken place even more important. The seas between Spitzbergen and Greenland are now nearly abandoned by the whalers, who resort in preference to Davis's Straits and Baffin's Bay, or to the sea which washes the coast of West Greenland. The Dutch fishers first began to frequent Davis's Straits in 1719; and as the whales had not hitherto been pursued into this vast recess, they were found in greater numbers than in the seas round Spitzbergen. From about this period it was usually resorted to by about 3-10ths of the Dutch ships. It was not till a comparatively late period that Davis's Straits began to be frequented by English whalers; and even so late as 1820, when Captain Scoresby published his elaborate and valuable work on the whale fishery, that carried on in the Greenland seas was by far the most considerable. But within the last few years, the Greenland fishery has been almost entirely deserted. The various discoveries made by the expeditions recently fitted out by government for exploring the seas and inlets to the westward of Davis's Straits and Baffin's Bay, have made the fishers acquainted with several new and advantageous situations for the prosecution of their business. What further revolutions the fishery may be destined to undergo, it is impossible to foresee; but there can be little doubt that the same results that have happened elsewhere will happen in Davis's Straits, and that it will be necessary to pursue the whale to new and, perhaps, still more inaccessible haunts.

The sea in Davis's Straits is less incommoded with field ice than the Greenland and Spitzbergen seas, but it abounds with icebergs; and the fishery, when carried on in Baffin's Bay and Lancaster Sound, is more dangerous, perhaps, than any that has hitherto been attempted.

The following Table gives a view of the produce of the Northern whale fishery during the 3 years ending with 1827: —

Years.	No. of Ships despatched.	No. of Whales captured.	Quantity of Oil.	Quantity of Whalebone.
			Tons.	*Tons.*
1825	110	501	6,597	360
1826	94	510	7,087	390
1827	88	1,155	13,179	732

It appears from this and the previous Table, that the number of ships sent out has declined nearly one half since 1820. The bounty was repealed in 1824, and the ships fitted out have since fallen off in the ratio of 112 to 88 or 90. This is a sufficient proof of the insecure foundation on which the trade had previously rested.

The whale fishery has for a lengthened period partaken more of the nature of a gambling adventure than of a regular industrious pursuit. Sometimes the ships do not get half a cargo, and sometimes they come home *clean*. The risk of shipwreck is also very considerable. It appears from Mr. Scoresby's Tables (vol. ii. p. 131.), that of 586 ships sent to the North during the 4 years ending with 1817, *eight* were lost. This period was, however, uncommonly free from disaster. It would seem, too, that the risk of shipwreck is greater in Davis's Straits than in the seas to the east of Greenland. In 1819, of 63 ships sent to Davis's Straits, no fewer than 10 were lost; in 1821, out of 79 ships, 11 were lost; and in 1822, out of 60 ships, 7 were lost. But 1830 has in this respect been the most disastrous. — Of 87 ships that sailed for Davis's Straits, no less than 18, or 22 per cent. of the whole, were totally lost; 24 returned *clean*, or without having caught a single fish; and of the remainder, not 1 had a full cargo, only

1 or 2 being *half fished!* If we estimate the value of the ships cast away, including the outfit, at 7,000*l.* each, the loss from shipwreck only will be 126,000*l.* The following Table exhibits a detailed account of the fishery in 1832: —

Account of the Northern Whale Fishery in 1832; exhibiting the Number and Tonnage of the Ships sent out by each Port, with the Number of Fish taken, and the Quantity of Oil and Bone.

Ports.	No. of Ships.	Tonnage.	Fish.	Oil.	Bone.	
				Tuns.	*Tons.*	*Cwt.*
Hull	30	9,938	539	4,603	251	11
Whitby	1	324	29	235	11	18
Newcastle	4	1,509	121	1,019	55	6
Berwick	1	309	22	185	9	10
London	3	1,151	44	265	12	14
Peterhead	11	3,076	159	1,244	63	8
Aberdeen	6	1,823	93	833	43	9
Dundee	9	2,929	240	1,902	104	10
Montrose	3	964	28	257	13	7
Kirkaldy	5	1,609	98	785	41	10
Leith	8	2,761	190	1,282	68	17
Totals	81	26,393	1,563	12,610	676	120

Estimated Value. — 12,610 tuns of oil, at 20*l.*, 252,200*l.*; 676 tons of whalebone, at 125*l.*, 84,500*l.*, making in all, 336,700*l.*

There has been a somewhat singular change in the ports from which the fishery is chiefly carried on. In London were undertaken all the discoveries which led to its establishment; and for some time a complete monopoly was enjoyed by the great companies formed in that city. Even between the years 1780 and 1790, the metropolis sent out 4 times the number of vessels that sailed from any other port. It was observed, however, that her fishery was, on the whole, less fortunate than that of the new rivals which had sprung up; and her merchants were so much discouraged, that in Mr. Scoresby's time they equipped only 17 or 18 vessels. They have since almost entirely abandoned the trade, employing in 1832 not more than 3 ships.

Hull early became a rival to London, having sent out vessels at the very commencement of the fishery. Although checked at first by the monopoly of the great companies, as soon as the trade became free she prosecuted it with distinguished success. In the end of the last century, that town attained, and has ever since preserved, the character of the first whale-fishing port in Britain.

Whitby engaged in this pursuit in 1753, and carried it on for some time with more than common success; but her operations have since been much limited. Liverpool, after embarking in the undertaking with spirit, has now entirely relinquished it. Meantime the eastern ports of Scotland have steadily carried on, and even extended, their transactions, while those of the country at large were diminishing. The increase has been most remarkable at Peterhead; and indeed this town, as compared especially with London, must derive a great advantage from avoiding, both in the outward and homeward voyages, 600 miles of somewhat difficult navigation.

The following summary has been collected from Mr. Scoresby, as the average quantity of shipping fitted out in the different ports for 9 years, ending with 1818; and the comparison of it with the number sent out in 1832 will show the present state of the trade: —

		Average of 1810—18.	1832.
England —	Berwick	$1\frac{7}{9}$	1
	Grimsby	$1\frac{4}{9}$	0
	Hull	$53\frac{4}{9}$	30
	Liverpool	$1\frac{8}{9}$	0
	London	$17\frac{8}{9}$	3
	Lynn	$1\frac{4}{9}$	0
	Newcastle	$4\frac{7}{9}$	4
	Whitby	$8\frac{8}{9}$	1
		$91\frac{5}{9}$	39
Scotland —	Aberdeen	$10\frac{8}{9}$	6
	Banff	$\frac{8}{9}$	0
	Burntisland	0	0
	Dundee	$7\frac{6}{9}$	9
	Greenock	$\frac{8}{9}$	0
	Kirkcaldy	$\frac{7}{9}$	5
	Kirkwall	$\frac{6}{9}$	0
	Leith	$8\frac{7}{9}$	8
	Montrose	$2\frac{7}{9}$	3
	Peterhead	$6\frac{8}{9}$	11
		$40\frac{1}{9}$	42
Total		$131\frac{6}{9}$	81

Hardly a ship now goes to Greenland.

We have already seen that, as a source of national wealth, the whale fishery is of exceedingly little importance. Neither does it seem to be of so much consequence as a nursery for seamen as is commonly supposed. The number employed in the Northern fishery does not exceed 4,500; and it may be doubted whether the casualties to which they are exposed do not, in a public point of view, more than balance the increased skill and hardihood they acquire in so perilous an occupation.

There seems no reason to apprehend any deficiency in the supply of oil from a falling off in the fishery. We have seen from the foregoing statements, that the fish oil imported in 1832 amounted to 12,610 tuns. But at present nearly half this quantity of olive oil is annually imported; and as olive oil is loaded with a duty of 8*l.* 8*s.* a tun, it is obvious that if this duty were reduced, as it ought to be, to 2*l.* or 3*l.* a tun, the increased quantity imported would go far to balance any falling off in the supply of train oil. When a coarser species is required, rape and linseed oil may be advantageously substituted for that of the whale. Tallow may also be applied to several purposes, to the exclusion of train oil. Although, therefore, the whale fishery should decline, we need not fear that any material injury will thence arise to the industry of the country: and it would be most impolitic to attempt to bolster it up, either by resorting to the exploded

system of bounties, or by laying heavy duties on oil or tallow imported from other countries.

The South Sea fishery was not prosecuted by the English till about the beginning of the American war: and as the Americans had already entered on it with vigour and success, 4 American harpooners were sent out in each vessel. In 1791, 75 whale ships were sent to the South Sea; but the number has not been so great since. In 1829, only 31 ships were sent out, of the burden of 10,997 tons, and carrying 937 men. The *Macrocephalus*, or spermaceti whale, is particularly abundant in the neighbourhood of the Spice Islands; and Mr. Crawfurd, in his valuable work on the *Eastern Archipelago*, (vol. iii. p. 447.), has entered into some details to show that the fishery carried on there is of greater importance than the spice trade. Unluckily, however, the statements on which Mr. Crawfurd founded his comparisons were entirely erroneous, neither the ships nor the men employed amounting to more than 1-5th or 1-6th part of what he has represented.

But errors of this sort abound in the works of those who had better means of coming at the truth. Mr. Barrow, in an article on the fisheries, in the *Supplement to the Encyclopædia Britannica*, states the number of ships fitted out for the Northern whale fishery in 1814 at 143, and their crews at 7,150; and he further states the number of ships fitted out for the Southern fishery in 1815 at 107, and their crews at 3,210. In point of fact, however, only 112 whale ships cleared out for the North in 1814, carrying 4,708 men; and in 1815, only 22 whale ships cleared out for the South, carrying 592 men! How Mr. Barrow, who has access to official documents, should have given the sanction of his authority to so erroneous an estimate, we know not. In the same article, Mr. Barrow estimates the entire annual value of the British fisheries of all sorts at 8,300,000*l*. But it might be very easily shown that, in rating it at 3,500,000*l*., we should certainly be up to the mark, or rather, perhaps, beyond it. — (See Fish.)

We annex a detailed account of the progress of the Southern whale fishery since 1814.

An Account of the Number of Ships annually fitted out in Great Britain, with their Tonnage and Crews, for the Southern Whale Fishery, and of the Bounties on their Account, from 1814 to 1824, both inclusive.

Years.	Ships.	Tons.	Men.	Bounties paid.	Years.	Ships.	Tons.	Men.	Bounties paid.
				£					£
1814	30	8,999	794	5,600	1820	68	19,755	1,827	9,100
1815	22	6,985	592	8,000	1821	55	14,398	1,396	8,300
1816	34	10,332	852	4,500	1822	44	11,432	1,022	7,400
1817	42	14,785	1,201	10,000	1823	59	17,669	1,536	6,800
1818	58	18,214	1,643	6,000	1824	31	9,122	796	7,300
1819	47	14,668	1,345	9,100					

An Account of the Number of Ships fitted out in the different Ports of Great Britain (specifying the same) for the Southern Whale Fishery, their Tonnage, and the Number of Men on board, during the Three Years ending the 5th of January, 1830.

Ports.	Year ending 5th of January, 1828.			Year ending 5th of January, 1829.			Year ending 5th of January, 1830.		
	Ships.	Tons.	Men.	Ships.	Tons.	Men.	Ships.	Tons.	Men.
London - -	31	10,158	874	21	7,000	604	31	10,997	937
Greenock - -	2	216	28		nil.			nil.	

Office of Registrar General of Shipping,
Custom-house, London, Dec. 16. 1830.

JOHN COVEY,
Reg. Gen. of Shipping.

American Whale Fishery. — For a lengthened period, the Americans have prosecuted the whale fishery with greater vigour and success than, perhaps, any other people. They commenced it in 1690, and for about 50 years found an ample supply of fish on their own shores. But the whale having abandoned them, the American navigators entered with extraordinary ardour into the fisheries carried on in the Northern and Southern Oceans. From 1778 to 1775, Massachusetts employed annually 183 vessels, carrying 13,820 tons, in the former; and 121 vessels, carrying 14,026 tons, in the latter. Mr. Burke, in his famous speech on American affairs in 1774, adverted to this wonderful display of daring enterprise as follows: —

"As to the wealth," said he, "which the colonists have drawn from the sea by their fisheries, you had all that matter fully opened at your bar. You surely thought these acquisitions of value, for they seemed to excite your envy; and yet the spirit by which that enterprising employment has been exercised ought rather, in my opinion, to have raised esteem and admiration. And pray, Sir, what in the world is equal to it? Pass by the other parts, and look at the manner in which the New England people carry on the whale fishery. While we follow them among the trembling mountains of ice, and behold them penetrating into the deepest frozen recesses of Hudson's Bay and Davis's Straits; while we are looking for them beneath the Arctic circle, we hear that they have pierced into the opposite region of polar cold; that they are at the antipodes, and engaged under the frozen serpent of the South. Falkland Island, which seemed too remote and too romantic an object for the grasp of national ambition, is but a stage and resting-place for their victorious industry. Nor is the equinoctial heat more discouraging to them than the accumulated winter of both poles. We learn, that while some of them draw the line or strike the

harpoon on the coast of Africa, others run the longitude and pursue their gigantic game along the coast of Brazil. No sea, but what is vexed with their fisheries. No climate that is not witness of their toils. Neither the perseverance of Holland, nor the activity of France, nor the dexterous and firm sagacity of English enterprise, ever carried this most perilous mode of hardy industry to the extent to which it has been pursued by this recent people; a people who are still in the gristle, and not hardened into manhood."

The unfortunate war that broke out soon after this speech was delivered, checked for a while the progress of the fishery; but it was resumed with renewed vigour as soon as peace was restored. The American fishery has been principally carried on from Nantucket and New Bedford in Massachusetts; and for a considerable time past the ships have mostly resorted to the Southern seas. "Although," says Mr. Pitkin, "Great Britain has, at various times, given large bounties to her ships employed in this fishery, yet the whalemen of Nantucket and New Bedford, unprotected and unsupported by any thing but their own industry and enterprise, have generally been able to meet their competitors in a foreign market." — (*Commerce of the United States*, 2d ed. p. 46.) The following statement may not be uninteresting.

Account of Vessels at Sea, from the United States, employed in the Southern, or Sperm Whale Fishery, on the 1st of January, 1833.

Owned in Massachusetts.	*Vessels.*	Owned in other States.	*Vessels.*
At New Bedford and Fairhaven	90	At New London, Con.	18
Nantucket	57	Bristol, R. I.	10
Edgartown	5	Warren, ditto	6
Falmouth	5	Newport, ditto	4
Plymouth	2	Hudson, New York	4
Salem	2	Poughkeepsie	1
Fall River	1	New York	1
Rochester	1	Sag Harbour	1
Wareham	1	Portsmouth, N. H.	1
Dartmouth	1	Total	37
Holmes's Hole	1	Owned in Massachusetts	166
Total absent from Massachusetts	166	Total	203

The produce in oil, of the sperm whale fishery, in 1832, was as follows:—

	Barrels.		*Barrels.*
Imported in ships from the Pacific Ocean,—		At Sag Harbour	1,000
At New Bedford and Fairhaven	30,476	Bristol	200
Nantucket	30,450	Warren	223
Newport	4,120	Sent home by various merchant ships	2,000
Plymouth	2,120	Taken in the Atlantic by small vessels	1,500
Imported in ships from the Brazils,—		Total of sperm oil in 1832	78,749
At New Bedford	5,550	Imported in 1831	107,752
New London	703		
Nantucket	407		

French Whale Fishery. — France, which preceded the other nations of Europe in the whale fishery, can hardly be said, for many years past, to have had any share in it. In 1784, Louis XVI. endeavoured to revive it. With this view he fitted out 6 ships at Dunkirk on his own account, which were furnished with harpooners and a number of experienced seamen brought at a great expense from Nantucket. The adventure was more successful than could have been reasonably expected, considering the auspices under which it was carried on. Several private individuals followed the example of his Majesty, and in 1790 France had about 40 ships employed in the fishery. The revolutionary war destroyed every vestige of this rising trade. Since the peace, the government has made great efforts for its renewal, but hitherto without much success. At present there are only from 12 to 15 ships engaged in the fishery.

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WHARF, a sort of quay, constructed of wood or stone, on the margin of a roadstead or harbour, alongside of which ships or lighters are brought for the sake of being conveniently loaded or unloaded.

There are 2 denominations of wharfs, viz. *legal quays* and *sufferance wharfs*. The former are certain wharfs in all sea-ports, at which all goods are required by the 1 Eliz. c. 11. to be landed and shipped, and they were set out for that purpose by commission from the Court of Exchequer, in the reign of Charles II. and subsequent sovereigns. Many others have been legalised by act of parliament. In some ports, as Chepstow, Gloucester, &c., certain wharfs are deemed legal quays by immemorial practice, though not set out by commission, or legalised by act of parliament.

Sufferance wharfs are places where certain goods may be landed and shipped; such as hemp, flax, coal, and other bulky goods; by special sufferance granted by the Crown for that purpose.

WHARFAGE, the fee paid for landing goods on a wharf, or for shipping them off. The stat. 22 Chas. 2. c. 11., after providing for the establishment of wharfs and quays, makes it lawful for any person to lade or unlade goods, on paying wharfage and cranage at the rates appointed by the king in council.

WHEAT (Ger. *Weitzen*; Du. *Tarw*; Da. *Hvede*; Sw. *Hvete*; Fr. *Froment, Bled, Blé*; It. *Grano, Formento*; Sp. and Port. *Trigo*; Rus. *Pscheniza*; Pol. *Pszenica*) a species of bread corn (*Triticum* Lin.), by far the most important of any cultivated in Europe. We are totally ignorant of the country whence this valuable grain was first derived; but it was very early cultivated in Sicily. It is raised in almost every part

of the temperate zones, and in some places as high as 2,000 feet above the level of the sea.

The kinds of wheat sown are numerous, but they may be classed under 4 heads: viz. cone or bearded wheat, which, however, is now little cultivated; white wheat, of which there are innumerable varieties, the *white Dantzic* being considered one of the best; red wheat, which is seldom sown where the climate is good and early, and the land in proper condition; and spring wheat. A greater number of people are nourished by rice than by wheat; but owing to the greater quantity of gluten which the latter contains, it makes by far the best bread. Rye comes nearer to wheat in its bread-making qualities than any other sort of grain; still, however, it is very inferior to it. The finest samples of wheat are small in the berry, thin skinned, fresh, plump, and bright, slipping readily through the fingers.

Being very extensively cultivated on soils of very various qualities, and frequently with very imperfect preparation, the produce of wheat crops in Great Britain varies from about 12 to 56 bushels per acre.

The counties most distinguished for the quantity and quality of their wheat are, Kent, Essex, Suffolk, Rutland, Hertfordshire, Berkshire, Hampshire, and Herefordshire, in England; and Berwickshire, and the Lothians, in Scotland. In the northern counties it is, speaking generally, of an inferior quality; being cold to the feel, dark coloured, thick skinned, and yielding comparatively little flour. In the best wheat counties, and in good years, the weight of a Winchester bushel of wheat is from 60 to 62 lbs. In the Isle of Sheppey, in Kent (where, perhaps, the best samples of wheat sent to the London market are produced), this grain, in some favourable seasons, weighs 64 lbs. a bushel. Where the climate is colder, wetter, or more backward, or in bad seasons, the weight of the bushel of wheat is not more than 56 or 57 lbs. It is calculated that the average weight of the bushel of good English wheat is 58½ lbs.; and that the average yield of flour is 13 lbs. of flour to 14 lbs. of grain. — (See Mr. Stevenson's very valuable article on *England*, in *Brewster's Encyclopædia*, vol. viii. p. 720.; *Loudon's Ency. of Agriculture, &c.*)

For a view of the regulations with respect to the importation and exportation of wheat, &c., see Corn Laws and Corn Trade. The price of wheat in 1833 was 52*s.* 11*d.* per quarter.

WHISKY, a spirit obtained by distillation from corn, sugar, or molasses, though generally from the former. Whisky is the *national spirit*, if we may so term it, of Scotland and Ireland; but that distilled in the former is generally reckoned superior to that of the latter. — (See Spirits.)

WINE (Ger. *Wein*; Fr. *Vin*; It. and Sp. *Vino*; Port. *Vinho*; Rus. *Wino, Winogradnoe winoe*; Lat. *Vinum*; Gr. Οινος; Arab. *Khumr*), the fermented juice of the grape, or berries of the vine (*Vitis vinifera*).

The vine is indigenous to Persia and the Levant; but it is now found in most temperate regions. The limits within which it is cultivated in the northern hemisphere of the Old World vary from about 15° to 48° and 52°; but in North America it is not cultivated farther north than 38° or 40°. It is rarely grown at a greater altitude than 3,000 feet. From Asia the vine was introduced into Greece, and thence into Italy. The Phoceans, who founded Marseilles, carried the vine to the south of France; but it is doubtful whether it was introduced into Burgundy till the age of the Antonines.* The species of *Vitis* indigenous to North America is very different from the *Vitis vinifera*. In favourable seasons, the vine ripens in the open air in England; and in the eleventh and twelfth centuries, considerable quantities of inferior wine were made from native grapes. Vineyards are now, however, unknown in this country; but the grapes raised in hot-houses, and used in desserts, are excellent.

The vine grows in every sort of soil; but that which is light and gravelly seems best suited for the production of fine wines. It succeeds extremely well in volcanic countries. The best wines of Italy are produced in the neighbourhood of Vesuvius: the famous Tokay wine is also made in a volcanic district, as are several of the best French wines; many parts of the south of France bearing evident marks of extinct volcanoes. Hermitage is grown among the *débris* of granite rocks. The most favourable situation for a vineyard is upon a rising ground or hill facing the south-east, and the situation should not be too confined;

——— apertos
Bacchus amat colles.

The art of expressing and fermenting the juice of the grape appears to have been practised from the remotest antiquity. The sacred writings tell us that Noah planted a vine-

* The ancient writers give the most contradictory accounts with respect to the introduction of the vine into Gaul. — (See the learned and excellent work of Le Grand d'Aussy, *Vie Privée des Français*, tome ii. pp. 329—333.) The statement given above seems the most probable.

yard soon after the deluge — (*Gen.* ix. 20.); and a modern Latin poet ingeniously represents the vine as a gift from Heaven, to console mankind for the miseries entailed upon them by that grand catastrophe!

> Omnia vastatis ergo quum cerneret arvis
> Desolata Deus, nobis felicia vini
> Dona dedit; tristes hominum quo munere fovit
> Reliquias, mundi solatus vite ruinam! .
>
> *Vanierii Præd. Rusticum*, lib. xi.

Species of Wine. — There are many varieties of vines; and this circumstance, combined with differences of soil, climate, mode of preparation, &c., occasions an extreme variety in the species of wine. But even between places immediately contiguous to each other, and where a cursory observer would hardly remark any difference, the qualities of the wines, though produced by the same species of grape, and treated in the same way, are often very different. A great deal evidently depends upon the aspect of the vineyard; and it is probable that a good deal depends on peculiarities of soil. But whatever may be the cause, it is certain that there are wines raised in a few limited districts, such as Tokay, Johannisberger, Constantia, the best Burgundy, Champagne, claret, &c., that no art or care has hitherto succeeded in producing of equal goodness in other places.

Ancient Wines. — The wines of Lesbos and Chios among the Greeks, and the Falernian and Cecuban among the Romans, have acquired an immortality of renown. Great uncertainty, however, prevails as to the nature of these wines. Dr. Henderson thinks that the most celebrated of them all, the Falernian, approached, in its most essential characters, near to Madeira. In preparing their wines, the ancients often inspissated them till they became of the consistence of honey, or even thicker. These were diluted with water previously to their being drunk; and, indeed, the habit of mixing wine with water seems to have prevailed much more in antiquity than in modern times.

Modern Wines. — The principal wines made use of in this country are port, sherry, claret, Champagne, Madeira, hock, Marsala, Cape, &c.

Port, — the wine most commonly used in England, — is produced in the province of Upper Douro, in Portugal; and is shipped at Oporto, whence its name. When it arrives in this country, it is of a dark purple or inky colour; has a full, rough body, with an astringent bitter-sweet taste, and a strong flavour and odour of brandy. After it has remained some years longer in the wood, the sweetness, roughness, and astringency of the flavour abate; but it is only after it has been kept 10 or 15 years in bottle, that the odour of the brandy is completely subdued, and the genuine aroma of the wine developed. When kept to too great an age, it becomes tawny, and loses its peculiar flavour. During the process of melioration, a considerable portion of the extractive and colouring matter is precipitated on the sides of the vessels in the form of crust. In some wines this change occurs much earlier than in others.

A large quantity of brandy is always mixed with the wine shipped from Oporto for England. Genuine unmixed port wine is very rarely met with in this country. We have been so long accustomed to the compounded article, that, were it possible to procure it unmixed, it is doubtful whether it would be at all suited to our taste. According to Mr. Brande's analysis, on which, however, owing to the differences in the quality of the wine, no great stress can be laid, port, as used in England, contains about 23 per cent. of alcohol. In 1833, 2,596,530 gallons of port were retained for consumption in the United Kingdom.

Oporto Wine Company. — The quality of the wine shipped from Oporto has been materially injured by the monopoly so long enjoyed by the Oporto Wine Company. This company was founded in 1756, during the administration of the Marquis Pombal. A certain extent of territory is marked out by its charter as the only district on the Douro in which wine is to be raised for exportation: the entire and absolute disposal of the wines raised in this district is placed in the hands of the Company; who are further authorised to fix the prices to be paid for them to the cultivators, to prepare them for exportation, and to fix the price at which they shall be sold to foreigners! It is obvious that a company with such powers cannot be any thing else than an intolerable nuisance. What could be more arbitrary and unjust than to interdict the export of all wines raised out of the limits of the Company's territory? But even in its own district, its proceedings have been most oppressive and injurious. The Company annually fix, by a fiat of their own, 2 rates of prices — one for the *vinho de feitoria*, or wine for exportation, and the other for *vinho de ramo*, or wine for home consumption — at which the cultivators are to be paid, *whatever may be the quality of their wines!* They have, therefore, no motive to exert superior skill and ingenuity; but content themselves with endeavouring to raise, at the least possible expense, the greatest supply of *vino de feitoria*, for which the Company allow the highest price. All emulation is thus effectually extinguished, and the proprietors who possess vineyards of a superior quality invariably adulterate their wines with inferior growths, so as to reduce them to the average standard. "In this way," says Dr. Henderson, "the finer products of the Douro vintages have remained in a great measure unknown to us; and port wine has come to be considered as a single liquor, if I may use the expression, of nearly uniform flavour and strength; varying, it is true, to a certain extent in quality, but still always approaching to a definite standard, and admitting of few degrees of excellence. The manipulations, the admixtures — in one word, the *adulterations* — to which the best wines of the Cimo do Douro are subjected, have much the same effect as if all the growths of Burgundy were to be mingled in one immense vat, and sent into the world as the only true Burgundian wine. The delicious produce of Romanée, Chambertin, and the Clos Vougeôt, would disappear, and in their places we should find nothing better than a second-rate Beaune or Macon wine." — (*History of Ancient and Modern Wines*, p. 210.)

Not only, however, have the Oporto Wine Company deteriorated the quality, but they have also raised the price of their wines to an enormous height. Secured against the competition of their countrymen, and enjoying, down to 1831, a nearly absolute monopoly of the British markets by means of the high duties on French wines, they have filled their pockets at our expense. At *the very moment when the Company have been shipping wine for England at 40l. a pipe, they have frequently shipped the same wine to other countries at 30l.!* — (*Fleetwood Williams on the Wine Trade.*) And the authentic Tables published by Balbi show that the price of wine has been trebled or quadrupled under the management of this corporation.—(*Essai Statistique sur le Royaume de Portugal*, tome i. p. 157.)

But though the abuses inherent in the constitution of the Company have been carried of late years to an enormous extent, it is long since its injurious effects on the commerce of this country were distinctly perceived and pointed out. So far back as 1767, the Board of Trade laid a memorial before his Majesty in council, in which they state, "With respect to many particular regulations of the Oporto Company, which we think justly objected to by the merchants as highly grievous and oppressive, we have not thought it necessary to enter into a minute description of them, being of opinion that one general and fatal objection lies against them all; viz. — that *they all contribute to establish in the Company a monopoly against your Majesty's subjects, from which by treaty they have a right to be exempted.*"

But notwithstanding this authoritative exposition of the injury done to the English by this monopoly, and the experience which every subsequent year afforded of its mischievous influence, such has been the inveteracy of ancient prejudice, that it was not till the session of 1831 that we took the only step by which we could hope to rid ourselves of its evils, as well as of a host of others, by equalising the duties on French and Portuguese wines, and putting an end to the absurd and injurious preference in favour of the latter established by the Methuen treaty.

England and Brazil are the only countries to which any considerable quantity of port wine is exported. Our imports amounted, at an average of the 10 years ending with 1833, to 22,121 pipes a year; of which, however, a portion is subsequently exported; while the exports from Portugal to all other countries, Brazil inclusive, have not recently amounted to 3,000 pipes. It has been supposed, now that there is no discriminating duty in favour of port, that its consumption in this country will gradually fall off, its place being filled by French and other wines; but though such a result be not improbable, it derives no confirmation from the pretty gradual decrease in the quantities of port retained for home use since 1827, the French wines retained for the same purpose having declined still more rapidly.

Sherry is of a deep amber colour; when good, it has a fine aromatic odour; its taste is warm, with some degree of the agreeable bitterness of the peach kernel. When new, it tastes harsh and fiery; it is mellowed by being allowed to remain 4 or 5 years or longer in the wood; but it does not attain to its full flavour and perfection until it is kept for 15 or 20 years. It is a very strong wine, containing about 19 per cent. of alcohol. It is principally produced in the vicinity of Xeres, not far from Cadiz, in Spain. It is very extensively used in this country as a dinner wine. Dry sherry, or *amontillado*, when genuine and old, fetches a very high price. Perhaps no wine is so much adulterated as sherry. With the exception of Marsala, the consumption of sherry has been far more influenced than that of any other wine by the reduction of the duties in 1825. In 1833, the quantity retained for home consumption amounted to 2,246,085 gallons, being *more than double* the quantity retained for consumption at an average of 1823 and 1824!—(See *post.*)

Claret, — the term generally used in England to designate the red wines, the produce of the Bordelais. Of these, Lafitte, Latour, Château-Margaux, and Haut-Brion, are so generally esteemed, that they always sell from 20 to 25 per cent. higher than any others of the province. The first mentioned is the most choice and delicate, and is characterised by its silky softness on the palate, and its charming perfume, which partakes of the nature of the violet and the raspberry. The Latour has a fuller body, and at the same time a considerable aroma, but wants the softness of the Lafitte. The Château-Margaux, on the other hand, is lighter, and possesses all the delicate qualities of the Lafitte, except that it has not quite so high a flavour. The Haut-Brion, again, has more spirit and body than any of the preceding, but is rough when new, and requires to be kept 6 or 7 years in the wood; while the others become fit for bottling in much less time.

Among the second-rate wines, that of Rozan, in the parish of St. Margaux, approaches in some respects to the growth of the Château-Margaux; while that of Gorce, in the same territory, is little inferior to the Latour; and the vineyards of Leoville, Larose, Bran-mouton, and Pichon-Longueville, in the canton of Pauillac, afford light wines of good flavour, which, in favourable years, have much of the excellence of the finer growths. In the Entre-deux-Mers, the wines of Canon and St. Emilion, in the vicinity of Libourne, are deemed the best, being of a full body and very durable. When new, these wines are always harsh and astringent; but they acquire an agreeable softness, and are characterised by a peculiar flavour, which has been not unaptly compared to the smell of burning wax. The aroma of the first growths is seldom fully developed till after they have been kept 8 or 9 years: but the secondary qualities come to perfection a year or two sooner. The colour often grows darker as the wine advances in age, in consequence of the deposition of a portion of its tartar; but, when well made, and thoroughly fined, it seldom deposits any crust.

(These particulars are borrowed from the excellent work of *Dr. Henderson, on Ancient and Modern Wines* (p. 184.). We have given, in a previous article — (see BORDEAUX),— full and authentic details as to the trade in claret. We beg, also, to refer the reader to that article for some observations on the wine trade of France, and on the injury done to it by the restrictive system of commerce.)

There is generally a very good supply of claret in bond in the docks in London. Its price varies from about 15*l.* per hogshead for the inferior, to 50*l.* and 55*l.* per hogshead for the superior growths. What are called cargo or shipping clarets may be bought at from 5*l.* to 10*l.* per hogshead. The finest case claret sells in bond at about 50*s.* per dozen; but parcels of very well flavoured wine may be bought at 25*s.*

Champagne, — so called from the province of France of which it is the produce, — is one of the most deservedly esteemed of the French wines. The wines of Champagne are divided into the 2 grand classes of white and red wines; and each of these again into still and sparkling: but there is a great variety in the flavour of the produce of different vineyards. Sillery is universally allowed to be the best of the still wines. It is dry, of a light amber colour, has a considerable body, and a charming aroma. "Le corps," (says M. Jullien,) "le spiritueux, le charmant bouquet, et les vertus toniques dont il est pourvu, lui assurent la priorité sur tous les autres." — (*Topographie de tous les Vignobles*, p. 30.) Dr. Henderson agrees with M. Jullien, in considering it as one of the wholesomest of the Champagne wines. The sparkling wines are, however, the most popular, at least in this country. Of these, the wine of Ay, 5 leagues south from Rheims, is, perhaps, the best. It is lighter and sweeter than Sillery, and has an exquisite flavour and aroma. That which merely creams on the surface (*demi-mousseux*) is preferred to the full frothing wine (*grand-mousseux*). Being bright, clear, and sparkling, it is as pleasing to the eye as it is grateful to the palate.

"Cernis micanti concolor ut vitro
Latex in auras, gemmeus aspici,
Scintillet exultim; utque dulces
Naribus illecebras propinet

"Succi latentis proditor halitus!
Ut spuma motu lactea turbido
Crystallinum lætis referre
Mox oculis properet nitorem."

Hautvilliers, about 4 leagues from Rheims and 1 from Epernay, used formerly to produce wine that equalled, and sometimes surpassed, the wine of Ay. But it is no longer cultivated with the same care; so that, though still very good, it now only ranks in the 2d class.

The best of the red wines of Champagne are those of Verzy, Verzenay, Maily, Bouzy, and St. Basle. "Ils ont une belle couleur, du corps, du spiritueux, et surtout beaucoup de finesse, de sève, et de bouquet." — (*Jullien*, p. 27.) The Clos St. Thierry, in the vicinity of Rheims, produces wine which, according to M. Jullien, unites the colour and the aroma of Burgundy to the lightness of Champagne.

The province of Champagne produces altogether about 1,100,000 hectolitres of wine; of which, however, the finest growths make but a small part. The principal trade in wine is carried on at Rheims, Avise, and Epernay. The vaults in which the vintages are stored are excavated in a rock of calcareous tufa to the depth of 30 or 40 feet. Those of M. Moet, at Epernay, are the most extensive, and few travellers pass through the place without going to see them. The briskest wines (*grands-mousseux*) keep the worst. — (*Jullien*, p. 34.)

Burgundy. — The best wines of this province, though not so popular in England as those of Champagne, enjoy the highest reputation. "In richness of flavour and perfume, and all the more delicate qualities of the juice of the grape, they unquestionably rank as the first in the world; and it was not without reason that the dukes of Burgundy, in former times, were designated as the *princes des bons vins*." — (*Henderson*, p. 161.) M. Jullien is not less decided: — "Les vins des premiers crus, lorsqu'ils proviennent d'une bonne année, réunissent, dans de justes proportions, *toutes les qualités qui constituent les vins parfaits*; ils n'ont besoin d'aucun mélange, d'aucune préparation, pour attendre leur plus haut degré de perfection. Ces opérations, que l'on qualifie dans certains pays de *soins qui aident* à la qualité, sont toujours nuisibles aux vins de Bourgogne." — (p. 104.)

Romané-Conti, Chambertin, the Clos Vougeôt, and Richebourg, are the most celebrated of the RED wines of Burgundy. Chambertin was the favourite wine of Louis XIV. and of Napoleon. It is the produce of a vineyard of that name, situated 7 miles to the south of Dijon, and furnishing each year from 130 to 150 puncheons, from an extent of about 65 acres. It has a fuller body and colour, and greater durability, than the Romané, with an aroma nearly as fragrant.

The white wines of Burgundy are less numerous, and, consequently, less generally known, than the others: but they maintain the highest rank among French white wines, and are not inferior to the red either in aroma or flavour.

The entire annual produce of wine in Burgundy and Beaujolais may at present be estimated, at an average, at nearly 3,000,000 hectolitres, of which about 750,000 suffice for the consumption of the inhabitants. Since the Revolution, the cultivation of the vine has been greatly extended in the province. Many of the new vineyards having necessarily been planted in comparatively unfavourable situations, a notion has been gaining ground that the wines of Burgundy were degenerating. This, however, is

not the case. On the contrary, the quantity of *bons crus*, instead of being diminished, has increased considerably; though, as the supply of inferior wines has increased in a still greater degree, the fine wines bear a less proportion to the whole than they did previously to the Revolution. —(*Jullien*, p. 90.)

The principal trade in Burgundy is carried on at Dijon, Gevrey, Châlons-sur-Saône, &c.

Besides the above, France has a great variety of other excellent wines. Hermitage, Sauterne, St. Péry, &c. are well known in England; and deservedly enjoy, particularly the first, a high degree of reputation.

Account of the Quantity and Value of the Wines exported from France in 1831; distinguishing between those of the Gironde and those of other Departments, and between those exported in Casks and Bottles; and specifying the Quantity and Value of those sent to each Country.—(*Administration des Douanes* for 1831, p. 249.)

Countries to which exported.	Wine in Casks.				Wine in Bottles.			
	Of the Gironde.		Of other Departments.		Of the Gironde.		Of other Departmts.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Litres.	*Francs.*	*Litres.*	*Francs.*	*Litres.*	*Francs.*	*Litres.*	*Francs.*
Russia	1,782,178	784,158	904,157	180,831	44,491	88,982	410,394	410,394
Sweden	88,072	48,440	321,373	64,295	10,128	20,256	14,138	14,138
Norway	229,249	126,087	58,109	11,622	1,126	2,252	5,147	5,147
Denmark	608,826	200,912	595,438	118,888	8,782	17,564	7,881	7,881
Prussia	2,323,234	681,270	1,237,909	246,396	10,376	20,752	199,149	199,149
Hanse Towns	7,035,499	1,891,591	5,812,562	1,162,512	42,345	84,690	110,521	110,521
Holland	1,781,574	1,158,063	3,641,311	728,262	7,586	15,172	14,752	14,752
Belgium	848,765	551,697	884,941	176,988	4,288	8,576	58,281	58,281
England	1,148,[illegible]	3,720,[illegible]	337,[illegible]	67,453	292,838	585,676	570,681	570,681
Portugal	234	74	4,171	834	114	228	180	106
Spain	13,900	4,587	431,571	86,314	23,210	46,420	13,396	13,396
Austria	- -	- -	53,[illegible]	6,[illegible]	90	180	18,819	18,819
Sardinia	4,032	1,331	6,[illegible]	1,247,131	597	1,194	38,330	38,330
The Two Sicilies	- -	- -	38,448	7,690	- -	- -	13,232	13,232
Tuscany, Modena, Parma, Roman States	- -	- -	406,404	81,281	- -	- -	24,950	24,950
Switzerland	- -	- -	7,[illegible]	1,[illegible]	- -	- -	31,287	31,287
Germany	- -	- -	[illegible]	[illegible]	- -	- -	277,882	277,882
Greece	- -	- -	[illegible]	[illegible]	- -	- -	1,790	1,790
Turkey	- -	- -	174,678	34,936	- -	- -	19,549	19,549
Egypt	- -	- -	636,788	127,358	- -	- -	13,378	13,378
Algiers	- -	- -	6,723,805	1,344,761	- -	- -	25,845	25,845
Barbary States	- -	- -	- -	- -	- -	- -	2,381	2,381
English possessions in Africa	765,047	252,465	589,325	117,865	72,661	145,322	2,425	2,425
Other countries on the coast of Africa	- -	- -	64,018	12,804	- -	- -	1,848	1,848
India, English possessions	48,884	18,576	8,875	1,775	333,702	667,404	1,634	1,634
Spanish do.	16,392	6,214	- -	- -	4,452	8,904		
Dutch do.	- -	- -	25,636	5,127	- -	- -	2,614	2,614
French do.	- -	- -	- -	- -	12,226	24,452	285	285
China	- -	- -	- -	- -	- -	- -	285	285
United States	1,649,845	544,449	5,278,987	655,797	436,900	873,800	534,174	534,174
Hayti	203,426	67,131	291,[illegible]	58,[illegible]	7,095	14,190	7,692	7,692
English possessions in America	- -	- -	2,760	552	110	220		
Spanish do.	616,014	203,314	753,815	150,763	53,298	106,596	14,929	14,929
Danish do.	195,748	64,597	266,[illegible]	53,[illegible]	16,094	32,188	8,020	8,020
Brazil	138,729	45,780	2,225,031	445,[illegible]	47,851	95,702	22,019	22,019
Mexico	55,510	18,318	41,043	8,208	239,018	478,036	7,803	7,803
Colombia	7,980	2,633	18,161	3,632	3,730	7,460	9,272	9,272
Peru	80,745	26,646	- -	- -	15,653	31,306		
Chili	39,186	12,931	- -	- -	[illegible]7,202	54,404	1,200	1,200
Rio de la Plata	136,884	45,[illegible]	125,940	25,188	197	34,194	11,151	11,151
Guadeloupe	616,287	203,375	2,[illegible]	413,907	[illegible]21	91,242	10,242	10,242
Martinico	480,376	158,524	2,360,[illegible]	472,086	,987	87,974	14,618	14,618
Bourbon	753,175	248,[illegible]	1,[illegible]	304,[illegible]	47,[illegible]54	93,108	15,262	15,262
Senegal	236,851	78,161	185,242	37,048	3,940	7,880	5,703	5,703
French Guiana	507,835	167,585	323,891	64,778	6,796	13,592	15,273	15,273
St. Pierre and Miquelon	- -	- -	39,537	7,[illegible]52	- -	- -	109	109
Totals	25,613,116	11,448,649	50,769,137	10,153,527	1,880,958	3,761,916	2,558,162	2,558,162

Exclusive of the above, there were exported from France, in the same year, 2,753,499 litres of *vins de liqueurs*, valued at 4,130,250 francs.

The total produce of the vineyards of France is estimated at about 35,000,000 hectolitres (770,000,000 Imp. gallons), worth 540,000,000 francs (21,600,000*l.*). We beg to refer the reader to the article BORDEAUX, for an account of the influence of the French system of commercial policy on this great department of industry.

Dispute as to the Comparative Merit of Champagne and Burgundy. — The question, whether the wines of Champagne or of Burgundy were entitled to the preference, was agitated during the reign of Louis XIV with extraordinary keenness. The celebrated Charles Coffin, rector of the University of Beauvais, published, during this controversy, the classical ode, partly quoted above, in which Champagne is eulogised, and its superiority vindicated, with a spirit, vivacity, and delicacy worthy of the theme. The citizens of Rheims were not ungrateful to the poet; but liberally rewarded him with an appropriate and munificent donation of the wine he had so happily panegyrised. Gréneau wrote an ode in praise of Burgundy; but, unlike its subject, it was flat and insipid, and failed to procure any recompence to its author. The different pieces in this amusing controversy were collected and published in octavo, at Paris, in 1712.—(See *Le Grand d'Aussy, Vie Privée des Français*, tom. iii. p. 39., and the *Biographie Universelle*, tom. ix. art. *Coffin (Charles)*.) Erasmus attributes the restoration of his health to his having drunk liberally of Burgundy; and has eulogised it in the most extravagant terms. An epistle of his, quoted by Le Grand d'Aussy, shows that Falstaff and he could have spent an evening together less disagreeably than might have been supposed: — "Le premier qui enseigna l'art de faire ce vin (Bourgogne), ou qui en fit present, ne doit-il point passer plutôt pour nous avoir donné la vie que pour nous avoir gratifié d'une liqueur."—(*Vie Privée des Français*, tom. iii. p. 9.)

Consumption of French Wine in England. Discriminating Duties. — Owing to the intimate connection subsisting between England and France for several centuries after the Conquest, the wines of the latter were long in almost exclusive possession of the English market: but the extension of commerce gradually led to the introduction of other species; and in the reigns of Elizabeth and James I., the dry white wines of Spain seem to have been held in the highest estimation. This, however, was only a temporary preference. Subsequently to the Restoration, the wines of France regained their former ascendancy.

In 1687, their importations amounted to 15,518, in 1688 to 14,218, and in 1689 to 11,106 tuns. It is exceedingly doubtful whether so much as a single pipe of port had ever found its way to England previously to this period — (*Henderson*, p. 313.) ; and it is most probable that the wines of France would have continued to preserve their ascendancy in our markets, had not their importation been artificially checked.

The trade with France had occasionally been prohibited previously to the accession of William III. ; but it was not until 1693 that any distinction was made between the duties payable on French and other wines. But Louis XIV. having espoused the cause of the exiled family of Stuart, the British government, in the irritation of the moment, and without reflecting that the blow aimed at the French would infallibly recoil upon themselves, imposed, at the period above-mentioned, a discriminating duty of 8*l.* a tun on French wines, and in 1697 increased it to 33*l.* ! In consequence of this enormous augmentation of duty on French wines, the merchants began to import wine from Oporto as a substitute for the red wines of Bordeaux, excluded by the high duties. It is probable, however, that these discriminating duties would have been repealed as soon as the excitement which produced them had subsided, and that the trade would have returned to its old channels, had not the stipulations in the famous commercial treaty with Portugal, negotiated by Mr. Methuen in 1703, given them permanence. Such, however, was unluckily the case : for, according to this treaty, we bound ourselves to charge in future *one third* higher duties on the wines of France than on those of Portugal ; the Portuguese, by way of compensation, binding themselves to admit our woollens into their markets in preference to those of other countries, at a fixed and invariable rate of duty.

Though very generally regarded at the time as the highest effort of diplomatic skill and address, the Methuen treaty was certainly founded on the narrowest views of national interest, and has proved, in no common degree, injurious to both parties, but especially to England. By binding ourselves to receive Portuguese wines for *two thirds* of the duty payable on those of France, we, in effect, gave the Portuguese growers a monopoly of the British market, and thereby attracted too great a proportion of the deficient capital of Portugal to the production of wine ; while, on the other hand, we not only excluded one of the principal equivalents the French had to offer for our commodities, and proclaimed to the world that we considered it better to deal with *two* millions of poor beggarly customers, than with *thirty* millions of rich ones, but we also provoked the retaliation of the French, who forthwith excluded most of our articles from their markets !

The injurious effects of the regulations in the Methuen treaty were distinctly pointed out by Dr. Davenant and Mr. Hume. The latter, in his *Essay on the Balance of Trade*, published in 1752, says, " Our jealousy and hatred of France are without bounds. These passions have occasioned innumerable barriers and obstructions on commerce, where we are commonly accused of being the aggressors. But what have we gained by the bargain ? *We lost the French market for our woollen manufactures*, and transferred the commerce of wine to Spain and Portugal, *where we buy much worse liquor at a much higher price !* There are few Englishmen who would not think their country absolutely ruined, were French wine sold in England so cheap, and in such abundance, as to supplant ale and other home-brewed liquors. But, would we lay aside prejudice, it would not be difficult to prove that nothing could be more innocent ; perhaps, more advantageous. Each new acre of vineyard planted in France, in order to supply England with wine, would make it requisite for the French to take an equivalent in English goods, by the sale of which we should be equally benefited."

In consequence of the preference so unwisely given to the wines of Portugal over those of France, — a preference continued, in defiance of every principle of sound policy and common sense, down to 1831, — the imports of French wine were for many years reduced to a mere trifle ; and notwithstanding their increased consumption, occasioned by the reduction of the duties in 1825, the quantity made use of in 1833 did not exceed 232,500 gallons ; while the consumption of Portuguese wines amounts to about 2,600,000 Imperial gallons ! This is the most striking example, perhaps, in the history of commerce, of the influence of customs duties in diverting trade into new channels, and altering the taste of a people. All but the most opulent classes having been compelled, for a long series of years, either to renounce wine, or to use port, the taste for the latter has been firmly rooted ; the beverage that was originally forced upon us by necessity having become congenial from habit. We have little doubt, however, now that the discriminating duty in favour of port is abolished, that the excellence of the French wines will ultimately regain for them some portion of that favour in the English market they formerly enjoyed.*

Madeira, — so called from the island of that name, — is a wine that has long been in extensive use in this and other countries. Plants of the vine were conveyed from Crete to Madeira in 1421, and have succeeded extremely well. There is a considerable difference in the flavour and other qualities of the wines of Madeira : the best are produced on the south side of the island. Though naturally strong, they receive an addition of brandy when racked from the vessels in which they have been fermented, and another portion is thrown in previously to their exportation. This is said to be required to sustain the wine in the high temperature to which it is subjected in its passage to and from India and China, to which large quantities of it are sent ; it being found that it is mellowed, and its flavour materially improved, by the voyage. It does not, however, necessarily follow that the wines which have made the longest voyages are always the best. Much must obviously depend on the original quality of the wine ; and many of the parcels selected to be sent to India are so inferior, that the wine, when brought to London, does not rank so high as that which has been imported direct. But when the parcel sent out has been well chosen, it is very much matured and improved by the voyage ; and it not only fetches a higher price, but is in all respects superior to the direct importations. Most of the adventitious spirit is dissipated in the course of the Indian voyage.

Madeira wines may be kept for a very long period. " Like the ancient vintages of the Surrentine hills, they are truly *firmissima vina*, retaining their qualities unimpaired in both extremes of climate, suffering no decay, and constantly improving as they advance in age. Indeed, they cannot be pronounced in condition until they have been kept for 10 years in the wood, and afterwards allowed to mellow nearly twice that time in bottle : and even then they will hardly have reached the utmost perfection of which they are susceptible. When of good quality, and matured as above described, they lose

* The mischievous operation of the Methuen treaty, and of the discriminating duty on French wines, were very strikingly exhibited by Mr. Hyde Villiers, in his able speech on the 15th of June, 1830. It is highly deserving of the reader's attention.

all their original harshness, and acquire that agreeable pungency, that bitter sweetishness, which was so highly prized in the choicest wines of antiquity; uniting great strength and richness of flavour with an exceedingly fragrant and diffusible aroma. The nutty taste, which is often very marked, is not communicated, as some have imagined, by means of bitter almonds, but is inherent in the wine."—(*Henderson*, p. 253.)

The wines of Madeira have latterly fallen into disrepute in England. The growth of the island is very limited—not exceeding 20,000 pipes, of which a considerable quantity goes to the West Indies and America. Hence, when Madeira was a fashionable wine in England, every sort of deception was practised with respect to it, and large quantities of spurious trash were disposed of for the genuine vintage of the island. This naturally brought the wine into discredit; so that sherry has been for several years the fashionable white wine. It is difficult, however, to imagine that adulteration was ever practised to a greater extent upon Madeira than it is now practised upon sherry. It is not, therefore, improbable, that a reaction will take place in favour of Madeira. The quantity entered for home consumption in 1827 amounted to 308,?95 gallons, whereas the quantity entered for home consumption in 1833 only amounted to 161,042 gallons.

Malmsey, a very rich luscious species of the Madeira, is made from grapes grown on rocky grounds exposed to the full influence of the sun's rays, and allowed to remain on the vine till they are over-ripe.

The trade in Madeira wine is carried on at Funchal, the capital of the island, in lat. 32° 37′ N., lon. 17° 6′ W. *Weights* and *Measures* same as at Lisbon.

Teneriffe wine, — so called from the island of that name, — resembles Madeira, and is not unfrequently substituted in its place; but it wants the full body and rich flavour of the best growths of Madeira.

German Wines. — The wines of Germany imported into England are principally produced on the banks of the Rhine and the Moselle. The Rhine wines constitute a distinct order by themselves. They are drier than the French white wines, and are characterised by a delicate flavour and aroma, called in the country *gäre*, which is quite peculiar to them, and of which it would, therefore, be in vain to attempt the description. A notion prevails, that they are naturally acid; and the inferior kinds, no doubt, are so: but this is not the constant character of the Rhine wines, which in good years have no perceptible acidity to the taste, at least not more than is common to them with the growths of warmer regions. Their chief distinction is their extreme durability. The wines made in warm dry years are always in great demand, and fetch very high prices.

The Johannisberger stands at the head of the Rhine wines. It has a very choice flavour and perfume, and is characterised by an almost total want of acidity. The vineyard is the property of Prince Metternich. The Steinberger ranks next to the Johannisberger. It is the strongest of all the Rhenish wines, and in favourable years has much flavour and delicacy.

The produce of certain vineyards on the banks of the Moselle is of superior quality. The better sorts are clear and dry, with a light pleasant flavour and high aroma; but they sometimes contract a slaty taste from the strata on which they grow. They arrive at maturity in 5 or 6 years; though, when made in a favourable season, they will keep twice that time, without experiencing any deterioration. — (*Henderson*, p. 226.)

Tokay, — so called from a town in Hungary near which it is produced, — is but litl known in England. It is luscious, possessing at the same time a high degree of flavour and aroma. It is scarce and dear; and very apt to be counterfeited.

Marsala. — The Sicilian white wine called Marsala, from the town (the ancient Lily bœum) whence it is shipped, and near which it is made, is now pretty largely consume in England; the entries for home consumption having increased from 79,686 gallons in 1823, to 312,993 in 1833; an extraordinary increase, particularly when it is considered that during the same period the consumption of most sorts of wine has been nearly stationary. Marsala is a dry wine; the best qualities closely resembling the lighter sorts of Madeira; but the increasing demand for it seems to be owing as much to its cheapness as to any peculiarity of quality. It is, however, an agreeable dinner wine. Marsala has been brought to its present state of perfection and repute by the care and exertions of 2 Englishmen, the Messrs. Woodhouse, established in Sicily, who have an extensive factory in the neighbourhood of Marsala. The wine is shipped in large quantities for America; whence a considerable quantity is again conveyed to the West Indies, where it is not unfrequently disposed of as real Madeira.

With the exception of Marsala, very little wine either of Sicily or Italy is imported into England. The wines of those countries are, indeed, without, perhaps, a single exception, very inferior to those of France. The natives bestow no care upon the culture of the vine; and their ignorance, obstinacy, and want of skill in the preparation of wine, are said to be almost incredible. In some districts, the art is, no doubt, better understood than in others; but had the Falernian, Cecuban, and other famous ancient wines,

not been incomparably better than the best of those that are now produced, they never would have elicited the glowing panegyrics of Horace.

Wines of Greece and Cyprus.—The soil in most parts of Greece and of the Grecian islands is admirably fitted for the growth of the vine; and, in antiquity, they produced some of the choicest wines. But the rapacity of the Turks, and the insecurity of person and property that has always prevailed under their miserable government, has effectually prevented the careful cultivation of the vine; and has occasioned, in many places, its total abandonment. It may, however, be fairly presumed, now that Greece has emancipated herself from the iron yoke of her oppressors, that the culture of the vine will attract some portion of that attention to which it is justly entitled; and that, at no distant period, wine will form an important article of export from Greece.

Nowhere, perhaps, has the destructive influence of Turkish barbarism and misgovernment been so apparent as in Candia and Cyprus. While these 2 renowned and noble islands were possessed by the Venetians, they supplied all Europe with the choicest dessert wines. Bacci affirms, that towards the end of the 16th century, Candia sent annually 200,000 casks of malmsey to the Adriatic; whereas at present it hardly produces sufficient to supply the wants of its few impoverished inhabitants.—(*Henderson*, p. 243.) The wines of Cyprus, particularly those produced from the vineyard called the Commandery, from its having belonged to the Knights of Malta, were still more highly esteemed than those of Crete. In the earlier part of last century, the total produce of the vintage of the island was supposed to amount to above 2,000,000 gallons, of which nearly $\frac{1}{2}$ was exported; but now, the wine grown and exported does not amount to $\frac{1}{10}$th part of these quantities! The oppression of which they have been the victims, has reduced the peasantry to the extreme of indigence. The present population of the island is not supposed to exceed 60,000,—a number insufficient to have peopled one of its many ancient cities; and small as this number is, it is constantly diminishing by the inhabitants availing themselves of every opportunity of emigrating. Recently Cyprus has passed into the hands of Mohammed Ali; but unless the Pacha establishes a different government in it from what he has established in Egypt, the miserable inhabitants will gain nothing by the change.—(There is a brief but good account of Cyprus in *Kinneir's Travels in Asia Minor*, &c. pp. 176—197.)

Cape Wines. — Of the remaining wines imported into England, those of the Cape of Good Hope form the largest proportion; the quantity annually entered for home consumption being about 540,000 Imperial gallons. The famous Constantia wine is the produce of 2 contiguous farms of that name, at the base of Table Mountain, between 8 and 9 miles from Cape Town. The wine is very rich and luscious; though, according to Dr. Henderson, it yields, in point of flavour and aroma, to the muscadine wines of Languedoc and Roussillon. But, with this exception, most of the Cape wines brought to England have an earthy disagreeable taste, are often acid, want flavour and aroma, and are, in fact, altogether execrable. And yet this vile trash, being the produce of a British possession, enjoys peculiar advantages in our markets; for while the duty on Cape wine is only 2*s.* 9*d.* a gallon, that on all other wines is 5*s.* 6*d.* The consequences of this unjust preference are doubly mischievous: in the first place, it forces the importation of an article of which little is directly consumed, but which is extensively employed as a convenient menstruum for adulterating and degrading sherry, Madeira, and other good wines; and, in the second place, it prevents the improvement of the wine; for, while the legislature thinks fit to give a bounty on the importation of so inferior an article, is it to be supposed that the colonists should exert themselves to produce any thing better? It is not easy to imagine a more preposterous and absurd regulation. The act enforcing it ought to be entitled, an act for the adulteration of wines in Great Britain, and for encouraging the growth of bad wine in the Cape colony!

Consumption of Wine in Great Britain. Duties.—We have repeatedly had occasion, in the course of this work, to call the reader's attention to the injurious operation of unequal and exorbitant duties. Perhaps, however, the trade in wine has suffered more from this cause than any other department of industry. We have already endeavoured to point out some of the effects resulting from the inequality of the duties, or from the preference so long given to the inferior wines of Portugal and Spain over the superior wines of France. But the exorbitance of the duties was, if possible, still more objectionable than the partial principle on which they were imposed. It appears from the subjoined Table, that during the 3 years ending with 1792, when the duty on French wines was 3*s.* 9*d.*, and on Portuguese 2*s.* 6*d.* per wine gallon, the consumption in Great Britain amounted, at an average, to 7,410,947 gallons a year, producing about 900,000*l.* of revenue. It is probable, had the increase taken place *gradually*, that these duties might have been doubled without any material diminution of consumption. But in 1795 and 1796 they were raised to 8*s.* 6*d.* per gallon on French, and to 5*s.* 8$\frac{1}{4}$*d* per gallon on Portuguese and Spanish wine; and the consequence of this sudden and inordinate increase, as exhibited in the Table, was, that the consumption fell from nearly 7,000,000 gallons in 1795, to 5,732,383 gallons in 1796, and to 3,970,901 in 1797! But this unanswerable demonstration of the ruinous effect of heavy and sudden additions to the duties did not prevent them being raised, in 1804, to 11*s.* 5$\frac{1}{2}$*d.* on French, and to 7*s.* 8*d.* on Portuguese and Spanish wine. They continued at this rate till 1825; and such was their influence, that, notwithstanding the vast increase of wealth and population since 1790, and the general improvement in the style of living, the total consumption of wine, during the 3 years ending with 1824, amounted, at an average, to only 5,248,767 gallons a year; being no less than 2,162,180 gallons under the annual consumption of the 3 years ending

with 1792! It may, therefore, be truly said, making allowance for the increase of population, that *the consumption of wine in Great Britain fell off more than fifty per cent. between* 1790 *and* 1824!

Had Mr. Vansittart continued in power, it is difficult to say when this system might have terminated; but no sooner had Mr. Robinson (now Lord Ripon) become Chancellor of the Exchequer, than he resolved upon the effectual reduction of the wine duties. In pursuance of this wise determination, Mr. Robinson took, in 1825, nearly 50 per cent. from the previously existing duties; and notwithstanding the spirit duties were at the same time reduced in a still greater degree, the consumption of wine in Great Britain has been increased from little more than 4,150,000 to about 5,200,000 Imperial gallons, while the loss of revenue has been but inconsiderable. We are, therefore, justified in affirming that this measure has been very successful, and that it is a most valuable example of the superior productiveness of low duties.*

The duties, as reduced by Mr. Robinson, were 7*s.* 3*d.* per Imperial gallon on French wines, 4*s.* 10*d.* per do. on all other foreign wines, and 2*s.* 5*d.* on those of the Cape of Good Hope. They continued on this footing till the equalisation act (1 & 2 Will. 4. c. 30.), which imposes a duty of 5*s.* 6*d.* per Imperial gallon on all foreign wines, and of 2*s.* 9*d.* on those of the Cape.

But the equalisation effected by this act ought not to have been brought about by adding any thing to the duties on port, sherry, &c., but exclusively by reducing those on French wines to their level. The subjoined Tables show that the consumption of wine in the United Kingdom was about stationary from 1826 to 1831; and the addition of 8*d.* a gallon, that was then made to the duties on all sorts of foreign wine except French, from which 1*s.* 9*d.* was deducted, appears to have sensibly affected the consumption of 1832. Considering, indeed, the increasing wealth and population of the British empire, and the more generally diffused use of wine, the small increase of the quantities retained for consumption is not a little surprising. A good deal is, we believe, ascribable to adulteration. It is certain, however, that the duties are still too high; but they are principally objectionable from the mode of their assessment. The trade will never be placed on a proper footing till the duty is imposed on an *ad valorem* principle. The imposition of the same duty on inferior and cheap wines, worth 10*l.* a hogshead, as on the choicest Burgundy and Champagne, worth 50*l.* or 60*l.* a hogshead, is so utterly subversive of all principle, that one is astonished it should be maintained for an instant. Its absurdity would not be exceeded, were the same duty charged on small beer that is charged on gin! The effect of this apparently equal, but really *most unequal* duty, is to exclude all low priced wines from the English markets; and to deprive the middle classes of the gratification derivable from their use. Commercially speaking, Bordeaux is much nearer London than Paris: and, but for this preposterous system, the cheap wines of the Gironde, Languedoc, and Provence might be bought here at a less price than in most parts of France. Were it necessary for the sake of revenue to continue the present system, it might be reluctantly submitted to; but it is abundantly certain, that a fairly assessed *ad valorem* duty would, by increasing the consumption of the middle classes, yield a much larger amount of revenue than is produced by the constant duty: and it is not to be endured, that the trade of the country should be deeply injured, and the enjoyments of the great bulk of the community materially impaired, for no purpose of public utility, but merely that injustice and absurdity may be prolonged! It is said, indeed, that the imposition of an *ad valorem* duty would lead to the commission of fraud; but we have been assured, by those familiar with the customs, that such precautions might easily be adopted as would prevent any danger on this head. And though it were otherwise — though a few thousand gallons of wine were admitted for home consumption at a somewhat lower duty than they ought to have paid — the injury would be of the most trivial kind, and would hardly, indeed, deserve a moment's attention. In the United States, most duties are imposed on an *ad valorem* principle; and it is not alleged that any real difficulty has to be encountered in their collection.

Consumption of Wine in Ireland. Duties. — In 1790, the duties on wine consumed in Ireland were considerably below the level of those imposed in Great Britain, and the average annual quantity of all sorts retained for home consumption in that country amounted to about 1,180,000 Imperial gallons, producing about 138,000*l.* a year of revenue. Had those to whom the government of Ireland was intrusted possessed the slightest knowledge of the merest elements of finance, or of the condition of the Irish people, they would not have attempted to add to the public revenue by augmenting the duties on wine. Owing to the limited number of the middle classes in Ireland, an increase of duty could not be expected to be productive; and though it had yielded 50,000*l.*, or even 100,000*l.* a year additional revenue, that would have been no compensation for the injury it was sure to do in checking the diffusion of that taste for luxuries and enjoyments so essential to the improvement of the people. But those who had to administer the affairs of Ireland were insensible to such considerations; and never doubted that 2 and 2 make 4 in the arithmetic of the customs as well as in Cocker! Such, indeed, was their almost incredible rapacity, that in the interval between 1791 and 1814, they raised the duty on French wine from 33*l.* 7*s.* a tun to 144*l.* 7*s.* 6*d.*; and that on port from 22*l.* 4*s.* 8*d.* to 55*l.* 11*s.*! This was a much more rapid increase than had taken place in England; and as the country was far less able to bear even the same increase, the consequences have been proportionally mischievous. In 1815, the quantity of wine retained for home consumption in Ireland had declined, notwithstanding the population had been doubled, to 608,000 Imperial gallons, or to about *half* the quantity consumed in 1790; and in 1824, the consumption had fallen to 467,000 gallons, while the revenue only amounted to 185,000*l.*!

It is unnecessary to make any commentary on such statements. But it is mortifying to reflect, that the legislature of a civilised country like Great Britain should have obstinately persevered in such a system for about ¼ of a century. We venture to affirm, that those who ransack the financial annals of Turkey and Spain, will find nothing in them evincing in every part greater rapacity, ignorance, and contempt for the public interest, than is displayed in the history of Irish taxation from 1790 to 1819.

The reduction of the duties in 1825 has nearly *doubled* the consumption of wine in Ireland, and has added considerably to the revenue. The duties are still, however, oppressively high as compared with the means of the population; and hence, notwithstanding the population of Ireland has more than doubled, and the wealth of the country been materially increased in the interval, the quantity of wine retained for home consumption in 1790, exceeded that retained for the same purpose in 1832, by more than 300,000 Imperial gallons! The Irish are particularly attached to French wines; and supposing the duty were fixed on an *ad valorem* principle, so that it should be 3*s.* 6*d.* or 4*s.* a gallon on the finer wines, we have no doubt whatever that the consumption would be speedily doubled or trebled, not only in Ireland, but also in Britain. We subjoin

An Account of the Quantities of all Sorts of Wine retained for Consumption in IRELAND, during the Four Years ending with 1832, and of the Nett Revenue accruing thereon.

Years.	Retained for Consumption.	Revenue.	Years.	Retained for Consumption.	Revenue.
	Imp. Gall.	*L.*		*Imp. Gall.*	*L.*
1829	715,609	181,144	1831	737,581	179,276
1830	757,674	174,561	1832	766,339	196 169

* Rates of duty same in Ireland as in Great Britain, since 1814.

* An article in the Edinburgh Review, No. 80., contributed to bring about this measure. See also an excellent tract on the *Wine Trade*, by Mr. Warre, published in 1824.

Adulteration of Wine. — We have already alluded to this practice. It was prosecuted to a very great extent previously to the reduction of the duties in 1825, and is still very far from being suppressed. It has been affirmed, but we are inclined to suspect the statement of exaggeration, that at this moment more than *a third* of all the sherry consumed in London is the produce of the *home presses!* Indeed, wines are every day offered for sale at prices at which every one conversant with the trade knows they could not be afforded were they genuine. Mr. Fleetwood Williams has given, in his valuable pamphlet on the *Wine Trade* (1824), some curious details on this subject.

The imposition of the duties on an *ad valorem* principle, by allowing genuine wine to be sold at a low price, would put an effectual stop to the practices of the adulterators. The increase of the duties in the reigns of William and Anne first gave birth to this discreditable fraternity — (see a curious paper of Addison's, *Tatler*, No. 131.); and it will continue to flourish as long as the duties are maintained on their present footing.

The only security against being imposed upon, is to deal only with respectable houses; with those largely engaged in the trade; and to whom a reputation for selling good wine is of ten times more importance than any thing they could expect to make by adulteration.

Account of the Quantity of French and other Sorts of Wine retained for Home Consumption in Great Britain from 1789 to 1832; specifying the Produce of the Duty, and the Rates of Duty thereon.

Years.	Quantities retained for Home Consumption.			Rates of Duty.						Nett Revenue.		
	French.	Other Sorts.	Total.	French.	Madeira.	Portuguese & Spanish.	Rhenish.	Cape.	Other Sorts.	French.	Other Sorts.	Total.
	Wine Gallons.	*Wine Gallons.*	*Wine Gallons.*	*Wine Gall.*	*Wine Gall.*	*Wine Gall.*	*Wine Gall.*	*Wine Gall.*	*Wine Gall.*	*L.*	*L.*	*L.*
1789	234,299	5,580,366	5,814,665	3 9	2 5 11/12	2 5 11/12	4 1	2 11 2/3	3 9	36,549	684,969	721,518
1790	246,334	6,245,983	6,492,313	-	-	-	-	-	-	41,352	779,209	820,562
1791	250,839	7,407,437	7,658,276	-	-	-	-	-	-	43,117	873,351	916,769
1792	303,727	7,778,522	8,082,249	-	-	-	-	-	-	59,693	959,951	1,019,645
1793	256,160	6,634,750	6,890,910	-	-	-	-	-	-	30,308	660,377	690,686
1794	99,118	6,700,102	6,799,220	-	-	-	-	-	-	14,487	780,536	795,023
1795	118,587	6,808,534	6,927,121	6 1½	4 1⅓	4 1⅓	5 8	4 6⅔	5 4	55,579	1,375,143	1,430,722
1796	50,881	5,681,502	5,732,383	8 6	5 8¼	5 8¼	7 8	6 1¾	6 11	25,253	1,134,270	1,159,523
1797	Excess of exports, 4,874 gals.	3,975,775	3,970,901	-	-	-	-	-	-	36,232	1 47,432	1,383,665
1798	45,367	4,715,290	4,760,657	8 9½	5 11	5 9⅛	7 6¾	6 3	7 0½	33,247	1,339,414	1,372,661
1799	51,126	4,726,505	4,777,631	-	-	-	-	-	-	31,316	1,661,510	1,692,826
1800	83,471	7,645,400	7,728,871	-	-	-	-	-	-	42,341	1,924,871	1,967,213
1801	141,693	6,864,617	7,006,310	8 6	5 8¼	5 8¼	7 3	6 1⅔	6 11	84,686	1,908,310	1,992,097
1802	129,280	6,226,469	6,355,749	8 10	5 11¼	5 10½	7 7½	6 3⅓	7 1	61,514	1,870,358	1,931,872
1803	192,136	7,989,330	8,181,466	10 4	6 11¼	6 10¼	8 7¼	6 10½	6 10¼	72,103	2,069,252	2,141,356
1804	21,804	4,818,915	4,840,719	11 3½	7 7	7 6	9 3	7 6	7 6	34,423	1,779,899	1,814,323
1805	63,983	4,501,565	4,565,551	11 5	7 8	7 7	9 4	7 7	7 7	81,386	1,922,480	2,003,866
1806	156,002	5,780,233	5,936,235	-	-	-	-	-	-	94,813	2,225,615	2,320,428
1807	160,114	5,762,223	5,922,337	-	-	-	-	-	-	89,159	2,245,058	2,334,197
1808	186,944	6,221,590	6,408,534	-	-	-	-	-	-	126,936	2,226,800	2,353,736
1809	125,266	5,682,821	5,808,087	-	-	-	-	-	-	The nett receipt of duty on French and other descriptions of wine cannot be separately stated for these years, in consequence of the destruction of the customs records by fire.		2,361,113
1810	190,917	6,614,359	6,805,276	-	-	-	-	-	-			2,315,615
1811	63,221	5,797,653	5,860,874	-	-	-	-	-	-			2,169,871
1812	77,312	5,059,178	5,136,490	-	-	-	-	-	-			1,911,352
1813	186,747	4,531,821	4,718,568	16 5	7 8	7 7	9 4½	2 6⅓	7 7			Customs records destroyed.
1814	36,880	4,904,783	4,941,663	11 5	7 8	7 7	9 4½	2 6⅓	7 7	73,185	1,959,655	2,032,840
1815	301,024	5,667,411	5,968,435	-	-	-	-	-	-	122,662	1,972,637	2,095,299
1816	126,625	4,294,182	4,420,807	-	-	-	-	-	-	76,046	1,534,252	1,610,299
1817	147,671	5,466,951	5,614,622	-	-	-	-	-	-	87,475	1,936,244	2,023,720
1818	266,424	5,873,066	6,139,490	-	-	-	-	-	-	155,370	2,086,010	2,241,380
1819	215,846	4,762,754	4,978,600	11 5½	7 8	7 7	9 5	2 6⅓	7 7	126,667	1,675,429	1,802,097
1820	182,175	4,837,785	5,019,960	-	-	-	-	-	-	106,892	1,711,503	1,818,396
1821	165,791	4,850,778	5,016,569	-	-	-	-	-	-	97,486	1,700,004	1,797,491
1822	177,758	4,797,401	4,975,159	-	-	-	-	-	-	104,425	1,689,588	1,794,013
1823	183,296	5,108,114	5,291,410	-	-	-	-	-	-	106,982	1,800,484	1,907,466
1824	204,901	5,274,831	5,479,732	-	-	-	-	-	-	117,202	1,850,751	1,967,953
1825	534,015	8,121,978	8,655,995	6 0	4 0	4 0	4 0	2 0	4 0	166,184	1,648,869	1,815,053
										Allowances for stock in hand - -		1,021,044
												794,009
	Imp. Gall.	*Imp. Gall.*	*Imp. Gall.*									
1826	356,846	6,093,968	6,450,814	*Per Imperial Gallon.*						107,292	1,162,825	1,270,118
1827	340,471	6,921,639	7,262,110	7 3 | 4 10 | 4 10 | 4 10 | 2 5 | 4 10						102,509	1,324,040	1,426,550
1828	451,361	7,129,464	7,580,825	equal to the former duties per wine gall.						136,024	1,370,098	1,506,122
1829	316,941	5,104,802	5,421,743							115,880	1,178,522	1,292,402
1830	266,085	5,410,686	5,676,771							95,139	1,256,468	1,351,607
1831	228,413	5,226,470	5,454,883	5 6 | 5 6 | 5 6 | 5 6 29 | 5 6						70,935	1,285,273	1,356,208
1832	203,252	4,995,951	5,199,203							55,368	1,321,662	1,519,643*

Account of the Quantities of Foreign Wines retained for Home Consumption in the United Kingdom, distinguishing each Sort, during the Ten Years ended 5th of January, 1833. (Imperial Measure.)

Years.	Cape.	French.	Portuguese.	Madeira.	Spanish.	Canary.	Rhenish.	Sicilian, &c.	Total.
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*	*Galls.*
1823	555,119	171,681	2,492,212	323,734	1,078,922	123,036	20,670	79,686	4,845,060
1824	595,299	187,447	2,512,343	297,479	1,217,034	117,428	25,976	77,085	5,030,091
1825	670,639	525,579	4,200,719	372,524	1,830,975	167,108	107,299	134,699	8,009,542
1826	630,436	343,707	2,833,688	286,275	1,622,580	134,445	66,994	140,318	6,058,443
1827	698,434	311,289	3,222,192	300,295	1,908,331	152,938	76,161	156,721	6,826,361
1828	652,286	421,469	3,507,021	272,977	2,097,628	137,553	86,905	186,537	7,162,376
1829	579,744	365,336	2,681,751	229,392	1,964,162	101,699	76,396	219,172	6,217,652
1830	535,255	308,294	2,869,608	217,138	2,081,423	101,892	68,322	252,513	6,434,445
1831	539,584	254,366	2,707,734	209,127	2,089,532	94,117	57,888	259,916	6,212,264
1832	514,262	228,627	2,617,405	159,898	2,080,099	72,803	38,197	254,251	5,965,542

* This includes 142,613*l.* of additional duty collected by the excise on wine in dealers' stocks.

Account exhibiting the Quantities of the different Sorts of Wine imported into and exported from the United Kingdom in 1833; the Quantities of each Sort retained for Home Consumption; the Rates of Duty; and the Gross and Nett Revenue accruing thereon.

Species of Wine.	Quantities imported into the United Kingdom.	Quantities exported from the United Kingdom.	Quantities retained for Home Consumption in the U. Kingdom.	Rates of Duty.	Gross Amount of Revenue received thereon.	Nett Amount of Revenue received thereon.
	Gallons.	*Gallons.*	*Gallons.*	*s. d.*	*L. s. d.*	*L. s. d.*
Cape	454,394	16,436	545,191	2 9	75,103 13 5	74,974 12 9
French	276,366	99,540	272,550	5 6	69,808 18 6	63,164 13 1
Madeira	301,097	209,194	151,042	—	47,902 4 2	44,177 7 5
Portuguese	2,296,733	243,577	2,696,550	—	732,937 6 2	713,557 6 5
Spanish	3,368,550	732,306	2,245,043	—	641,773 8 3	616,036 15 10
Rhenish	54,361	12,473	43,758	—	12,760 19 1	12,055 6 9
Canary	253,542	148,915	68,852	—	20,032 12 6	18,944 15 5
Tuscan	6,440	940	729	—	203 4 6	203 4 6
Sicilian, and other sorts*	503,418	149,917	312,993	—	87,829 1 5	86,104 19 11
Total	7,443,841	1,613,298	6,207,779		1,688,351 8 0	1,629,219 2 1
		Received from the excise for additional duty on wine in dealers' stocks			4,610 18 6	4,610 18 6
				L.	1,692,962 6 6	1,633,830 0 7

Price of Wine in London. — The following is an account of the price of wine in bond in London, in March, 1834.

		L. s.	*L. s.*			*L. s.*	*L. s.*
Port, 1st class, old	per pipe	44 0 to 50 0		Marsala	per pipe	14 0 to 16 0	
2d and 3d do.	—	34 0 — 40 0		Mountain	per butt	16 0 — 35 0	
light and common	—	25 0 — 33 0		Tent	per hhd.	20 0 — 26 0	
Sherry, 1st quality, old, high flav.,	per butt	64 0 — 80 0		Claret, 1st growth	—	40 0 — 48 0	
2d and 3d quality	—	42 0 — 56 0		2d and 3d	—	20 0 — 38 0	
4th and 5th do.	—	20 0 — 35 0		cargo, and inferior qualities	—	4 0 — 18 0	
common, consigned	—	15 0 — 18 0		Burgundy, red	per hhd.	40 0 — 45 0	
Madeira, East India, fine	per pipe	38 0 — 55 0		white	—	48 0 — 50 0	
do., very fine	—	60 0 — 80 0		Champagne	per doz.	1 8 — 2 14	
do., middling and common	—	20 0 — 35 0		Sauterne, 1st quality, old	per pipe	30 0 — 40 0	
West India, 1st quality	—	40 0 — 45 0		2d growth	—	16 0 — 25 0	
2d and 3d do.	—	25 0 — 40 0		Hermitage, red	—	28 0 — 38 0	
direct London particular	—	40 0 — 50 0		white	—	30 0 — 40 0	
2d quality	—	30 0 — 38 0		Moselle	per aam	10 0 — 20 0	
inferior	—	18 0 — 25 0		Hock	—	20 0 — 50 0	
Teneriffe, best old	—	30 0 — 40 0		Cape Madeira, best	per pipe	16 0 — 18 0	
cargo	—	10 0 — 14 0		2d and 3d quality	—	11 0 — 15 0	
Lisbon	—	30 0 — 38 0		common	—	10 0 — 13 0	
Bucellas	—	25 0 — 30 0		Pontac	—	15 0 — 20 0	

" *Measures.* — According to the system of wine measures that prevailed down to 1826, the gallon contained 231 cubic inches; the tierce, 42 gallons; the puncheon, 84 gallons; the hogshead, 63 gallons; the pipe or butt, 126 gallons; and the tun, 252 gallons. But in the new system of measures introduced by the act 5 Geo. 4. c. 74., the Imperial standard gallon contains 277·274 cubic inches: so that the tierce = 35 (very nearly) Imperial gallons; the puncheon = 70 (very nearly) do.; the hogshead = 52½ (very nearly) do.; the pipe or butt = 105 (very nearly) do.; and the tun = 210 (very nearly) do. — (See WEIGHTS AND MEASURES.)

A very great quantity of wine is sold to the consumer in dozens; much more, indeed, than is sold in any other way; and yet there is no regulation as to the size of bottles,— a defect which has occasioned a great deal of abuse. No one doubts the propriety of making all gallons, bushels, &c. of the same capacity; and why should not similar regulations be enforced in the case of measures so universally used as bottles?

Wine the produce of Europe may not be imported for home consumption, except in British ships, or in ships of the country of which the wine is the produce, or of the country from which it is imported, on forfeiture thereof, and 100*l.* by the master of the ship. — (3 & 4 *Will.* 4. c. 54.)

No abatement of duties made on account of any damage received by wine. — (3 & 4 *Will.* 4. c. 52.)

Wine from the Cape must be accompanied by a certificate of its production. — (See *antè*, p. 660.)

Wine exported to foreign parts, from the bonded warehouses, must be shipped in vessels of not less than 70 tons burden. — (3 & 4 *Will.* 4. c. 57.)

Wine for Officers of Navy. — For the quantity of duty-free wine to be allowed to officers of the navy, and the regulations under which it is to be allowed, see *antè*, p. 667.

Regulations as to mixing, bottling, &c. in Warehouses. — 1. Wines, when deposited in warehouses of special security, or in warehouses situated near the places of landing and shipping, and declared in the order of approval to be substantially built, and capable of affording general accommodation to the trade, may be allowed to be fitted up, fined, and racked, as often as the owners may deem necessary, the lees to be destroyed without payment of duty, the quantities destroyed being correctly ascertained for the purpose of being eventually deducted from the official accounts.

2. Bonded brandy may be allowed to be added to wine in the bonded stores for its preservation or improvement, and the whole to pay duty as wine upon being taken out for home consumption, provided the whole quantity of brandy contained in the wine, at the time of entry for home consumption, do not exceed 20 per cent.; and that a proper sample for the purpose of ascertaining the strength be allowed to be taken out by the proper officers.

3. Wines may be allowed to be mixed with wines of the same description as often as necessary for their preservation or improvement; provided that wine so mixed be kept separate from other wine, and that the packages containing the same be branded as *mixed wine*, and the brand or other marks of the original shipper be effaced. — (*Treasury Order*, 20th of May, 1830.)

Wine may be bottled for exportation in a bonded vault appropriated for the purpose, upon giving 24 hours' notice; but no foreign bottles, corks, or packages may be used, except those in which the wine may have been imported and warehoused, unless the full duties shall have been paid on the same; and not less than 3 dozen reputed quarts, or 6 dozen reputed pint bottles, shall be exported in each package; and if any surplus or sediment remain, it is to be immediately destroyed in the presence of the officer, or the full duties paid upon it. — (3 & 4 *Will.* 4. c. 57., and *Customs Min.* 31st of Dec. 1828.)

The brands or marks on the casks into which wines or spirits may be racked at the bonded warehouses are to be effaced, and no other brand or mark to be retained thereon than those which were on the casks when originally imported. — (*Treasury Order*, 29th of June, 1830.)

WOAD (Ger. *Waid*; Du. *Weede*; Fr. *Pastel, Guéde, Vouéde*; It. *Guadone, Guado, Glastro*; Sp. *Pastel, Glasto*), the *Isatis tinctoria* of botanists, a biennial plant, with a

* The other sorts are quite trifling, and do not deserve notice.

fusiform fibrous root, and smooth branchy stem, rising from 3 to 5 feet in height. Woad is indigenous to most parts of Europe; and was extensively used from a very remote period, down to the general introduction of indigo, in the dyeing of blue. It is still cultivated to a considerable extent in France; but in this country its cultivation is chiefly restricted to a few districts in Lincolnshire. After being bruised by machinery, to express the watery part, it is formed into balls, which ferment and fall into a dry powder, which is sold to the dyer. Woad is now seldom employed without a mixture of indigo. By itself, it is incapable of giving a bright and deep blue colour; but the colour which it does give is very durable. The best methods of conducting the fermentation and preparation of woad are still so very ill understood, that the goodness of any parcel of it can never be ascertained till it be actually used; so that it has the disadvantage of being purchased under the greatest uncertainty as to its true value. At the proper age, indigo plants yield about 30 times as much colouring matter, and of a far superior quality, as an equal weight of woad; so that there is no prospect that any improvement that may be made in its preparation will ever render it, either in goodness or cheapness, a rival of the former. — (*Loudon's Ency. of Agriculture; Bancroft on Colours*, vol. i. p. 167.) We have previously — (see INDIGO) — given some account of the efforts made by the woad growers to prevent the use of indigo.

WOOD. See TIMBER.

WOOL (Ger. *Wolle;* Du. *Wol;* Da. *Uld;* Sw. *Ull;* Fr. *Laine;* It. and Sp. *Lana;* Port. *Lã, Lãa;* Rus. *Wolna, Scherst;* Pol. *Welna;* Lat. *Lana*), a kind of soft hair or down. The term is not very well defined. It is applied both to the fine hair of animals, as sheep, rabbits, some species of goats, the vicuna, &c.; and to fine vegetable fibres, as cotton. In this article, however, we refer only to the wool of sheep, — an article which has continued, from the earliest period down to the present day, to be of primary importance — having always formed the principal part of the clothing of mankind in most temperate regions.

Species of Wool. — It has been customary in this country to divide wool into 2 great classes — long and short wools; and these again into subordinate classes, according to the fineness of the fibre.

Short wool is used in the cloth manufacture; and is, therefore, frequently called clothing wool. It may vary in length from 1 to 3 or 4 inches: if it be longer, it requires to be cut or broken to prepare it for the manufacture.

The *felting* property of wool is known to every one. The process of hat making, for example, depends entirely upon it. The wool of which hats are made is neither spun nor woven; but locks of it, being thoroughly intermixed and compressed in warm water, cohere and form a solid tenacious substance.

Cloth and woollen goods are made from wool possessing this property; the wool is carded, spun, woven, and then being put into the fulling mill, the process of felting takes place. The strokes of the mill make the fibres cohere; the piece subjected to the operation contracts in length and breadth, and its texture becomes more compact and uniform. This process is essential to the beauty and strength of woollen cloth. But the long wool of which stuffs and worsted goods are made is deprived of its felting properties. This is done by passing the wool through heated iron combs, which takes away the laminæ or feathery part of the wool, and approximates it to the nature of silk or cotton.

Long or combing wool may vary in length from 3 to 8 inches. The shorter combing wools are principally used for hose, and are spun softer than the long combing wools; the former being made into what is called hard, and the latter into soft worsted yarn.

The fineness of the hair or fibre can rarely be estimated, at least for any useful purpose, except by the wool sorter or dealer, accustomed by long habit to discern those minute differences that are quite inappreciable by common observers. In sorting wools, there are frequently 8 or 10 different species in a single fleece; and if the best wool of one fleece be not equal to the finest sort, it is thrown to a 2d, 3d, or 4th, or to a still lower sort, of an equal degree of fineness with it. The best English short native fleeces, such as the fine Norfolk and Southdown, are generally divided by the wool sorter into the following sorts, all varying in fineness from each other: — viz. 1. Prime; 2. Choice; 3. Super; 4. Head; 5. Downrights; 6. Seconds; 7. Fine Abb; 8. Coarse Abb; 9. Livery; 10. Short coarse or breech wool. The relative value of each varies, according to the greater demand for coarse, fine, or middle cloths.

The softness of the fibre is a quality of great importance. It is not dependent on the fineness of the fibre; and consists of a peculiar feel, approaching to that of silk or down. The difference in the value of 2 pieces of cloth made of 2 kinds of wool equally fine, but one distinguished for its softness and the other for the opposite quality, is such, that, with the same process and expense of manufacture, the one will be worth from 20 to 25 per cent. more than the other. Mr. Bakewell showed that the degree of softness

depends principally on the nature of the soil on which sheep are fed: that sheep pastured on chalk districts, or light calcareous soils, usually produce hard wool; while the wool of those that are pastured on rich, loamy, argillaceous soils, is always distinguished by its softness. Of the foreign wools, the Saxon is generally softer than the Spanish. Hard wools are all defective in their *felting* properties.

In clothing wool, the colour of the fleece should always approach as much as possible to the purest white; because such wool is not only necessary for cloths dressed white, but for all cloths that are to be dyed bright colours, for which a clear white ground is required to give a due degree of richness and lustre. Some of the English fine woolled sheep, as the Norfolk and Southdown, have black or gray faces and legs. In all such sheep there is a tendency to grow gray wool on some part of the body, or to produce some gray fibres intermixed with the fleece, which renders the wool unfit for many kinds of white goods; for though the black hairs may be too few and minute to be detected by the wool sorter, yet when the cloth is stoved they become visible, forming reddish spots, by which its colour is much injured. The Herefordshire sheep, which have white faces, are entirely free from this defect, and yield a fleece without any admixture of gray hairs.

The cleanness of the wool is an important consideration. The Spanish wool, for example, is always scoured after it is shorn; whereas the English wool is only imperfectly washed on the sheep previously to its being shorn. In consequence, it is said that while a pack of English clothing wool of 240 lbs. weight will waste about 70 lbs. in the manufacture, the same quantity of Spanish will not waste more than 48 lbs. Cleanness, therefore, is an object of much importance to the buyer.

Before the recent improvements in the spinning of wool by machinery, great length and strength of staple was considered indispensable in most combing wools. The fleeces of the long woolled sheep fed in the rich marshes of Kent and Lincoln used to be reckoned peculiarly suitable for the purposes of the wool-comber: but the improvements alluded to have effected a very great change in this respect; and have enabled the manufacturer to substitute short wool of 3 inches staple, in the place of long combing wool, in the preparation of most worsted articles. A great alteration has, in consequence, taken place in the proportion of long to short wool since 1800; there having been in the interim, according to Mr. Hubbard's calculations — (see *post*) — an increase of 132,053 packs in the quantity of the former produced in England, and a decrease of 72,820 in the quantity of the latter.

Whiteness of fleece is of less importance in the long combing than in clothing wool, provided it be free from gray hairs. Sometimes, however, the fleece has a dingy brown colour, called a *winter stain*, which is a sure indication that the wool is not in a thoroughly sound state. Such fleeces are carefully thrown out by the wool sorter; being suitable only for goods that are to be dyed black. The fineness of heavy combing wool is not of so much consequence as its other qualities.

The Merino or Spanish breed of sheep was introduced into this country about the close of last century. George III. was a great patron of this breed, which was for several years a very great favourite. But it has been ascertained that, though the fleece does not much degenerate here, the carcase, which is naturally ill formed, and affords comparatively little weight of meat, does not improve; and as the farmer, in the kind of sheep which he keeps, must look not only to the produce of wool, but also to the butcher market, he has found it his interest rather to return to the native breeds of his own country, and to give up the Spanish sheep. They have, however, been of considerable service to the flocks of England; having been judiciously crossed with the Southdown, Ryeland, &c.

Deterioration of British Wool. — It appears to be sufficiently established, by the evidence taken before the House of Lords in 1828, and other authorities, that a considerable deterioration has taken place in the quality of British wool, particularly during the last 30 years. The great object of the agriculturist has been to increase the weight of the carcase and the quality of the wool; and it seems very difficult, if not quite impossible, to accomplish this without injuring the fineness of the fleece. Mr. Culley says, that the Herefordshire sheep that produce the finest wool are kept lean, and yield 1½ lb. each; he adds, "if they be better kept, they grow large and produce more wool, but of an inferior quality." This would seem to be universally true. The great extension of the turnip husbandry, and the general introduction of a larger breed of sheep, appears, in every instance, to have lessened the value of the fleece. Speaking of the Norfolk fleeces, Mr. Fison, a wool sorter, says, that 25 years ago the weight was 2½ lbs. a fleece, and that now it is 3 lbs. or 3½ lbs. — (*Report*, p. 356.) But according to a Table furnished by the same gentleman, containing the results of his experience, it appears that of 15 tods, or 420 lbs., of clothing wool grown in Norfolk in 1790, 200 lbs. were *prime*, while, in 1828, the same quantity of Norfolk wool only yielded 14 lbs. prime! — (*Ibid.* p. 207.) The statements of other witnesses are to the same effect. — (*Ibid.*

pp. 388. 640. and 644.) According to the estimate in Mr. Luccock's *Treatise on English Wool* which has always enjoyed the highest reputation, the produce of all sorts of wool in England, in 1800, was 384,000 packs, of 240 lbs. a pack. But Mr. Hubbard, a very intelligent and extensive wool-stapler at Leeds, has shown, that, supposing Mr. Luccock's estimate of the number of sheep to be correct, the quantity of wool now produced cannot, owing the the greater weight of the fleece, be estimated at less than 463,169 packs; being an increase of 20 per cent.! It is, therefore, probable, notwithstanding the decline in the price of wool, that, taking into account the greater weight of the carcase, and the greater weight of the fleece, sheep produce more at present to the farmer than at any former period.

Number of Sheep in Great Britain. — It is not possible to form any accurate estimate, either of the number of sheep, or of the quantity of wool annually produced. With the exception of Mr. Luccock's, most of the statements put forth with respect to both these points seem much exaggerated. But Mr. L.'s estimate, which is considerably under any that had previously appeared, was drawn up with great care; and is supposed to approach near to accuracy. According to Mr. Luccock, the

Number of long woolled sheep in England and Wales in 1800, was	4,153,308	
of short woolled ditto	14,854,299	
Total number shorn		19,007,607
Slaughter of short woolled sheep per annum	4,221,748	
Carrion of ditto	211,087	
Slaughter of long woolled ditto	1,180,413	
Carrion of ditto	59,020	
Slaughter of lambs	1,400,560	
Carrion of ditto	70,028	
		7,140,856
Total number of sheep and lambs		26,148,463

In some parts of England there has been an increase in the number of sheep since 1800, and in others they have decreased. But we have been assured by competent judges, that, on the whole, the number has not materially varied in the interim.

During the last half century a very decided increase has taken place in the number of sheep in Scotland, and a very great improvement in the breed, particularly in the Highlands. In this district, many of the proprietors have let their estates in large farms to *store farmers*, who have introduced the Cheviot breed of sheep, in the place of the small black-faced heath breed that was formerly the only one to be met with. We may remark, by the way, that a good deal of unmerited odium has attached to the patrons of this system; for, though it be true that, in a few instances, the peasantry were rudely ejected from their little possessions, there can be no doubt that it has, on the whole, been decidedly advantageous. Besides rendering large tracts of country more valuable to the proprietors and the public generally, the condition and habits of the peasantry have been materially improved. Instead of loitering away more than half their time, as was their former practice, they have now either become the servants of the large farmers, or have resorted to towns and villages, and been metamorphosed into industrious tradesmen, fishermen, &c. A very small proportion of the whole has emigrated; and the country is more populous at present than before the sheep farming system began.

In the *General Report of Scotland* (vol. iii. Appen. p. 6.), the number of sheep is estimated at 2,850,000; and, allowing for the increase that has taken place since 1814, we may, perhaps, estimate the total number of sheep in that part of the empire at this moment at 3,500,000.

According to Mr. Wakefield, there is not a single flock of breeding sheep in the whole province of Ulster. — (*Account of Ireland*, vol. i. p. 341.) And though there be considerable flocks in Roscommon and other counties, we believe that, if we estimate the whole number of sheep in Ireland at 2,000,000, we shall be a good deal beyond the mark.

On the whole, therefore, if we are right in these estimates, the total number of sheep in Great Britain and Ireland may be taken at about 32,000,000. This estimate is 10,000,000 under that given by Dr. Colquhoun for 1812; but that learned person assigns no grounds whatever for his estimate, which is utterly inconsistent with all the really authentic information on the subject. It is curious enough to observe the German statistical writers referring to Dr. Colquhoun's statements, as if they were of standard authority. They would be about as near the mark, were they to quote the "Arabian Nights" in proof of any disputed historical fact.

British Trade in Wool. — From 1660 down to 1825, the export of wool was strictly prohibited. A notion grew up towards the end of the 17th, and continued to gain ground during the first half of last century, that the wool of England was superior to that of every other country; that long wool could not be produced anywhere else; and that, if we succeeded in keeping the raw material at home, we should infallibly command the market of the world for our woollen manufactures. In consequence,

innumerable statutes were passed, — the enactments in some of which were the most arbitrary and severe that can be imagined, — to prevent the clandestine exportation of wool. Mr. John Smith was one of the first who, in his excellent work, entitled *Memoirs of Wool* *, exposed the injustice and absurdity of this system, by proving, that whatever advantages the manufacturers might gain by preventing the exportation of wool, were more than lost by the agriculturists. But in despite of Mr. Smith's reasonings, which were enforced by many later writers, and which experience had proved to be in all respects accurate, the prohibition of the exportation of wool was continued till 1825, when Mr. Huskisson happily succeeded in procuring the abolition of this miserable remnant of a barbarous policy. The improvement of machinery, by enabling short or clothing wool to be applied to most of those purposes for which long or combing wool had been exclusively appropriated, had annihilated the only apparently tenable argument on which the prohibition of exportation had ever been vindicated; and even this, it will be observed, applied only to a small proportion of the whole wool produced in England.

Down to 1802, the importation of foreign wool into Great Britain had been quite free; and, being the raw material of an important manufacture, the policy of allowing it to be imported free of duty is obvious. In 1802, however, a duty of 5*s*. 3*d*. a cwt. was laid on all foreign wool imported. In 1813, this duty was raised to 6*s*. 8*d*.; and in 1819, Mr. Vansittart raised it to the enormous amount of 56*s*. a cwt., or to 6*d*. per lb.! Had English wool sufficed for all the purposes of the manufacture, such a duty would have been less objectionable; but the very reverse was the case. The use of foreign wool had become, owing to the deterioration of British wool, and other circumstances, quite indispensable to the prosecution of the manufacture: and as our superiority over the foreigner in several departments of the trade was by no means decided, it is plain that the imposition of a duty which amounted to about 50 per cent. upon the price of a considerable quantity of the wool we were obliged to import, must, had it been persevered in, have ruined the manufacture. It occasioned, indeed, during the period of its continuance, a considerable decline of the exports of woollens, and was productive of other mischievous effects, from which the manufacture suffered for a considerable period after it was repealed.

The evidence as to the absolute necessity of employing foreign wool, taken before the Lords' committee, was as decisive as can well be imagined. Mr. Gott, of Leeds, one of the most extensive and best informed manufacturers of the empire, informed the committee, that, in his own works, he used only foreign wool. On being asked whether he could carry on an export trade to the same extent as at present, if he manufactured his cloth of British wool, Mr. G. replied, that, in certain descriptions of cloth, "*he could not make an article that would be merchantable at all for the foreign market, or even for the home market, except of foreign wool.*" We subjoin a few additional extracts from the evidence of this most competent witness.

"Can you give the committee any information with respect to the competition that now exists between foreigners and this country in woollen cloths?" — "I think the competition is very strong. In some instances the foreigner has, probably, the advantage; and in others, the superiority of the British manufacture, I think, has greatly the advantage; that would apply, I should say, particularly to the fine cloths of Great Britain compared with foreign cloths; in some descriptions of low cloths, the foreigners are nearly on a footing, and in some instances, perhaps, superior to us."

"Speaking of the finer cloths, is the competition such as to render an additional duty on the importation of foreign wool likely to injure the export trade." — "*I have no doubt, speaking on my oath, that it would be fatal to the foreign cloth trade of the country.* I would say further, that it would be equally injurious to coarse manufactures of all kinds made of English wool. The competition now with foreigners is as nearly balanced as possible; and the disturbing operation of attacks of that description would necessarily enable the foreigner to buy his wool cheaper than we should do it in this country: the result would be, that foreigners would, by such a premium, be enabled to extend their manufactures, to the exclusion of British manufactures of all descriptions."

In another part of his evidence, Mr. Gott says, — "If 2 pieces of cloth at 10*s*. a yard were put before a customer, one made of British wool, the other of foreign wool, one would be sold, and the other would remain on hand: I could not execute an order with it. If any person sent to me for cloth of 7*s*. or 8*s*. a yard, and it were made of English wool, it would be sent back to me, and I should resort to foreign wool, or foreign mixed with British, to execute that order."

On Mr. Gott being asked whether, in his opinion, the price of British wool would have been higher, had the duty of 6*d*. per lb. on foreign wool been continued, he answered, — "My opinion is, that the price of British wool would have been less at this

* This learned and accurate work contains a great deal of information with respect to the progress of manufactures and commerce in England.

time; the demand for British wool would have been very much less. *British manufactures would have been shut out of every foreign market;* and the stock of wool would have accumulated, as it will do if ever that duty be imposed again." — (*Mr. Gott's Evidence*, pp. 292, 293.)

The view taken by Mr. Gott of the effect of the importation of foreign wool on the price of British wool was supported by the concurrent testimony of all the manufacturing witnesses examined by the committee. Blankets, flannels of all sorts, baizes, carpets, bearskins, &c. are made principally of English wool; and the command of foreign wool enables the manufacturers to use a considerable quantity of English wool in the manufacture of certain descriptions of cloth, which, if made entirely of it, would be quite unsaleable. On Mr. Goodman, a wool-stapler of Leeds, being asked whether, if a duty were laid on foreign wool, it would force the use of English wool in the manufacture of cloths, from which it is now excluded, he answered, — "Certainly not: we could not get people to wear such a cloth; they want a better, finer cloth; it is so much handsomer in its wear, and so much more durable."—(*Report*, p. 241.) Mr. Francis, of Heytesbury, declared that there was no demand for cloth made wholly of British wool; that it was principally applicable to the manufacture of blankets, baizes, &c.; and that the exclusion of foreign wool would only injure the manufacture, without raising the price of British wool.—(p. 268.) Statements to the same effect were made by Mr. Webb (p. 270.), Mr. Sheppard (p. 294.), Mr. Ireland (p. 319.), and, in short, by every one of the witnesses conversant with the manufacture.

The history of the manufacture since 1828 has completely confirmed the accuracy of the statements made by Mr. Gott and the other witnesses. Its progress from that period down to the present time has been one of uninterrupted prosperity; and so far from having been injured by the immense importations that have been made of foreign wool, the price of British wool is higher at this moment (March, 1834,) than at any former period! We believe, indeed, that it has now attained an unnatural elevation; and that its extreme high price, by making a corresponding addition to the price of cloth, will react on the manufacture, and will, consequently, by occasioning its depression, lower wool to a more moderate level.

Foreign Wool imported into England. — A very great change has taken place, within the course of the present century, both as respects the quantity of foreign wool imported, and the countries whence it is derived. Previously to 1800, our average imports of wool did not much exceed 3,000,000 lbs., mostly brought from Spain; the wool of which has long maintained a high character. In 1800, our imports amounted to near 9,000,000 lbs.; and they have since gone on gradually increasing, till they now amount to between 25,000,000 and 40,000,000 lbs. Instead, however, of being principally derived from Spain, as was the case down to 1814, the greater part of this immense supply of foreign wool is now furnished by Germany. The late king of Saxony, when elector, introduced the breed of Merino sheep into his dominions, and exerted himself to promote the growth of this valuable race of animals. His praiseworthy efforts have been crowned with the most signal success. The Merino sheep seem to succeed better in Saxony and other German states than in Spain; and have increased so rapidly, that the Spanish wool trade has become insignificant compared with that of Germany! The importations of German wool were quite trifling during the war — amounting, in 1812, to only 28 lbs.; but since the peace they have increased beyond all precedent. In 1814, they amounted to 3,432,456 lbs.; in 1820, they were 5,113,442 lbs.; in 1825, they reached the enormous amount of 28,799,661 lbs.; but this being a year of overtrading, they declined, in 1826, to 10,545,232 lbs. They have since, however, recovered from this depression; and, in 1833, amounted to 25,370,106 lbs. — (There is a very good account of the German wool trade in the *Foreign Quarterly Review*, No. xi. art. 8.)

The breed of sheep that was carried out to New South Wales and Van Diemen's Land has succeeded remarkably well; and Australia promises, at no distant day, to be one of the principal wool-growing countries of the world. The imports into Great Britain have been rapidly increasing. In 1833, they amounted to 3,516,869 lbs., while the imports from Spain only amounted to 3,339,150 lbs. The Spanish flocks suffered severely during the campaigns in Spain; and the best Spanish wool does not now bring more than ½ the price of the best German wool.

I. Number of Sheep and Quantity of Sheep's Wool produced in England, according to Mr. Luccock's Tables, revised by Mr. Hubbard, and made applicable to 1828.

County.	1800. Number of Short Wool Sheep.	Weight of Fleece.	Number of Packs.	Number of Long Wool Sheep.	Number of Packs.	1828. Weight of Fleece.	Number of Packs of Short Wool.	Number of Packs of Long Wool.
Northumberland	538,162	5½	12,333	- -	- -	5½	6,167	6,166
Durham	159,385	5	3,320	- -	- -	5½	- -	3,818
Ditto	- -	9	- -	67,900	2,520	8½	- -	2,380
Cumberland	378,400	3⅝	5,915	- -	- -	5	7,883	
Westmorland	223,725	3¼	3,262	- -	- -	5	4,660	
York, West Riding	383,122	var.	6,678	- -	- -	5½	4,390	4,389
East ditto	306,240	5	6,380	- -	- -	6	- -	7,656
North ditto	365,326	var.	5,939	- -	- -	5	5,708	1,902
Holderness	- -	8	- -	84,000	2,800	8	- -	2,800
Other part of Yorkshire	- -	8	- -	14,310	477	8	- -	477
Lancaster	310,000	3⅜	4,522	- -	- -	4½	5,812	
Chester	65,000	var.	926	- -	- -	4½	1,218	
Derby	362,400	3	4,530	- -	- -	6	- -	9,060
Nottingham	255,147	var.	4,112	- -	- -	6½	- -	6,910
Lincoln	123,648	5½	2,833	- -	- -	6	- -	3,091
Ditto, rich land	- -	9	- -	1,241,625	46,561	9	- -	46,561
Ditto, marshes	- -	8	- -	87,360	2,916	9	- -	3,281
Ditto, miscellaneous land	- -	8	- -	505,657	16,855	6	- -	12,641
Rutland	- -	5	- -	114,000	2,370	6	- -	2,850
Northampton	- -	6	- -	640,000	16,000	6	- -	16,000
Warwick	182,962	3	2,287	- -	- -	6	- -	8,574
Ditto	- -	5	- -	160,000	3,333			
Leicester	20,000	5½	291	- -	- -	6	- -	10,013
Ditto	- -	7	- -	380,528	11,100			
Oxford	304,584	var.	5,203	- -	- -	5	- -	6,345
Bucks	222,968	3	2,787	- -	- -	5	- -	4,645
Gloucester	355,000	var.	5,400	- -	- -	6	- -	8,875
Ditto	- -	8	- -	200,000	6,666	8	- -	6,666
Somerset	500,700	4½	9,288	- -	- -	5	5,215	5,216
Worcester	330,504	5½	4,820	- -	- -	4¾	- -	6,541
Monmouth	177,619	var.	1,431	- -	- -	4	- -	2,960
Hereford	500,000	2	4,200	- -	- -	4	2,778	5,555
Shropshire	432,034	2½	4,397	- -	- -	4	2,344	4,960
Stafford	185,120	2	1,526	- -	- -	4½	- -	3,503
Ditto	- -	7	- -	3,720	118			
Bedford	204,000	5	4,250	- -	- -	5	- -	4,250
Berks	306,600	5½	4,151	- -	- -	3½	4,471	
Huntingdon	108,000	4½	2,000	- -	- -	5½	- -	4,480
Ditto	- -	7	- -	87,500	2,532			
Cambridge	67,744	4	1,128	- -	- -	4½	1,270	
Ditto	- -	8	- -	41,688	1,390	8	- -	1,390
Suffolk	497,000	2⅜	5,176	- -	- -	4½	8,801	
Norfolk	683,704	2	5,697	- -	- -	4½	4,273	8,546
Ditto	- -	7	- -	38,500	1,123	7½	- -	1,203
Essex	519,000	3	6,486	- -	- -	4	8,650	
Hertford	277,000	4½	5,297	- -	- -	5	2,885	2,885
Middlesex	45,000	4	750	- -	- -	5	937	
Kent	524,475	3½	7,000	- -	- -	4¾	- -	10,380
Ditto, Romney market	- -	7	- -	185,000	5,400	6½	- -	5,010
Ditto, the marsh	- -	7	- -	108,330	3,160	6½	- -	2,934
Surrey	283,000	3	3,540	- -	- -	3½	4,127	
Sussex, downs	316,800	2	2,540	- -	- -	3	3,960	
Ditto, lowlands	547,000	3	6,837	- -	- -	3	6,837	
Hampshire	516,600	3	6,457	- -	- -	3	6,457	
Isle of Wight	61,000	3½	800	- -	- -	4	1,016	
Wilts, downs	585,500	2¾	6,684	- -	- -	2¾	6,685	
Ditto, pasture	117,500	3	1,460	- -	- -	4	1,958	
Dorset	632,240	3¾	9,880	- -	- -	3¾	9,878	
Devon	436,850	4	7,280	- -	- -	5	2,275	6,826
Ditto	- -	8	- -	193,750	6,458	8	- -	6,458
Cornwall	203,000	4	3,382	- -	- -	7	- -	5,920
Total	14,854,299		193,475	4,153,308	131,794		120,655	263,847

1800 — Short fleeces			193,475
Long fleeces			131,794
			325,269
Short and long, skin and lamb's wool			58,705
			383,974
Part of Wales not included in the above Tables			9,262
Increase from 1800 to 1828			69,933
			463,169
1800 — Packs of short wool			193,475
1828 — Ditto ditto			120,655
Decrease			72,820

1828 — Short fleeces			120,655
Long fleeces			263,847
			384,502
Short and long, skin and lambs' wool			69,405
			453,907
Wales, taken as before			9,262
			463,169
1800 — Packs of long wool			131,794
1828 — Ditto ditto			263,847
Increase			132,053

1800 — Total quantity of short wool	-	193,475	
Ditto ditto of long wool	-	131,794	
			325,269
1828 — Total quantity of short wool	-	120,655	
Ditto ditto of long wool	-	263,847	
			384,502
Increase of wool - -	-	59,233	fleeces.
Increase of skin and lambs' wool	-	10,700	
Total increase - -		69,933	

N. B. — The wool from slaughtered sheep and carrion not mentioned in this Table; but allowed for above.

II. Account of Sheep and Lambs' Wool imported into Great Britain from Foreign Parts in the undermentioned Years; specifying the Countries whence it was brought, and the Quantity brought from each, with the Rates of Duty and the Produce of the Duty

Countries from which imported.	1810.	1820.	1825.	1830.	1832.	1833.	Rates of Duty chargeable.	
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*		
Russia, Sweden, and Norway -	50,503	75,614	1,995,900	203,231	855,680	1,405,082	Until 5 July 1803	Free.
Denmark - -	351,741	13,527	554,213	179,717	302,848	372,490	From 5 July 1803, to June 1804	5*s.* 3*d.* per cwt.
Prussia - -	123,057	107,101	131,100	713,246	855,988	505,379	— 1 June 1804, to 5 April 1805	5*s.* 10*d.* —
Germany - -	778,855	5,113,442	28,799,661	26,073,882	19,832,225	25,370,106	— 5 April 1805, to 10 May 1806	5*s.* 11*d.* 8-20ths.
The Netherlands	2,873	186,051	1,059,243	939,123	209,144	811,051	— 10 May 1806, to 5 July 1809	6*s.* 4*d.* 2-30ths.
France - -	- -	230,909	436,678	45,093	1,973	259,841	— 5 July 1809, to 15 April 1813	6*s.* 8*d.* per cwt.
Portugal - -	3,018,961	95,187	953,793	461,942	193,544	681,968	— 15 April 1813, to 5 July 1819	7*s.* 11*d.* —
Spain & Canaries	5,952,107	3,539,229	8,206,427	1,643,515	2,626,624	3,339,150	— 5 July 1819, to Oct. 1819	1*d.* per lb.
Gibraltar - -	349,055	3,851	19,250	- -				
Italy - -	21,554	2,815	227,453	9,461	78,552	855,510		
Malta - -	40,010	5,050	72,131	- -	564	4,803		
Ionian Islands -	- -	- -	25,983					
Turkey - -	- -	189,584	513,414	- -	17,992	361,591		
Morocco -	- -	- -	- -	- -	14,465	105,689		
Guernsey, Jersey, Alderney, and Man - -	41,407	19,015	22,266	7,745	13,516	30,374	Of British Possessions.	Of Foreign Countries.
East Indies -	701	8,056						
New Holland and Van D.'s Land	167	99,415	323,995	1,967,309	2,377,057	3,516,869	*Per lb.*	
Cape of G. Hope	29,717	13,869	27,619	33,407	83,257	93,325	From 10 Oct. 1819, to 5 Jan. 1823	1*d.* 6*d.* per lb.
British North American colonies, West Indies, & United States of America - -	4,111	1,477	80,538	9,038	628,915	335,649	From 5 Jan. 1823, to 10 Sept. 1824	3*d.* 6*d.* —
Mexico - -	- -	- -	- -	- -	3,139		From 10 Sept. 1824, to 10 Dec. 1824	1*d.* 3*d.* —
Peru - -	- -	- -	14,313	5,741	23,191	14,640	From 10 Dec. 1824, to 5 July 1825	1*d.* 1*d.* —
Chili - -	- -	14,792	2		30,359	207,143	From 5 July 1825, free.	½*d.* per lb. on wool not of the value of 1*s.* per lb.
Rio de la Plata and Brazil -	116,173	73,036	331,302	20,589	15,456	2,049		1*d.* per lb. on wool of the value of 1*s.* per lb. & upwards.
Prize - -	23,837							
Total import from foreign parts - -	10,914,137	9,789,020	43,795,281	32,313,059	28,142,489	38,076,413		
Quantities retained for home consumption -	- -	7,691,773	41,101,636	31,522,859	27,666,350	39,066,620		
Amount of duty received - -	*L. s. d.* 32,580 4 3	*L. s. d.* 181,860 19 6	*L. s. d.* 163,799 16 7½	*L. s. d.* 120,420 8 0	*L. s. d.* 102,031 2 3	*L. s. d.* 137,855 1 8		

II. Account of the Quantities of British Wool and Woollen Yarn, exported from the United Kingdom in 1833; specifying the Countries to which they were sent.

Countries to which exported.	Wool.	Woollen and Worsted Yarn (including Wool or Worsted Yarn mixed).	Countries to which exported.	Wool.	Woollen and Worsted Yarn (including Wool or Worsted Yarn mixed.
	Lbs.	*Lbs.*		*Lbs.*	*Lbs.*
Russia - - - -	- -	88,786	Other parts of Africa - -	- -	168
Denmark - - - -	- -	7	British colonies in N. America	884	11,308
Prussia - - - -	- -	2,063	British West Indies - -	- -	194
Germany - - - -	8,428	1,085,040	Foreign West Indies - -	- -	112
Holland - - - -	173,172	490,458	United States of America - -	105,214	283,993
Belgium - - - -	3,273,498	119,040	Mexico - - - -	- -	2,556
France - - - -	1,424,208	3,282	Colombia - - - -	- -	47
Portugal, Azores, and Madeira	144	2,196	Peru - - - -	- -	1,232
Spain and the Canaries - -	- -	551	Isles of Guernsey, Jersey, Alderney and Man - - -	6,562	23,616
Italy - - - -	- -	30,649			
East Indies and China - -	-	760	Total -	4,992,110	2,107,478
Cape of Good Hope - -	- -	1,120			

IV. Price of Southdown Wool per lb. from 1784 to 1833, both inclusive.

Years.	Price of Wool.	Years.	Price of Wool.	Years.	Price of Wool.	Years.	Price of Wool.	Years.	Price of Wool.
	s. d.		*s. d.*		*s. d.*		*s. d.*		*s. d.*
1784	0 8½	1794	1 1	1804	1 10	1814	2 2	1824	1 2
1785	0 9	1795	1 3	1805	2 3	1815	1 11	1825	1 4
1786	0 9	1796	1 4	1806	1 10	1816	1 6	1826	0 10
1787	0 11	1797	1 3	1807	2 0	1817	2 7	1827	0 9
1788	1 0	1798	1 3	1808	1 9	1818	2 6	1828	0 8
1789	1 0	1799	1 9	1809	3 0	1819	1 7	1829	0 6
1790	1 0½	1800	1 5	1810	2 4	1820	1 5	1830	0 10
1791	0 11½	1801	1 7	1811	1 5	1821	1 3	1831	1 1
1792	1 4	1802	1 7	1812	1 8	1822	1 3	1832	1 0
1793	0 11½	1803	1 8	1813	1 11	1823	1 3½	1833	1 5

Prices of Wool in the London Market, March, 1834.

			L.	s.	d.		L.	s.	d.
Spanish									
Leonesa		per lb.	0	2	6	to 0	4	0	
Segovia		—	0	2	6	— 0	3	6	
Soria		—	0	2	6	— 0	3	0	
Caseres		—	0	2	9	— 0	3	6	
Seville		—	0	2	0	— 0	2	9	
Portugal		—	0	1	7	— 0	2	0	
lamb's wool		—	0	1	9	— 0	1	10½	
German									
Saxon and Silesian,	1st & 2d elect.	—	0	4	9	— 0	5	3	
	prima	—	0	4	0	— 0	5	0	
	secunda	—	0	3	0	— 0	3	6	
	tertia	—	0	2	2	— 0	2	6	
Austrian, Bohemian, and Hungarian	electoral	—	0	4	0	— 0	5	6	
	prima	—	0	3	6	— 0	4	6	
	secunda	—	0	2	6	— 0	3	6	
	tertia	—	0	2	0	— 0	3	0	
	lambs'	—	0	2	9	— 0	4	6	
	pieces	—	0	2	6	— 0	4	0	
	fribs	—	0	1	9	— 0	2	9	
Australian									
best flocks, superior fleeces		—	0	3	6	— 0	4	6	

			L.	s.	d.		L.	s.	d.
Australian — continued.									
seconds	per lb.		0	2	9	to 0	3	10	
inferior flocks	—		0	2	3	— 0	2	9	
Van Diemen's Land									
inferior	—		0	1	0	— 0	1	9	
middling	—		0	1	10	— 0	2	1	
combing	—		0	0	0	— 0	0	0	
superior	—		0	2	6	— 0	2	11	
Cape	—		0	1	0	— 0	1	11	
British fleeces									
North & South Down hoggets	—		0	2	0	— 0	2	2	
half-bred ditto	—		0	2	0	— 0	2	2	
ditto ewes clothing	—		0	1	10	— 0	2	0	
Kent fleeces	—		0	2	1	— 0	0	0	
combing skins	—		0	1	8	— 0	1	10	
ditto flannel wool	—		0	1	8	— 0	1	10	
ditto blanket ditto	—		0	1	3	— 0	1	6	
Leicester fleeces	—		0	1	6	— 0	2	0	
In York Devons	—		0	0	10	— 0	0	0	
ditto Down	—		0	1	0	— 0	0	0	
ditto Merino	—		0	1	0	— 0	1	4	
goats' wool, Turkey	—		0	1	6	— 0	1	6½	

WOOLLEN MANUFACTURE, the art of forming wool into cloth and stuffs. This has always ranked as an important branch of national industry; and, until it was recently surpassed by the cotton manufacture, was decidedly the most important of all the manufactures carried on in England.

Rise and Progress of the British Woollen Manufacture. Exports. — There can be no doubt that the arts of spinning wool, and manufacturing the yarn into cloth, were introduced into England by the Romans, — the inhabitants being previously clothed only in skins. From the period of the Romans quitting England, down to the 10th century, there are no notices of the manufacture; and those relating to the period from the 10th to the 13th century are but few and imperfect. It is certain, however, that the manufacture of broad cloths was established soon after the year 1200, if not previously. — (*Smith's Memoirs of Wool*, vol. i. p. 17.) But the woollen manufactures of Flanders being at this period, and long afterwards, in a comparatively advanced state, English wool was exported in large quantities to Bruges and other Flemish cities, whence fine cloths and other products were brought back in exchange. Edward III. took the most judicious measures for improving the English manufacture, by inviting over Flemish weavers, fullers, dyers, and others, and protecting them from the assaults of the rabble. Shortly after the first emigration of Flemings, or in 1337, an act was passed, prohibiting the wear of any cloths made beyond sea, and interdicting the export of English wool. — (*Ibid.* vol. i. p. 25.) But in these turbulent times such restraining acts were little better than a dead letter; and this, indeed, was soon after repealed. — (*Ibid.* vol. i. pp. 32. 39.) From this remote period the manufacture has always been regarded as of primary importance, and has been the object of the especial solicitude of the legislature. It may be doubted, however, whether it has derived any real advantage from the numberless statutes that have been passed in the view of contributing to its advancement. With the exception, indeed, of the prohibition of the export of English wool, which was finally put a stop to in 1660, the other acts, being mostly intended for the regulation of the manufacture, could not be otherwise than mischievous; and the benefit derived by the manufacturers from the prohibition was more apparent than real; inasmuch as it occasioned a diminished growth of wool, at the same time that it was impossible to prevent its clandestine exportation. Mr. Smith has proved that the manufacture made a far more rapid progress during the reign of Elizabeth, when wool might be freely carried out of the kingdom, than it ever did during any equal period subsequent to the restriction on exportation. Foreign wool began to be imported in small quantities in the 13th century.

At first, the manufacture seems to have been pretty equally distributed over the country. In an insurrection that took place in 1525, more than 4,000 weavers and other tradesmen are said to have assembled out of Lancham, Sudbury, and other towns in Suffolk. The manufacture had been previously introduced into Yorkshire. In 1533, an act was passed (34 & 35 Hen. 8. c. 10.), reciting, "that the city of York afore this time had been upholden principally by making and weaving of coverlets, and the poor thereof daily set on work in spinning, carding, dyeing, weaving, &c.;" that the manufacture, having spread into other parts, was "thereby debased and discredited;" and enacting, as a remedy for this evil, that henceforth "none shall make coverlets in Yorkshire, but inhabitants of the city of York!" This may be taken as a fair specimen of the commercial legislation of the time. Indeed, it was enacted, nearly at the same period, that the manufacture should be restricted, in Worcestershire, to Worcester and 4 other towns. Worsted goods, so called from Worsted, now an inconsiderable town in Norfolk, where the manufacture was first set on foot, were produced in the reign of Edward II., or perhaps earlier; but Norwich soon after became, and, notwithstanding the competition of Bradford, probably is still, the principal seat of this branch of the manufacture. In an act of Henry VIII. (33 Hen. 8. c. 16.), worsted yarn is described as "the priva e

commodity of the city of Norwich." In 1614, a great improvement took place in the woollen manufacture of the west of England, by the invention of what is called medley or mixed cloth, for which Gloucestershire is still famous. During the reign of Charles II., there were many, though unfounded, complaints of the decay of the manufacture; and by way of encouraging it, an act was passed (30 Car. 2. st. i. c. 3.), ordering that all persons should be buried in woollen shrouds! This act, the provisions of which were subsequently enforced, preserved its place on the statute book for more than 130 years!

Towards the end of the 17th century, Mr. Gregory King and Dr. Davenant — (*Davenant's Works*, Whitworth's ed. vol. ii. p. 233.) — estimated the value of the wool shorn in England at 2,000,000*l.* a year; and they supposed that the value of the wool (including that imported from abroad) was quadrupled in the manufacture; making the entire value of the woollen articles annually produced in England and Wales, 8,000,000*l.*, of which about 2,000,000*l.* were exported. In 1700 and 1701, the official value of the woollens exported amounted to about 3,000,000*l.* a year. Owing to the vast increase in the wealth and population of the country, the manufacture must have been very greatly extended during the last century; but the increase in the amount of the exports was comparatively inconsiderable. At an average of the 6 years ending with 1789, the annual official value of the exports was 3,544,160*l.* a year, being an increase of only about 540,000*l.* on the amount exported in 1700. The extraordinary increase of the cotton manufacture soon after 1780, and the extent to which cotton articles then began to be substituted for those of wool, though it did not occasion any absolute decline of the manufacture, no doubt contributed powerfully to check its progress. In 1802, the official value of the exports rose to 7,321,012*l.* being the largest amount they ever reached till last year, when they amounted to 7,777,952*l.* During the last 3 years, indeed, every part of the manufacture has been in a state of unexampled improvement and extension. It is probable that the extraordinary rise in the price of wool may give a temporary check to the manufacture; but it cannot be of long continuance. During the 5 years ending with 1833, the official and the declared or real values of the woollen manufactures exported from the United Kingdom have been as under: —

	1829.	1830.	1831.	1832.	1833.
Official value of woollen manufactures exported - - -	£ 5,372,490	£ 5,558,709	£ 6,097,558	£ 6,544,576	£ 7,777,952
Declared or real value of ditto - -	4,661,259	4,850,884	5,227,701	5,239,992	6,289,649

Value of the Manufacture. Number of Persons employed. — The most discordant estimates have been given as to both these points. For the most part, however, they have been grossly exaggerated. In a tract published in 1739, entitled *Considerations on the Running* (Smuggling) *of Wool*, the number of persons engaged in the manufacture is stated at 1,500,000, and their wages at 11,737,500*l.* a year. Dr. Campbell, in his *Political Survey of Great Britain*, published in 1774, observes, — "Many computations have been made upon this important subject, and, amongst others, one about 30 years since, which, at that time, was thought to be pretty near the truth. According to the best information that can be obtained, there may be from 10,000,000 to 12,000,000 sheep in England, some think more. The value of their wool may, one year with another, amount to 3,000,000*l.*; the expense of manufacturing this may probably be 9,000,000*l.*, and the total value 12,000,000*l.* We may export annually to the value of 3,000,000*l.*, though one year we exported more than 4,000,000*l.* In reference to the number of persons who are maintained by this manufacture, they are probably upwards of 1,000,000. Sanguine men will judge these computations too low, and few will believe them too high." — (Vol. ii. p. 158.) But the moderation displayed in this estimate was very soon lost sight of. In 1800, the woollen manufacturers objected strenuously to some of the provisions in the treaty of union between Great Britain and Ireland, and were allowed to urge their objections at the bar of the House of Lords, and to produce evidence in their support. Mr. Law (afterwards Lord Ellenborough), the counsel employed by the manufacturers on this occasion, stated, in his address to their Lordships, on information communicated to him by his clients, that 600,000 packs of wool were annually produced in England and Wales, worth, at 11*l.* a pack, 6,600,000*l.*; that the value of the manufactured goods was 3 times as great, or 19,800,000*l.*; that not less than 1,500,000 persons were immediately engaged in the operative branches of the manufacture; and that the trade collaterally employed about the same number of hands. — (*Account of the Proceedings of the Merchants, Manufacturers, &c.* p. 34.)

It is astonishing that reasonable men, conversant with the manufacture, should have put forth such ludicrously absurd statements. We have already seen that the quantity of wool produced in England and Wales, in 1800, did not really amount to 400,000 packs; and the notion that *three* out of the *nine* millions of people then in the country were directly and indirectly employed in the manufacture, is too ridiculous to deserve notice, though it was generally acquiesced in at the time. — (See *Middleton's Survey of*

Middlesex, 2d ed. p. 644.; *Adolphus's Political State of the British Empire*, vol. iii. p. 236.)

Mr. Stevenson, who is one of the very few writers on British statistics to whose statements much deference is due, has given the following estimate of the value of the woollen manufactured goods annually produced in England and Wales, and of the interest, &c. of the capital, and the number of persons employed in the manufacture: —

Total value of manufactured articles		£18,000,000
Value of raw material	£6,000,000	
Interest on capital, sum to replace its wear and tear, and manufacturers' profits	2,400,000	
Wages of workmen	9,600,000	
		£18,000,000

Number of people employed, 480,000, or perhaps 500,000.

But even this estimate requires to be materially modified. Taking Scotland into account, and allowing for the increase of population and of exportation since Mr. Stevenson's estimate was made, the total value of the various descriptions of woollens annually produced in Great Britain may, at present, be moderately estimated at from 20,000,000*l.* to 22,000,000*l.*, or 21,000,000*l.* at a medium. We have further been assured by the highest practical authorities, that Mr. Stevenson's distribution of the items is essentially erroneous; and that, assuming the value of the manufacture to be 21,000,000*l.*, it is made up nearly as follows: —

Total value of manufactured articles		£21,000,000
Value of raw material	£7,000,000	
Oil, soap, dye stuffs, &c.	1,450,000	
Wear and tear of capital, and profit	4,250,000	
Wages	8,300,000	
		£21,000,000

At present, the average wages of the people employed may be taken at about 25*l.* a year, making the total number employed 332,000. And, however small this may look as compared with former estimates, we believe it is fully up to the mark, if not rather beyond it.

Most of the innumerable statutes formerly passed for the regulation of the different processes of the manufacture have been repealed within these few years; and the sooner every vestige of the remainder disappears from the statute book, the better.

I. Account of the Quantities of each Description of Woollen Manufactures exported from the United Kingdom in 1833; specifying the Quantities and Total Value of those sent to each Country.

Countries to which exported.	Cloth of all Sorts.	Napped Coatings, Duffels, &c.	Kerseymeres.	Baizes of all Sorts.	Stuffs, Woollen or Worsted.	Flannel.	Blankets and Blanketing.	Carpets and Carpeting.	Woollens mixed with Cotton.	Hosiery, viz. Stockings, Woollen or Worsted.	Sundries, consisting of Hosiery, Rugs, Coverlids, Tapes, &c.	Declared Value.
	Pieces.	*Pieces.*	*Pieces.*	*Pieces.*	*Pieces.*	*Yards.*	*Yards.*	*Yards.*	*Yards.*	*Doz. Pair.*	*L.*	*L.*
Russia	4,891	131	551	9	28,309	11,009	1,060	13,432	558	268	451	93,072
Sweden	29	-	2	-	4,222	140	328	325	300	128	46	5,212
Norway	652	15	72	125	3,265	3,075	1,550	60	2,589	608	308	12,321
Denmark	42	-	25	8	885	2,215	180	1,596	-	85	134	2,034
Prussia	3	-	1	-	10	320	-	-	-	70	26	150
Germany	17,790	5,530	13,562	486	451,222	312,860	5,638	68,596	297,654	5,763	6,638	634,916
Holland	13,669	9,929	964	10,912	69,971	550,789	5,796	28,613	34,479	18,586	1,475	282,123
Belgium	1,051	1,886	1,035	1,355	38,978	134,452	7,450	9,126	212,055	17,185	1,880	108,633
France	2,937	161	80	279	20,268	16,955	2,240	7,675	26,517	237	642	55,944
Portugal, Azores, and Madeira	13,329	238	759	6,637	20,061	7,725	5,486	6,426	68,786	410	1,976	149,358
Spain and the Canaries	2,987	19	507	949	49,903	10,793	7,700	8,705	19,174	858	824	111,970
Gibraltar	1,932	10	437	98	1,918	12,395	2,000	1,476	13,761	496	344	19,436
Italy	12,483	-	647	17	90,337	10,120	4,924	40,761	79,379	2,137	1,485	220,512
Malta	977	-	130	-	3,917	4,220	2,830	400	2,604	35	380	12,468
Ionian Islands	130	16	33	19	284	605	70	516	498	152	141	2,919
Turkey and Continental Greece	1,134	63	34	15	5,960	6,980	50	13,840	1,260	272	509	20,102
Morea and Greek islands	63	-	-	-	70	307	-	-	-	-	-	914
Isles Guernsey, Jersey, Alderney and Man	2,346	76	4	235	3,625	37,552	13,463	15,530	195	786	1,622	35,722
East Indies and China	127,696	-	370	24	199,665	76,225	21,830	2,484	64,164	1,777	2,405	961,333
New Holland	3,453	78	320	139	4,482	21,421	164,626	11,110	12,510	3,551	1,569	54,182
Cape of Good Hope	4,163	612	690	1,190	6,898	30,048	16,809	2,537	4,981	799	599	42,604
Other parts of Africa	252	1	91	111	1,032	8,351	3,200	120	-	417	1,312	7,189
British colonies in North America	38,547	231	355	348	61,454	501,215	277,645	147,933	45,763	23,388	17,677	376,878
——— West Indies	7,981	415	225½	5,480	14,457	53,380	107,131	1,449	5,978	2,572	6,836	102,101
Foreign West Indies	6,025	-	75	134	8,870	10,676	139,770	5,855	10,050	115	1,347	59,848
United States of Amer.	271,503	96	2,217	474	511,701	211,157	2,239,219	220,873	445,942	148,615	20,594	2,265,407
Brazil	24,190	36	801	13,310	50,770	5,530	73,562	4,454	148,312	190	3,902	274,569
Mexico and the States of South America	36,934	-	7,810	2,079	37,325	13,957	23,529	53,485	107,547	3,267	3,317	382,516
Total	597,189	19,543	31,795½	45,036	1,690,559	2,055,072	3,128,106	667,377	1,605,056	232,766	78,236	6,294,432

II. Summary Account of the Quantity and Declared Value of the Woollen Yarn; and of the Quantities of the different Descriptions of Woollen Manufactures, with the Total Declared Value of the same; exported from the United Kingdom, in each Year from 1820 to 1832, both inclusive.

Years.	Woollen and Worsted Yarn.		Woollen Manufactures.										
	Quantity.	Decl. Value.	Cloths of all Sorts.	Napped Coatings, Duffels, &c.	Kerseymeres and Baizes.	Stuffs, Woollen or Worsted.	Flannel.	Blankets and Blanketing.	Carpets and Carpeting.	Woollens mixed with Cotton.	Hosiery viz. Stockings, Wooll. or Wrstd.	Sundries, consisting of Rugs, Tapes, &c.	Total Declared Value of Woollen Manufactures.
	Lbs.	*L.*	*Pieces.*	*Pieces.*	*Pieces.*	*Pieces.*	*Yards.*	*Yards.*	*Yards.*	*Yards.*	*Dz. Prs.*	*L.*	*L.*
1820	3,924	810	288,700	59,644	115,827	828,901	2,569,105	1,288,409	526,124	407,716	59,960	39,337	5,586,138
1821	9,121	1,917	375,464	69,622	133,010	1,022,342	3,504,851	1,424,238	764,922	627,800	107,779	38,986	6,462,886
1822	12,515	2,392	420,497	67,757	139,317	1,078,428	4,503,612	1,926,711	884,922	1,120,326	136,597	47,042	6,488,167
1823	6,423	1,127	356,027	54,226	135,883	1,150,133	4,311,997	2,131,632	778,426	918,469	106,420	44,619	5,636,586
1824	12,640	2,188	407,720	51,585	155,117	1,242,403	3,105,961	1,990,041	848,842	1,393,443	113,123	43,361	6,043,051
1825	76,961	14,467	384,880	45,268	173,548	1,138,808	2,959,594	2,162,834	888,324	1,793,301	106,498	45,335	6,185,648
1826	131,032	22,794	328,559	41,800	122,900	1,125,308	2,423,120	1,082,582	903,597	531,517	71,922	37,223	4,966,879
1827	255,708	37,932	371,965	51,690	169,623	1,258,667	2,518,887	1,899,600	1,195,939	846,768	148,117	43,559	5,245,649
1828	436,722	56,243	335,042	40,646	154,091	1,310,853	2,539,766	2,097,542	1,197,947	981,152	159,463	48,314	5,069,741
1829	589,558	73,648	363,075	16,186	86,242	1,307,558	1,572,920	1,839,961	811,538	1,074,077	91,285	41,948	4,587,603
1830	1,108,023	122,430	388,269	22,377	83,878	1,252,512	1,613,099	2,176,391	672,869	1,099,518	111,146	54,038	4,728,666
1831	1,592,455	158,111	436,143	13,892	59,909	1,487,404	1,572,558	2,546,328	678,656	1,000,004	143,774	64,648	5,232,013
1832	2,204,464	235,307	396,661	23,453	75,858	1,800,714	2,304,750	1,681,840	690,042	1,334,072	152,810	55,443	5,244,479

WRECK, in navigation, is usually understood to mean any ship or goods driven ashore, or found floating at sea in a deserted or unmanageable condition. But in the legal sense of the word in England, *wreck* must have come to land; when at sea, it is distinguished by the barbarous appellations of *flotsam*, *jetsam*, and *ligan*. — (See FLOTSAM.)

In nothing, perhaps, has the beneficial influence of the advance of society in civilisation been more apparent than in the regulations with respect to the persons and property of shipwrecked individuals. In most rude and uncivilised countries, their treatment has been cruel in the extreme. Amongst the early Greeks and Romans, strangers and enemies were regarded in the same point of view. — (*Hostis apud antiquos, peregrinus dicebatur. — Pomp. Festus;* see also *Cicero de Offic.* lib. i. c. 12.) Where such inhospitable sentiments prevailed, the conduct observed towards those that were shipwrecked could not be otherwise than barbarous; and in fact they were, in most instances, either put to death or sold as slaves. But as law and good order grew up, and commerce and navigation were extended, those who escaped from the perils of the sea were treated in a way less repugnant to the dictates of humanity: and at length the Roman law made it a capital offence to destroy persons shipwrecked, or to prevent their saving the ship; and the stealing even of a plank from a vessel shipwrecked or in distress, made the party liable to answer for the whole ship and cargo. — (*Pand.* 47. 9. 3.)

During the gloomy period which followed the subversion of the Roman empire, and the establishment of the northern nations in the southern parts of Europe, the ancient barbarous practices with respect to shipwreck were every where renewed. Those who survived were in most countries reduced to servitude; and their goods were every where confiscated for the use of the lord on whose manor they had been thrown. — (*Robertson's Charles V.* vol. i. note 29.) But nothing, perhaps, can so strongly evince the prevalence and nature of the enormities, as the efforts that were made, as soon as governments began to acquire authority, for their suppression. The regulations as to shipwreck in the Laws of Oleron are, in this respect, most remarkable. The 35th and 38th articles state, that "Pilots, in order to ingratiate themselves with their lords, did, like faithless and treacherous villains, sometimes willingly run the ship upon the rocks, &c.;" for which offence they are held to be accursed and excommunicated, and punished as thieves and robbers. The fate of the lord is still more severe. "He is to be apprehended, his goods confiscated and sold, and himself fastened to a post or stake in the midst of his own mansion house, which being fired at the four corners, all shall be burned together; the walls thereof be demolished; the stones pulled down; and the site converted into a market place, for the sale only of hogs and swine, to all posterity." The 31st article recites, that when a vessel was lost by running on shore, and the mariners had landed, they often, instead of meeting with help, "were attacked by people more barbarous, cruel, and inhuman, than mad dogs; who, to gain their monies, apparel, and other goods, did sometimes murder and destroy these poor distressed seamen. In this case, the lord of the country is to execute justice, by punishing them in their persons and their estates; and is commanded to plunge them in the sea till they be half dead, and then to have them drawn forth out of the sea, and stoned to death."

Such were the dreadful severities by which it was attempted to put a stop to the crimes against which they were directed. The violence of the remedy shows better than any thing else how inveterate the disease had become.

The law of England, like that of other modern countries, adjudged wrecks to belong to the king. But the rigour and injustice of this law was modified so early as the reign of Henry I., when it was ruled, that if any person escaped alive out of the ship, it should be no wreck. And after various modifications, it was

decided, in the reign of Henry III., that if goods were cast on shore, having any marks by which they could be identified, they were to revert to the owners, if claimed any time within a year and a day. By the statute 27 Edw. 3. c. 13., if a ship be lost and the goods come to land, they are to be delivered to the merchants, paying only a reasonable reward or SALVAGE (which see) to those who saved or preserved them. But these ancient statutes, owing to the confusion and disorder of the times, were very ill enforced; and the disgraceful practices previously alluded to, continued to the middle of last century. A statute of Anne (12 Ann. st. 2. c. 18.), confirmed by the 4 Geo. 1. c. 12., in order to put a stop to the atrocities in question, orders all head officers and others of the towns near the sea, upon application made to them, to summon as many hands as are necessary, and send them to the relief of any ship in distress, on forfeiture of 100*l.*; and in case of any assistance given, salvage is to be assessed by 3 justices, and paid by the owners. Persons secreting any goods cast ashore, are to forfeit treble their value; and if they wilfully do any act whereby the ship is lost or destroyed, they are guilty of felony without benefit of clergy. But even this statute seems not to have been sufficient to accomplish the end in view; and in 1753, a new statute (26 Geo. 2. c. 19.) was enacted, the preamble of which is as follows: — "Whereas, notwithstanding the good and salutary laws now in being against plundering and destroying vessels in distress, and against taking away shipwrecked, lost, or stranded goods, many wicked enormities have been committed, to the disgrace of the nation, and the grievous damage of merchants and mariners of our own and other countries, be it," &c.: and it is then enacted, that the preventing of the escape of any person endeavouring to save his life, or wounding him with intent to destroy him, or putting out false lights in order to bring any vessel into danger, shall be capital felony. By the same statute, the pilfering of any goods cast ashore is made petty larcery.

By statute 1 & 2 Geo. 4. c. 75. it is enacted, that any person or persons wilfully cutting away, injuring, or concealing any buoy or buoy rope attached to any anchor or cable belonging to any ship, whether in distress or otherwise, shall be judged guilty of felony, and may, upon conviction, be transported for 7 years.

(For an account of the sums to be paid to those assisting in the saving of wreck, see art. SALVAGE in this Dictionary; see also the chapter on Salvage in Mr. Abbott's (Lord Tenterden's) work on the *Law of Shipping*.)

Number of Shipwrecks. — The loss of property by shipwreck is very great. It appears from an examination of *Lloyd's List* from 1793 to 1829, that the losses in the British mercantile navy only amounted, at an average of that period, to about 557 vessels a year, of the aggregate burden of about 66,000 tons, or to above 1-40th part of its entire amount in ships and tonnage. The following account of the casualties of British shipping in 1829 is taken from *Lloyd's List*:—

On Foreign Voyages — 157 wrecked; 284 driven on shore, of which 224 are known to have been got off, and probably more; 21 foundered or sunk; 1 run down; 35 abandoned at sea, 8 of them afterwards carried into port; 12 condemned as unseaworthy; 6 upset, 1 of them righted; 27 missing, 1 of them a packet, no doubt foundered. *Coasters and Colliers* — 109 wrecked; 297 driven on shore, of which 121 known to have been got off, and probably many more; 67 foundered or sunk, 4 of them raised, 6 run down; 13 abandoned, 5 of them afterwards carried in; 3 upset, 2 of them righted; 16 missing, no doubt foundered. During the year, 4 steam vessels were wrecked; 4 driven on shore, but got off; and 2 sunk.

Of the prodigious number of ships that are thus annually engulphed, many are laden with valuable cargoes; and besides this immense loss of property, there is also a very great loss of life. It is believed, that a little more strength in the building, and care in the selection of the masters, would obviate many of these calamities. And nothing, we are assured, would contribute so much to improve the fabric of ships, as the adoption of the plan we have elsewhere recommended (p. 1024.), of allowing them to be built in bond, free of all duty.

During the last war with France, 32 ships of the line went to the bottom, besides 7 fifty-gun ships, 86 frigates, and a vast number of smaller vessels. And the losses sustained by the navies of France, Spain, Holland, Denmark, &c. must have very greatly exceeded those of ours. Hence, as Mr. Lyell has observed, it is probable that a greater number of monuments of the skill and industry of man will, in the course of ages, be collected together in the bed of the ocean, than will be seen at one time on the surface of the continents. — (*Principles of Geology*, 2d ed. vol. ii. p. 265.)

Y.

YARD, a long measure used in England, of 3 feet, or 36 inches. — (See WEIGHTS AND MEASURES.)

YARN (Ger. *Garn*; Du. *Garen*; Fr. *Fil*; It. *Filato*; Sp. *Hilo*; Port. *Fio*; Rus. *Prasha*), wool, cotton, flax, &c. spun into thread.

Z.

ZAFFER, OR ZAFRE. After the sulphur, arsenic, and other volatile parts of cobalt have been expelled by calcination, the residuum is sold, mixed or unmixed with fine sand, under the above name. When the residuum is melted with siliceous earth and potash, it forms a kind of blue glass, known by the name of smaltz — (see SMALTZ), — of great importance in the arts. When smaltz is ground very fine, it receives in commerce the name of *powder blue*. Zaffer, like smaltz, is employed in the manufacture of earthenware and China, for painting the surface of the pieces a blue colour. It suffers no change from the most violent fire. It is also employed to tinge the crystal glasses, made in imitation of opaque and transparent precious stones, of a blue colour. It is almost wholly brought from Germany.

Account of the Zaffer imported, exported, and retained for Home Consumption, with the Nett Duty thereon, in 1831 and 1832.

Years.	Imports.	Exports.	Retained for Consumption.	Duty.
	Lbs.	*Lbs.*	*Lbs.*	*L.*
1831	227,512	115	227,982	950
1832	266,935	448	263,952	417

The duty was reduced, in 1832, from 9*s.* 4*d.* to 1*s.* a cwt.

ZEA, INDIAN CORN, or MAIZE. See Maize

ZEDOARY (Ger. *Zittwer;* Fr. *Zédoaire;* It. *Zedoaria;* Sp. *Cedoaria;* Arab. *Judwar;* Hind. *Nirbisi*), the root of a plant which grows in Malabar, Ceylon, Cochin-China, &c., of which there are 3 distinct species. It is brought home in pieces of various sizes, externally wrinkled, and of an ash colour, but internally of a brownish red. Those roots which are heavy and free from worms are to be chosen; rejecting those which are decayed and broken. The odour of zedoary is fragrant, and somewhat like that of camphor; the taste biting, aromatic, and bitterish, with some degree of acrimony. It was formerly employed in medicine; but is scarcely ever used by modern practitioners. — (*Milburn's Orient. Com.*)

ZINC, or SPELTER (Ger. *Zink;* Fr. *Zinc;* It. *Zinco;* Sp. *Zinco, Cinck;* Rus. *Schpiauter;* Lat. *Zincum*), a metal of a brilliant white colour, with a shade of blue, composed of a number of thin plates adhering together. When this metal is rubbed for some time between the fingers, they acquire a peculiar taste, and emit a very perceptible smell. It is rather soft; tinging the fingers, when rubbed upon them, with a black colour. The specific gravity of melted zinc varies from 6·861 to 7·1, the lightest being esteemed the purest. When hammered, it becomes as high as 7·1908. This metal forms, as it were, the limit between the brittle and the malleable metals. Its malleability is by no means to be compared with that of copper, lead, or tin; yet it is not brittle, like antimony or arsenic. When struck with a hammer, it does not break, but yields, and becomes somewhat flatter; and by a cautious and equal pressure, it may be reduced to pretty thin plates, which are supple and elastic, but cannot be folded without breaking. When heated to about 400°, it becomes so brittle that it may be reduced to powder in a mortar. It possesses a certain degree of ductility, and may, with care, be drawn out into wire. Its tenacity is such, that a wire whose diameter is equal to $\frac{1}{10}$th of an inch, is capable of supporting a weight of about 26 lbs. Zinc has never been found in a state of purity. The word zinc occurs for the first time in the writings of Paracelsus, who died in 1541; but the method of extracting it from its ores was not known till the early part of last century. — (*Thomson's Chemistry.*) The compounds of zinc and copper are of great importance. — (See Brass.)

Manufacture of Zinc, &c. — There used to be 2 smelting-houses for the preparation of zinc near Bristol, and 3 near Swansea, but they have been all abandoned, with the exception of 1 of the latter. The material used by the English manufacturer is blende, or black jack (sulphuret of zinc); it is commonly found with lead, and is procured of the best quality in Flintshire and the Isle of Man. Besides its employment in the manufacture of brass, bell metal, and other important compounds, zinc has of late years been formed into plates, and applied to many purposes for which lead was formerly used, such as the roofing of buildings, the manufacture of water-spouts, dairy pans, &c. Foreign zinc, being less brittle, is better fitted for rolling than that of England.

The duties on spelter, which were formerly prohibitory, have been reduced to 2*l.* a ton on that formed into plates, or cakes, and to 10*s.* on what is not in cakes; and, in consequence, considerable quantities are now imported, partly for home use, and partly for re-exportation to India and China. Foreign zinc is principally made at Gleinitz, in Upper Silesia; whence it is conveyed by an internal navigation to Hamburgh. The freight from the latter to Hull and London is nominal merely; the wool-ships being glad to take it as ballast. Hainault, near Namur, has also some part of the spelter trade. A good deal of spelter is shipped from Hamburgh for France and America.

Zinc is produced in the province of Yunan, in China; and previously to 1820, large quantities of it were exported from that empire to India, the Malay Archipelago, &c. But about that time the free traders began to convey European spelter (principally German) to India; and being, though less pure, decidedly cheaper than the Chinese article, it has entirely supplanted the latter in the Calcutta market: latterly, indeed, it has begun to be imported even into Canton. — (See Tutenag.) During the 3 years ended with 1832, the exports of foreign spelter from this country for India and China were, in 1830, 62,356 cwt.; 1831, 51,609; 1832, 37,499. And, exclusive of these, considerable quantities were exported from Amsterdam, Rotterdam, &c. We subjoin an

Account of the Zinc or Spelter imported, exported, and retained for Home Consumption, and the Duties thereon, in 1831 and 1832.

Years.	Imports.	Exports.	Retained for Consumption.	Duty.
	Cwt.	*Cwt.*	*Cwt.*	*L.*
1831	76,413	62,684	20,526	10,196
1832	68,764	49,740	25,214	5,784

The price of spelter declined within the last 3 or 4 years, from about 15*l.* to 9*l.* a ton; but it has recently rallied, and is now (April, 1834) about 11*l.* 10*s.* a ton in bond.

THE END.

LONDON:
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SUPPLEMENT.

OCTOBER, 1834.

N. B. — We intend publishing a larger Supplement in September or October, 1835; and we earnestly entreat our various friends at home and abroad to transmit to us, through Messrs. Longman and Co., such information as they conceive may enable us to correct, add to, improve, or supply any article. We shall carefully observe any stipulations as to the use of such communications.

ABATEMENT OF DUTIES. — No abatement is to be made, on account of damage on the voyage, from the duties payable on the following drugs, viz. cantharides, cocculus Indicus, Guinea grains, ipecacuanha, jalap, nux vomica, opium, rhubarb, sarsaparilla, and senna. — (4 & 5 *Will.* 4. c. 89.. § 5.)

ALE AND BEER. — In consequence of the complaints, whether well or ill founded, of the inconveniences arising from the increase of beer shops — (see *Dict.* p. 14.), a material change has been made in the mode of licensing houses for the sale of beer. Under the act 1 Will. 4. c. 64. — (*Dict.* p. 14.), the commissioners of excise, or other persons duly authorised, were bound to grant licences, costing 2*l.* 2*s.* a year, to all persons not excepted in the act, empowering them to sell ale, beer, porter, cider, &c. to be drunk *indifferently either on or off the premises.* But the act of last session, 4 & 5 Will. 4. c. 85., has made the obtaining of a licence to retail beer to be drunk on the premises contingent on the applicant being able to produce a certificate of good character, subscribed by certain persons rated at a certain amount to the poor: it has also raised the cost of such licence to 3*l.* 3*s.*; and reduced the cost of a licence to sell beer not to be drunk on the premises to 1*l.* 1*s.* We subjoin a full abstract of the act: —

Persons applying for a Licence to sell Beer to be drunk on the Premises, to deposit a Certificate of good Character, &c. — Every person applying for a licence to sell beer or cider by retail, to be drunk in the house or on the premises, shall, in addition to the application setting forth the particulars required by the act 1 Will. 4. c. 64., annually produce to and deposit with the commissioners of excise, collector, or other person authorised to grant such licence within the parish or place in which the person applying intends to sell beer or cider by retail, a certificate signed by 6 persons residing in and being and describing themselves to be inhabitants of such parish, place, &c., and respectively rated therein to the poor at not less than 6*l.*, or occupying a house therein rated to the poor at not less than 6*l.*, none of whom shall be maltsters, common brewers, or persons licensed to sell spirituous liquors or beer or cider by retail, nor owners or proprietors of any houses licensed to sell liquors, beer, or cider by retail, stating that the person applying for the licence is of good character; and at the foot of such certificate one of the overseers of the parish, township, or place shall certify (if the fact be so) that such 6 persons are inhabitants respectively rated as aforesaid; and such certificate shall respectively be in the form of the schedule annexed to this act: provided always, that in any parish, township, or district maintaining its own poor, in which there are not 10 inhabitants rated to their relief to the amount of 6*l.* each, or not occupying houses respectively rated to the poor at 6*l.* each (not being maltsters, common brewers, or persons licensed to sell spirituous liquors or beer or cider by retail), the certificate of the majority of the inhabitants of such parish, township, or district maintaining its own poor, as are rated to the amount of 6*l.* each, shall be deemed to be a sufficient certificate for the purposes of this act. — § 2.

Penalty on Overseers. — Any overseer who shall, without due cause, refuse to certify that the persons who have signed the certificate are respectively rated to the poors' rate as aforesaid, to forfeit not more than 5*l.* — § 3.

Beer drunk in Sheds. — Any person licensed under the act 1 Will. 4. c. 64., to sell beer, cider, &c. not to be consumed on the premises, who shall employ, permit, or suffer any person or persons to take or carry any beer, &c. from his house or premises, to be drunk or consumed for his benefit or profit, in any other house, tent, shed, &c. belonging to, or hired, used, or occupied by such licensed person, such beer, &c. shall be held to have been consumed on the premises, and the person selling the same shall be subject to the like forfeitures and penalties as if it had been actually drunk or consumed in a house or upon premises licensed only for the sale thereof. — § 4.

Billetting. — Provisions for billetting soldiers under mutiny acts to extend only to those licensed to sell beer or cider to be drunk in the house or on the premises, and not to extend to those licensed to sell beer not to be consumed on the premises. — § 5.

Justices to regulate the Opening and Closing of Houses.—Justices in petty sessions are authorised to fix the hours at which houses and premises licensed to sell beer under this act shall be opened and closed; but any person thinking himself aggrieved by any such order may appeal at any time, within 4 months from its date, to the justices in quarter sessions, on giving the justices making the order 14 days' notice of his intention; and the decision of the justices in quarter sessions shall be final: provided, however, that the hour to be fixed for opening any house shall not in any case be earlier than 5 o'clock in the morning, nor for closing the same later than 11 o'clock at night, or before 1 o'clock in the afternoon on Sunday, Good Friday, Christmas Day, or any day appointed for a public fast or thanksgiving; and the hours so fixed by the justices, with reference to the districts within their jurisdictions, shall be taken to be the hours to be observed and complied with under this act as fully as if the same had been specially appointed by it. — § 6.

Constables, &c. to visit licensed Houses. — All constables and officers of police are authorised to enter into all houses licensed to sell beer or spirituous liquors to be consumed upon the premises whenever they

shall think proper; and if any person licensed as aforesaid, or any servant or person in his employ or by his direction, shall refuse to admit such constables, &c. into such house or premises, the person having the licence shall for the first offence forfeit and pay any sum not exceeding 5*l.*, together with the costs of conviction, to be recovered within 20 days before 1 or more justices; and it shall be lawful for any 2 or more justices, upon any person being convicted of such offence for the second time, to adjudge (if they think fit) that such offender be disqualified from selling beer, ale, porter, cider, or perry, by retail, for 2 years after such conviction, or for such shorter space as they may think proper. — § 7.

Penalty for making or using false Certificates. — Persons certifying any matter having reference to this act as true, who know the same to be false, or using any certificate, knowing the same to be forged, shall, on conviction of such offence before 2 or more justices, forfeit and pay the sum of 20*l.*; and every licence granted to any person making use of any certificate to obtain the same, such person knowing such certificate to be forged, or the matters certified therein to be false, shall be void to all intents and purposes; and any person using such certificate shall be disqualified for ever from obtaining a licence to sell beer or cider by retail. — § 8.

No Licence to be granted without a Certificate. — No licence for the sale of beer or cider by retail to be consumed or drunk in the house or on the premises shall be granted, except upon the certificate hereby required: provided, that in all extra-parochial places the certificate required by this act may be signed and given by inhabitants rated to the poor at 6*l.* in any adjoining parish or parishes. — § 9.

Retailers to produce their Licences on Requisition of 2 Magistrates. — In case any complaint be laid before 2 justices against any licensed person for an offence against the tenor of his licence, or against this act or the act 1 Will. 4. c. 64., the said justices may require such person to produce his licence before them for their examination; and if he wilfully neglect or refuse so to do, he shall forfeit for such offence any sum, not exceeding 5*l.*, the said justices shall think proper; and such person may be convicted, proceeded against, and dealt with for such offence in the same manner, *mutatis mutandis*, as is directed by the act 1 Will. 4. c. 64. with regard to persons guilty of a first offence against said act; and the penalty imposed for such offence is to be applied in the manner that a penalty for a first offence against said act is directed to be applied. — § 10.

Continuance of Powers, &c. — The powers, provisions, and penalties of 1 Will. 4. c. 64. to apply to persons licensed under this act, and to their sureties, &c. — § 11.

Act 1 Will. 4. c. 64. to continue in force, except as hereby altered. — § 12.

Duties on Beer Licences under the 1 Will. 4. c. 64. repealed, and new Duties granted in lieu thereof. — From and after the passing of this act, the duties payable on excise licences for the sale of beer by retail under the act 1 Will. 4. c. 64. shall cease, and in lieu of such duties there shall be paid upon the licences hereby authorised to be granted the duties following; viz.

For and upon every licence to be taken out by any person for the sale of beer by retail, not to be drunk or consumed in or upon the house or premises where sold, the annual sum of 1*l.* 1*s.*	For and upon every licence to be taken out by any person for the sale of beer by retail, to be drunk or consumed in or upon the house or premises where sold, the annual sum of 3*l.* 3*s.* — Sec. 13.

The duties to be under the management of commissioners of excise, and to be recovered and accounted for under the provisions of the act 1 Will. 4. c. 64. — § 14.

Not to affect Duty on Licences to retail Cider and Perry. — Nothing in this act shall affect the amount of duty payable under the 1 Will. 4. c. 64. on licences to retail cider and perry; but every such licence shall specify whether it be granted for the sale of cider and perry by retail not to be drunk in the house or premises where sold, or for the retail of the same to be drunk in the house or premises where sold. — § 15.

Licences under this Act not to authorise Persons to sell Wine. — No licence granted under the act 1 Will. 4. c. 64. and this act shall authorise any person to take out or hold any licence for the sale of wine, spirits, or sweets or made wines, or mead or metheglin; and if any person licensed under the act 1 Will. 4. c. 64. and this act shall permit or suffer any wine, spirits, &c. to be brought into his house or premises to be drunk or consumed there, or shall suffer them to be drunk or consumed in his house or premises, he shall, over and above any excise penalties to which he may be subject, forfeit 20*l.* — § 16.

Penalty on unlicensed Persons. — Such persons selling beer and cider by retail to be drunk off the premises, 10*l.*; to be drunk on the premises, 20*l.* — § 17.

Board over the Door. — Every person licensed to sell beer, cider, or perry, by retail, under the authority of the act 1 Will. 4. c. 64. and this act, shall, on the board required by the former act to be placed over his door, paint and keep thereon, after the words "licensed to sell beer or cider by retail," the additional words "not to be drunk on the premises," or "to be drunk on the premises," as the case may be, on pain of forfeiting the penalty imposed by such act for not having such board over the door. — § 18.

What is retailing of Beer, &c. — Every sale of beer, or of cider or perry, in any less quantity than 4½ gallons, shall be deemed and taken to be a sale by retail. — § 19.

Penalties for selling Spirits or Wine without Licence. — Persons licensed to sell beer or cider under the act 1 Will. 4. c. 64. and this act, who sell spirits or wine, sweets, &c. without being licensed, are liable to the penalties imposed by the laws of excise for selling spirits or wine, sweets, &c. without licence. — § 20.

Certificate not to be required for Houses in certain Situations, if Population exceed 5,000. — The beforementioned certificate shall not be required as to any house situated within the cities of London and Westminster, or within any parish or place within the bills of mortality, nor within any city or town corporate, nor within the distance of 1 mile from the place used at the last election as the place of election or polling place of any town returning a member to parliament, provided that the population, determined according to the last parliamentary census taken in such city, town, &c., shall exceed 5,000: provided, that no licence for the sale of beer, ale, porter, cider, or perry by retail on the premises in the cities of London and Westminster, or in any parish within the bills of mortality, or in any such city or town corporate, or town returning a member to parliament as before mentioned, shall be granted after the 5th day of April, 1836, unless the house or premises specified as those in which beer or cider is intended to be sold shall be of the value of 10*l.* per annum. — § 21.

Service of Summons. — Summonses or orders not legally served unless by some constable or other peace officer. — § 22.

Commencement. — Act shall commence and take effect from and after the 10th day of October, 1834. — § 23.

Form of Certificate referred to in § 2.

We, the undersigned, being inhabitants of the parish [*or* township, *as the case may be*] of and respectively rated to the poor at not less than 6*l.* per annum, and none of us being maltsters, common brewers, or persons licensed to sell spirituous liquors, or being licensed to sell beer or cider by retail, do hereby certify, That *A. B.*, dwelling in street [*here specify the street, lane, &c.*] in the said parish [*or* township, &c.] is a person of good character.

[*Here insert the day of signing the certificate.*]

(Signed) *E. F.*, *G. H.*, *I. K.*, *L. M.*, *N. O.*, *P. Q.* [*Here state the residence of each of the persons signing.*]

I do hereby certify, That all the above-mentioned persons whose names are subscribed to this certificate are inhabitants of the parish [*or* township, &c.] of rated to 6*l.* to the relief of the poor of the said parish.

C. D.
[Overseer of the parish *or* township, &c.]
Date.

APPLES — Duty on, reduced from 4*s.* to 2*s.* a bushel. — (4 & 5 *Will.* 4. c. 89. § 15.)

BARILLA. — The duties on barilla used in the bleaching of linen are to be repaid to the persons using it, under such regulations as the commissioners of customs may issue. — (4 & 5 *Will.* 4. c. 89. § 14.)

BOOKS. — Under the late law, such books as might be imported were admitted, provided they were of editions printed in or since the year 1801, on payment of a duty of 5*l.* a cwt.; but this duty is now reduced to 2*l.* 10*s.* a cwt., with the additional proviso, that the books, besides being printed in or since 1801, are in *foreign living languages.* — (4 & 5 *Will.* 4. c. 89. § 15.) This condition was inserted principally to obviate the risk of dictionaries, or the class books used in our schools, being supplied from the Continent; the booksellers contending that the 2*l.* 10*s.* a cwt. of duty was insufficient to balance the influence of the paper duty, and the peculiar burdens incident to the getting up of books in this country. It has been alleged, indeed, that it will not effect its purpose; because, as is contended, both Latin and Greek are living languages; the former being spoken in certain parts of Hungary and Poland, and the latter in Greece! But the intention of the legislature is too obvious to admit of its being defeated by any quibbling of the sort now mentioned. By a living language is meant a language spoken by a nation or people, and not by a few learned individuals; and the dialect of the modern Greeks is abundantly different from that of their ancestors. The duty of 1*l.* a cwt. on foreign books printed prior to 1801 ought to be repealed; it throws obstructions in the way of their importation, at the same time that it is quite unproductive of revenue.

Smuggling of English Books from abroad. — Very considerable loss is sustained by literary men and booksellers, by the clandestine importation of English works printed abroad, of which the copyright has not expired. There is hardly, in fact, one of our popular authors, copies of whose works, printed in France or America, may not be readily procured in London; and as those by whom they are printed have neither copyright nor paper duty to pay, they are able materially to undersell the native article. It is surely unnecessary to say, that every practicable effort should be made to hinder such an invasion of private property; and in this view we beg to suggest, that the permission given to persons coming from abroad to bring with them single copies of all prohibited works, ought to be withdrawn. It opens a door for smuggling and fraud; and there is neither sense nor justice in allowing any individual to invade the rights of another, merely because he has been across the Channel. A specific penalty, recoverable by a summary process, ought also to be imposed on every individual offering such books for sale. This would be much more effectual in preventing such practices than the existing law. — (See *Dict.* p. 141.)

BOTTLES (STONE). — In 1812, a duty of 2*s.* 6*d.* a cwt., increased in 1817 to 5*s.*, was imposed upon stone bottles. The average nett produce of this duty has not recently exceeded 3,500*l.* a year. But, to collect this insignificant sum, the manufacture had to be placed under the surveillance of the excise, and those engaged in it subjected to various troublesome and vexatious regulations. The duty did not extend to Ireland, so that a drawback had to be granted on bottles exported to that country, and a countervailing duty charged on those imported from it. This unproductive and troublesome duty was imposed at the instance of the glass bottle manufacturers, who contended, that if stone bottles were exempted from duties, they would be used instead of glass bottles, to the injury of those engaged in manufacturing the latter. But the purposes to which stone bottles and glass bottles are applied are so very different, that it would require a much greater reduction of the price of the former than could possibly be occasioned by the abolition of the duty, to make them be substituted, to any extent worth mentioning, in the place of the latter. These views were ably enforced by the Commissioners of Excise Inquiry; and, having been adopted by government, the duty has been abolished. — (4 & 5 *Will.* 4. c. 77.; see also *Fifth Report by Commissioners of Excise Inquiry.*)

It is to be hoped that the duty on glass bottles may, also, be speedily put an end to. It produces about 110,000*l.* a year. We noticed (*Dict.* p. 1256.) the propriety of enacting and enforcing some regulations as to the size of bottles. The bottle is, in fact, a very important measure; a great deal of wine and other liquors being sold by the dozen. But there is, at this moment, the greatest discrepancy in the size of bottles; and it appears to us that it would be highly expedient, in order to obviate the numerous frauds arising from this source, to enact that all bottles be made to contain not less than a certain specified quantity, and to place them under the acts relating to weights and measures.

COAL. — We are glad to have to state, that the duty on coal exported in English ships has been repealed; and that the duty on all descriptions of coal exported in foreign ships has been reduced to 4*s.* a ton. The increased exportation of coal this measure will occasion, cannot fail of being highly advantageous. Ships that might otherwise have had to go out in ballast, will now have an opportunity of taking with them what may prove a profitable cargo; at the same time that the cost of conveying the mineral abroad operates as a premium in favour of our own manufactures. The fact, too, that there is, in South Wales alone, a supply of coal sufficient to meet the present demand of the empire for more than 2,000 years, shows the futility of imagining that the measure can be injurious, by its hastening the exhaustion of the mines.

COMPANIES (PUBLIC SCOTCH). — The following Table can hardly fail of being interesting. It was drawn up by Mr. Gray, accountant and stock-broker, Glasgow, and may, we believe, be safely relied on. It shows the periods when almost all the great joint stock associations now existing in Scotland were established; the amount of *paid up* capital held by each; the dividend thereon; the period when the dividend is paid; the amount of each share; and the prices the shares brought on the 1st of January, 1834.

Description of Stock.	When formed.	Capital paid in.	Dividend.	When payable.	Shares.	Prices, 1st January, 1834.
Banks.		£.			£. s. d.	£. s. d.
Bank of Scotland	1695	1,000,000	6 per cent.	April, Oct.	83 6 8 all paid	156 0 0
Royal Bank of Scotland	1727	2,000,000	5½ —	Jan. July	100 0 0 —	161 5 0 ex. div.
British Linen Company	1746	500,000	8 —	June, Dec.	100 0 0 —	235 0 0
Commercial Bank	1810	600,000	6 —	Jan. July	500 0 0 100*l.* pd.	165 0 0
National Bank	1825	500,000	5 —	Jan. July	100 0 0 10*l.* —	13 16 0 ex. div.
Glasgow Union Bank	1830	400,000	2½ —	June	250 0 0 50*l.* —	53 0 0
Western Bank of Scotland	1832	600,000	- -	June	200 0 0 50*l.* —	34 0 0
Insurance Companies.		Number of Shares.				
Caledonian Fire Insurance Co.	1805	1,000	- -	July	100 0 0 10*l.* —	13 0 0
Hercules Insurance Co.	1809	7,000	5 per cent.	April	100 0 0 10*l.* —	10 10 0
North British Insurance Co.	1809	50,000	6 —	June	100 0 0 10*l.* —	15 0 0
Insurance Co. of Scotland	1821	100,000	- -	August	10 0 0 all paid	6 5 0
Standard Life Insurance Co.	1825	100,000	5 per cent.	August	10 0 0 1*l.* —	1 4 0
Scottish Union Insurance Co.	1824	250,000	5 —	January	20 0 0 1*l.* —	0 15 0 ex. div.
Edinburgh Life Assurance Co.	1823	5,000	6 —	January	100 0 0 10*l.* —	11 11 0
West of Scotland Fire Insu. Co.	1823	100,000	4 —	July	100 0 0 10*l.* —	Par
Miscellaneous.						
Glasgow Royal Exchange	1827	1,172	1*l.* 1*s.* per share	Whitsund.	50 0 0 42*l.* —	31 0 0
Do. Gas Company	1818	4,420	10 per cent.	Feb. Aug.	25 0 0 all paid	55 0 0
Do. Water Company	1807	2,880	- -	Whits. Mart.	50 0 0 —	91 0 0
Do. Crausstonhill Water Co.	1808	7,200	- -	Whitsund.	25 0 0 —	12 10 0
Do. New Clyde Shipping Co.	1824	500	1*l.* per share	May	10 0 0 —	Par
Do. Old Clyde Shipping Co.	1819	600	2*l.* 10*s.* —	March	25 0 0 —	35 0 0
Edinburgh Gas Company	1818	4,500	10 per cent.	Feb. Aug.	25 0 0 —	60 0 0
Do. additional for New Stock	-	- -	- -	- -	25 0 0 5*l.* paid	24 0 0
Do. Water Company	1819	5,400	5 per cent.	June, Dec.	25 0 0 all paid	32 0 0 ex. div.
Do. and Dalkeith Railway Co.	1826	1,000	- -	- -	50 0 0 —	60 0 0
Do. and Glasgow Un. Canal Co.	1817	4,810	- -	Mar. Sept.	50 0 0 —	6 0 0
Do. and Glasgow do. (allocated)	1817	4,810	- -	Mar. Sept.	96 0 0 —	18 0 0
Do. and Leith Glass Company	1824	10,000	- -	February	20 0 0 16*l.* paid	4 0 0
Do. Equitable Loan Company	1825	5,000	5 per cent.	April	20 0 0 10*l.* —	9 10 0
Leith Gas Company	1821	750	6 —	July	20 0 0 all paid	30 0 0
Forth and Clyde Canal	1768	1,200	25*l.* per share	Whits. Mart.	400 16 0 —	550 0 0
Monkland Canal	1768	2,000	- -	Feb. Aug.	7 8 6 —	
Garnkirk Railway	1826	1,280	2 per cent.	Martinmas	50 0 0 —	
Monkland & Kirkintilloch do.	1824	1,540	5 —	Whits. Mart.	25 0 0 —	28 0 0
Shott's Iron Company	1824	2,000	2½ —	February	50 0 0 30*l.* paid	15 0 0 to 16 0 0

CORN LAWS AND CORN TRADE.

An Account of the Total Quantity of Quarters of Foreign Wheat that have paid Duty for Consumption in the United Kingdom, under 9 Geo. 4. c. 60., since that Act came into force in 1828, till 5th of July, 1834, and the Total Amount of Duty received thereon; and showing, from the Total Quantity of Quarters, and the Total Amount of Duty so received thereon, what the Duty was per Quarter at an Average of the whole Period; — and,

The same Account for Foreign Barley, Oats, Rye, Peas and Beans, Wheat, Meal and Flour, Oatmeal, Maize or Indian Corn, Buck Wheat; and the same Account for all these, the Produce of, and imported from, any British Possession in North America, or elsewhere, out of Europe. — (*Parl. Paper.* No. 568. Sess. 1834.)

	Foreign Corn, Meal, and Flour.			Corn, Meal, and Flour, the Produce of, and imported from, British Possessions out of Europe.		
	Quantities charged with Duty for Home Consumption, under Act 9 Geo. 4. c. 60. from the passing of the Act (15th of July, 1828) to the 5th of July, 1834.	Amount of Duty received thereon.	Rates of Duty taken on the Average of the whole Period.	Quantities charged with Duty for Home Consumption, under Act 9 Geo. 4. c. 60. from the passing of the Act (15th of July, 1828) to the 5th of July, 1834.	Amount of Duty received thereon.	Rates of Duty taken on the Average of the whole Period.
	Quarters.	£.	*Per Qr.* s. d.	*Quarters.*	£.	*Per Qr.* s. d.
Wheat	4,834,796	1,605,414	6 8	419,594	75,803	3 7
Barley	1,074,986	248,517	4 7	313	23	1 6
Oats	1,463,536	433,170	5 11	8,973	294	0 8
Rye	142,626	26,667	3 9			
Peas	221,628	80,278	7 3	5,540	519	1 10
Beans	184,959	96,831	10 6			
Indian corn	102,216	18,823	3 8	211	26	2 5
Buck wheat	35,123	13,546	6 0			
Wheat meal and flour	*Cwt.* 1,894,591	183,173	*Per Cwt.* 1 11	*Cwt.* 368,744	26,334	*Per Cwt.* 1 5
Oatmeal	6	2	8 4	1,843	78	0 10

CURRANTS. — The exorbitant duty of 44*s.* 4*d.* a cwt. on currants has been reduced to half that amount, or to 22*s.* 2*d.* a cwt. — (4 & 5 *Will.* 4. c. 89. § 15.) But this reduction, considerable as it is, is not enough. The duty ought not to exceed 10*s.*, or at most 12*s.* The price of currants in bond usually varies from 20*s.* to 25*s.*; so that the duty, as fixed by the late act (4 & 5 Will. 4. c. 89.), will still be equal to about 100 per cent. *ad valorem.* But such a duty is obviously oppressive; the more especially as currants, if low-priced, would be largely consumed by all classes in this country; and as they form the principal equivalent the inhabitants of the Ionian Islands and of the Morea have to offer in exchange for foreign products. We are satisfied, too, that had the duty been reduced to 10*s.* a cwt., it would, in a few years, have yielded more revenue

than it will ever yield at its present rate. Such a reduction would have brought currants within the command of a much greater number of persons; and would, in fact, have gone far to render them an article of general consumption; whereas, the duty of 22*s.* 2*d.* will still confine their use to the wealthier classes.

It has been said, that a reduction of the duty from 44*s.* 4*d.* to 10*s.* a cwt. would not have made a corresponding reduction in the price of the article; and that the measure would have redounded more to the advantage of the growers of currants than of the consumers in this country. That such might have been in some degree the case, at the outset, we admit; but the greater advantages derived by the raisers of currants would have made them be produced in much larger quantities, so that at no distant period we should have reaped the full advantage of the reduction in the rate of duty, at the same time that our trade with the Ionian Islands and the Morea would have been increased proportionally to the increase in the imports of currants. However, we are grateful for what has been done; and it may be fairly presumed that the beneficial effect of the reductions already made will lead to others on a still greater scale.

FIGS. — The duty on figs has been reduced from 21*s.* 6*d.* to 15*s.* a cwt. Nearly the same may be said of this reduction as of that of the duty on currants. It is too trifling to have much effect on consumption; and there can, we apprehend, be little doubt that a duty of 10*s.* would, by stimulating the latter, be more productive of revenue than a duty of 15*s.*

FLAG.—Any of his Majesty's subjects hoisting the Union Jack in their vessels, or any pendants, &c. usually worn in his Majesty's ships, or any flag, jack, pendant, or colours whatever in imitation of or resembling those of his Majesty, or any ensign or colours whatever other than those prescribed by proclamation, 1st of January, 1801, shall forfeit for every such offence not more than 500*l.* (*sic in orig.*) — (4 & 5 *Will.* 4. c. 13. § 11.)

FUNDS. — The act 4 & 5 Will. 4. c. 31. directs that the "Four per cent. annuities created 1826" (*Dict.* p. 588.) be paid off. The holders of every 100*l.* of such 4 per cent. annuities are entitled to receive, in lieu thereof, 100*l.* new 3½ per cent. annuities, or, if they dissent from this, 100*l.* in cash, and proportionally for every greater or less sum. The interest on the new 3½ per cent. stock created under this act, is to be paid half-yearly, at the Bank of England, on the 5th of January and the 5th of July each year; and the new stock is not to be redeemable till the 5th of January, 1840. The annuities so to be created are to be added to the existing *New 3½ per cent. annuities.*—(*Dict.* p. 587.) Bonds and contracts to transfer a given amount of 4 per cent. annuities to be deemed satisfied by the transfer of an equal amount of new 3½ per cent. annuities; but lenders of 4 per cent. annuities, on contract to replace, may demand 100*l.* in cash for every 100*l.* annuities so lent. Trusts, &c. as to 4 per cents. shall extend to 3½ per cents. Commissioners for the reduction of the national debt may advance money to pay off dissentients.

FUNDS (AMERICAN). — The subjoined statement will not, we hope, be uninteresting. It gives a view of the most prominent facts with respect to the public funds of the principal American States; exhibiting, amongst other particulars, their respective amounts, the periods when they are redeemable, the objects for which they were created, and their price in London in August, 1834.

Account of the United States Debt, and of the separate Debts of each State.

Funds.	Capital.	When redeemable.	Objects of Creation.	Price in London.
	Dollars.	*Years.*		
U. States 5 per ct.	4,755,296	1835	-	95
Alabama do.	300,000	1852	Banking	
Do. do.	3,500,000	1863	capital	96
Illinois 6 per cent.	100,000	1850	—	
Indiana do.	200,000	1852	—	
Louisiana, Wilson's Loan, 5 per cent.	1,800,000	1839	—	100
		1844	—	
		1849	—	
Do. Baring's Loan, 5 per cent.	1,666,667	1838	—	
		1843	—	99
		1844	—	
Do. do.	7,000,000	1847	—	103½
		1850	—	
		1852	—	
		1841	—	105
		1846	—	
Mississippi 6 per ct.	500,000	1851	—	
		1856	—	
Do. do.	500,000	1861	—	110
	500,000	1866	—	—
	500,000	1871	—	—

Funds.	Capital.	When redeemable.	Objects of Creation.	Price in London.
	Dollars.	*Years.*		
New York 5 per ct.	1,400,000	1837	Canals	95
Do. do.	3,124,270	1845	—	107
Do. do.	877,000	1846,1847	—	
Do. do.	150,000	1850	—	
Do. 6 per ct.	2,093,500	1837	—	113
Do. do.	850,000	1845	—	
Do. Chenango Canal, 5 per ct.	1,000,000	1845	—	
Ohio 5 per cent.	400,000	1850	—	114
Do. 6 per cent.	4,000,000	1850	—	—
Pennsylv. 5 per ct.	1,300,000	1841	Canals,	
Do. do.	500,000	1846	rail-roads,	
Do. do.	1,000,000	1850	&c.	
Do. do.	5,000,000	1853,1854	—	104
Do. do.	2,483,162	1856	—	104½
Do. do.	9,340,661	1858	—	105
Do. do.	2,000,000	1860	—	105½
Do. do.	800,000	1863	—	
		1845	—	100
Virginia do.	500,000	1850	—	—
		1851,1852	—	—
Do. 6 per cent.	400,000	1844	—	

IMPORTATION AND EXPORTATION. — The commissioners of customs, agreeably to the powers given them to that effect by the 3 & 4 Will. 4. c. 52. § 135. — (see *Dict.* p. 669.), have appointed the undermentioned places, within the several ports of the United Kingdom, at which vessels coming into or departing out of such ports shall bring to, for the boarding or landing of customs officers. Every master of a vessel failing to comply with the provisions of said act in this respect forfeits 100*l.*

ENGLAND.

Ports.	*Stations for bringing to.*
LONDON	Gravesend Reach, below the Custom-house.
ABERYSTWITH	On the bar, or a little above the junction of the rivers Rhydol and Ystwith.
Aberdovey	A little to the westward of the town, in the river Dovey.
ALDBOROUGH	Orford haven, the entrance of the rivers Ore and Alde.
ARUNDEL	The piles on the eastern side of the river, between the revenue watch-house and the Duke of Norfolk's Quay, in the harbour of Littlehampton.
BARNSTAPLE	Skern and watch-house, Appledore.
BEAUMARIS	Opposite the town, at Fryars Roads.
Amlwch	Within the harbour.
Conway	In the roadstead opposite the town.
Carnarvon	In the bay off the town, opposite the Bell Tower, and at Abermenai.
Pwllheli	At the entrance of the harbour, by the Gimblet Rock.
Barmouth	In the harbour.
Holyhead	In the harbour.
BERWICK	At the entrance of the harbour, near the pier head.
BIDEFORD	Skern and watch-house, Appledore.
BOSTON	Hob Hole.
BRIDGEWATER	Between Botestall Point, on the coast of the Bristol Channel, and Black Rock, about a mile within the mouth of the river Parrott.
BRIDLINGTON	The bay or harbour.
BRIDPORT	The outer buoy, distant about 300 yards, abreast of the harbour.
BRISTOL	Pill and Kingsroad.
CARDIFF	Penrith Roads, a little to the eastward of the mouth of the river Taff.
CARDIGAN	At Pwllcam, a little inside the bar or harbour's mouth.
CARLISLE	Fisher's Cross.
CHEPSTOW	At the entrance of the river Wye.
CHESTER	Dowpool, 6 miles from Hoylake.
CHICHESTER	Cockbush harbour.
CLAY	Blackney and Clay harbour.
COLCHESTER	Coln River, off Mersea Stone, Mersea Island.
COWES (EAST)	Roadstead of Cowes, extending from east to west about 2½ miles.
DARTMOUTH	Between the mouth of the harbour and Sandquay Point.
Salcombe	At the mouth of the harbour and Snaps Point.
DEAL	In the Downs, in open roadstead.
DOVER	The outer harbour.
Folkstone	In the harbour.
EXETER	At the Passage Way, Exmouth.
Teignmouth	At the Point.
FALMOUTH	In the harbour, off Kiln Quay and watch-house.
FAVERSHAM	Between the mouth of Faversham Creek and the Horse Sand in the East Swale.
Milton	At the mouth of Milton Creek in the Swale.
FOWEY	Near the Custom-house, not far from the entrance of the harbour.
GLOUCESTER	
GRIMSBY	At the outfall, near the entrance of the harbour.
GOOLE	Hull Roads.
GWEEK	Durgan Roads, just at the entrance of the river Hel.
HARWICH	In the harbour, between the Guard and Walton Ferry.
HULL	Hull Roads, between the east end of the citadel and the entrance to the Humber dock to the westward.
ILFRACOMBE	In the harbour.
IPSWICH	In the harbour, between the Guard and Walton Ferry.
ISLE OF MAN	
Douglas, *Derby Haven*, *Peel*, *Ramsey*	In their respective bays.
LANCASTER	Glasson Dock, on the river Lune.
Poulton	Sea Dyke, entrance of the river Wyre.
Ulverston	Pile Fowdry, near the Isle of Walney.
LEIGH	Leigh Slade, or Leigh Swatch, which channel is formed by the spit of a sand called Marsh End, leading from the east end of Canvy Island, and nearly opposite to a windmill, called the Hamlet Mill, situate upon the Cliff, about ½ a mile to the westward of Southend, and about 2 miles from Leigh.
LIVERPOOL	At the entrance of the respective docks.
LLANELLY	
LYME	The basin within the pier or cobb of Lyme Regis.
LYNN	Nottingham Point, intermediate space between Common Strath Quay, where the estuary narrows into a river, about 3 miles below the town, or near as circumstances permit within the point.
MALDON	Barrow Hills, opposite Blackwater River, Maldon.
MILFORD	In the haven, opposite the town of Milford.
MINEHEAD	The entrance of the harbour.
NEWCASTLE	Opposite the watch-house, at the entrance of the river Tyne.
Shields	Low Lights, North Shields.
Blyth	At the entrance of the harbour.
NEWHAVEN	In the stream, between the piers and the tide surveyor's watch-house.
NEWPORT (Wales)	At the watch-house, 1 mile from the Custom-house.
PAINTON	Hawker's Cove, within the harbour.
PENZANCE	Gwavas Lake.
St. Michael's	St. Michael's Mount Roads.
PLYMOUTH	Within the line of the breakwater, viz. the Sound, Catwater, and Hamoaze.
POOLE	At the entrance of the harbour, between South Deep, opposite Brownsea Castle, and the Essex buoy, opposite the castle stables.
PORTSMOUTH	Between Blockhouse Point and the north end of his Majesty's dock-yard.
Longstone	In the roadstead, within 1 mile of the Spil Buoy.
RAMSGATE	In the harbour.
Margate	In the harbour.
Seasalter	At the entrance of the harbour.
ROCHESTER	Sheerness.
RYE	The outer channel, and in Stag's Hole, in the inner channel.
Hastings	In the open roadstead.
Southover	In the open roadstead.
SCARBOROUGH	Entrance of the harbour, opposite the light-house, at the end of Vincent's Pier.
SCILLY	
SHEERNESS	Near the entrance of the harbour, in the western branch, opposite the customs watch-house and Kingston Wharf.
SOUTHAMPTON	Itchen buoy, or Bursledon buoy.
SOUTHWOLD	Opposite the jetty, near the entrance of the harbour.
STOCKTON	Ninth buoy, or opposite Cleveland Port.
ST. IVES	In the bay, within ½ a mile of St. Ives pier.
Hayle	The same.
SUNDERLAND	At the entrance of the harbour, near the watch-house on the South pier.
SWANSEA	In the harbour.
Neath	Briton Ferry, near the entrance of Neath River.
TRURO	Falmouth harbour.
WELLS	Between the entrance of the harbour and Wells Quay.
WEYMOUTH	Weymouth Roads.
WHITBY	The harbour.
WHITEHAVEN	In the harbour, between the tongue and barwark.
Harrington, *Workington*, *Maryport*	In their respective harbours.
WISBEACH	At the light-houses about 3 miles below the station at Sutton Wash.
WOODBRIDGE	Bawdsey Ferry, the entrance of the river Deben.
YARMOUTH	Yarmouth Roads, between Nelson's monument and the haven's mouth — on the Brush, a short distance within the haven's mouth, at the south-east angle of the river.

SCOTLAND.

Ports.	*Stations for bringing to.*
ABERDEEN	That part of Aberdeen Bay which falls within a line beginning at the eastern-most point of the Girdle Ness, and running north 1½ mile, to a point due east of the centre of the Broad Hill.
Peterhead	The bay.
Newburgh	Within the river Ythan, opposite to the village Newburgh.
Stonehaven	Stonehaven Bay, within 800 yards of the entrance of the harbour.
AYR	South Quay at Ayr.
BANFF	The Legal Quays.
BERRIEHEAD	The harbour.
Inverkeithing	The harbour.
CAMBELTOWN	The harbour.
DUMFRIES	The harbour.
DUNDEE	The harbour.
Newburgh and *Perth*	Caroline Roads, 1½ mile to the eastward of the harbour of Dundee.
GLASGOW	Entrance of the harbour.
GRANGEMOUTH	Entrance of the harbour.
Alloa	Alloa roadstead.
Kinghorne	Kinghorne roadstead.
GREENOCK	From Gravel Point, to the eastward of the town of Greenock, in the county of Renfrew, to Kempock Point, being the western point of Gourock Bay, including therein Cartsdyke Bay, Greenock Roads, the anchorage at the tail of the bank, and Gourock Bay.
Rothsay	Rothsay Bay, lying and being within Boyany Point, on the east of the town of Rothsay, in the Isle of Bute, county of Bute, and Ardmalish Point on the west of the said town.
Oban	Oban Bay, in the county of Argyle, as lies within Fishing-house Point on the eastern side, and Currick Point on the western side of the said bay.
Tobermory	The Bay of Tobermory, lying and being within Leidag Point to the south-east, Portmore Point to the north-west, and the Isle of Calve on the east of Tobermory, Isle of Mull, county of Argyle.
Inverary	The roadstead of Inverary, lying and being off the town of Inverary, in the county of Argyle, and extending ½ a mile north-east of the quay of the said town.

Ports.	*Stations for bringing to.*
Lochgilphead	Lochgilphead Roads, at the east end of the Crinan Canal, lying and being within Ardrishaig Point, on the western side of Lochgilphead and Kilmory Point, on the eastern side of the said loch.
INVERNESS	The harbour.
IRVINE	The harbour.
KIRKALDY	Entrance of the harbour.
Aberdour and Burntisland	Burntisland Roads.
Pittenween	Kirkaldy Bay.
Dysart	Kirkaldy Bay.
Wemyss	Kirkaldy Bay.
Methil	Kirkaldy Bay.
Leven	Largo Bay.
Largo	Largo Bay.
Elie	Entrance to their respective harbours.
Anstruther	Entrance to their respective harbours.
St. Andrew's	St. Andrew's Bay.
KIRKWALL	The Bay, or Kirkwall Roads, extending along the beach, in a north-east direction, to Thief's Holm, and in a westerly direction to Quanterness Skerry, thence in a southerly direction to the Legal Quays.
Stromness	The bay called Cairston Roads.
LEITH	Between the martello tower and chain pier at Newhaven.
Dunbar	In the harbour.
Fisherrow	In the harbour.
LERWICK	In the bay, opposite the Custom-house.
MONTROSE	Within the bar, at the entrance of the river South Esk, which is called the Still.
Arbroath	The harbour.
PORT GLASGOW	Port Glasgow Roads, or roadstead, commencing at the black and white chequered buoy, on the east point of the bank called the Perch, distant from the harbour about 200 yards, and extending in a south-easterly direction by the course of the river Clyde to the old ruins called Newark Castle.
STORNAWAY	The harbour.
STRANRAER	The harbour of Stranraer.
Port Patrick	The harbour.
THURSO	Thurso Bay, within Holburn Head to the anchorage ground at Scrabster Roads.
Wick	Wick Bay, when abreast or within the head land called the Old Man of Wick.

IRELAND.

BALTIMORE	
Castle Townsend	At the entrance of the harbours of Castle Townsend, Baltimore, Crook Haven, and Bere Haven.
Crook Haven	At the entrance of the harbours of Castle Townsend, Baltimore, Crook Haven, and Bere Haven.
Bere Haven	At the entrance of the harbours of Castle Townsend, Baltimore, Crook Haven, and Bere Haven.
BELFAST (Floating Stn.)	Garmoyle Roads, in Belfast Lough.
COLERAINE	Port Rush Bay, outside the harbour.
CORK (COVE)	Between the Spit buoy and the town of Cove.
West Passage	Between Ferry Point to the southward and Horse Head to the north-west.
Kinsale	Upper Cove, on the eastern side of the harbour.
Youghall	Within the entrance of the harbour, between Blackball Head to the eastward, and Ferry Point.
DROGHEDA	North Crook, at the entrance of the Boyne.
Queenborough	In the river Boyne, opposite Queenborough.
DUBLIN	Pigeon-house, between the harbour light-house and the end of the North Wall.
DUNDALK	Soldiers Point.
GALWAY	To the eastward, or under the shelter of, Mutton Island.
LIMERICK	Tarbert's Roads, to the southward of Tarbert Island, in the county of Kerry.
LONDONDERRY	Greencastle, situate on the north side of Lough Foyle.
NEWRY	Warren Point Roads.
Strangford	Ballyheury Bay or Audley's Town Bay.
SLIGO	Oyster Island.
Killibegs	Anchorage of Killibegs.
Ballyshannon	In the river, abreast of Ward Town house.
Ballina	Moyne Pool.
Killala	Killala Pool.
WATERFORD	Passage.
New Ross	Passage.
Dungarvan	The harbour.
WESTPORT	The anchorage ground at Annagh Head, in Clew Bay.
WEXFORD	South Bay, about 10 miles from Wexford.

LISBON. — In return for the privilege conceded to the Portuguese under the Methuen treaty (*Dict.* p. 1177.), of admitting their wines to entry for consumption in Great Britain, at 2-3ds the duty charged on French wines, British woollens were admitted into Portugal at a duty of 15 per cent. This rate of duty was afterwards extended to all British articles; and, since 1782, it has been charged according to a tariff or valuation fixed that year. But, with the exception of goods from Brazil, all other foreign goods consumed in Portugal paid a duty of 30 per cent. These distinctions are now, however, at an end; the subjoined decree having fixed the duty on *all* goods admitted to consumption in Portugal, without regard to their origin, at 15 per cent. This regulation was a good deal complained of here, but without reason. Having judiciously equalised the duties on French and Portuguese wines, we had no right or title to expect that the Portuguese should continue to render us the stipulated equivalent of what we had ourselves withdrawn. In so far, too, as we are concerned, the change is not really of any material importance, and will not sensibly affect our trade with Portugal. We subjoin the decree referred to: —

I. All goods and merchandise, of whatever nature and origin, and under whatever flag they may be imported, are admitted into the Custom-house of Lisbon and Oporto, to be despatched for consumption.

Sect. 1. Live pigs, gunpowder, and foreign olive and turnip oil, are excepted from the foregoing article.

Sect. 2. The importation of grain will be regulated by a special law; and in the mean time the existing dispositions thereunto relating will continue in force.

Sect. 3. Tobacco, soap, and orchilla weed, continue subject to the laws and conditions of the state contracts.

Sect. 4. Wine, vinegar, brandy, and other spirits of whatever quality they may be, are only admitted in bottles or jars of half a *canada*, Lisbon measure, and in boxes containing 2 dozens of bottles each. Rum, however, is admitted in casks of any size.

II. Goods admitted to consumption by the present decree, if imported in Portuguese vessels from the country in which they are produced, or in ships of that country coming direct, will pay 15 per cent., levied upon the tariff valuation, and where there is no tariff, *ad valorem*. In the contrary case, will pay the duty hereby established increased by ½ of the same duty.

Sect. 4. Vinegar, wine, brandy, and all other spirits will pay 300 reis per bottle or jar. The decree of the 7th of December, 1825, remains in full force as regards rum, whatever place it comes from. The goods comprehended in this paragraph remain subject to the clauses of the preceding article, as far as they are applicable.

Palace of Necessidades, 18th of April, 1834.

OLIVE OIL. — In consequence of petitions and representations from the woollen manufacturers, setting forth the serious injury they sustained from the oppressive duty of 8*l.* 8*s.* a tun laid on olive oil (*Dict.* p. 862.), it has been reduced 50 per cent., or to 4*l.* 4*s.* a tun. — (4 & 5 *Will.* 4. c. 89. § 15.) The reduction does not, however, extend to oil brought from Naples or Sicily; but his Majesty is empowered, if he see cause, to reduce the duty on such oil to 4*l.* 4*s.* a tun, by an order in council. This exception is understood to have been made in the view of facilitating the negociations now in progress with the King of Naples for a reduction of the exorbitant duties laid on pilchards and other British articles imported into his dominions. It is to be hoped that these negociations may be speedily brought to a satisfactory conclusion; for the largest portion by far of the olive oil made use of here being brought from Naples (Gallipoli, see *Dict.* p. 863.), the continuance of the high duties on it goes far to nullify the measure. Those who take into view the importance of olive oil in the arts, particularly in the woollen manufacture, and are aware that the revenue derived from it has not exceeded 50,000*l.*

a year, will probably join with us in opinion, that the duty should either be repealed, or reduced to, at most, 2*l.* 2*s.* a tun.

POST-OFFICE. — The inconveniences complained of in *Dict.* p. 936., with respect to the transmission of newspapers by post, have been almost entirely obviated by the act 4 & 5 Will. 4. c. 44.

It relates partly to the conveyance of newspapers to and from the colonies, and partly to their conveyance to and from foreign parts. At present, 1½*d.* each is charged on all British and Irish newspapers sent by packet to any of the colonies; and 3*d.* on all colonial newspapers sent by packet to Great Britain and Ireland. But these charges are to cease on the 1st of October, 1834; and from and after that date the Post-office is to receive British and Irish newspapers duly stamped, and to convey them to the colonies free of postage; and the colonial postmasters are to receive newspapers printed within the colonies, and to transmit them by packet to Great Britain and Ireland; the General Post-office being bound to deliver them to their address within the kingdom free of postage. — §§ 2. and 3.*

The following clauses relate to the conveyance of newspapers to and from foreign parts: —

Newspapers to and from Foreign Parts. — From and after the 1st day of October, 1834, the Post-office shall receive any printed newspapers duly stamped for conveyance by packet boats from Great Britain and Ireland to any foreign port, and forward the same accordingly free of postage; and newspapers printed in any foreign kingdom or state, and brought into the U. K. by packets, shall (*if printed in the language of the foreign kingdom or state from which the same shall be forwarded, but not otherwise*) be delivered by the General Post within the U. K. free of postage: provided, that before any newspapers to or from any foreign port be conveyed or delivered free of postage, under the provisions of this clause, satisfactory proof be laid before the postmaster-general that printed newspapers sent from Great Britain or Ireland are allowed to pass by post within such foreign kingdom or state free of postage, and also that newspapers addressed to any person or place in Great Britain or Ireland from the same are allowed to pass by post within it free of postage; and it is hereby declared, as to every newspaper put into the post-office within Great Britain or Ireland for conveyance by packet, addressed to any foreign kingdom or state in which printed British newspapers are not allowed to pass by post free of postage, the postmaster-general (until such satisfactory proof be laid before him) and his deputies shall demand and take 2*d.* for the conveyance of every newspaper to any foreign port, to be paid when it is put into the post-office; and as to every newspaper addressed to Great Britain or Ireland, and brought into the U. K. from any foreign kingdom or state in which such newspapers are not allowed to pass by post free of postage, it is declared that the postmaster-general (until such satisfactory proof be laid before him) and his deputies shall demand and take for the conveyance of every such newspaper by post 2*d.*, to be paid on delivery thereof to its address, over and above any postage charged thereon by any foreign post-office, provided such paper be in the language of the kingdom or state from which it is forwarded. — § 4.

Re-imposition of Postage.—The postmaster-general, with consent of the Lords of the Treasury, is authorised to re-impose the duty of postage in the event of the conditions as to reciprocity not being complied with. — § 5.

Newspapers to be sent in Covers, open at Sides, &c. — Every newspaper sent by post under this act, must either be sent without a cover, or in a cover open at the sides; nothing is to be printed on the paper after it has been published, nor is any writing or mark to be made upon such paper, or the cover thereof, other than the name and address of the person to whom it is sent, nor is any paper or thing to be enclosed or concealed in such paper or its cover. — § 6.

Limitation of Time for Postage. — Newspapers to be posted within 7 days after date of the same; otherwise may be detained, or charged with postage as a letter. — § 7.

Newspapers addressed to Persons who have removed may be re-directed, and sent to them free of Extra Charge. — But if any newspaper shall have been opened or used, it shall, on re-direction, be charged with the rate of a single letter, from the place at which it shall be re-directed to the place at which it shall be ultimately delivered. — § 8.

Postmaster-general, with Consent of the Treasury, may contract with Editors, &c. of unstamped Publications for forwarding the same by Post, on Payment of a yearly Sum for each Publication. — § 9.

Power to search. — The postmaster and his deputies may examine and search printed papers sent in covers, open at the sides, and in case any words or communication be found to be printed on any such paper after the same was published, or any writing or mark be found on it or the cover thereof other than the name and address of the person to whom it is sent, or any other paper or thing be enclosed or concealed in or with it, or any printed words or communication be found upon its cover, or in case any newspaper brought into the U. K. from any foreign kingdom or state be not printed in the language of such kingdom or state, every such packet shall be charged with treble the duty of letter postage; and as to every paper or packet going out of the U. K., the postmaster-general or his deputies may either detain it, or forward it by post, charged with letter postage; and in case any newspaper printed and posted in the U. K., and sent by post under this act, shall appear not to be duly stamped, it shall be stopped and sent to the commissioners of stamps at London or Dublin.

The other clauses are of no importance.

Inland North American Postage. — The act 4 Will. 4. c. 7. places the regulation of the *inland postage* of the North American colonies, and the appropriation of the revenue arising from the same, wholly in the power of the provincial or colonial legislatures.

RAISINS. — The duty on *all* raisins, without distinction of quality, brought from a foreign country, has been reduced to 15*s.* a cwt.; and to half that sum on those brought from a British possession. — (4 & 5 *Will.* 4. c. 89. § 15.) This measure will, no doubt, materially increase the consumption of raisins. The tax ought, however, to have varied with the quality. A duty of 15*s.* a cwt. is not too much on Malaga muscatels; but, to be in proportion, the duty on Smyrna blacks should not exceed 5*s.* a cwt.

SEAMEN. — The reader will find in the body of this work, p. 1015., a notice of the corporation established by the act 20 Geo. 2. c. 38. for the relief and support of maimed and disabled merchant seamen, and of the widows, children, &c. of such seamen as were killed or drowned in the merchant service. But, as the funds at the disposal of the corporation have been very limited, it has not been much heard of. Under previous acts, 6*d.* per month was deducted from the wages of all seamen in the merchant service; the produce of which assessment was paid over to the trustees of Greenwich Hospital, in the benefit of which institution such seamen were to be allowed to participate. But this

* *N. B.* — The old regulations still continue in force as to all newspapers conveyed to and from the colonies otherwise than by packet.

arrangement has latterly been much objected to, and apparently not without good reason; for it appears from the official returns (*Dict.* pp. 1016, 1017.), that, though the contributions from merchant ships to Greenwich Hospital in 1828 and 1829 exceeded 20,000*l.* a year, there was not on the establishment a single individual who had been exclusively employed in the merchant service! The heavy expenses attending the collection of the duty were, also, much objected to.

Repeal of the 6d. a Month Greenwich Duty. — To obviate these complaints, the 4 & 5 Will. 4. c. 34. directs that the contribution of 6*d.* per month by seamen in the merchant service to Greenwich Hospital shall cease from the 1st of January, 1835; and that 20,000*l.* a year shall be advanced from the consolidated fund to the Hospital, to make good the deficiency caused by the cessation of such contribution.

New Establishment for Support of Merchant Seamen, &c. — And to provide still more effectually for the relief and support of maimed and disabled merchant seamen, and of the widows, &c. of those killed or drowned in the merchant service, the act 4 & 5 Will. 4. c. 52. has been passed. This act repeals the 20 Geo. 2. c. 38., except in so far as it relates to the establishment of the corporation of president and governors for the relief of maimed, &c. merchant seamen, and of the widows and children of seamen killed or drowned in the merchant service; and it also repeals as much of the act 37 Geo. 3. c. 73. as relates to the wages of seamen dying while employed in ships trading to the West Indies. Having thus cleared the way for a new system, it goes on to enact: —

President and Governors empowered to relieve disabled Seamen, &c. — The said president and governors and their successors are authorised to provide, in their hospital, for such seamen as are rendered incapable of service by sickness, wounds, or other accidental misfortunes, and those who shall become decrepit or worn out by age, or to allow them certain pensions, or otherwise, as the president and governors deem meet and most for the advantage of the said charity; and also to relieve the widows and children of such seamen as shall be killed, slain, or drowned in the said service; and also to relieve the widows and children of seamen dying after having contributed during a term of 21 years to the funds of this corporation: provided such children are not of the age of 14 years, or if of that age or upwards, not capable of getting a livelihood by reason of lameness, blindness, or other infirmities, and are proper objects of charity; and also to relieve the widows and children (such children being proper objects of charity) of such seamen as at the time of their death shall have been receiving or been entitled to pensions, under and by virtue of this act, from the fund hereby to be created, as decrepit or worn-out seamen: provided that no widow shall be entitled to any benefit under this act, who shall not have been the wife of such seaman or pensioner before he became entitled to relief under its provisions: provided nevertheless, that no seaman shall be entitled to any provision or benefit of this act, on account of any hurt or damage received on board any ship or vessel, unless he produce, or cause to be produced, a certificate of the said hurt or damage from the master, mate, boatswain, and surgeon, or so many of them as were in the vessel to which he belonged at the time of his receiving such hurt or damage, or of the master and 2 of the seamen, if there be no other officer, or in case the master shall die, or be killed or drowned, then of the person who shall take upon him the care of the ship or vessel, and 2 of the seamen on board the same, under their hands and seals, thereby signifying how and in what manner such seaman received such hurt or damage, whether in fighting, defending, working, loading, or unloading the said ship or vessel, where and when he entered, and how long he had served on board the same; and the parties so signing and sealing such certificate are hereby required to make oath to the truth thereof before some justice of the peace, if given in Great Britain or Ireland, or the chief officer of the customs of the port or place where there is no justice of the peace, or before the British consul or resident in any foreign country where such certificate is executed (who are respectively authorised and required to administer the same without fee or reward); and in case of sickness, whereby such seaman shall be rendered incapable of service, a certificate signed, sealed, and authenticated in like manner, signifying that he was healthy when he entered on board such ship or vessel, and that such sickness was contracted on board the same, or on shore in doing his duty in the service of the ship, and not otherwise, and expressing the time and place he entered on board such ship or vessel, and how long he had served therein; and that no widow, child, or children of any seaman killed, slain, or drowned in the said service, shall be relieved or entitled to any allowance by virtue of this act unless she or they, or some person on her or their behalf, shall produce a certificate, signed, sealed, and authenticated in like manner, signifying how and in what manner such seaman lost his life in the service of the said ship or vessel, the time and place he entered on board, and how long he had served therein; and that no widow, child, or children of any seaman in the said service shall be entitled to any relief by virtue of this act, unless she or they shall produce, or cause to be produced, a certificate under the hands and seals of the minister and churchwardens and overseers of the poor of the parish, township, or place, or any 2 of them, or under the hands and seals of the minister and overseers of the poor of the parish, township, or place, or any 2 of them, where there are no churchwardens, or if in Scotland, by the minister and elders, or if in Ireland, by a justice of the peace for the parish, township, or place where such widow, &c. shall at the time reside, and if such widow, &c. are some of the people called Quakers, then by any 2 reputable persons of that persuasion, of the parish, township, or place where such widow, &c. have a legal settlement, or do inhabit and reside, to be attested by 2 or more credible witnesses, that such widow was the lawful wife and real widow, and that such child or children was or were the lawful child or children of such deceased seaman as aforesaid, and that such child or children is and are under the age of 14 years, or if of that age or upwards, not capable of getting a livelihood by reason of lameness, blindness, or other infirmities, and is or are proper objects of charity; and that no seaman shall be provided for by a pension or otherwise, as decrepit or worn out, unless he have served in the merchant service for the space of 5 years, and have during that time paid the monthly duty out of his wages, imposed by the act 20 Geo. 2. c. 38., or by this act required to be henceforward paid and deducted, as the case may happen, for the uses and purposes herein provided. — § 2.

Forgery of Certificate. — Forged certificates to be null and void; and those knowingly using them to be liable to the punishment of an incorrigible rogue. — § 3.

Courts. — The president and 5 assistants to make a court, who are to meet weekly. The court may apply the monies of the corporation, and appoint the officers and their salaries, and do all other matters and things necessary. — § 4.

All Masters and Owners of Merchant Ships or Vessels, &c. to pay 2s. per Month. — For effecting the ends and purposes aforesaid, every master of any merchant ship or vessel belonging to any British subject, and every owner, being a British subject, navigating or working his own ship or vessel, whether the said ship or vessel be employed on the high sea, or coasts of Great Britain or Ireland, or in any port, bay, or creek of the same, shall, from and after the 31st day of December, 1834, pay 2*s.* per month, and propor-

tionably for a lesser time, during the time he or they shall be employed in such merchant ship or vessel, for the uses and purposes aforesaid: provided always, that such masters or owners, or their widows and children under 14 years of age, or being objects of charity as aforesaid, shall be entitled to a proportionate increase of the pension or allowance, by this act provided, according to the difference between the amount of the monthly duty paid by other seamen, mariners, and pilots, in case such master or owner shall have paid the 2*s.* per month for a period of 5 years or 60 months before any application to the said president and governors for relief under this act; but in case any such master or owner be killed or drowned, or become decrepit, maimed, or disabled, before he or they shall have paid such increased rate of 2*s.* per month for the full period of 5 years or 60 months as aforesaid, then such masters or owners, or their widows and children, shall be entitled to such smaller pension or allowance as the said president and governors, or the trustees to be appointed, shall think fit. — § 5.

All Seamen, or other Persons serving on board such Ships or Vessels, to pay 1*s. per Month.* — Every seaman or other person whatsoever who shall serve or be employed in any merchant ship, or other private ship or vessel, belonging to any British subject, whether employed on the high sea, or coasts of Great Britain or Ireland, or in any port, bay, or creek of the same, and every pilot employed on board any such ship or vessel, shall, from and after the 31st day of December, 1834, pay 1*s.* per month, and proportionably for a lesser time, during the time he or they shall be employed in or belong to the said ship or vessel, for the uses and purposes aforesaid: provided that this act shall not be construed to extend to any person employed in taking fish, in any boat upon any of the coasts of Great Britain or Ireland, or the islands of Guernsey, Jersey, Alderney, Sark, and Man, nor to any person employed in boats or vessels that trade only from place to place within any river of Great Britain or Ireland. — § 6.

Masters of Ships to keep in their Hands 1*s. per Month out of Seamen's Pay.* — The master, owner, or commander of every such merchant or private ship or vessel is hereby required to deduct out of the wages, shares, or other profits payable to seamen or other persons employed on board such ship or vessel (other than those hereby excepted), the said monthly duty, and shall pay the same, together with the amount of the duty owing from himself, to such officer or officers as shall be lawfully appointed at any of the out-ports for collecting the said duty of 1*s.* per month, if such seamen or other persons be entitled to any such wages, shares, or profits. — § 7.

Appointment of Receivers. — President and governors, with the concurrence of commissioners of customs, to appoint such persons to receive the monthly duties at the out-ports as they may think fit, making them a reasonable allowance for their trouble, which is not, however, in any case, to exceed 5 per cent. on the gross sum collected. — § 8.

Muster Roll. — Every master is to keep a true and faithful muster roll of the crew of his ship, specifying in writing the name of every one of the crew, including apprentices, with the various particulars as to the place of each person's birth, the place and time of his entry to the ship, the place and time of his discharge from or leaving the same, and if he be discharged or left, with the other particulars specified in the subjoined formula, in the event of his being hurt, killed, &c.: —

A List and Account of the Crew (including the Master and Apprentices) of the Ship of the Port of whereof is Master, at the Period of her Departure from the Port of in the United Kingdom, and on her Return to the Port of in the United Kingdom, and also of those who have joined the Ship at any Time during the Voyage.

Men's Names.	Place of Birth.	Place and Time of Entry.				Place and Time of Discharge, or leaving the Ship.				When and where received hurt or damaged.	When or where killed or drowned, or died a natural Death.	Wages due at Time of Death.	What Clothes or other Effects any deceased Man has left.	Amount of Monthly Duty.
			Day.	Month.	Year.		Day.	Month.	Year					
												L s. d.		

Duplicates of this account are to be delivered to the collectors of the duties at the port where the vessel discharges; and any master or commander neglecting to keep such muster roll, and neglecting or refusing to deliver it to the collectors of the duties, shall forfeit for every such offence the sum of 5*l.* The collectors are to transmit to the president and governors the duplicates received from such vessels as do not belong to the port of discharge; and the latter are to transmit them to the same. Collectors neglecting to transmit such duplicates incur a penalty of 5*l.* — § 9.

Masters to deduct Penalties from Wages. — The master of every ship coming within the provisions of this act shall deduct out of the wages of the seamen thereof the amount of all forfeitures incurred by any such seamen, and every master is hereby required truly to enter the same in a book to be kept by him for that purpose, which shall be signed by the master and the person next in command, both of them certifying that it contains all the forfeitures which have been incurred by the seamen of the ship during the voyage, to the truth whereof the master shall make oath when required before the officer of the president and governors in London, or before their collectors at the out-ports; and the said book, or a true copy thereof signed and certified as aforesaid, shall, within 1 calendar month after the ship's return from her voyage, be delivered to the said officer by the master, together with extracts from the log-book of the entries therein of the causes of the several forfeitures; and every master who shall refuse or neglect to deliver such account shall forfeit and pay the sum of 20*l.* — § 10.

Examination of Masters, &c. — Collectors may summon masters of vessels, and examine them upon oath as to the truth of the muster rolls; masters refusing to appear or to answer, to forfeit 10*l.* — § 11.

Regulations as to Government Ships — Secretaries, &c. of public government offices to give in a list of ships and vessels employed in their service, and of the seamen or other persons employed in such ships or vessels; and the treasurers, &c of such offices are to pay no wages or freight to any master, &c. until he produce an acquittance signed by receiver of duties. — § 12.

Payment of Duties. — The said monthly duties are to be paid at the port where the ship or vessel unloads her cargo, *before she be cleared inwards;* and all officers are interdicted from granting any cockets, transire, &c., or permitting any vessel to go out of any port, unless it appear by the acquittances of the collectors of the said duties that they are not more than 3 months in arrear of the same; every officer acting contrary to this regulation to forfeit 10*l.* But masters or owners may agree with the trustees and collectors for half-yearly payments. — § 13.

Prevention of Delay. — To prevent unnecessary delay, it is enacted, that if masters fail to produce proper acquittance or certificate of agreement, tidewaiters to be continued on board at their expense. — § 14.

Penalties by this act recoverable before a magistrate. — § 15.

Appointment of Trustees, &c. — From and after the 1st day of October, 1834, it shall be lawful for the owners, masters, and commanders employed on board ships and vessels belonging to any of the out-ports to assemble and meet at any time and place within the same that shall be appointed by any 5 or more

of them, by giving 10 days' previous notice, to be fixed at the Custom-house, wharf, quay, or other public place; and such persons, or the greater part of them, being so assembled, are authorised from time to time to nominate and appoint, by an instrument in writing under their hands and seals, 15 persons to be trustees for such out-port, for receiving, collecting, and applying the said duties, which trustees shall continue to act until the 26th day of December, 1835, and until new trustees are nominated and confirmed; and that within 10 days after the 26th day of December in each succeeding year, the owners, masters, &c. at such out-ports shall have power to meet and choose 15 persons to be trustees for the year ensuing, by an instrument in writing under their hands and seals, or the majority of them so assembled, having given previous notice in the manner before directed; which said respective trustees shall continue from time to time until new trustees are nominated, &c. as aforesaid; and the said instrument shall be sent, free of expense, to the president and assistants or committees of the said corporation, who are required to confirm the same under the common seal of the corporation, without fee or reward, within 15 days after the receipt thereof; which trustees when so confirmed (and whereof *five* shall be a quorum) shall have the same powers and authorities to make by-laws, and to revoke or alter the same, and to receive and apply any sums of money which shall be contributed, devised, or bequeathed by any well-disposed persons for the purposes aforesaid, and to appoint receivers and other officers, and to collect, receive, pay, and apply the said duties of 2*s.* per month and 1*s.* per month so to be allowed and paid by the seamen or other persons serving on board any ship or vessel belonging to such persons, at such out-ports, according to such rules, orders, and regulations as are or shall be established by virtue and in pursuance of this act, or have been established and continued under the provisions of the act 20 Geo. 2. c. 38., so far as the same are not inconsistent with or repealed or varied by the provisions of this act; and the said receivers and other officers shall have the same powers and authorities as the other receivers and officers appointed in pursuance of this act, and shall be liable to the same penalties and forfeitures: provided always, that if the instrument of trust be not sent to the president and assistant or committees within 60 days after every appointment of trustees, the trust thereby created shall be considered void, and the trustees appointed under it as discharged from the same; and that the president and governors shall have power to appoint a receiver or receivers for the port or place from which such instrument of trust has not been sent, for collecting the forementioned duties and allowances payable at such port or place aforesaid; and the said president and governors shall have power to demand from the outgoing trustees of such port or place an account in writing of the former management of such void trust, and also to demand payment from such trustees of any balance which may at the time of such default be in their hands, who are hereby required to pay the same to such receiver appointed as aforesaid, together with the books of account and other books belonging to such trustees relative to such trust. — § 16.

Appointments on Default. — These are not to be revocable within 5 years. — § 17.

Former Trustees. — Trustees previously appointed at the several out-ports to be subject to the provisions of this act. — § 18.

Trustees in Bristol. — The corporation of the Merchants Venturers of Bristol are appointed trustees for the duties, &c. received there; and empowered to hold lands, &c. for the purpose of this act. — § 19.

Hull Trustees. — The guild of the Trinity house of Kingston-upon-Hull appointed trustees for the duties, &c. received there. — § 20.

Greenock and Glasgow, &c. — The ports of Glasgow, Greenock, and Port Glasgow, &c. to be deemed one united port, and masters of ships belonging thereto to elect trustees for collecting duties, &c. — § 21.

Transmission of Accounts. — Trustees of out-ports to transmit accounts of the yearly receipts and expenditure to president and governors. — § 22.

Transmission of Muster Rolls. — Collectors appointed by trustees or corporations aforesaid, are excepted from sending duplicate of muster rolls to the president and assistants. — § 23.

Sections 24. and 25. enact that no seaman shall be entitled to the benefit of this act unless he pays the duty; and that those seamen who have served longest shall be first provided for.

Maimed Seamen to be provided for at the port where the accident happens. — § 26.

Disabled Seamen having served and paid 5 years to be provided for where they have contributed most. — § 27.

Seamen shipwrecked, or made prisoners by the enemy, may be relieved. — § 28.

Where regular Certificates cannot be obtained, others may be admitted. — In all cases where the certificates directed to be produced by this act for the purpose of entitling parties to relief and support cannot be obtained, such other certificates as shall be satisfactory to the president and governors or trustees respectively shall be received and allowed, so as to entitle the party producing the same to the pensions or other relief provided by this act. — § 29.

Wages of deceased Seamen to be paid to the Trustees. — All sums of money due for wages to any seaman, mariner, or other person engaged on board any British merchant ship in any port or ports in Great Britain or Ireland, who shall have died on board during the voyage, shall, within 3 months after the arrival of such ship in any port of Great Britain and Ireland, be paid to the trustees of the said port appointed in pursuance of this act, or to the receiver or collector or other authorised agent of the said president and governors, where there are no such trustees, to and for the use of the executors or administrators of the seaman or other person so dying; and in case no claim shall be made on the said trustees by such executors or administrators on account of such wages, within 1 year after the same have been paid over, then the said trustees shall remit the same to the collector or receiver, or other their authorised agent, of the president and governors at the port of London, in such manner and times as the said president, &c. shall direct, to and for the use of the executors or administrators of the seaman, or other person so dying; and in case no claim shall be made on the said president, &c. by the executors, &c. of such seaman, on account of such wages within 1 year after the same shall have been first paid over to their collector, then it shall be lawful for them to direct such wages to be paid over (but without interest for the same) to the widow, or if there be no widow claiming, then to the lawful issue respectively, or such persons as by virtue of the statutes of distribution of intestates' effects shall be entitled to the same; and if any master or commander of any merchant ship neglect or refuse to pay over to the said trustees, or the receiver or collector at the port aforesaid, all such sums of money within the time before limited, he shall forfeit for every such offence double the amount of the sums of money due to any seaman or other person for wages. — § 30.

Wages if not demanded in 5 years by representatives to go to the use of the president and governors, or the trustees of the respective ports. — § 31.

Payment to Seaman's Hospital in London. — President and governors to pay 5 per cent. out of duties received by them from seamen in the port of London to the Seaman's Hospital Society in that port. — § 32.

Deductions from gross Amount. — It shall be lawful for the receiver or collector or other authorised agent of the president and governors at the port of London, and he is hereby authorised, to deduct and receive from the gross amount of such sums of money as shall be derived from the unclaimed wages of deceased seamen, received by him in respect of such wages, 5 per cent. in satisfaction of all expenses and trouble he may be put to in the receipt, collection, or transmission thereof. — § 33.

The contributions to the new fund will, most likely, amount to about 50,000*l.* a year; so that, if it be discreetly and economically managed, it will afford the means of suitably providing for a large number of disabled merchant seamen, as well as for the wives

and children of those who have lost their lives in that service. The distressing consequences of those accidents and casualties to which seamen are so peculiarly liable, will thus be materially reduced; so that the service will, in fact, be rendered less hazardous, and more respectable.

SLATE. — Slate and chalk laden on board any ship or vessel bound for foreign parts shall be deemed ballast; and all such ships or vessels having on board only slate, or slate and chalk, shall be deemed to be departing in ballast; and if, on the return of any such ship or vessel, any slates or chalk be remaining on board, they shall be deemed to be her ballast. — (4 & 5 *Will.* 4. c. 89. § 3.)

SMUGGLING.—The 85th clause in the act 3 & 4 Will. 4. c. 53., for the prevention of smuggling (*Dict.* p. 1061.), authorising justices to sentence seafaring men, convicted of smuggling, to serve in the navy for 5 years, has been repealed. Persons convicted of such offences are now to be committed to the house of correction, to hard labour, for not less than 6 months for the first offence, 9 for the second, and 12 for the third. — (4 & 5 *Will.* 4. c. 13. § 2.)

SPIRITS. — The reader will find, in the body of this work (art. Spirits, p. 1075.), a statement of the smuggling and other pernicious consequences resulting in Ireland from the oppressive duties laid on spirits previously to 1823; of the good effects of the reduction of the duty to 2*s.* 10*d.* the Imperial gallon in that year; and of the influence which the addition of 6*d.* to the duty in 1831 had in reviving that illicit distillation, the preceding reduction had gone far to put down. The view we took of the necessity of making a fresh reduction of the duty was approved and strongly recommended by the Commissioners of Excise Inquiry; and has, we are glad to say, been acted on by government; the act 4 & 5 Will. 4. c. 75., introduced by Lord Althorp, having reduced the duty on British spirits, entered for home consumption in Ireland, to 2*s.* 4*d.* a gallon.

It was contended, when this measure was before parliament, that the reduction should be extended to all parts of the empire; and that, by confining it to spirits used in Ireland, a new temptation would be created to smuggle from that country into England and Scotland. This no doubt will be, in some degree, the case; and we hope that no long period will be allowed to elapse till the measure be generalised. We do not, however, think that there is much probability of its giving birth to any considerable amount of smuggling; and it is not to be denied that the reduction was much more urgently required in Ireland than anywhere else. Scotch whisky carried to Ireland is admitted for consumption at the low duty.

Spirit Licences. — The act 4 & 5 Will. 4. c. 75. made certain additions to the duties on spirit licences, which are now as follows: —

From the 10th of October, 1834, retailers of spirits whose premises are rated under

			l.	*s.*	*d.*	
		10*l.* per annum, shall pay	5	5	0	per annum of licence duty.
At 10*l.* and under	20*l.*	—	6	6	0	—
20*l.* —	25*l.*	—	9	9	0	—
25*l.* —	30*l.*	—	11	0	6	—
30*l.* —	40*l.*	—	12	12	0	—
40*l.* —	50*l.*	—	14	3	6	—
50*l.* and upwards		—	15	15	0	—

The spirit licences of grocers in Ireland, not selling spirits to be consumed on the premises of said grocers, not to be affected by this act. — § 8.

All houses licensed at the passing of the present act to continue to be deemed of the same value, so long as the present persons hold them, and the premises remain unaltered; afterwards, their annual value is to be determined according to the mode prescribed in 6 Geo. 4. c. 81. § 9.

STARCH.—The injurious influence of the duty on starch, the nett produce of which, in 1833, was only 91,517*l.* 18*s.* 2½*d.*, was most ably exposed, and its abolition strongly recommended, by the Commissioners of Excise Inquiry; and we are glad to have to add that, agreeably to this recommendation, the duty has been abolished. — (4 & 5 *Will.* 4. c. 77.)

STEAM VESSELS.

Account of the Number and Tonnage of Steam Vessels, distinguishing the Countries to which they belonged, which entered Inwards and cleared Outwards, stating whether they conveyed Goods or Passengers, or both, in 1833 and 1834. — (*Parl. Paper*, No. 320. Sess. 1834.)

Countries to which the Vessels belonged.	Year ending 5th January, 1834.											
	With Goods only.				With Passengers only.				With both Goods and Passengers.			
	In.		Out.		In.		Out.		In.		Out.	
	Vessels.	*Tons.*	*Vessels.*	*Tons.*	*Vessels.*	*Tons.*	*Vessels.*	*Tons.*	*Vessels.*	*Tons.*	*Vessels.*	*Tons.*
United Kingdom and its dependencies: —												
From and to foreign parts	13	636	7	317	966	81,906	772	60,133	479	75,619	530	81,471
Coastwise	63	6,554	151	26,174	1,741	167,146	1,744	167,292	9,524	1,459,965	9,466	1,458,646
France	1	72	4	288	44	3,128	58	4,176	47	5,384	25	1,800
Holland	-	-	-	-	13	3,655	-	-	4	1,121	16	4,196
	Year ending 5th January, 1833.											
United Kingdom and its dependencies: —												
From and to foreign parts	7	340	9	634	840	61,151	711	45,084	375	55,330	392	54,398
Coastwise	54	5,868	155	23,336	1,815	185,337	1,809	184,495	8,299	1,298,111	8,362	1,293,817
France	4	288	-	-	16	1,092	37	2,654	62	4,604	33	2,529
Holland	-	-	-	-	29	8,149	-	-	8	2,248	5	10,116

Note. — Vessels with passengers only are not compelled to enter and clear at the Custom-house.

SWEETS. — An excise duty was imposed on sweets — that is, on home-made wines, mead, or metheglin, &c. — manufactured for sale, so early as 1696. In 1803 it amounted to 49*s.* a barrel; the produce of the duty varying from that year to 1816 from about 21,000*l.* to about 33,000*l.* a year. But in 1816 it fell off to little more than half its previous amount. This sudden decline was doubtless occasioned by the great increase in the consumption of Cape wine, consequent to the reduction of the duty on it, in 1814, from about 6*s.* to about 2*s.* 6*d.* a gallon. In 1817 it was attempted to revive the manufacture of home-made wine, by taking a third from the duty on sweets; which amounted, after the reduction, to about 1*s.* $0\frac{1}{4}$*d.* a gallon; and in 1826 it was further reduced to 6*d.* But the ease with which the article may be made by private individuals, and the decisive check given, by the introduction of Cape and other cheap foreign wines, to the use of home-made substitutes, prevented these reductions from having any material influence; and in 1832 the duty had dwindled to 3,721*l.* Under these circumstances, the Commissioners of Excise Inquiry wisely recommended the abolition of the duty, which has been effected by the act 4 & 5 Will. 4. c. 77. — (*Fifth Report by Commissioners of Excise Inquiry*, p. 18, &c.)

SYDNEY.

Population. — There is, in the *Dict.* p. 1099., an account of the population of the colony of New South Wales, according to the census of 1828, accompanied with an intimation that doubts were entertained as to its accuracy. These have since been fully confirmed by the returns obtained under a census taken on the 2d of September, 1833. It appears from them that the population of the colony of New South Wales, exclusive of aborigines, amounted at that date to 60,261; of which were —

	Free.	*Convict.*		*Total.*
Males - -	22,843	21,845	Males - -	44,688
Females - -	13,475	2,098	Females - -	15,573
	36,318	23,943		60,261

Of the free population, 5,265 males and 4,944 females were under 12 years of age. The total population of Sydney, in September, 1833, was 16,232, of which 13,492 were free.

The census of 1828 made the population of the colony only 36,598. The total immigrants from the 1st of July, 1828, to the 31st of December, 1833, have been, men 2,531, women 2,323, children 1,846; in all, 6,699. Now, if we add this number to the population as given by the census of 1828, it would follow, had that census been accurate, that the colonial births, during the intervening 5 years, had exceeded the deaths by about 17,000. But an increase of this sort, taking the magnitude of the female population into account, is evidently impossible; and shows that the population had been materially underrated in 1828.

Wages in New South Wales. — Every one in any degree familiar with such subjects is aware of the extreme difficulty of obtaining accurate accounts of the rate of wages. But in the case of colonies, this difficulty is materially increased; it being the object of those interested in the encouragement of emigration, to set its advantages, of which high wages are probably the greatest, in the most striking light, and conversely. Hence we did not venture to lay any details as to the rate of wages at Sydney before the reader, except those given by the late Emigration Commissioners; and as these gentlemen mentioned that their statements had been obtained from the colonial agent, and other authentic sources, we had no doubt of their accuracy. — (*Dict.* p. 1103). We regret, however, to be obliged to say that this confidence, though apparently well founded, seems to have been not a little misplaced. The Rev. Henry Carmichael, one of the professors in the Australian College, Sydney, has shown, in his valuable tract, entitled *Hints to Emigrants to New South Wales*, that the statements put forth by the Emigration Commissioners were "calculated very seriously to mislead;" and that, in point of fact, they have misled very many individuals, who, on arriving at Sydney, found the wages far below what they had been made to expect.

A committee, consisting of the most intelligent persons of the class referred to, have drawn up a report on the eligibility of New South Wales as a place of resort for emigrant mechanics, in which, among other things, they declare that the account of the rate of wages (see *Dict.* p.1103.), published by the Emigration Commissioners, "is extravagant and ridiculous." "Common labourers," they say, "do not earn more than 4*s.* to 5*s.* per week, with rations and lodgings; mechanics, out of Sydney, do not average more than 15*l.* to 20*l.* per annum, with rations, &c.; mechanics of the highest qualifications, in Sydney, do not average more than 2*l.* per week the year round. Agricultural labourers, capable of managing a farm in the capacity of bailiff, not more than 15*l.* to 20*l.* per annum, with rations, and hut to live in; and persons of higher grades and similar occupations cannot get more than 40*l.* to 60*l.* per annum, and rations."

In corroboration of the accuracy of these statements, Mr. Carmichael gives the substance of a letter from William M'Pherson, Esq., collector of internal revenue, and secretary of the Emigrants' Friend Society, dated the 18th of June, 1833.

"Good mechanics can earn, in Sydney, from 30*s.* to 40*s.* per week, without board or lodging; and in the country, from 20*l.* to 30*l.* per annum, with house and rations.*

"Common labourers in Sydney obtain about 14*s.* per week, without board or lodging; and in the country, about 12*l.* per annum, with house (or rather hut) and rations.*

"Wages given to farm servants vary with their qualifications; 50*l.* to 60*l.*, with a house and rations, may be considered the highest wages given to overseers of a superior description, and 20*l.* to 25*l.* to those of humbler pretensions.

"Their being married or single makes, in general, no difference in the rate of wages, unless where the females are expected to perform any domestic duties: but rations are usually given to the wife and children of a married overseer as well as to himself.

"Good ploughmen, or shepherds, obtain from 15*l.* to 20*l.*, with a house and rations.

"Wages of domestic servants are —

Of a single man - -	from	*L.*12 to *L.*20
Of a single woman - -	—	8 - 15
Of a married couple - -	—	20 - 30

"*N.B.* — A married pair of emigrants may easily find a small house, containing 2 apartments, to accommodate them on their arrival, at a weekly rent of from 7*s.* to 10*s.*; and an unmarried man may lodge and board for 10*s.* 6*d.* per week."— (*Carmichael's Tract*, p. 32, 33. Lond. ed.)

These statements certainly differ very widely from those of the Emigration Commissioners. The greater mildness and salubrity of the climate appears to be the principal, or rather, perhaps, the only recommendation in favour of emigrating to Australia rather than to Canada or the United States; but whether this be a sufficient counterpoise to the vast distance of Australia from Europe, the heavy expense of the voyage thither, the chances of drought, and the high price and general bad quality of the land, is a point as to which we do not presume to decide; but it is one that deserves the serious attention of every one who is projecting a visit to the antipodes.

* The rations allowed to free labourers may be rated per week as follows, viz. —

	Lbs.	*oz.*		*Lbs.*	*oz.*
Flour - -	10	0	Tobacco - -	0	2
Beef and mutton	10	0	Salt - -	0	2
Tea }† - -	0	2	Soap - -	0	2
Sugar }† - -	1	0	Milk† - -	7	quarts.

† This latter (the milk), being given in lieu of tea and sugar. So that labourers, if well-behaved and industrious, are sure to raise themselves above the station which they occupy at home.

TARIFF. — Instead of the customs duties on the undermentioned articles, imposed by the act 3 & 4 Will. 4. c. 56., given in the first column of the Table entitled TARIFF in the *Dictionary*, the act 4 & 5 Will. 4. c. 89. § 15. has substituted the following: —

	L.	s.	d.
Apples, dried - - - - the bushel	0	2	0
Books in the foreign living languages, being of editions printed in or since the year 1801, bound or unbound - - - - the cwt.	2	10	0
Bottles of earth or stone, viz. empty - the dozen	0	0	6
full - -	Free.		
Bronze, viz. all works of art made of bronze, the cwt.	0	1	0
other manufactures of bronze, for every 100*l.* of the value - - - - -	30	0	0
Cassava powder or starch, the produce of and imported from any British possession in America the cwt.	0	1	0
Currants - - - - the cwt.	1	2	2
Figs - - - - the cwt.	0	15	0
Grapes, for every 100*l.* of the value -	5	0	0
Mats and matting, for every 100*l.* of the value -	20	0	0
imported from any British possession, for every 100*l.* of the value - - - -	5	0	0
Oil, viz. animal oil - - - the cwt.	0	2	6
cocoa nut oil - - - the cwt.	0	1	3
olive oil - - - - the tun	4	4	0
the produce of or imported from any part of the dominions of the King of the Two Sicilies, after 31st of August, 1834 - - the tun	8	8	0
imported in a ship belonging to any of the subjects of the King of the Two Sicilies, after 31st of August, 1834 - the tun	10	10	0
Note.—See art. OLIVE OIL in this *Supplement*.			
palm oil - - - - the cwt.	0	1	3
Palmetto thatch, the produce of and imported from the British possessions in America - the cwt.	0	0	1
Plantains, dried, the produce of and imported from the British possessions in America, for every 100*l.* of the value - - - - -	5	0	0
Pears, dried - - - - the bushel	0	2	0
Prunes, commonly called French plums and prunellos the cwt.	1	0	0
Prunes - - - - the cwt.	0	7	0
Raisins - - - - the cwt.	0	15	0
the produce of and imported from any British possession - - - the cwt.	0	7	6
Seal skins of British taking, imported direct from the fishery or from a British possession, the doz. skins	0	0	1
Spirits, viz. brandy, the produce of and imported from the British possessions in America, viz. not being of greater strength than the strength of proof by Syke's hydrometer - the gallon	0	9	0
being of greater strength - - the gallon	0	13	6

TEA.—The commissioners of customs have, by a minute dated the 10th of July, 1834, issued the following regulations with respect to the warehousing of tea, and its removal from the original port of importation to any other warehousing port, for the purpose of being warehoused for home consumption.

1. That the warehouses which may be approved for the deposit of tea, be exclusively appropriated to that purpose.
2. That the article be weighed and examined at the time of importation, the officers taking care that all the packages imported in each vessel be "scribed" with a progressive number, with the initials of the vessel's and master's names, and the gross landing weight; and that the duty be charged according to the quantity and quality then ascertained.
3. That no packages be allowed to be divided into smaller packages (except for the purpose of storage), nor the mixing of tea, of any sort or sorts, be permitted in the warehouses, either for home consumption or exportation.
4. That the packages be sorted and arranged in the warehouse by the occupier, according to their respective "chops" or "lots," so as to enable the officers to select from each the required number of packages for taring, and to ascertain the proper tare to be allowed on the packages in each "chop" or "bed"; and that the rule to be observed, as to number of chests to be turned out in each "chop" or "bed," being of the same size and description of tea, be as follows, viz.—

1 to 5 — 5 chests of the same size and description of teas - 1 turned out.	
6 to 40 — 40 - - - - - 3	ditto
41 to 80 — 80 - - - - 4 or 5	ditto
81 to 120 — 120 - - - - 5	ditto
121 to 200 — 200 - - - - 6	ditto
201 to 300 — 300 - - - - 8	ditto
301 to 500 — 500 - - - - 10	ditto
501 to 800 — 800 - - - - 12	ditto
801 and upwards - - - - 16	ditto

And that, in addition to the tare, an allowance for draft be made of 11lb. upon each package exceeding 28 lbs. gross, to be deducted from the foot of the landing account.

5. That tea entered for exportation be previously weighed, and any deficiency of the landing quantity charged with duty, unless such tea be deposited in a warehouse of special security.
6. That the officers be authorised, under the 124th section of the Regulation Act, to draw samples of tea, not exceeding 3 ounces of each description and quality, unless under special circumstances, such samples to be disposed of as the Board may see fit to direct. And that the merchants or proprietors of the goods be allowed to take the like quantity as samples, under the 31st section of the General Warehousing Act.
4. That the removal of teas from the original ports of importation to any other warehousing port in the United Kingdom, for the purpose of being re-warehoused for home consumption, do take place under the regulations and conditions specified in the General Orders of the 14th of June, 1831, and 3d of November, 1832, in regard to the removal of articles the produce of the East Indies; and that tea so removed be allowed to be deposited in warehouses or floors which may have already been approved for other goods.
8. When tea, or other East India goods, shall be imported into either of those ports for the Glasgow market, and transhipped into craft properly secured, for removal to Glasgow in charge of the officers of the revenue, under such regulations for the security of the revenue as may appear necessary in such cases, the examination of the goods, for the purpose of ascertaining the duty thereon, may take place at Glasgow instead of the port of importation.

In all other cases, goods shall be examined at the time of importation, for the purpose of fixing the amount of duty to which they may be liable, and the duty so ascertained shall be assessed on the goods at whatever future period they may be delivered for home consumption.

Under these arrangements, there will be no objection to the goods being removed from the original port of importation to any other warehousing ports in the United Kingdom, for the purpose of being re-warehoused for home consumption, under the same regulations and restrictions now applicable to the removal of articles the produce of the East Indies.

The ports of London, Liverpool, Bristol, Hull, Newcastle, Leith, Glasgow, Greenock, Port Glasgow, Dublin, Belfast, and Cork, have been declared ports into which tea may be imported and warehoused.

VAN DIEMEN'S LAND.—*Population.*—Including military, the total population of Van Diemen's Land amounted, on the 1st of January, 1834, to 31,551. The males are to the females in the proportion of 22 to 9, and the free to the convict population nearly as 18½ to 12½. The total estimated value of the articles of colonial produce exported from the colony in 1833 was 152,967*l.*; of which 81,881*l.* worth were shipped from Hobart Town, and the residue from Launceston, which is rapidly rising in point of commercial importance. The total imports into the island during the same year, consisting chiefly of British manufactures, were valued at 352,894*l.*; of which those imported into Hobart Town were supposed to be worth 249,312*l.*, and those into Launceston 103,082*l.*—(*Hobart Town Almanac for* 1834).

UNITED STATES (TRADE OF).—The following statements in relation to the trade and navigation of the United States during the 3 years ending the 30th of September, 1833, have been extracted from the official returns printed by order of Congress:—

1. Statement showing the Quantity and Value of the Cotton Wool annually exported from the United States, since 1821.

Years.	Sea Island.	Other Sorts.	Value.	Years.	Sea Island.	Other Sorts.	Value.
	Lbs.	*Lbs.*	*Dollars.*		*Lbs.*	*Lbs.*	*Dollars.*
1821	11,344,066	113,549,339	20,157,484	1828	11,488,419	199,302,044	22,487,229
1822	11,250,635	153,424,460	24,035,058	1829	12,833,597	252,005,879	26,575,511
1823	12,136,688	161,586,582	20,445,530	1830	8,147,165	290,511,937	22,674,883
1824	9,525,722	138,843,941	21,947,401	1831	8,511,762	268,668,022	25,289,492
1825	9,665,278	166,784,629	26,346,619	1832	2,743,373	313,471,749	31,721,682
1826	5,972,852	198,562,563	25,025,214	1833	11,142,987	313,555,617	36,191,105
1827	13,140,758	279,169,517	29,359,545				

It appears from this statement, that though the quantity of cotton exported from the United States in 1825 did not much exceed half the quantity exported in 1833, its value, owing to the exorbitant price it then fetched, was greater than at present.

II. Statement showing the comparative Values of the Articles, arranged in Classes, exported from the United States during each of the 3 Years ending the 30th of September, 1833; with the Total Value of the Imports during the same Years.

Articles.	1831.	1832.	1833.
	Dollars.	*Dollars.*	*Dollars.*
Products of the sea	1,889,472	2,558,538	2,402,469
the forest	4,265,477	4,347,794	4,986,339
animals	2,828,936	3,179,522	3,556,880
Vegetable food	13,997,472	8,532,494	9,839,468
Tobacco	4,892,388	5,999,769	5,775,968
Cotton	52,289,492	31,724,682	36,191,105
Other agricultural products	253,145	159,716	328,598
Manufactures	2,969,435	2,730,833	2,857,430
Cotton manufactures	1,126,313	1,229,574	2,532,517
Other do.	595,164	613,149	586,241
Gold and silver coin	2,058,474	1,410,941	366,842
All other articles	1,109,992	830,448	933,541
Total domestic products	61,277,057	63,137,470	70,317,698
foreign do.	20,033,526	24,039,473	19,882,735
Total	81,310,583	87,176,943	90,140,433
Imports into the United States	103,191,124	101,029,266	108,118,311

III. Account of the Imports and Exports of Tea, Coffee, and Sugar into and from the United States during the 3 Years ending the 30th of September, 1833, with the Quantities left for Consumption.

Articles.	Imports.			Exports.			Left for Consumption.		
	1831.	1832.	1833.	1831.	1832.	1833.	1831.	1832.	1833.
	Lbs.	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*
Tea	5,182,867	9,506,606	14,639,822	526,186	1,279,462	1,712,779	4,656,681	8,627,144	12,927,043
Coffee	81,757,386	91,722,329	99,955,020	6,056,629	55,251,158	21,897,114	75,700,757	35,471,171	75,057,906
Sugar, brown	98,576,928	69,117,717	85,689,044	17,297,837	14,230,070	2,001,424	81,279,091	55,887,647	83,687,620
white	10,437,726	6,334,571	11,999,088	5,274,579	3,258,875	4,475,869	5,163,147	3,075,696	7,523,219

IV. Navigation of the United States during the 3 Years ending the 30th of September, 1833.

	1831.	1832.	1833.
	Tons.	*Tons.*	*Tons.*
American tonnage entered	922,952	949,622	1,111,441
— sailed	972,504	974,865	1,142,169
Foreign tonnage entered	281,948	393,058	496,705
— sailed	271,994	387,305	497,059

V. Amount of the registered, enrolled, and licensed Tonnage of the United States, on the 31st of December, 1830, 1831, and 1832.

	Tons.	*Tons.*	*Tons.*
Registered	576,475	620,451	686,989
Enrolled and licensed	615,301	647,394	752,461
Total	1,191,776	1,267,846	1,439,450

WAREHOUSING SYSTEM. — The act 4 & 5 Will. 4. c. 89. § 20. has the following important proviso: —

The commissioners of customs shall remit or return the duties payable or paid, on the whole or any portion of wine, spirits, or other fluid, which shall be lost by any unavoidable accident in the warehouse in which it was deposited according to the provisions in the act 3 & 4 Will. 4. c. 57., or any other act to be passed for the warehousing of goods; and the duties upon the following articles, *deposited in warehouses of special security*, viz. wine, currants, raisins, figs, hams, cheese, and mahogany, when taken out of warehouse for home use, shall be charged upon *the quantities actually delivered.*

WEIGHTS AND MEASURES. — The act 4 and 5 Will. 4. c. 49., passed during last session, repeals some of the clauses in the acts 5 Geo. 4. c. 74. and 6 Geo. 4. c. 12., establishing the new system of weights and measures, and enacts others in their stead; it also puts an end to the mischievous practice of selling by heaped measure. It sets out with repealing the provisions in the acts referred to, that require that all weights and measures shall be models and copies in shape or form of the standards deposited in the exchequer; and those allowing the use of weights and measures not in conformity with the Imperial standards established by the said acts; or that allow goods or merchandise to be bought or sold by weights and measures established by local custom, or founded on special agreement. — § 1. It then goes on to enact: —

Weights and Measures stamped at the Exchequer declared legal. — Weights and measures verified and stamped at the exchequer as copies of the standard weights and measures, corresponding in weight and capacity with those established by the said acts, shall be deemed legal weights and measures, and may be used for comparison as copies of the Imperial standard weights and measures, although not similar in shape to those required under the provisions of the said acts. — § 2.

Superintending Officer of Exchequer may verify and stamp Weights, &c. — The auditor or comptroller-general, or other superintending officer of the exchequer, may compare, verify, and stamp as correct standard measures of a yard, standard weights, and standard measures of capacity, any weights and measures which correspond in length, weight, and capacity with the standards, or parts or multiples thereof respectively, deposited in the exchequer under the act 5 Geo. 4. c. 74., though such weights and measures may not be models or copies in shape or form of the standards so deposited. — § 3.

Abolition of Heaped Measure. — From and after the 1st day of January, 1835, so much of the said acts as relate to heaped measure is hereby repealed, and the use of heaped measure is abolished, and all bargains, sales, &c. made by heaped measure after the said 1st day of January, 1835, shall be null and void; and thereafter no weight made of *lead* or of *pewter* shall be stamped or used. — § 4.

Copies of the Imperial Standards to be provided, &c. — At the general quarter sessions next after the passing of this act, the magistrates of every county or county of a city in England and Wales, and in Scotland the justices of the peace at meetings to be called for the purpose by the sheriffs and the magistrates of each royal burgh, within 3 months after the passing of this act, shall respectively determine the number of copies of the Imperial standard weights and measures which they deem requisite for the comparison of all weights and measures in use within their counties, counties of cities, and burghs respectively, and shall direct that such copies, verified and stamped at the exchequer, be provided for the use of the same, and be deposited at certain central and convenient places, under the care of an inspector or inspectors of weights and measures, to be by the said magistrates appointed and dismissed as occasion may require. — § 5.

The next 6 clauses relate to the furnishing of copies of the Imperial standard weights and measures to the different counties, cities, &c.

Stone Weight, Hundred Weight, and Ton. — From and after the 1st of January, 1835, the weight denominated a stone shall in all cases consist of 14 standard pounds avoirdupois, the weight denominated a hundred weight shall consist of 8 such stones, and the weight denominated a ton shall consist of 20 such hundred weight; and all contracts made by any other stone, hundred weight, or ton, from and after the 1st day of January, 1835, shall be null and void.

All Articles to be sold by Avoirdupois Weight, except as herein stated. — From and after the 1st day of January, 1835, all articles sold by weight shall be sold by avoirdupois weight, excepting gold, silver, platina, diamonds, or other precious stones, and drugs *when sold by retail*; and such excepted articles, and none others, may be sold by Troy weight.

All Weights and Measures to be stamped by Inspectors. — In England and Wales the magistrates at quarter sessions, and in Scotland the justices of the peace at a meeting called by the sheriff, and in Ireland the grand jury of each county and county of a city or town, shall procure, for the use of the inspectors, stamps for the stamping or sealing all weights and measures used in such county, which stamp shall be the stamp for such county, and no other shall be considered legal; and all weights and measures used for buying and selling, or for the collecting of any tolls or duties, or for the making of any charges on the conveyance of goods or merchandise, shall be examined and compared with one of the copies of the Imperial standard weights and measures provided under the authority of this act by the inspectors appointed as aforesaid, who shall stamp such weights and measures when examined and compared, if found to correspond with the said copy, the fees for which examination shall be according to the scale contained in the annexed schedule; and all persons who, after the 1st of January, 1835, in England and Wales and in Scotland, or after the 1st of July, 1835, in Ireland, shall make any weights or measures other than those authorised by this act, or shall sell or use any weights or measures not stamped as aforesaid, or which shall be found light or otherwise unjust, shall on conviction forfeit a sum not exceeding 5*l.*; and any contract, bargain, or sale made by such weights or measures shall be wholly null and void, and all such light or unjust weights and measures shall be seized, forfeited, and condemned. — § 14.

Regulations as to Fiar Prices. — In Scotland, from and after the 1st day of January, 1835, the *fiar prices* of all grain in every county shall be struck by the Imperial quarter, and all other returns of the prices of grain shall be set forth by the same, without any reference to any other measure whatsoever; and any sheriff clerk, clerk of a market, or other person offending against this provision, shall forfeit not more than 5*l.* nor less than 1*l.* — § 15.

The inspectors are further directed to give security to the extent of 100*l.* for the due and punctual performance of the duties of his office. Power is granted to magistrates to examine weights and measures, to order such as are light or otherwise unjust to be forfeited and destroyed, and those using them to be subjected to a penalty not exceeding 5*l.*; and a similar penalty to be imposed on those refusing to produce weights and measures for inspection, or obstructing the magistrates. All persons forging or counterfeiting any stamp or mark used in the stamping or marking weights or measures, incur a penalty of not more than 50*l.* and not less than 10*l.* each offence; and persons knowingly selling or uttering the same, forfeit not more than 10*l.* and not less than 2*l.* each offence. — § 16. &c. The schedule of fees is as follows: —

SCHEDULE OF FEES

To be taken by all Inspectors of Weights and Measures (except those appointed for the Cities of London and Westminster, or under the Authority of the Founders' Company), and by all Weighmasters in Ireland.

For examining, comparing, and stamping all brass weights, within their respective jurisdictions —

	s.	d.
For each half hundred weight	1	6
For each quarter of a hundred weight	0	9
For each stone	0	6
For each weight under a stone	0	1½

For examining, comparing, and stamping all iron weights, or weights of other descriptions not made of brass, within their respective jurisdictions —

	s.	d.
Each half hundred weight	0	6
Each quarter of a hundred weight	0	3
For each stone, and all weights under a stone	0	2

For examining, comparing, and stamping all wooden measures, within their respective jurisdictions —

	s.	d.
Each bushel	0	6
Each half bushel	0	3
Each peck, and all under	0	2
Each yard	0	6

For examining, comparing, and stamping all measures of capacity of liquids, made of copper or other metal, within their respective jurisdictions —

	s.	d.
Each five gallon	1	8
Each four gallon	1	4
Each three gallon	1	0
Each two gallon	0	8
Each gallon	0	4
Each half gallon	0	2
Each quart	0	1
Each pint, and under	0	0½

WINE. — The Oporto Wine Company, described in the *Dict.* art. WINE, p. 1247., has been abolished by a decree dated Lisbon, 30th of May, 1834, of which the following are the principal clauses: —

Art. 1. All the privileges, authorities, prerogatives, and immunities of whatever nature or denomination granted to the Wine Company of the Alto Douro, and to the junta of its administration, from the time of its establishment to this day, are abolished.

Art. 2. The free disposal of their vineyards and wines is accordingly restored to the cultivators of the Upper and Lower Douro, as to those of all other parts of these kingdoms.

Art. 3. All imposts hitherto laid on the wines of Oporto, with the exception of the subsidio litterario, and of the duties on consumption in the city of Oporto and its district, as well as that of 12,500 reis on each pipe exported from the Foz of the Douro, are abolished.

Art. 4. The subsidio litterario shall be received, as in every other place, by the receiver general or his deputies.

Art. 5. The duties on consumption shall be received in the same manner; but those on exportation will be paid at the Custom-house of the city of Oporto, on the manifests which are to be presented by the sellers and exporters, under the penalties ordered in such cases.

Art. 7. All ordinances and regulations whatever contrary to the present decree are abolished, as if they were expressly mentioned. The ministers of the interior and finance are charged with the execution of the present decree.

WOOLLEN MANUFACTURE. — The exemption from the export duty of 10*s.* per cent. enjoyed by woollen goods, or goods of wool and cotton or wool and linen, exported to places within the limits of the East India Company's charter, has been repealed by the 4 & 5 Will. 4. c. 89. § 18.

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